

TELANGANA LAND AND PEOPLE

FROM STONE AGE TO 1323 CE
VOLUME 1



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*Natural Colour Composite Image of Telangana State and its environs
Source: Director, Telangana State Remote Sensing Application*



*Cover page photo: Ramappa Temple in Warangal.
UNESCO declared World Heritage sight in Telangana*

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Authors

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FROM STONE AGE TO 1323 CE (VOLUME 1)**

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**Cover page photo: Ramappa Temple in Warangal.
UNESCO declared World Heritage sight in Telangana**



Foreword

Telangana emerged as the twenty-ninth state on the map of India in the year 2014. The dream of statehood has been realised after a long and sustained struggle by its people after six decades. Thereafter, due to a proactive policy of the state government, an ever-growing number of public functionaries are being recruited through the Public Service Commission. The existing manpower of a couple of lakh employees along with the fresh recruits are meant to serve around 40 million people across the State.

A word about the Dr MCR Human Resource Development Institute would be appropriate. The Institute was set up in the year 1976. Its mission is to empower public servants towards citizen centric and good governance. Its vision is to be reckoned as the hub of excellence in all fields of public administration. Driven by these twin engines, the Institute has evolved into a hub of eco-friendly sylvan ambience equipped with cyber enabled modern facilities, attracting renowned faculty to train more than a thousand trainees at a time on residential basis. The on-line training provides an additional multiplier.

Therefore, with the creation of Telangana, the institutional mandate is to equip all the public functionaries, including existing and fresh recruits with relevant set of knowledge and skills coupled with positive attitudes so as to serve the entire society. It is considered necessary to sharpen the understanding about Telangana state and its land and people amongst trainees. In fact, relevant material has evolved during class-room sessions conducted by a competent resource team. It has also been shared with successive batches of trainees for last three to four years using e-learning as well as class-room mode. Their feedback has been overwhelmingly positive. Encouraged by such a resounding response, the reading material is now turned into this series of volumes on **Telangana - Land & People**. The successive volumes would show up in due course on the academic platform of the Institute.

This volume does not lay any claim to originality or research orientation. What it claims, in all its humility is an honest endeavour to capture factual and scientific narrative from all available and authentic sources, covering the vast canvas of Telangana – Land and People. Almost all our trainees have found this material extremely beneficial. I am quite confident that it would facilitate the Telanganites in particular and their well-wishers in general to revisit the grandiose of their own history.

**Director General
Dr MCR HRD Institute**

Hyderabad
June 2022





Preface

Human civilisation begins with the emergence of the human beings on the earth. Indian subcontinent boasts about human presence during Pleistocene period. The present-day Telangana lands were peopled by hunter gatherers during Holocene period. To cover such a vast canvas of such an ancient people is a daunting task. It was however simplified by the historic creation of Telangana as the twenty-ninth state of Union of India. A new state needs to orient its ranks of public servants afresh. That need for Telangana orientation has been the *raison d'être* for this volume.

Telangana - Lands & People - Volume 1

The present book covers the period from stone age to 1323 CE. It consists of sixteen chapters. Each chapter is a modular unit. It can be read independently or in a sequence, depending upon reader's choice. But once started, we are confident that other chapters, like flower in a garland shall demand their attention too. Telangana, like a freshly strung garland would leave its unique fragranced with each reader.

The first, second and third chapters focus upon the cosmic evolution including the evolution of life and *Homo erectus* (man). The Big Bang gives way to centrifugal scattering followed by gravitational coalescing. As elements come together, heavenly bodies are formed, including our solar system. As cosmic dice keeps rolling, our dear earth shows up in due course of time. By now life has evolved, first in water followed by that on land. In due course, the massive dinosaurs show up and become extinct just in one hour due to asteroidal collision with the planet earth. Extinction of dinosaurs accelerates the evolutionary process. Climate changes; new flora and fauna show up; continental drift gives rise to new continents, including our Indian subcontinent. Primates evolve into *Homo erectus*, our remote ancestors. Human beings had arrived on the planet earth.

The fourth, fifth and sixth chapters focus upon interaction between man and nature giving birth to technology, leading to Agricultural revolution. As population grows, nomadic hordes moving through stones start settling on land near water bodies. The concept of 'village' and 'country' comes into being. With the magic of irrigation, surplus produce ignites trade and commerce. Civilisations rise and fall. But, before they are lost for ever, modern day satellite-based technology has brought them to light. Discovery of iron witnesses' megalithic culture in peninsular India.

The seventh, eighth and ninth chapters focus upon evolution of law, jurisprudence and polity. Certain customs and practices become traditions which later coalesce into law. The need to control a growing population with an ever-growing economic surplus gives birth to polity. The coercive power of state subsumes republics and kingdoms. That is how Mauryans come to establish the first pan Indian imperium, covering all aspects of governance, economy and society, as we understand today.

The tenth, eleventh and twelfth chapters focus upon Satavahanas, Vakataks, Ikshvakus, Chalukyas and Rashtrakutas, sweeping the full first millennium and embracing Telangana – land and its people. Polity apart, the times had flavour of trade-based economy interacting with Roman empire. The growing prosperity leads to emergence of new urban centres. We also witness a large-scale migration of a learned class of persons from across the Vindhya to peninsular India. As local languages evolve, we witness construction of monumental temples and translation of Indian classics in several local languages. The age of regional effervescence has arrived.

The thirteenth and fourteenth chapters have a broader focus, covering other regions and such events which impacted the lot of Telangana land and people as well. Explosion of knowledge frontiers in various fields be it in astronomy, mathematics, medicine, surgery, metallurgy and agriculture and its management has been one aspect. Then, repulsion of Islamic invasions from the western and north western borders for five long centuries kept the Indian subcontinental land mass safe and secure. The consequent peace and tranquillity ensured Indian economy to grow, so as to be at the apex at global level in those days.

The fifteenth and sixteenth chapters, finally deal exclusively with the Kakatiya's times. Their political birth, rise, climax maturity, decline and collapse has been covered first. Then, their civilisational and cultural contributions in terms of governance, taxation, trading policy, tanks and temples are covered next. With this, we come to the end of Kakatiya times.

Kakatiyas collapsed in 1323CE. Thereafter, Telangana land and people came under the sway of a new set of alien rulers from Islamic lands. That narrative would be covered in subsequent volumes.

Coordinator





Acknowledgements

Just as it takes a village to bring up a child, the same is true for a book. How many people have helped in this endeavour? Let me remember their names. Innumerable Civil service trainees spread over batches in the Institute come first. Their active participation in terms of class-room learning, subsequent feedback and discussions to finalise the sections and chapters of this book is unforgettable.

Senior academics especially Prof E Revathi and Prof M Pandurang Rao provided their historic insights. Professional Photographer, Ravinder Reddy and author of Telangana Atlas, Shankar Reddy provided their unique support. The crucial input of Mr GS Reddy and his team, in the Directorate of Telangana Space Research Application Centre was timely and apt. The office team consisting of Mr Tiwari and Mr Balakishan, has taken pains to convert an assorted raw material into a finished product.

Mr Balakishan needs a special mention as he was at work on 24x7x365 basis – round the clock and round the year. Supriya's signature designing style throughout the book is etched from cover to cover. Someone has to suffer the verbal bombardment to endorse the work. That duty (rather reluctantly) fell to the share of Sushma, my wife. She had no choice but to suffer this one-sided monologue, especially during dinner times. Finally, the leadership of the Dr MCR HRD Institute, especially the Director General, who let the entire project unfold deserve our lifetime's gratitude.

AK Goel
Coordinator





Team of Authors

AK Goel is a retired IAS Officer of 1974 batch allotted to Andhra Pradesh cadre. After superannuation in the year 2010, he has been focussing upon the project relating to Telangana – Land and People from Stone Age to the present times. He has acted as coordinator for the present project covering the period from the Stone Age to 1323CE.

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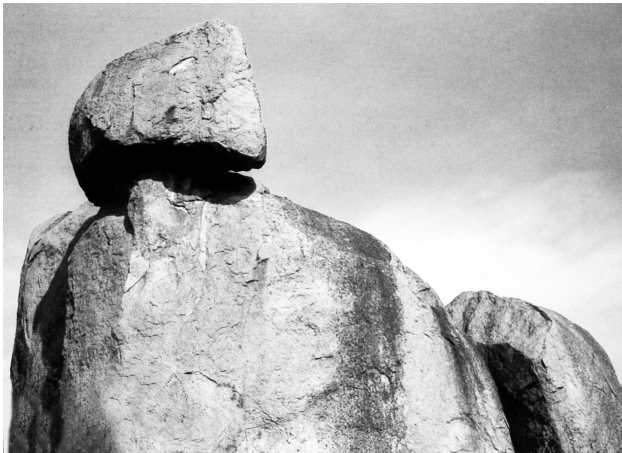
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Molten lava leading to rock formation



1. The Universe, Solar System & the Earth

This chapter, in brief, tries to narrate the Cosmic Evolution starting with the Big Bang, galaxies, stars and the solar system. It touches upon Sun, Moon and our dear planet, Earth. Evolution of seasons, earth's journey in space and role of water in shaping its surface is also covered.

1.1 THE BIG BANG

In the beginning, all matter was confined in a huge sized super massive ball composed of hydrogen. Then the ball exploded, with a big bang, some 13.7 billion years ago. This cataclysmic explosion hurled the constituent material in all directions, thereby forming different stars and galaxies. These galaxies have been receding apart from each other at the speed of thousands to hundreds of thousand miles a second.¹

Galaxies are formed of stars and nebulae made up of interstellar clouds of dust and gas. They are considered as the building blocks of the universe and are constantly moving away from each other. They appear in different sizes and can comprise between as many as one million to three billion stars. Because they rotate in space, many become spiral in form, with a dense oval centre and trailing gas clouds. They are grouped in clusters. For example, our own galaxy is called the Milky Way. It ranks amongst the larger galaxies of the universe. It appears as a band of faint light crossing the sky from horizon to horizon on a moonless clear night. It consists of around a hundred million stars, including the Sun.²

Galaxies, like our mothers are always in a state of motion, never at rest

Galaxies, like our mothers are always in a state of motion, never at rest. But unlike our mothers, they started reproducing right



from their inception. Our own galaxy - the Milky Way, like a normal mom is giving birth to one star per year. But astronomers have recently found a super mom. It gives birth to a new star, undergoes celestial pregnancy soon and is ready to deliver a new star the very next day. In all, it spawns 740 stars in a year. Simultaneously, 240 stars are pushed out. The unusual high birth rate of this super mom is causing some anxiety among the scientists. This mature galaxy is some six billion years old and has come back to life. It is nicknamed Phoenix (the bird that rises from ashes).

The overall galactic productivity however, has been declining exponentially. Half the stars were born during the boom period that lasted from eleven billion years ago to nine billion years ago. Since then, it has taken four times longer to produce the rest. Universe is dominated by old stars. Cosmic GDP output is only 3% of what it used to be at its peak. Universe is suffering from a long-term reproductive crisis; just like our global aging population.

‘Stars, populating a galactic family, are essentially high temperature balls of hydrogen and helium. They are formed when nebulae begin to condense and coalesce. When the stellar core reaches a high enough temperature, it leads to a nuclear fusion reaction wherein hydrogen is steadily converted into helium. This process produces an enormous amount of energy that also accounts for the star’s luminosity. Once the hydrogen at the core is exhausted, the stars begin to degenerate. Massive stars die in a spectacle of explosion called supernova. If the remnant of the star, after the explosion is more than three times the solar mass, the remnant undergoes further collapse and finally forms a Black Hole. If the remnant is less than three times the mass of the Sun, it will form a Neutron star. When the Sun falls short of hydrogen at its core, it will swell to become a red giant for a billion years and eventually it will eject its outer layer and finally survive as a white dwarf for billions of years.’³ The Sun, which began some 4.5 billion years ago as one of the stars, is made up of roughly 74% hydrogen and 24% helium. Other elements such as iron, nickel, oxygen, silicon, sulphur, magnesium, carbon, neon, calcium, and chromium can be found in trace amounts. The

Sun, a massive ball of hot gases, is hot enough to start a nuclear fusion reaction within its core. Every second, it fuses four million tonnes of hydrogen. Despite this, it has enough fuel to last another five billion years.⁴

In such a hugely populated universe, Sun is obviously not alone. It has its own big family of planets and other heavenly bodies. One of the planets is Earth, our own dear Earth. All these planets, including Earth revolve around Sun. This is called the Solar System, with Sun at its centre. All others including Earth, other planets, asteroids, meteoroids, comets and dust are revolving around it. The Solar System completes one revolution around the Milky Way galaxy in about 225 million years.

The Solar System

The Sun and planets were born from the Big Bang's vast cloud of dust and gas. Due to gravity, the cloud began to fall towards its center, and the separate masses began to rotate. Temperatures climbed to the point where hydrogen bonded to produce helium at the center of this spinning disc, and our Sun was born. 'Situated

at the centre of Solar System, it can be likened to an internal combustion engine generating energy with enough fuel to last for another five billion years.'⁵ There are nine planets, including our own little Earth. As these planets orbit around the Sun, they are rounded off in shape by their own gravity. Their density is not enough to cause thermonuclear fusion. After all, there can be only one boss in the Solar System and that is Sun. Everyone else, including our little Earth has to not

After all, there can be only one boss in the Solar System and that is the Sun



only revolve around it but also receive its entire power and energy from the 'big boss'. Lest we forget, the 'big boss' accounts for 99.8% of the solar mass. Dust particles were drawn together further out by electrostatic and other forces. Over time, they grew into larger rocks. The gravitational pull of tiny pebbles pushed them together, eventually forming planets. The four planets nearest to the Sun, Mercury, Venus, Earth, and Mars, were primarily made of solid

material with high melting points. They are stony planets with solid and small metal cores. Jupiter, Saturn, Uranus, and Neptune, the gas giants, are further away from the Sun.

The cosmic journey of our planet Earth began like its other cousins. However, its evolutionary trajectory was destined to be lucky and hence quite different. Early in its history, it began to sort itself into a number of different layers. The natural decay of radioactive material at its centre generated enormous quantities of heat. It melted rocks, forming a liquid 'mantle'. It was enveloped by a cooler solid crust. Relatively speaking, the crust is no thicker than the skin on a peach. Then, as still today, the molten rock regularly erupted through the thin surface layer. This volcanic activity released gases like nitrogen and carbon dioxide. That formed the basis of our planet's atmosphere. With gases came water vapours which precipitated and formed oceans. And it was in these oceans, that the first stirrings of basic life evolved, some 3.5 billion years ago.

Volcanic eruptions along with gases and water vapour were also happening on other planets. But, no life to the best of our knowledge appears to have evolved over there. They either have no atmosphere or have extreme temperatures. For example, mercury has no atmosphere; Venus is too hot with average surface temperature at 480°C. Mars is too cold with an average surface temperature of -50°C. 'Therefore, our planet Earth appears to be the only place where we have right atmosphere and tolerable temperatures. It is 'just right' for life.'⁶

The Moon

'A planet the size of Mars collided with the early Earth some 4.5 billion years ago,' according to the scientists. The massive impact ripped apart substantial Earth's crust. It started orbiting around the Earth, before gradually coalescing to form another body. We call it Moon. The hitting planet also had a liquid iron core. Due to heat of impact, this joined up Earth's existing liquid iron. Consequently, it ended up with a big iron core. It is this core which produces the Earth's magnetic field and acts as a defensive shield.'⁷

The impact was to have other profound influences. As 70% of earthen crust was removed which ultimately formed the Moon, the remaining 30% crust was too thin to hold together. Therefore, continental plates started moving around more easily. This movement eventually gave birth to continents. Without this collision that created the Moon, the plates would be locked together as they are on Venus. And, there would be far fewer habitats on Earth today. The collision had one other dramatic effect. It tilted our planet by 23.5 degree, and the tilt remains intact even today. Without the tilt, the seasons around the globe would remain rather fixated. That would have surely made life on our planet rather monotonous and boring.

Ours is the largest Moon relative to its mother planet. And, this gives it a powerful gravitational influence. Moon's gravity determines oceanic tidal cycle. It also acts as a stabilising gyro to the Earth's angle of tilt. Without this, Earth angle of tilt may vary as far as 90 degrees. In that situation, North Pole would point towards Sun directly. Ice caps would melt flooding our planet. The Moon is a vital climate regulator on Earth, providing the stability for life to evolve. Therefore, if the Sun energises, then Moon surely stabilises our planet Earth.

**Therefore,
if the Sun
energises,
then Moon
surely
stabilises
our planet
Earth**



Four seasons

‘Why the Earth has different seasons? Well, as it revolves around the Sun, its axis of rotation keeps pointing in the same direction. Therefore, the solar angle at a given point on Earth varies throughout the year. This variation in the Sun angle is the prime cause of our seasons. The orientation of Earth with respect to Sun also determines the length of the day. Together, the Sun angle and day length determine the total amount of solar radiation incident on the Earth.’⁸

The chance collision that created the Moon and left the Earth spinning on a tilted axis has shaped lives of wild life and flora more than any other factor. As the Earth orbits around the Sun, different parts are tilted towards it at different times. In the northern hemisphere, the

North Pole is tilted away from the Sun in December, producing the dark, cold winter. Precisely during this period, as South Pole is tilted towards the Sun, it experiences bright and warm summer. As the Earth continues its journey, the North Pole is gradually turning towards the Sun. It rises higher in the sky with day length stretching with every passing day. In March, the Sun is directly over the Equator. Lengths of day and night are exactly equal. It is called, Spring Equinox.

Sun's influence continues to increase in the northern hemisphere till June. Summer peaks with bright and warm days. Exactly at this juncture, southern hemisphere experiences dark and cold winter. From then on, the North Pole begins to tilt away from the Sun. The day length starts to decrease. Summer turns to autumn and by September, the Sun is directly over the Equator. Lengths of day and night are once again exactly equal. It is called Autumn Equinox. Tilting of North Pole away from the Sun continues till December. During the same period, the southern hemisphere tilts closer to the Sun. And we witness the height of northern winter and southern summer in December, yet again. This completes one full circulation of planet Earth around the Sun.

Seasonal shifts show wide variations on Earth. The transition from winter to summer at the poles is sudden and dramatic. Continental size of Antarctica simply doubles as the surrounding ocean freezes. Temperate regions witness four seasons. They lie between the polar circles and tropics. Oceans too experience four seasons, but none extreme. Tropical regions, witness only two seasons, wet and dry. When Sun is directly overhead, more water evaporates off the oceans and there is more rising hot air to carry it up in the atmosphere. This produces more clouds, storms and rains. During June, when Sun shines above northern tropics, rains pour. And during December, by the same logic, southern portion enjoy rains. In equatorial regions, where the Sun rises and sets at exactly the same time each day of the year, we have no seasonal cycles.

For billions of animals on our planet, seasonal changes imply continuous migration. Warming influence of the Sun and changing

supplies of fresh water determine their locus. Butterflies cover 3200 km from Europe to Africa to escape cold. Caribou migrate 3000 km in search of fresh pasture every summer. European swifts following the Sun and their insect prey cover 18000 km on their wings. Baleen whales, like modern day nuclear submarines travel huge distances in the oceans. In fact, all the animals and plants on Earth have lives dominated by a chance cosmic event, a collision that shifted our lucky planet by 23.5 degrees and in the process, changed the whole history of life on planet Earth.

1.2 EARTH'S JOURNEY

The apparently stationery looking earth is, in fact quite a dynamic entity. Revolving around the Sun, once a year is one kind of movement. But why does it rotate around its own axis on a daily basis? One theory suggests that Solar System, in its primordial form was a massive cloud of dust and gases like hydrogen and helium produced during the Big Bang. About 4.6 billion years ago, a nearby supernova explosion sent shock waves through solar nebula. It caused rotation. The increased angular momentum flattened dust clouds. The resultant clustering due to gravity eventually formed planets. Thus, current rotation period of the Earth, among other factors, is the result of this initial rotation. What was happening then is a matter of theories and conjectures. However, we know that without rotating once in 24 hours around its own axis, the Earth would not have known the phenomena of day and night. This rotation is as important a phenomenon as revolution of Earth around the Sun. The latter, as is well known is responsible for the phenomena of seasons.

With these initial conditions, our planet Earth commenced its evolutionary journey. A variety of forces are constantly engaged in transforming its surface, causing earthquakes and volcanic eruptions, creating oceans, mountain ranges and oceanic trenches. Two theories have been put forward to explain these phenomena. One of them is called the continental drift theory and the other is known as plate tectonics theory.

‘In 1915, the continental drift theory was propounded by the German scientist, Alfred Wegner. It says that in the beginning, there was just one super continent, pangaia. Some 200 million years ago, it broke up into two parts, the northern part called angara land and the southern part called gondwana land. The space in between was filled by the tethys sea. By the end of the cretaceous period, some 50 million years ago, the two parts were separating into land masses that looked like modern-day continents. The theory appeals to our common senses. The bulge of Africa fits the shape of coast of North America. South America’s Brazil protrusion fits along the coast of Africa beneath the bulge. The northward movement of the Indian peninsula led to the formation of Indian ocean. The Atlantic ocean was formed due to the westward movement of two Americas.’⁹

Wegner thought that continental drift is caused due to impact of centrifugal and tidal forces. Other geographers however thought that these forces are too weak to move continents. Therefore, a more sophisticated theory of plate tectonics was propounded. It states that our planet’s crust, lithosphere is made up of twenty or so separate and distinct tectonic plates. They are floating on the fluid-like – asthenosphere or the upper mantle of Earth. The major plates are the African, Antarctic, Australian, Indian, Eurasian, North American, South American and Pacific plates. There are minor plates like Arabian etc. Earth’s continents are like ships drifting at sea. As plates interact, the common boundary region undergoes earthquakes and volcanic eruptions. Consequently, mountains, mid oceanic ridges and oceanic trenches are formed. Two plates moving towards each other causes subduction of one plate beneath the other. The convergent boundary region undergoes massive convulsions. The crust is broken. Rocks get bent. Both are crumpled. And massive layers of Earth’s crust get uplifted, forming mountains. That is how, Himalayas have been formed. The process continues unabated even today. We are informed by experts that Himalayan ranges are still rising by around few centimeters per year.

This double movement of our planet Earth has been responsible for its continuous evolution ever since its birth. Thereafter, the entire

Earth's surface broadly started coalescing around three continental bodies. North Atlantic and Angara land made up the northern body. They comprised the present-day North America, Russia, Siberia and China. The large southern body was called Gondwanaland. It comprised peninsular India, Africa, South America, Australia and Antarctica. Separating and enveloping the two huge bodies was the Tethys Sea. The present-day northern India, Iran, Middle East and Northern Africa were then safely buried in the depths of Tethys. That was the scenario some 70 million years ago. It is known as Triassic period. Imagine travelling from Hyderabad to Delhi in those days needing a submarine. The eventuality never arose as neither human nor submarines were around at that distant point in time.

Forces shaping Earth's surface

We have seen those tectonic plates floating on upper mantle over geological time frame determine the shape of Earth's surface. But subterranean events remain mystery to the naked eye. However, there are other equally powerful forces, quite visible which bring about changes in Earth's surface. They are running water, winds, waves and glaciers. These forces move enormous quantities of material from one place to another, ceaselessly. Under the constant onslaught of winds, water and ice, even the hardest of rocks crumble and decay in course of time. The disintegrated materials are then carried away and deposited afar. While, the river water shapes the land on its surface, the ground water works below the surface. Winds are mostly active in deserts while ice changes the face of mountains. Waves constantly hammer the coastline and bring about changes in its features.

The river in its upper course flows with great speed, piercing deep into the land. It produces V-shaped valleys and gorges as vertical corrosion is its main function in this phase. As gradients are more abrupt and frequent, rapids, contracts and waterfalls are common features during this journey. The river Ganga emerging from its source at Gomukh till Rishikesh along several tributaries like Bhagirathi, Mandakini and Alaknanda abounds in such features. In

its middle course, the gradient softens the speed moderates and the river span increases. Now, the rivers start meandering and swings from one side to another in loops. We can witness this phenomenon in the same Ganga from Kanpur to Patna. In the lower course, the river loses its speed substantially and is forced to offload the sediments it is carrying so far. It may split into multiple courses before merging into sea. Alluvial plains and deltas are formed at this stage. Gangetic delta in Sunderbans, Mahanadi delta beyond Cuttack, Godavari delta beyond Rajahmundry, Krishna delta beyond Vijayawada and Kaveri delta beyond Thanjavur are prime examples of this phenomenon in our own country.

1.3 LIFE SOURCES, SUN AND WATER

‘All life on our planet ultimately depends upon two vital ingredients, energy from the Sun and liquid water. Amount of Sun’s energy reaching the planet is not evenly spread. Sun’s rays have to travel less through the Earth’s atmosphere to hit the bulge around the equator compared to the distant poles. Therefore, equatorial regions are sunnier. At higher latitudes, the lower angle of the Sun also means that energy is spread over a wider area than in the tropics.’¹⁰

The amount of water available to life on land is also largely influenced by the Sun. 90% of world’s fresh water is created by evaporation from oceans and most of that occurs near the Equator in warm tropical seas. The other 10% comes from the surface of lakes and rivers or is released by evapo-transpiration by plants. The water vapour is carried high into the atmosphere on rising warm air. It cools at higher altitudes, forms clouds which are blown round the world through winds. Mountains intercept them, cool them and the bulging mass precipitates as rain. Because, most of the Sun’s energy falls around the Equator, the moisture evaporates, rises, cools and produces terrestrial downpour. That multiplies forests, which act as lungs for our planet. They produce oxygen that we breathe and remove carbon dioxide from the air by locking it up in wood. They convert Sun’s energy into a form

which animals can eat. They also regulate the supply of fresh water by soaking up what falls as rain and releasing it back into the air slowly as vapour.

The journey of running water begins high up in mountains. Humble streams flow down to join and become big streams. As journey continues, the streams keep getting bigger as they climb down the mountain heights and become mighty rivers. They travel hundreds of miles to their ultimate destination, the ocean. Here the cycle begins again, as water evaporates, precipitates over the land and eventually returns to the sea through rivers. This is the global hydrological cycle. Rivers have worn down the mountains and carried parts of them to the sea. And, all along the way, their fresh water has brought life in abundance. Rivers provide drinking water, food, irrigation, transport and electricity to much of the world's population, though at a great cost to wildlife. Many voices across the globe are predicting that future world conflicts will be waged not over oil or even territory, but fresh water. It is arguably the world's most precious and finite resource.

Many voices across the globe are predicting that future world conflicts will be over fresh water



Global bands of sand

‘There is a marvellous symmetry in the distribution of world deserts. Most of them lie in two globe circling bands along the edges of the tropics. It is mainly because of the way the Earth's atmosphere circulates. The atmosphere operates as a kind of heat machine, kept in continuous motion by solar energy. At the Equator, the Sun is always vertically overhead. Therefore, the equatorial region absorbs the bulk of the solar radiation reaching the Earth. The air warms up, expands and rises, carrying with it the vast quantities of water vapours from the warm tropical oceans. As it raises, it cools, loses its buoyancy and spreads laterally north and south. Cooling reduces the air's ability to hold water. Therefore, moisture condenses to produce the enormous deluges typical of the equatorial regions.’¹¹

Now, the moisture stripped air continues to travel north and south and begins to sink. As it sinks, the continuous flow of air starts to compress and warm up again. As a result, all along the Tropic of Cancer and Capricorn, we find parched, warm and high-pressure air at the Earth's surface. This air and the wind associated with it explain distribution of world's deserts along these two symmetrical bands, north and south. Nothing transforms a desert landscape as quickly as a massive sandstorm. Seasonal winds pick up huge clouds of sand and dust, blowing them across the desert, burying villages in a row and blocking out the sky. The few animals that can cope in these conditions have special adaptations. Camels have extra long eyelashes and long hair filled nostrils which can be closed to shut out sand particles. In the Sahara, walls of moving sand can reach more than a mile high and are clearly visible from space. Each year, some 300 million tons of airborne sand is generated there. This is the largest source of dust and plays a vital role in global ecology. It creates storm in Florida, travels as far as Greenland and even fertilises the Amazon in South America.

Even in the driest deserts, tiny amounts of water are present in rock. Wildly fluctuating desert temperatures continually freeze and thaw this water. After being baked and frozen like this for thousands of years, even huge rocks break down into smaller and smaller fragments until they eventually blow across the desert as grains of sand. Blasted by the power of winds, thrown against cliffs and rubbed against each other, grains become rounded and coated with a red polish of iron oxide. As the sand particles continue to hurl across the landscape, they gather in piles. That is how sand dunes are formed. Astronauts were deeply impressed and described them as the most beautiful sight visible from the space while returning to Earth after moon landing in 1969 CE.

The long story of the cosmic evolution has been narrated at a galactic speed. However, the short story of our planet Earth is the Big Bang, cosmic dust, gravity, nuclear fusion, electrostatic forces,

liquid water, a collision in space, a moon, a tilted axis, and in the end, a world that is uniquely fit for life. It is due to series of events and consequences of plain good luck. Since its birth, as our dear Earth continues to hurl towards eternal journey, its surface is being shaped by various forces like wind, waves, water, volcanoes and earthquakes. It appears that when the cosmic dice was thrown by God, our planet Earth came out with a double six.



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- 6) *Alaslair Fothergill - Planet Earth, p 15*
- 7) *Ibid, p 15-16*
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2. The origin of Life & its Evolution

This chapter, in brief, narrates the story of 'Evolution of life' starting with a mere 'Cell'. Thereafter, it witnesses marine life, amphibians and reptiles followed by dinosaurs. An asteroidal collision with the planet Earth brings almost the entire life of flora and fauna to extinction. The massive dinosaurs too become extinct just in one hour. The phenomenon is known as Cretaceous Tertiary (KT Event). It is followed by climate changes, coupled with movements of continents which witnesses evolution of primates. Some of them with four legs (quadrupeds) dare to stand up and become bipedal. That is how our ancestors evolved and since then, they have been moving around and also procreating at a furious pace while discovering new secrets of nature. Shaping of tools and domesticating fire are their earliest discoveries.

2.1 FORMATION OF 'CELL'

History of cosmic evolution is awesome. History of evolution of life is awesome too. Some 4.5 billion years ago, since its inception, the planet Earth started revolving around the Sun as well as commenced rotating about its axis. The material conditions on its surface as well as underneath were undergoing slow yet sure geological changes. Alongside, a totally new phenomenon unknown till now in cosmic history was to take shape. This is known as 'The Origin of Life'. Hitherto, everything was material based, be it gases, vapours, cosmic dust or whatever. But down the line, something totally new was to sprout on Earth. This is called 'cell', the basic unit of life on Earth. It happened some 3.5 billion years ago. It is also called 'Archean Era'. This cell had an inherent quality. It split into two, with each part retaining the original characteristics. That is what may be called the fundamental basis for life on Earth. Once a cell was formed, it split into two. Then, two

become four and four become eight, then sixteen, then thirty-two and so on and the process continued unabated. As cell split and multiplied, new forms of life appeared. This ever-changing web of life is known as 'Evolution.' Thus, journey of life commenced some 3.5 billion years ago with the first formation of cell.

Since then till 1.5 billion years ago, as the planet Earth cooled, its crust and mountains were formed. Marine life also developed. This is called Precambrian Era. Thereafter, the period between 1500 million years and 286 million years ago is called 'Age of Ancient Life'. Sea covered continents. Continents were flat and merged as Pangaea. The climate oscillated between mild, warm, humid and then cooler. Coral swamps were formed, and then fish appeared followed by insects. Sharks were abundant. Thereafter, terrestrial plants appeared followed by forests. Amphibians appeared too. This is also known as Palaeozoic Era. It was followed by the 'Age of Reptiles', the period between 286 million years and 144 million years ago. Life continued to evolve on land and water and in between as well. Continental drift began and as they got separated, mountains and deserts were formed. This was followed by the Cretaceous period that lasted from about 144 million years ago (MYA) to 66 MYA. Dinosaurs appeared, peaked and became extinct. Their skeletal remains have been discovered along the Godavari Pranahita Valley within the present-day Telangana districts of Adilabad, Karimnagar and Warangal.

And lastly, we move on to the most important phase of evolution, the 'Age of Mammals'. It spanned from, 66 million years up till 5 million years ago. Firstly, continental seas disappeared. Then, warmer climate, flowering plants and birds appeared. This was followed by rise of Alps, Himalayas and forests. As climate became drier and cooler, plants continued to multiply. So did mammals. Then, forests declined and grasslands developed. That is when many grazing mammals and first human like primates showed up. This important period of evolution is also known as Tertiary. Strategic importance of this period is due to discovery of hydrocarbons. More than 50% of Earth's hydrocarbons come from the tertiary rocks. It

includes a good spread of coal mines in Telangana, along with gas reserves in Krishna-Godavari basin.

After monkeys arose 60 million years ago, the evolutionary clock truly started ticking. Monkeys, apes, and humans all descended from them. Monkeys and apes first appeared 35 million years ago. Human predecessors who looked like apes first arose 15 million years ago. The earliest human like beings appeared about 5 million years ago. Now, with Himalayas, forests, grasslands, flowering plants and human like primates in place, we move onto the ultimate phase of evolution. Four Ice Ages cover northern hemisphere with glaciers. Many species including large mammals become extinct. And as Ice Age ends and warmer climate ensue, our ancestors known as 'homo sapiens' appeared on the planet Earth some one lakh years ago. It took some 3.5 billion years for a single 'cell' to evolve through fish, amphibian, terrestrial animal, dinosaur and primate to Homo sapiens. Evolution of life on the planet Earth had taken a long, long time indeed. To simplify the cosmic dimension, Carl Sagan has devised a calendar. It condenses the cosmic span into a single year. This special one-year period would translate 24 days into one billion years and one second for every 475 years. Let us calibrate on this simplified scale of 'one year' right from 'Big Bang'.

On January 1, the universe comes into being with a 'Big Bang'. On May 1, Milky Way originates. September 11(9/11) marks the beginning of our Solar System and September 25, the origin of life on Earth. On November 24, Earth's crust forms and fish appear on December 18. Amphibian, insects, coral swamps appear thereafter. On December 25, Continental Drift begins and in due course of time, continents are separated by December 27. By now, the mighty dinosaurs have risen, peaked and have become extinct. By noon of December 30, Himalayas appear. Our ancestors, the primates show up only at 10:30 in the evening of December 31. What a short span of just one and a half hour for human existence compared to the total time span of one full year of the universe? We can now summarize the evolution story. Solar System forms, life originates in a cell. It splits and multiplies ever since. Then Earth's crust, fish,

amphibians, insects, and coral swamps are followed by dinosaurs and primates. Monkeys and apes follow them. Eventually, the modern looking humans appear on Earth. When the evolutionary dice was thrown, only our human species came out with a double six. Our planet Earth had come into being due to series of events and consequences of plain good luck. It appears that we, the people on this planet, have been lucky to survive and witness the story of evolution. We are lucky people - on the lucky planet, indeed.

2.2 THE DAY THE DINOSAURS DIED

The Cretaceous period spanned around 144 million years ago (MYA) to 66 million years ago (MYA). An asteroid was heading towards the planet Earth at a speed of roughly 45,000 miles per hour about 66 million years ago. The air in front of the asteroid was compressed and intensely heated as it collided, blasting a hole through the atmosphere and causing a supersonic heat wave. The asteroid collided with a shallow sea near the Yukatan peninsula, which is now part of the Gulf of Mexico. The Cretaceous epoch came to an end at that point, and the Palaeogene period began. The extinction event known as the Cretaceous Palaeogene (K-Pg) extinction is also known as the Cretaceous Tertiary (K.T.) extinction.

A terrifying possibility has emerged as a result of scientists' computer modelling. The asteroid, which was at least six to nine miles wide when it collided with Earth, carved an eighteen-mile-deep crater and hurled nearly twenty-five trillion metric tonnes of debris into the sky in less than two minutes. The impact with the planet released the energy equivalent to several million Hiroshima-style nuclear weapons detonating at the same time. A mountain higher than Mount Everest temporarily came up when the earth's crust rebounded. The finding of the 160 km (112 mile) crater in the Gulf of Mexico's Yukatan Peninsula has clearly proven this line of thought. The original explosion resulted in the formation of a "rooster tail," a massive jet of molten material that departed the atmosphere. Much of the debris was hundreds of times hotter than the sun's surface, igniting everything within a thousand km.

In addition, an inverted cone of liquid, superheated rock rose and coated the Western Hemisphere with numerous red-hot blobs of glass known as tektites.

Some of the ejecta escaped Earth's gravitational pull and drifted around the sun in erratic orbits. Bits of this made their way to other planets like Mars and moons in the solar system over millions of years. According to mathematical models, at least part of the stray debris still contained living bacteria. If this is the case, the asteroid may have seeded life throughout the solar system while destroying life on Earth.



Skeleton of Dinosaur collected by GSI, at Yamanpalli village in Adilabad District of Telangana state and mounted at the Natural History Gallery, Dinosaurium, in BM Birla Science Centre, Hyderabad, is one of the finest specimens of the world.

On impact, the asteroid evaporated. Its material mixed with evaporated earth rock to generate a blazing plume that reached halfway to the moon before collapsing into a pillar of incandescent dust. According to computer models, the debris storm heated the atmosphere within fifteen hundred miles of ground zero, causing massive forest fires. The flying material converged on the opposite side of the world as the earth turned, falling and setting fire to the whole Indian subcontinent. Seventy percent of the world's forest was destroyed by fires. Meanwhile, massive tsunamis raged throughout the Gulf of Mexico, ripping up coasts and peeling off

hundreds of feet of rock, carrying debris inland and then sucking it back into deep water, creating jumbled deposits that oilmen occasionally uncover during deep-sea drilling.

This was just the start of the destruction. For months, the impact's dust and soot, as well as the conflagrations, prevented all sunlight from reaching the planet's surface. Photosynthesis virtually ceased, eliminating the majority of plant life, extinguishing phytoplankton in the oceans, and creating a drop in atmospheric oxygen levels. Following the fires, Earth experienced a period of extreme cold, possibly even a deep freeze. The two most important food chains on the planet, in the water and on land, both collapsed. Seventy-five percent of all species have become extinct. The carbon cycle came to a halt when more than 99.9999 percent of all living species on the planet died. Except for a few species like sea turtles and crocodiles, no tetrapods weighing more than 25kg (55 lb) survived. The planet itself became noxious. When the asteroid hit, it evaporated layers of limestone, releasing a trillion tonnes of carbon dioxide, ten billion tonnes of methane, and a billion tonnes of carbon monoxide into the atmosphere, all of which are potent greenhouse gases. The impact also evaporated anhydrite rock, causing ten trillion tonnes of sulphur compounds to be ejected into the atmosphere. Sulphur reacted with water to make sulphuric acid, which then dropped as acid rain, possibly stripping the leaves from any remaining plants and leaching the nutrients from the soil.

Today, the layer of debris, ash, and soot deposited by the asteroid strike is preserved in the earth's sediment as a stripe of black about the thickness of a notebook. This is called the KT boundary. That is the dividing line between the Cretaceous period and the Tertiary period. Till date, no dinosaurs' remains have been found in the layers three meters, or about nine feet, below the KT boundary. This depth represents many thousands of years. Some Palaeontologists have argued that the dinosaurs were on their way to extinction long before the asteroid struck. The other causal or contributory factors to the extinction were the Deccan traps, other volcanic eruptions, climate change and sea level change. Others counter

that the three-metre problem merely reflects how hard it is to find fossils. Sooner than later, they hope that scientists will discover dinosaurs much closer to the moment of destruction.

The K.Pg extinction event was severe, rapid and global. The event impacted all the continents at the same time. It is estimated that the

**...entire
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entire dinosaurian population on the planet earth was eliminated in just one hour. In the geological records, K.Pg event is marked by a thin layer of sediment called the K.Pg boundary, which can be found throughout the world in marine and terrestrial rocks. The boundary clay shows unusually high levels of the metal iridium, which is more common in asteroids than in the earth crust.



The extinction of dinosaurs, of course was not the end of the planet, earth. The event provided evolutionary opportunities in its wake. Many groups underwent remarkable adaptive radiation. Life diverged into new forms and species within the disrupted and emptied ecological niches. Mammals diversified in the Palaeogene, thereby evolving into new forms such as horses, whales and primates. The surviving group of dinosaurs were avians, ground and water fowl, who radiated into modern species of birds, fish and perhaps lizards.

2.3 EVOLUTION OF PRIMATES, OUR ANCESTORS

If we think of cosmic history in terms of 12 months, the history of human like primates would occupy just about one and a half hours. But in terms of terrestrial history, the evolution of primates was epochal and decisive in shaping its future. But, when and where did the primates first emerge? To understand their evolutionary history, let us go back to the end of Cretaceous and beginning of Tertiary period, some 66 MYA (million years ago). It was the beginning of a major geological transition. About 75 percent of all animal and plant life that lived in the past had vanished. The extinction of dinosaurs, as already explained is the most famous of these disappearances. By then, Continental Drift had also commenced. That affected the

climate on a global scale. With climate change, came the changes in vegetation. New plant life provided new animal forms with food and safety. Insects flourished. As a result, the number of insectivores, or mammals that eat insects, rose. Some of these mammals lived in the woody habitat of bushes, shrubs, vines, and trees, which was above ground. Trees with enormous flowers and fruits eventually emerged. Tree-dwelling mammals, often known as primates, emerged 60 million years.

A type of amphibious four-legged whale colonised the Fayum region about 43 MYA, presently situated in South west area of Egypt. The creature measured over three metres (10 feet) in length and weighed around 600 kg (about 1320 pounds). 'Phiomictus Anubis'¹ is the name given to it. It was Africa's most ferocious and old beast. The whale was able to walk on land as well as swim in the sea. The evidence suggests that whales evolved from land mammals to marine mammals. Anatomical analysis of the specimen reveals that the new whale species is unlike any other previously recognised species. It was a huge predator with large, powerful jaws that allowed it to dominate its surroundings.

Some 35 MYA, the same Fayum region was a tropical rain forest area. It had many rivers and lakes. The climate was warm. Evidence of successful living primates, resembling monkey and apes has been unearthed. Over time, it turned into a complete desert. Thereafter, monkeys and apes started evolving on divergent lines. Some 24 MYA, the apes diversified and spread geographically. It went on till 6 MYA. Some 10 to 5 MYA, the area around Bilaspur district in Himachal Pradesh was a lake. The evidence suggests towards gorilla sized species which was well on its way towards further evolution. Hari ka Tibba, about 30 km from present day Bilaspur is a veritable treasure house of primates. Today, the area is surrounded by Shivalik ranges in lower Himalayas. At this juncture, hominid-ape split occurred. This hominid, our closest looking ancestor till then, emerged in Africa some 4 MYA. The climate change during the period also played an important role in evolutionary line leading to humans. The drying climate diminished

forests giving rise to grasslands. The relatively more open country favoured ground living. Under these circumstances, emerged the most crucial development during evolution, Bipedalism.



Around 4.4 MYA, bipedal locomotion or walking on two legs evolved. A brief background of this crucial development would be in order. Some 24 MYA, forests were aplenty. Monkeys and apes were living on tree branches. While swinging by the arms through these branches, they assumed upright position. So, they did while climbing up and down the trees with use of grasping hand and feet. Around 16 million years ago, the climate started drying. Forests dwindled and country opened up with grasslands. More open country too favoured bipedalism. As hands were freed from locomotion, several other activities were taken up. Food could be carried from one location to another. Small seeds and nuts could be harvested by both hands and directly fed to mouth. Over time, tools were made and used. It enhanced the food supply as well as security. Long distance travel became possible because bipedal posture limits the area directly exposed to the Sun, thereby reducing heat stress.

The new way of life with erect posture called for shifts in both body and mind. The flat foot got rearranged and gave way to an elegant arc. The pelvis, spine, arms, chest and neck were accordingly modified. As skull, perched high reached for the sky, the eyes looked straight to search the horizon for food, sex or enemies. Standing erect, their world view underwent a complete transformation. Hitherto, while moving around on all the four, they could not look beyond

10 to 20 meters. But, as they stood tall on their two legs, overall vision suddenly reached beyond 100 to 200 m. These distances have enormous security implications. Predators approaching our ancestors could be seen quite early before their charge. It would anyway take 5 to 10 seconds to close the gap. This crucial element provided enough lead time for our ancestors to protect and safeguard themselves. Security against predators was responsible not only for their survival but increasing population over time.

Our ancestors who stood up erect had to pay a price. Body balance and stability while walking became the first victim. Hitherto, like a log on a four-wheeler, the body was carried on all the four. But now, it was carried on just two legs. The oblong straight spine had to bend backwards, therefore suffering more wear and tear, causing arthritis and slip disks. It made harder to overcome gravity to supply brain with sufficient blood. Body weight above the pelvis and lower limbs put greater stress on hips, knee and feet. Stress on the lower body of females, especially during pregnancy was even greater. Due to the fact that women were walking on the two legs in an erect position, the birth canal of the woman became very narrow. Hence, the women gave birth to a child that was much more immature than the child of the animal kingdom that walked on four legs. The child delivery became more laboured. But, advantage of bipedalism was the flexible thumb of the human beings that made them use their hands to develop arts and crafts and the creation of big containers for the storage of grains. The overall advantages of bipedalism must have been greater than a few disadvantages. Otherwise, our ancestors would never have become bipedal.

Because plants had become scarce, they had to adapt their dietary habits to include meat. Furthermore, meat delivers a higher concentration of protein in the diet. Hunting accelerated the development of the body's upright posture, increased brain growth, and so coordinated and reinforced all other activities. They evolved into an all-consuming beast. Our forefathers were neither swift nor powerful enough to readily overpower or catch up with hunting animals. They got cunning, killing animals with stones and clubs.

Both hands became strong instruments, moving in tandem with the brain to activate the entire anatomy. They invented tools to assist them control their surroundings, and they were known as Hominids. With the advancement of tools, this bipedal hominid was well on his way to becoming the master of the world.

Peake and Fleure summarise the changes in body activity that occurred during the evolution of humans as a species as follows: an increase in gestational period; an increase in brain-growth; a reduction in jaw-growth and jaw muscle, following elaboration of the hands and perfecting of the thumbs; development of stereoscopic vision and refinement of the ear, and of them memorization of sights and sounds; all accompanied by marked alterations towards a more erect posture, to stand verticle. The evolution of hands and instruments to share work led in the decrease of jaws, which included the removal of previously massive and interlocking canine teeth, allowing the lower jaw to move considerably more freely than it appears to have done among apes. The intricacy of speech appears to be influenced by the increased flexibility of the jaws. The common stock from which man and these apes came may have grown in size,

Loss of Oestrus led to menstruation in females which resulted into frequent sexual activity leading to a high rate of reproduction



and likely in the length of life both before and after birth, and the trend appears to have continued in man, as the gestation time in the latter is 280 days, compared to 220 or fewer in ancient primates. Increased brain growth has occurred from the delay in the hardening of the skull, allowing it to register more and more delicate facts of vision and hearing. The prenatal period has been stretched, and the human body has become increasingly reliant for longer periods of time; as a result, the scope of maternal devotion has grown.

Oestrus was lost in females, and they developed menstruation in its place. This resulted in frequent sexual activity and a high rate of reproduction. From an ancient lemur to a modern man, there has been a noticeable increase in the size of the skull and the size of the brain, as well as its complexity.

2.4 HUMAN ORIGINS AND THEIR SPREAD

Where exactly did the modern humans originate? What is the location of their anthropological sprout? There is no consensus on this issue. Single origin theory suggests that modern humans emerged in just one part namely Africa and then spread to other parts of the old world. The second theory, the multiregional theory suggests that modern humans emerged in various parts of the world, and eventually became the varieties of humans we see today.

Global cooling between 6 MYA and 5 MYA saw Savannahs replace the tropical forests. The appearance of this new environment was in turn matched by an evolutionary pulse that gave rise to new carnivores and omnivores. Among them were the hominines, the ancestors of modern man. From 3 MYA to about 2 MYA, there is evidence of important evolutionary changes, so much so that by around 1.8 MYA, these hominids came closer to our genus, *Homo*. Brain expanded and to allow bigger brained babies to be born, the female pelvis modified accordingly. The species is called *Homo erectus*. Brains became much bigger and full bipedalism was attained. The problem was compounded because hominines stayed the same size. Bigger brains could be achieved only by reducing the size of another organ, the stomach. The trade-off reduced the efficiency of the digestive tract, which in turn demanded a still better diet. Discovery of fire solved this problem to a certain extent because the cooked food was soft on digestive tract. The process of cooking could break down animal proteins before digestion takes place.

Between 1.5 MYA and 0.5 MYA, the humans had not only evolved but grew into a reasonable population, of say not less than 50,000 Nos. They were in Asia, including India (*Asian Homo erectus*), Africa (early *Homo ergaster/rudolfensis*) and Europe (*Neanderthals*). Some of them must have been occupying the Australian and the south Asian land masses (*Australopithecines*). By around 1,00,000 years ago, the human population of all species had grown into a substantial size, say not less than 5,00,000 Nos.

The growing brain of Hominines, in the midst of growing population developed that crucial mental faculty which we call 'memory'. Our

ancestors could remember and thereby manipulate so as to support and to organize others in more complex ways. These 'groups' in due course of time evolved into more sophisticated social structures. Empowered technologically due to an ever growing 'tool kit', they were further reinforced by these evolving social structures due to the development of 'memory'.

The first anatomically modern humans – *Homo sapiens* – evolved in Africa between 2 lakh and 1.4 lakh years ago, according to DNA research. The earliest modern-looking human skulls have been discovered in the Orno basin in Ethiopia and the Klasies river mouth in Southern Africa, and they are about 1.3 lakh years old. Some of these early humans may have begun migrating northwards out of Africa as early as 1 lakh years ago. Majority, of course stayed back. Population of these migratory lot remained small for millennia. Then, some 71,000 years ago, the eruption of Toba in northwest Sumatra caused an environmental catastrophe on an extraordinary scale; parts in India were covered with an ash up to 3 m (10 feet) deep. Global temperatures were lowered for a millennium. These ecological disruptions, however, increased the pace of evolutionary change by developing new genetic structures.

By around 50,000 years ago, archaeological and genetic data points to a further fast expansion of the human population of at least a million people. New weapons appeared, as did mastery of an ever-expanding set of talents. Spears were built from expertly crafted stone blades attached to hardwood shafts and handles, making them lighter and multi-component weapons. Textiles and baskets have been discovered, as well as more ordered camp site layouts with homes and underground food stores. The number of trading networks has likewise exploded. Raw resources, notably stone, were once transported over a distance of 80 km (50 miles), but were now traded over hundreds of km.

2.5 DOMESTICATION OF FIRE

Around one million years ago, discovery of fire was a major milestone during our evolutionary journey. By then, bipedalism was already

in vogue. Free hands were shaping stone tools, which have been discovered dating from about 2.5 MYA. The growing stone tool kit included hand axe, scrapper and spear head. Skeletal remains of varied shapes enriched it further. Tools shaped wooden logs and branches. A simple wooden stick drilled quickly in a churning mode over a piece of dry wood produced enough heat to start fire. It could have been made by striking flints. Once ignited, the dried up biomass lying around kept it going.

By about 8 lakh years ago, some human species were making occasional use of fire. By about 3 lakh years ago, *Homo erectus*, Neanderthals and the forefathers of *Homo sapiens* were using fire on a regular basis. Humans had a dependable source of light, warmth and a deadly weapon against prowling predators. This security shield created by this new weapon made humans more secure than their surrounding flora and fauna. This was the breakpoint for the growing population of humans in whichever habitat they had evolved till then.

Now, the control and use of fire put enormous energy under human control. Fire was used for hunting and gathering people. It was lit to drive out animals from their hiding places. Confused animals running hither and thither were despatched by hunters positioned strategically at safe distance. Fire flares also kept predators away, a not inconsiderable advantage given that there were so many all around. Fire also provided warmth. It facilitated movement of population in cold climes of the world.

But the best thing fire did was to soften any edible item which humans consumed, be it flesh, roots or fruits. Fire changed not only food chemistry; it changed its biology as well. Cooking killed germs and parasites that infected food. Humans could now chew comfortably and digest the soft food easily. In contrast to this, the chimpanzees had to spend five hours a day chewing raw food. A single hour was sufficient for humans to eat cooked food. This weaning away from chewing did not require long and sharp teeth. Teeth became smaller; intestines became shorter. By shortening the intestines and decreasing their energy consumption, cooking inadvertently opened the way to the bigger brains of Neanderthals and sapiens.

The domestication of fire was a major watershed unlocking several possibilities in future.

About 1 lakh years ago, counting all its species together, the human population was not less than half a million. It consisted of Erectus, mostly in Asia; Sapiens, mostly in Africa; Neanderthals, mostly in southern Europe and Denisovan in Australia. A certain share in population must have been contributed by other species in Americas as well. However, we don't know their genetic makeup, yet.

About a lakh of years ago, all species of human population put together was not less than half a million



Homo sapiens was by no means the only human species in the world some 50,000 years ago; there were Neanderthals, too. They adapted well to habitats and climates from arid Middle East to cold central Europe. They were effective hunters; their use of tools was sophisticated; their dead were buried with some elaboration; they probably had a language too. But, in the evolutionary race, they could not match their contemporary Homo sapiens. This could be due to lack of social flexibility and cultural traditions. Homo sapiens were able to overcome its environmental challenge to

an unprecedented degree. The most striking evidence is provided by a wide variety of artefacts, engraved stones, ornaments, figurines, exotic shells, amber and ivory, and most famously, cave paintings. The Neanderthals had almost no cultural tradition of this kind. By around 30,000 years ago, both Neanderthals and Homo erectus were extinct.

About 70,000 years ago, sapiens from East Africa spread into the Arabian Peninsula and from there, they quickly spread onto the entire Eurasian land mass. When Homo sapiens landed in other geographies, they found them already populated by other human species. Then what happened? There are two conflicting theories. The storey of attraction, sex, and intermingling is told in the Inbreeding theory. As African immigrants moved across the globe, they interbred with different human populations, resulting in the individuals we know today. The Replacement theory, on the other hand, paints a completely different picture, one of incompatibility, repulsion, and possibly extermination. According to this theory, sapiens and other humans had diverse anatomies, mating patterns,

and even body odours. They had no sexual attraction to one another. The two populations remained fully different, and sapiens displaced all preceding populations without combining with them, according to this theory. If this is correct, the entire modern human population can be traced back to East Africa, some 70,000 years ago. As a result, we are all referred to as “pure sapiens.”

Till the end of twentieth century, the Replacement theory had been the common wisdom as it had firmer archaeological backing. But that ended in the year 2010 when genetists jumped into the arena with their fresh insights. It turned out that 1-4 per cent of the unique human DNA of modern populations in the Middle East and Europe is Neanderthal DNA. That is not a huge percentage; yet in terms of absolute population, it is significant. Yet another finding was that upto 6 percent of the unique human DNA of modern Melanesians and aboriginal Australian is Denisovan DNA. Similarly, in our own Indian subcontinent, 92.7% human DNA belongs to south Asian erectus, 6.5% human DNA belongs to African sapiens and the rest to even middle east Neanderthals. It simply implies that a huge majority of human beings populating Indian sub-continent today have almost the same DNA. The contribution of immigrated ‘DNA’ either from Africa or Middle East is just marginal. More than a billion Indians today should draw comfort from the ‘Genome’ study that their ancestors, some 4.3 million years ago became bipedal; some 1 million years ago discovered fire and since then have been multiplying furiously, yet hanging together, by and large within the same ecological and familial ambience. Immigration of populations from other lands had been as common as the emigration of local populations to other lands. People of this land, by and large are essentially rooted in this soil. A great majority of Indians are basically, Mattibiddalu (sons of the soil).

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3. The Indian Sub-continental Land Mass

This chapter narrates the geological history of the Indian sub continental land mass. The split of ancient Gondwana plate, its collision with Eurasian plate which resulted in rising of Himalayan ranges from the depths of the Tethys Sea, followed by glacial melt, causing formation of Indo-Gangetic. Brahmaputra river systems, giving birth to the vast alluvial plains is one part of the story. Volcanic eruptions alternating with moisture precipitation causing formation of intertrappeans in peninsular India along with non-glacial river system like Godavari and Krishna forms the other part of the story. Simultaneously, due to tectonic compression, tertiary rocks rich in hydrocarbons like coal and gas were taking shape beneath the earthen crust. The story of Cognitive revolution, followed by large scale movement of our intelligent (sapiens) ancestors across the planet with ever increasing size of their brain (cranial capacity) is also narrated. Those Homo sapiens were destined to rule the planet earth in the millennia to come.

3.1 THE GRAND FUSION

How old is the Indian landmass? Well, it is as old as the entire geological history. No wonder, the Indian landmass spans the entire spectrum spread over various geological periods. Some 65 million years ago, the Gondwanaland split into two land masses. The eastern one comprised peninsular India, Madagascar and Australia and the western one comprised Africa and South America. This period is called Jurassic period. ‘Tethys Sea extended over wide areas covering Europe in the north and northern Africa in the south. Its eastern arm submerged Iran, Pakistan and northern India extending up to Assam.’¹

Around these times, something unique happened. Stupendous volcanic outbursts overwhelmed a vast area in Gondwanaland. A

huge geography was flooded by the outpourings of this extremely mobile lava from fissures. Hill ranges, as high as 1200 meters were formed. They are called Deccan traps. As river streams were blocked due to solidifying lava flow, lakes were formed. Fish and frogs flourished in these lakes. Plants grew and flowered in adjoining lands. Dinosaurs thrived in marshy lands and tortoises crawled on beaches. With the passage of time, these lakes were filled up with sediments washed down from the land. Then came another volcanic outburst with lava flowing solidifying and lakes forming, yet again. Old formations including plant and animals like tortoises, frogs and dinosaurs were submerged beneath this. And over time, fresh lakes were formed, new plants and animals reappeared and sediments filled up streams. It was the same cycle of events repeating all over again, like a cosmic clock. Thus, volcanism and sedimentation were repeated many times. This accumulated mass is called Inter trappeans. It embraces signatures of the flora and fauna existing then.

The huge outpouring of lava from the bowels of Gondwanaland did something more than creating Deccan trap. The centre of gravity of rotating Earth was slowly changing due to this massive lava flow. Gondwanaland's fringes broke off and plunged into Tethys. The vast ocean began to become shallow. A massive pile of sediments continued to build up on Tethys' sinking floor. It threw the planet Earth's internal balance off. The balance was re-established as a result of the most extreme changes. Volcanism erupted at a number of locations, resulting in massive convulsions that upheaved the Tethys deposits into a massive mountain range. The Great Himalayas are the name given to them by humans today. According to geologists, 16.66 million cubic kilometres of lava spilled out of the bowels of Gondwanaland to form these mountains. The lowest layers of sediments were fused into magma as the sinking sea floor reached deeper into the zone of increased temperature and pressure.

With this uplift, all traces of Tethys in the mountainous region vanished. The Himalayan chain occurs as a huge arc from west to east with its convexity pointing towards Indian landmass. Below them are Shivalik hills, extending from Jammu in the west to Assam

in the east. The Indo Gangetic plains, lying along its foothills from Hazara to Assam are a continuous deep basin with an estimated depth of 1050 to 6000 meters. It has been filled up with the alluvium of multiple river systems, mainly Indus, Ganga and Brahmaputra. This alluvium is derived from the rising mountains as well as from the plateau on the south.

Central Asian scholar Alberuni wrote in the 11th century that if you've seen the soil of India with your own eyes and meditated on its nature, if you consider the round stones that are found in the Earth no matter how deep you dig, stones that are smaller at greater distances from the mountains, and where streams flow more slowly, and stones that appear pulverised in the shape of sand where the streams begin to stagnate near their mouths and close to the sea, if you consider all this, you could scarcely help thinking that India has once been a sea which by degrees has been filled up by the alluvium of the streams.²

Just imagine that Himalayan Mountain system, the biggest and the most formidable today were once lying under the Tethys Sea. Indo Gangetic plains have been formed by the transportation of alluvium of streams through river. Peninsular India, of course is composed of the most ancient rocks which had never been submerged under the sea. These three segments namely Himalayas, Indo Gangetic plains and Peninsula put together constitute the physical geography of our country. Peninsular India which envelopes Deccan plateau, needless to say is the oldest amongst the lot.

Indian Geology

Broadly, Indian geology consists of three distinct physiographic units, namely Peninsula, the Himalayan regions and the Indo Gangetic alluvial plains. They radically differ from each other due to their origin during different era along geological history. Each one of them is as different as chalk from the cheese, literally.

First came the Peninsula, the oldest entity. It stands on the most ancient rocks of Archean and Pre Cambrian age ie., right from Earth's formation, some 4.6 billion years till 600 million years ago. It has not been impacted by the tectonic revolution. It protrudes

south into the Indian Ocean and has undergone some erosion, due to occasional advancement or retreat of the sea along the coasts. Various forces such as water, atmosphere, plants and animals have been acting upon these rocks all along the evolutionary process. These forces have metamorphosed these ancient rocks to varying degrees. The Peninsula also has the Deccan traps and the Rajmahal lava flows of Jurassic to Eocene age i.e., from some 200 million years till 40 million years. The Post Cambrian sedimentary rocks occur in Gondwana basin as well as parts of coastal tracks.

After Peninsula, came the ever-rising Himalayan ranges. As they rose, the monsoon winds from south oceanic spread found the barrier ever more formidable. Overtime, it could not cross them. Consequently, the moisture precipitated and gurgled down the mountainous slopes through innumerable streams. They, sprouted in higher altitudes, carried sediments along with them and deposited the same during their course downstream. Overtime, this took the shape of Indo-Gangetic-Brahmaputra alluvial plains. They have come into being only since last one million years or so. Therefore, Indian land mass consists of the peninsula aged more than 600 million years, the Himalayas, aged some 50 million years, and the Indo-Gangetic-Brahmaputra plains, just as young as one million years only. To put it even more simply, peninsular rock, Himalaya chalk (both are calcium carbonate, CaCO_3) and the Indo-Gangetic-Brahmaputra cheese (the soft alluvium) constitute our landmass. In other words, Indian geology is nothing but rock, chalk and cheese. So simple indeed.

3.2 FORMATION OF THE HIMALAYAS

‘The Himalayas demand superlatives: the highest mountain, the highest pass, the deepest gorge, the highest living plants and animals. Other mountain ranges in the world are penetrated by roads and railways. But no railways and few roads cross the Himalaya. These mountains are so large that they can be flown over but never tunnelled into, climbed but never conquered, mapped but seldom inhabited. Kenneth Bason, formerly a Superintendent of the Survey

of India, called them 'The greatest physical feature on Earth'. History of such mighty mountains would be in order.

When dinosaurs still dominated the planet, Gondwana plate had broken and its Indian component floated freely as a continent in the southern hemisphere. Around 70 MYA, it crossed the Equator and eventually collided with the continental plate of Eurasia. As the Gondwana plate continued to push northwards, the edges of the two continents squashed and thickened. A buckled and jumbled mixture of ancient rocks from the two plates upheaved the sedimentary rocks from the floor of the ancient Tethys Sea that once separated India and Asia. The result was the Himalayas. The relentless push of the plate continues even today, which is why they are still growing and there are so many earthquakes in the adjoining region. In 1841, an earthquake triggered a huge landslide north of Nanga Parbat in Karakoram ranges. The entire side of the valley fell into the Indus, blocking its flow completely. A massive lake started building up and stretched 32 km (20 miles) long behind the obstruction. Eventually, the dam burst, drowning an entire Sikh army camped 480 km (300 miles) downstream.

According to geologists, the mountains are continuing to rise. It used to be easy to traverse the mountains because the passes were at a lower elevation. It's true that they're based on the earliest routes taken by humans and animals. However, in northern India, they have already grown significantly, posing a formidable barrier between China, Central Asia, and India. They will continue to grow. The Himalayas are said to have risen by 2440 to 3050 m since the arrival of humans. In the northwest, the Hindu Kush and Karakoram ranges are included. In northern Pakistan, the Karakoram range forms an arc that separates it from China. These mountains are referred to as the Karakoram. As the Himalayas fill us with awe and inspiration, they terrify people as well. The Karakoram peaks around K-2, in contrast to the Himalayan peaks, are ferocious.

These mountains span the northern frontiers of India and separate it from China's mainland. These ranges neatly divide the two giant plains. Standing on the top of the Everest on a cloudless day, we can

see towards north the dry, desolate Tibetan plateau. Also called roof of the world, it stretches far into the distance of Asia. To the south, we can see a lush, fertile low-lying green expanse spreading across India. They are Indo-Gangetic-Brahmaputra plains, one of the most densely populated regions of the world.

Tibet is in the shadow of Himalayas and receives little rains while the Gangetic plains are soaked by the monsoon. The Tibetan plateau was the floor of an ancient sea. We can still find marine fossils there at more than 4000 m (13,120 feet) above the sea level. Today, it is an immense barren plain nearly four times the size of France, most of it being higher than Europe's highest peaks. The Spartan plateau is incredibly dry and desolate. Scanty in vegetation and fresh water, it is deficient in oxygen too. However, this barren landscape, due to its enormous presence and position, exerts a huge influence on the rainfall and rivers across Asia. During summers, the sun warms the massive flat expanse of Tibet. The plateau heats up like a giant hotplate. As the warm air rises, humid air is sucked in from the Indian Ocean. Clouds build and as they hit the huge Himalayan wall, monsoon rains precipitate over the foothills and the riverine plains to the south. On exceptional occasions, the Tibetan plateau receives snow during summers. If this happens, the white blanket reflects the sun. It takes longer to heat up thereby delaying the onset of monsoon rains. Being the roof of the world, all the major Asian rivers, the Ganges, Brahmaputra, Yellow, Indus and Erawady begin their journeys in Tibet. Together, they provide water for nearly half the world's population.

Indo-Gangetic-Brahmaputra plains are one of the most densely populated regions of the world today



Rivers are great levellers. They carve deep V-shaped valleys in mountainous regions, carrying away the eroded mountain material, which is finally deposited in the sea. The main rivers of the Himalayas, the Indus and the Ganges carry between them a billion tons of sediment per year. If trucks were to be loaded up with this material, the line of vehicles would stretch more than 40 times around

the planet. This has created the largest body of sediment in the world, the 'Bengal fan' covers 56,980 square km (22,000 square miles).³

Shivaliks, the poor cousin

Some twenty million years ago, Shivalik systems came into being. The reason being, that as Himalayas were being formed, the Gondwanaland's northwards push continued. Shivalik hills extend for 1600 kilometres from Baluchistan to Assam. They rise to a height of 1600 meters. Younger, shorter and devoid of snow, Shivalik hills are just a poor cousin of Himalayan hills, always around but never as magnificent.

In spite of this, the rising Shivaliks gave rise to a singular and powerful river. Shivalik or Indo-Brahm River is the name given to it in geological time. 'Flowing westward, it began in Assam's north-eastern corner and continued on to Pakistan's westernmost plateau, the Rawalpindi Plateau. Eventually, it joined the Indus River, which flows into the Arabian Sea. On its right bank, it received rivers from both the Gangetic and the Indus systems. Sone and Chambal may have come from India's peninsula on its left bank. Between 25 million and 5 million years ago, a massive river flowed through the area. There were tonnes of rotting carcasses in the 6000 meter deep basin, as well as mud, sand, gravel, rocks, and other natural debris. Forests and grassland can be imagined, with a river winding its way through one or the other. There is a connection between Asia and Africa, where these animals are currently found in the form of hippopotami, antelope, and giraffes. Despite their extinction, they have left behind enough evidence to show that India and Africa were connected by land during the tertiary period, roughly 60 million years ago.⁴

You can just imagine a mighty Indo-Brahma River from Assam to Rawalpindi, which sweeps the waters of rivers like the Ganges and the Indus along its path. An area of India that is connected to Africa is home to an abundance of Hippopotamus and Giraffe. Until about 5 million years ago, all of this had been going on for about 40 million years. It had to have been an amazing place with an even more amazing time period. As far as our ancestors were concerned, they were the only missing piece in the grand scenario.

Soils

How old are soils, especially in Indian subcontinent? Well, they are almost as old as the Indian landmass. Therefore, the history of soils as well as the underlying landmass spans the entire spectrum spread over various geological periods. And how were they formed? Well, it was the handiwork of multiple forces operating jointly upon underlying rocks spread over long periods that we got this crucial life-giving medium called soil. As a growing medium for plants, soil can be defined as a material composed of weathered rock materials mixed with organic matter, water, and air in a limited agricultural sense. This medium is the source of all food for humans and plants, as well as many industrial raw materials. Weathering is the gradual breakdown and transformation of rock masses into soil. Two forces are used to achieve this goal. Physical forces break the rock into smaller pieces. Disintegration is the term for it. The mineral composition is then altered by chemical agents, leading to the formation of rock. Decomposition is the name given to this phenomenon. The processes of disintegration and decomposition are mutually supportive.

Four factors are namely, water, atmospheric forces, physical and organic agents disintegrate the rocks.²⁵

Water, in whatever form is the most powerful force amongst them. Rains dislocate mountain rocks. As they tumble down, the gushing streams push and shove them ahead. Frequent collisions and incessant rolling down the water course reduce rock size to boulders, pebbles and eventually sand. Fury of water along with sand in motion rounds up boulders and pebbles into gentler sizes and shapes. Water denudes rocks not only mechanically but acts a solvent too. Chemicals like potash, soda, silica and lime get dissolved in water. Along with these salts and gases in suspension, the rocks are denuded slowly yet surely due to solvent action of water. Along the coast, sea waves beating against the cliffs incessantly also help in soil formation. The action of glaciers in tearing down boulders and hydration of rocks in presence of water conclusively proves immense water power in disintegrating rocks.

Atmospheric forces act on rocks in a multiple manner. Firstly, the oxygen of the atmosphere oxidises and disintegrates its surface.

Then, water vapour gets into the interstices of rocks. During cold, as the water freezes, it expands. The increased volume of ice exerts a force of 1640 tonnes per square metre. This implosive force shatters these massive looking formidable rocks into smithereens. Then, carbon dioxide gas in atmosphere dissolves limestone and chalk and becomes available as plant food. The rain water charged with calcium carbonate flows into sea. Shell fish and corals feed on them and over time, settle in the form of dead shells and form new rocks. Also, strong current of winds carries sand and salts from the sea shore and the dry beds of the river and other water bodies into the interior.

Physical agents disintegrate rocks through periodic heating and cooling cycle. Rocks are very poor conductors of heat. Hence, impact of heat or cold extends only up to a slight depth from the surface. Repeated expansion and contraction produce a strain which peels its layers. Then earthquakes, hot springs and volcanoes are other factors which alter even physical surface of Earth.

Plants and animals act as organic agents towards soil formation. Fresh surfaces emerge as solid rock breaks down. Blue-green algae grows on exposed surfaces as a result of bacterial action. Vegetation acts on rock as a mechanical hammer and chemical solvent as the quantity of soil on hard surfaces increases. Rocks are silently torn apart by roots penetrating the cracks. Roots, meanwhile, dissolve soil particles invisibly as acids form in their tissues. Rodent's burrow into the ground and expose rocks to weathering agents, such as rats, squirrels, and rabbits. Small earthworms and even smaller ants aid in the decomposition and disintegration of the material by consuming it. Earthworms are capable of consuming large amounts of soil, amounting to incredible 22 tonnes per acre. Roots, water, and air can penetrate the loose soil more easily. By dragging leaves and straws into the soil, these worms enrich the soil with organic matter and make light soils heavier. A film of capillary water encircles each individual soil particle, increasing the soil's ability to hold water. Soil particles decompose quickly and easily in this water. There is always an increase in bulk associated with hydration, oxidation, and carbonation processes. To reduce the rocks to finer aggregates, further disintegration and disruption occurs as a result of these forces.

Therefore, the journey from solid rocks to humble soil is quite complex yet exciting. Moving water acting like a perpetual roller crusher smashes huge boulders into fine sand. Atmospheric oxygen oxidises rock surface and softens it. Thermal stress due to repeated hot and cold cycle peels its surface off. Bacterial action deposits a thin layer of soil. As vegetation sprouts and roots enter clefts, rocks are torn asunder. Humble earthworms literally eat soil and enrich it. With so many agencies at work, it is time to remember the invisible bacteria and the humble earthworm acting silently yet diligently to have given us one of the most precious gifts of nature, soil. No wonder, the emerging human society would consider it divine and worship it as such. The present-day Telangana society considers soil as divine and worships it during 'Boddemma' followed by 'Batukamma' festivals.

**Today,
Telangana
region
worships
divine soil in
Bodemma &
Batukamma
festivals**



Peninsular India

Soils have undergone secondary modifications through climate, topography and organic agencies. However, the underlying rocks have given rise to certain definite types of soils. It is variation in the underlying rocks which is reflected in the overlying soils. The foundations of soils of India have been classified into six categories. Ancient crystalline and metamorphic rocks form the first category. These are the oldest rocks constituting the basement of peninsular India. These rocks have given rise to red soils. Cuddapas and Vindhyan are the next in line. Due to the age of the formation, the resulting soils are extremely mature. Old river deposits, sand, and silt are found in the chain-like depressions in Peninsula's table land. In contrast to the mature soils of the Gondwana rocks, the Gondwana soils are less diverse and less fertile. This trap is ranked fourth in the Deccan trap group. This volcanic lava is rich in ferro-magnesium and alumina. The black cotton soil is the most common type of derived soil. The sedimentary rocks of extra-peninsular India fall into the fifth grouping. They can be found in valleys and depressions of the hilly and mountainous terrain. There are two distinct periods of time: the Mesozoic and Eocene period (240 MYA

to 65 MYA) and Tertiary, relating to sandy rocks (65 MYA to 5 MYA). The sixth and final group of rocks is made up of more recent and less recent rocks. Unlike the soils of peninsular India, which are mainly made up of decomposition products of rocks, drift soil is a completely different type of soil. Laterite soils, desert, and the Indo Gangetic alluvium fall into this category.

Therefore, soils in India are quite diverse. They differ from area to area. Alluvial soils, by far, is the most important soil groups in our country. Various river systems have transported a huge quantity of weathered rocks and deposited as silt along its course all the way up to oceans. Indo Gangetic alluvium has enriched Punjab, Haryana, Uttar Pradesh, Bihar, Bengal and Orissa. Brahmaputra has enriched Assam. Mahanadi, Godavari, Krishna and Kaveri have enriched coastal regions of Orissa, Andhra and Tamil Nadu. Black soils are mostly found atop the Deccan trap which substantially covers Maharashtra and also spills in adjoining Gujarat, Madhya Pradesh, Karnataka and Telangana. Red in general, the soil colour may be sometimes brown, chocolate, yellow, grey or even black. Soils get sticky when wet and crack up when dried. Red soils practically cover the whole archaic basement of peninsular India. From Bundelkhand to extreme south, it embraces south Bengal, Orissa, parts of Madhya Pradesh and sweeps across major parts of Telangana, Karnataka and Tamil Nadu in a contiguous manner. These soils started developing around Mesozoic-Tertiary ages, some 240 million years ago. They are by far the oldest soil formations in India. Peninsular Indian land mass resembles an inverted triangle. Vindhyan ranges sit atop its base, while the Indian Ocean touches its apex. Ranges of Eastern and Western Ghats flanked by thin coastal strips on either side constitute the other two sides. The Krishna-Tungabhadra River system bisects it horizontally almost through the middle. The land mass lying north of Tungabhadra River, south of Vindhyan ranges, and bound by sea is broadly understood as Deccan lands. Its eastern wing abuts Bay of Bengal, while its western wing abuts Arabian Sea. The in between lands sitting atop the Deccan plateau are bestowed with all kinds of soils, namely, alluvial, black cotton and red soils. Nestling in the heart of peninsular India,

this diversified soil base enriched by plentiful flora and fauna was destined to be in the frontline of the earliest evolution of mankind from Caveman to modern man.

3.3 QUATERNARY PERIOD

About a million years ago, commenced the shortest of all the geological periods, called Quaternary period. It is subdivided into the Pleistocene (the glacial age) and the Holocene or Recent (the post-glacial age). The Holocene began about 10,000 years ago.

During the vast time stretch covering Pleistocene, there have been eight ice ages during the last 8 lakh years, each interspersed with warmer periods of about 10,000 years known as interglacials, brief and extreme periods of this cycle.⁶ The Ice Ages were periods of exceptional cold, away from the equator. Ice sheets advanced across the frozen wastes of the northern hemisphere as temperatures fell below 150 Celsius. Substantial Earth surface in North America, northern Europe and Kashmir valley and its adjoining parts was squarely covered under snow. With so much of the earth's water locked up into the vast swathes of ice sheets, sea levels fell upto 150 mtrs., (500 feet). As they did so, land bridges appeared, linking many major land areas like the present-day north-eastern Russia with the north western America in Alaska. Many present-day islands like British Island, Japan, Korea, Indonesia and Australia were connected to continental land masses.

With each advance of the ice, the plants and animals of the northern hemisphere withdrew to warmer latitudes. As the ice retreated, so they moved northwards again. Humans too, in all probabilities must have migrated with these changing climates. Yet despite the extremes of cold, the human species continued to evolve and expand. Equatorial regions were also affected as rainfall diminished; half the land area between the tropics (30°N to 30°S latitude) became desert. The mastery of fire and invention of clothing were crucial to this achievement, as were improving tool kit laced with new social and communication skills. The height of the last ice age or LGM (Last Glacial Maximum) was reached about 20,000 years ago.⁷ From then

onwards, as the ice sheets retreated, the whole of the Eurasian land mass between the ice to the north and deserts to the south, productive grass lands and steppes were created. Rich in seasonal grasses, they sustained large herds of mammoth, bison, horse and reindeer; all of them important food sources of Palaeolithic hunters.

What about the bigger land mass bound by tropics in Africa and Asia lying between 30°N to 30°S latitude around the equator. Half of this had become desert; but the other half had never been under glaciation. The bulk of Africa and the present-day India (except its northern fringes) along with the present-day Mexico and Brazil were blessed with perennial rivers systems like Nile, Amazon, Indo gangetic riverine system, Brahmaputra and Irrawaddy. Our ancestors had not only evolved but were expanding their population at an accelerated pace. It is conservatively estimated that population grew from about 0.5 to 1 million, between the period 1.5 to 1 lakh years BP. Bulk of these humans, undoubtedly were sustaining in this tropical band lying between 30° N to 30°S latitude. A vast majority of them evolved in-situ due to supportive factors like no glaciation, moderate climate, plentiful flowing water in perennial streams, coupled with plentiful of food provided by ever present flora and fauna. Peninsular India with rivers like Godavari and Krishna were an integral part of this evolutionary story.

Our ancestors lived in caves. They survived the storms of the Ice Ages. In fact, caves were refuges for the cave bear too. These animals were some 5 meters (16 feet) long and weighed some 400 kilo grams. Their size terrified opponents. Just imagine, entering a pitch-dark cave chamber just to discover it being already occupied by a family of cave bears. Armed with superior tools, our ancestors wiped out cave bears by the end of last Ice Age. The competition for safe and cosy caves was won. But the fear of caves has not left us, even today. They left plenty of evidence of their cave life such as bones, hearths and weapons. But our ancestors left something much more, the most incredible gallery of prehistoric art. Safely ensconced within cave premises, with enough leisure at their command, our ancestors turned creative artists. They sketched animals, painted them and

thereby left an incredible gallery of prehistoric art. It is indeed amazing to think that, at one time, lions, panthers, bears, rhinos and mammoths roamed in jungles while our ancestors were busy in sketching these animal figures and painting them in the safe confines of their caves, a rare combination of home as well as the creative work place.⁸

About 10,000 years ago, the Holocene era began. Prior to the Holocene period, the Kashmir Valley and its neighbouring northern regions were also heavily glaciated. Kashmir, the Punjab, Daula Dhar range and Siwalik foothills are all places where evidence of glaciation has been found in the Himalayas. Four major glaciations, known as Gunz, Mindel, Riss, and Wurm, occurred during the Pleistocene. Many other periods of glacial advances and retreats (interstadials) occurred during the glacials, as well as periods of warm climate.

Peninsular Indian land mass is the oldest of geological formation dating back to some 600 million years ago. The Himalayan formation is comparatively young, just 40 million years. Although Peninsular India was never glaciated, gravel beds or conglomerates can be found in several of its river valleys (such as the Narmada, the Godavari, and the Krishna) interspersed with silts and clays. These alluvial deposits, which make up the river terraces, are thought to show events in the peninsular region that correspond to glacial regions. Animal fossils have been used to link some of these deposits to glacial and interglacial periods.

3.4 COGNITIVE REVOLUTION

Beginning about 70,000 years ago, the planet earth was populated by several species of the genus, Homo (man). It included Neanderthals, sapiens, erectus, denisovan and others. From around that date, sapiens started doing very special things. They started communicating among themselves. The appearance of this new faculty constitutes the 'Cognitive Revolution'. For an individual, it networked their own sensory organs, especially eyes and ears to brains resulting in appropriate vibration among vocal cords. Voice of sapiens was

... This constituted the primitive edifice of what is known as 'Information' today



not just indicating pain, fear or laughter; it indicated something more. This constituted the primitive edifice of what is known as 'Information' in today's world. The ever-increasing volume of new informations coupled with improvement in communication skills evolved in what we call 'speech' (vak). Spoken words were soon garlanded together to form sentences and that is how the spoken language took birth. As the number of groups contributing to these new phenomena called 'speech' were so many and varied, the same diversity is visible in so many spoken languages. This Cognitive Revolution put sapiens in the driving seat and by around 30,000 years ago, all the other species like Neanderthals, Denisovan and others were left behind in the evolutionary race. Cognitive Revolution transformed our raw ancestors' called Homo (man) into something new called sapien (thinking), who were also conversing.

Following the Cognitive Revolution, sapiens acquired the technology and organising skills to break out of their Afro Asian land mass and settle in the outer world. The first proof that our ancestors crossed a substantial body of water apart from the normally understood image of their walking across vast stretches of lands comes from the presence of stone tools in Japan that dates back to 1 lakh years BP.⁹ The main land of Asia was inhabited by Homo erectus. Japan is today some 150 km, away from Korea and there are several islands enroute. The earliest settlers in Japan must have travelled by raft or boat. Japan was separated from Asia by deep waters that would have persisted even when sea levels were lower. The situation in the present-day British islands was different. At the height of recent Ice Age, these islands were connected to the Eurasian land mass. Their yet another achievement was to reach Australia, some 45,000 years ago. There are traces of human occupation in the desert of central Australia going back to 50,000 years B.P. They were living in the Indonesian archipelago (a group of islands separated from Asia and from each other by only narrow straits). Probably the first seafaring societies, they built and manoeuvred ocean-going

vessels and became long distance fishermen, traders and explorers. As they pushed on, they encountered a totally new universe of unknown creatures. It included a 200 Kg two metre kangaroo; a marsupial lion, as massive as a modern tiger, big kolas rustling in the trees; flightless birds twice the size of ostriches sprinting on the plains and dragon like lizards and snakes five metres long slithering around the tree-trunks and on ground under thick canopy.

Within a few thousand years, virtually all these species were eliminated by this new immigrant, *Homo sapiens*. Food chains throughout the entire Australian ecosystem were broken and rearranged in favour of this thinking and talking invader.

The extinction of Australian megafauna was just the beginning. It was followed by an even larger ecological disaster in Americas. Some 18,000 years ago, a few immigrants arrived in American continent on foot. They could do so because sea levels were low enough that a land bridge connected north eastern Siberia with north western Alaska. During 18,000 years BP, the ocean level was about 130m (425 feet) lower than the present. Climatic realities were much harsher compared to Australian journey. Extreme Arctic conditions where sun never showed up in winter, when temperatures can drop to minus fifty degrees Celsius only hardened the resolve of these new immigrants. They marched south from Alaska into the plains of Canada and the western United States. The rolling grassland, were teeming with animal life. It included giant bison with a six-foot horn spread, towering bear like creatures called *Casteroides*, rodents the size of bears, herds of horses and camels, oversized lions, fearsome sabretooth cats and giant ground sloths that weighed upto eight tons and reached a height of six meters, stage moose, two types of musk oxen, several varieties of large often lion sized cats, mastodons and three types of mammoths. South America hosted an even more exotic menagerie of large mammals, reptiles and birds. Within 2,000 years of *sapiens*' arrival, most of these unique species were gone. Thousands of species of smaller mammals, reptiles, birds and even insects and parasites became extinct. Some scholars try to blame climate change, but that might have been a marginal factor. The contribution of '*Homo sapiens*', our ancestors was, no doubt, decisive and fatal.

The main islands of the Mediterranean including Sicily, Crete, Cyprus, Rhodes and many others were all settled in Neolithic times i.e., 10,000 years B.P., if not before. In subsequent times, islands like Crete and Cyclades witnessed advanced civilisations, based mainly on trade and shipping. Major expansion began into the Arctic about 4,500 years ago as the continental ice sheets retreated. Finally, some 2,000 years ago, humans began to settle the deep pacific islands from where they reached New Zealand around 1,200 years ago; some 1,000 years before the Iceland was discovered by Captain Cook. The question remains; who discovered New Zealand? Captain Cook or the nameless multitudes who set their foot for the first time there some 1200 years ago?

At the end of the Ice Age, around 10000 years ago, climate became more temperate. Many large animals became extinct, yet new warmer climate adapted plants which provided a rich new food source and animals multiplied. This was the time when people began experimenting with domesticating animals, followed by domestication of plants. This is known as 'Agricultural Revolution', whose advancement pushed hunters and gatherers to the margins. Several important changes were taking place in the surrounding ambience as well. Man was making tools, improving upon them, painting, hunting, gathering, fishing and finally domesticating animals and plants. By 10,000 years ago, humans had occupied the whole of habitable worlds. Various estimates of population put the figure between 2 million to 4 million at that distant point in time. It can be said with reasonable certainty that about one-third of this population must have been occupying the Indian subcontinent.

Agriculture made possible not merely a phenomenal growth of human population, which is thought to have increased some 16-fold between 10,000 years ago and 6,000 years ago, but also gave rise to the familiar landscape of village communities which have remained intact, by and large in the countryside, even today. Nowhere are the continuities of history more visible. The enduring structure of human society, which transcend and outline the political change, carry us

back to the end of Ice Age, to the changes which began when the shrinking Ice-cap left a new world to be explored and tamed.

Neanderthal Man (*Homo sapiens neanderthalensis*)

The earliest known Neanderthal skull was discovered in the year 1848 during construction of the Gibraltar fortifications. A skull and a skeleton were later found near Dusseldorf, Germany. Numerous Neanderthal man skeletons and skulls have been found throughout Europe, the Middle East and North Africa, including France, the Isle of Jersey, Belgium, Spain and the former Yugoslav republics of Hungary and Czechoslovakia.

According to these findings, the Neanderthal man lived in Europe, Africa, and western Asia approximately 72,000 years ago. Despite his diminutive frame, he had a wide forehead, large brows, long arms, and bent thighs; his gait was stilted, and his hair was matted. He had a large brain-case, but it was underdeveloped. About 1.55 to 1.65 m tall, he must have been strong and well-built. In comparison to modern men, his lower limbs were shorter and his thigh bones were arched. In addition to hunting bears and mammoths, he also hunted a variety of other animals. By then, he had mastered the art of cooking meat over fire so that the tenderised meat could be eaten with ease.

Mammoths, Europe's woolly elephants, were a favourite prey item of the Neanderthal men. They fought with boulders and wood spears tipped with flint blades. In order to successfully hunt in a pack, one must be well-organized, well-prepared, and strategic. *Homo erectus*, on the other hand, appears to have relied on individual hunting prowess. He also buried his dead with great reverence, using stone-tipped arrows.

After making the hand-axes, he gradually expanded his collection of tools by making additional knives, spearhead awls and scrapers all made from the original core of flint. In addition to the spear and the sling, he also had at his disposal a variety of other weaponry. Also, he began to use animal bones and horns. When the surface deposits of flint were depleted, he dug shafts to reach the subsurface deposits, which he used to meet the increasing demand. As a result of these advancements, we were able to take a significant step toward greater

control over our surroundings. Bone needles and sinew were used to bind the animal skins together. He also had the ability to create flames. For the rest of his life, he lived at the cave entrances.

To put it simply, the Neanderthal man was able to meet all three of his essential needs for life, which included a source of food; clothing; and shelter. Some 72,000 years ago, he cared for the sick and disabled as well. The Neanderthals were light years ahead of early stone-age humans in terms of material culture. The most potent weapon he had against wild animals was the ability to make fire. Advancement was also symbolised by wearing clothing made from animal skins. The hostile environment he had to contend with during the last Glacial Age was a major factor in his progress.

The skeletal structure of these Neanderthals was more similar to that of *Homo sapiens*, and they and modern humans had little in common. They were kept alive by their fellows until an accidental rockfall claimed their lives, according to the remains found in two of the caves. This was the beginning of the idea that man cared for his own, and that he had a sense of belonging and family,' says Solecki in his book. Analysis of pollen in soil samples found near the remains of a single person revealed pollen from eight different flower species. These Neanderthals may have been the first Flower People because they buried their dead in bouquets of flowers.

Homo sapiens sapiens

Many of the Neanderthal skeletons found in Israel exhibit characteristics that are strikingly similar to those of modern humans. The thighs are long and slender, with straight thighbones. The brow ridge is still visible. The Israeli Neanderthal shows how *Homo sapiens sapiens* evolved from *Homo sapiens neanderthalensis*, which first appeared from 40,000 to 30,000 years ago, to the present-day form. The skeleton of this early man, including the structure of the skull, bears no striking resemblance to that of modern man. Skull capacity had surpassed that of modern men. The only difference between early man and modern man was that early man had a more durable body structure.

For a brief period of time about 25,000 years ago, Europe's glacial climate began to improve. Homo sapiens, the modern human species, took the place of the Neanderthal man, who mysteriously vanished. He had the same cranial capacity as a modern man. Human brains, one of nature's wonders and the seat of man's soul or spirit, have evolved from the scattered nerve cells of coelenterates up through the evolutionary ladder of brain development. As Jacquetta Hawkes sums up, "Throughout this vast stretch of time, there has been an increase in the size and complexity of the Neo-Pallium or New Brain. In fossil skulls, which are our primary record for this human epic, we can see a rise and expansion of the forehead and vault, as well as an increase in the capacity of these structures. For this is the most complex and subtle instrument in the world, housed in curved bone plates of a skull's cranium, which at the command of the whole man has created the rich cultures and diverse art forms that make up human history."



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4. Pre-Historic Times

This chapter covers a period from about 2.6 million years ago (MYA) till about 10,000 BCE. The long-time span is characterized by Palaeolithic and Mesolithic Age. The incessant endeavour of our ancestors (Homo sapiens) witnessed a continuous evolution of tools and technologies. As population grew, there was simultaneous development of their cave life with an economy based on hunting and gathering. Telangana ecology with plentiful of water bodies along with abundant flora and fauna was a natural habitat, facilitating growth of such society. Domestication of wolf evolving into dog ignited the process of domestication of other animals like sheep and goat. This continued unabated till around 10,000 BCE when population of the present-day Telangana land was not less than 10,000 human beings. Almost all of them, needless to say, were 'Matti Biddalu' (sons of the soil).

Yet another distinctive feature of those times was an abundance of rock paintings. They have been discovered across rocky terrains across India; with a fair share scattered across Telangana lands as well. Recent research by archaeologists has only confirmed the tradition of rock paintings all over Telangana during those distant times.

4.1 SCIENCE AND TECHNOLOGY IN PREHISTORIC TIMES

Advances in knowledge, skills and technology has been an integral part of human evolution, long before our ancestors developed the art of writing. Hominids in Africa manufactured simple stone implements some 2.6 million years¹ ago. The stone tool assembly or toolkit is called Oldowan after Olduvai george in Tanzania. Some archaeological sites in the same Olduvai george from around this time until about 1.6 million years ago are thought by some to be living floor, that is home bases or camp sites. At these sites, tools and hominid remains appear to be concentrated. Some paleo-anthropologists believe that such concentrations may be

caused by such agencies as river currents washing tools from several upstream sites to a single location and not from uses as home bases.

While talking about stone tools, it must be understood that wooden tools as well as bones preceded stones as tools by millions of years. But due to bio-degradation, wood and bones could not survive the forces of nature acting relentlessly over such a vast stretch of times. As stones and stone tools survived, we have to begin with the 'Stone Age'.

The early tools were simple broken pebbles. They were improved by flaking pieces off a core, creating distinctive shapes with only a single cutting edge that we call hand axes (or bifaces) and scrapers or choppers. The hammer stone was used to facilitate making of several other tools. This toolkit industry continued for more than a million years before different stone tools emerged. Various types of points, spearheads, knives, arrowheads or teeth (such as saw's teeth) were developed. This toolkit was used by different societies of later species such as *H. Neanderthatensis* (6 lakh years to 30,000 years ago) as well as our own species, *H. Sapiens* (which may be 2 lakh years old). Other stone tools from this period included needles as well as burins (engraving tools).

The New Stone age or Neolithic occupies a much shorter time than the Old Stone age. In terms of kinds of stone tools manufactured, such as ground stone axe or adze heads and small points called microliths, the period begins as early as 20,000 years ago and ended when metal came into common use, say about 5,000 years ago.

About 35,000 years² ago, people crossed a land bridge from Australia into Tasmania. Changing sea levels eventually made Tasmania as an isolated island, with its last land connection to Australia submerged by about 10,000 BCE.

By around 30,000 BCE, the modern *Homo Sapiens* was the only member of the genus left, since the Neanderthals were no longer present in Europe. From this time, technological changes became quite swift.

About 28,000 BCE³, in the region now known as Czech Republic, people-built kilns and produced small ceramic figures and beads. Ceramics are produced by heating natural earth until it changes form without melting. If heating continues further, earthen mass melts and after cooling, glasses are formed. Ceramics are different from merely dried up earth or clay, which softens when rewet. The high heat at which ceramics are produced drives off water, chemically bound to the earthen mass as well as any water that has soaked into it. Depending upon the type of clay or earth, the outcome of this heating can be terracotta, stoneware, China porcelain, brick or tile.

It must be understood that the first bricks were not ceramics or kiln fired. They were made of clay mud hardened by sundrying but without the chemically bound water driven off by heat. When kiln-based bricks became available, the cost of making them reserved them for special monumental buildings. The common people however continued to build houses using sun dried bricks only.

The microlith industry is dated from about 11,500 years BP to around 9,000 years BP. There are clues that suggest that microlith technology was inspired, at least in parts by the growing human population and its drain upon local material resources including good stones for tools. Constant upgradation of technology to optimize the limited resources has been a consistent endeavour of mankind. It was evolution from old stone tools to microliths some 10,000 years ago. Now a days, it is evolution from canal flow irrigation to drip irrigation. Good stones were being put to optimal use then, just like limited water is being put to optimal use today.

Starting about 10,000 years ago, or about 8,000 BCE, people made the major technological advance of domesticating animals and plants, in that order. This is called 'Agricultural Revolution'. It must be understood that even during their nomadic phase, people knew how to raise crops and keep animals, even before Agricultural Revolution. But they were reluctant to do until rising population or reduced natural food supply forced them into agriculture. There are archaeological records to show that rise in population preceded the adoption of Agriculture.

Temples first – Village grew up around them, later

Archaeologists are familiar with the several monumental structures like Stonehenge in Britain dating back to 2500 BCE. It was built by a developed agricultural society. However, in the year 1995, archaeologists discovered a site in south east Turkey called Gobekli Tepe. In its oldest stratum, there was no sign of any settlement, houses or daily activities. They also discovered monumental pillared structures decorated with spectacular engravings. Each stone pillar weighed some seven tons reaching a height of five meters. In a nearby quarry, they found a half-chiselled pillar weighing fifty tons. Altogether, they unearthed more than ten monumental structures, the largest of them nearly thirty meters across.

These structures at Gobekli Tepe are dated to about 9500 BCE and all available evidence indicates that they were built by hunter-gatherers. Repeated tests only confirmed the date of the structures and the pre-agricultural society of their builders. Why would a foraging society build such structures? Probably, thousands of foragers belonging to different bands and tribes worked together over an extended period to build the entire complex. Only a sophisticated religious or ideological system could sustain such efforts.

There is yet another secret behind this discovery. Such a large working population would surely need adequate food supply on an assured basis. For many years, genetists have been tracing the origins of domesticated wheat. Recent discoveries indicate that at least one domesticated variant, Einkorn wheat originated in the Karacadag hills, just thirty kilometers away from Gobekli Tepe. It is likely that the cultural centre at Gobekli Tepe was in some manner connected to Karacadag hills where initial domestication of wheat by humankind was taking shape. Foragers shifted from gathering wild wheat to intense wheat cultivation and that is what may have supported the building activity of the temple complex, followed by running it as well.

There is yet another secret in this finding. These monumental structures have decorated stone pillars. These decorations require engravings on hard blocks of granite. Were there some tools strong

enough to do this stone craft? Was there some kind of metal, even in its raw material form which was used by those foragers to engrave these motifs resembling animals, men and some kind of obscure designs on such oblong pillars in a certain geometric pattern?

All these findings challenge over conventional picture regarding evolution. We hitherto believed that our pioneering ancestors first built a village after settling down around a waterbody. When the village prospered, they set up a temple in the middle. But Gobekli Tepe suggests that the temple may have been built first, and that a village grew up later around it.⁴

Even before the farming became the way of life, towns were forming Another myth is that urbanisation originated as a result of the Agricultural revolution. Even before farming became a way of life, towns were forming. Trade was the driving cause for pre-agricultural settlements. Towns arose at the crossroads of trade routes or near supplies of tradeable items. Jericho, for example, was established long before agriculture. Astronomy, mathematics, and technology were the most important developments in the years after the agrarian revolution.



A significant development along the course of Agricultural revolution was the discovery of metals like copper, bronze and iron. Stone tools were soon replaced with the newly found solid metals with a sharp edge. Copper was the first metal to be employed and it was in use as early as 6400 BCE. Some historians called it as 'Copper Age' or 'Chalcolithic Revolution'. The period from about 6400 BCE to about 1000 BCE could be thought about as Copper Age, followed by Bronze Age and finally Iron Age. We may also think about this time period as (Ceramic Age) since pottery, along with glass were dominant. During most of these times, metals were used by soldiers and specialized technicians such as carpenters and masons, while average persons were using ceramic items for their normal household purpose.

The same general time period encompassed the wheel revolution. It gave us the potter's wheel, the wheeled vehicles like bullock carts

and horse chariots. The round, innocuous and an innocent looking object namely 'wheel' has powered the human civilization since time immemorial to the present-day modern world. When it was invented is not known for sure. However, it is understood that someone from potter's society (kumhar or kummari) was the original innovator behind this revolutionary technology. We all know that potters make pots from mud. Initially, they were mixing soil with water, kneading it and shaping the dough with their bare hands. The smaller items like cups, glasses and saucers could be shaped by a pair of hands just sitting in one place and in one position. But, to make bigger items like water pots to store water and grains, he had to go around the big lump of mud several times to shape just one item. The process was laborious and tiring. In due course of time, potter may have thought that instead of him going around the lump of mud, why cannot the lump turn around while he shapes the required item sitting just at one place. This idea must have undergone a long process of trial and error, before evolving into a round wheel crafted from wood. Mounting this wheel on to a fulcrum made its revolution quite smooth. In due course of time, male in potter's society generated enough revolving momentum in the wheel by using a long wooden stick, while his better half was simultaneously busy in shaping the required items from cups, saucers and big water storage pots using her nimble hands and fingers. The 'wheel technology' was invented by potter's society with a complete gender balance in the production process.

Potters were inventors of wheel and the fishermen were the inventors of the concept of sailing

In fact, this was also the time of another great advance in transportation, the sail. This was the first power source that did not depend upon biological input. It was to evolve in sailing ships in times to come. If potters were original inventors of wheel, it is fishermen who invented the concept of sailing. The ecosystem of a fishermen necessarily needed land for habitation but also nearby water body, be it tributary, river or seacoast for their livelihood. Catraman was the early invention crafted by hallowing trunk of a tree by using sharp bones and stone tools. It



evolved into a boat over time. Addition of oars provided speed and manoeuvrability. Experience showed that speed and direction of natural wind was more powerful and decisive in determining the speed and direction of boat. In due course, sails were mounted, wherein the speed and direction of natural wind manoeuvred through oars could speed up the boat in a desired direction. Single sail, in due course of time, evolved into multi sails attached to bigger boats. Discovery of monsoon enabled those boats to evolve into ships that could be propelled across oceans to cover long continental journey. But, behind all the trans-oceanic journey of modern ships carrying goods, men, women and armaments along with soldiers, it would be appropriate to remember that an unknown fisherman living in some unknown coastal location at that distant point of time was the original inventor of this powerful technology.

After the momentous discovery of the wheel and the concept of sailing, finally, the period saw the dawn of history, as writing was developed.

4.2 THE PRE-HISTORY IN GODAVARI AND KRISHNA BASIN

The Formation of Laterite

Experts have proposed a schedule of wet and dry intervals for a large portion of India. The emergence of the laterite, a peculiar sub-aerial alteration product and a widely occurring geological formation, has been related to the climatic variations that have occurred in Peninsular India, according to the examination of stone implements. The earliest artefacts of prehistoric man, in the form of Palaeolithic stone implements, are found in huge quantities embedded in the low-lying laterites. Laterite⁵, a degraded clayey material composed primarily of hydrated silicate of alumina and iron, can only form in areas where there is a lot of rain. In truth, laterite is only found in tropical places, and only in areas where there is a lot of rain. Water logging of the soil appears to be a crucial requirement for its creation. There was most certainly an alternation of separate wet and dry seasons in southern India. The occurrence of massive laterite deposits could indicate that the wet period was extremely long.

Following the creation of the laterite, a dry spell appears to have set in, causing the upper part of the laterite to break apart and weather. The implements of the Early Stone Age (Lower Palaeolithic) are found in this area beneath degraded laterite, either in situ or washed down and re-deposited. The environment became more pleasant during the dry era, and the early occupants lived on laterite.

The artefacts of ancient humans were carried partially into river gravels and partly into shallow detrital beds during another era of intense storms. Following a second dry season, formerly desolate places were repopulated. Finally, a wet phase deposited alluvium, which covered the ruins of the previous dry period's residents. More advanced stone industries appeared during this and subsequent times when rainfall reduced to current levels. In general, aggradation or a general elevation happened during dry periods, while weathering of the surface or down-cutting of the rivers, which flowed with greater force through a narrower channel, occurred during wet periods.

The following occurrences can be seen along the right bank of the Krishna river to the east of Bhimavaram village in Gadwal district's Alampur mandal. The riverbed was more than 3 to 4 km wide during the Pleistocene, according to the evidence. The early settlers used the now-abandoned flood plain to make their tool kits.

The part near Krishnapuram on the Nandikotkur-Atmakur road, near Bhavanasi⁶, a tributary of the Krishna in Kurnool district, shows an almost complete image. The first wet phase appears to have been preceded by an initial episode of laterite production under conditions of high humidity. During the subsequent dry epoch, Middle Pleistocene Palaeolithic Man lived on the dried-up laterite plain. Then it appears that there was a period of heavy rains, during which artefacts with laterite staining were washed down and re-deposited in a pebble bed. A red clay was deposited as the downpour became less severe, but still significant. As a result, we have a double cycle of wet followed by dry and wet phases in that order.

Pleistocene fauna has been found in Krishna Godavari basin.

Palaeolithic Hunters and Food gatherers

The Godavari Valley contains fossils of vertebrates from the middle Pleistocene era. It has long and thick tusks, and one of the species identified is the enormous *Elephas antiquus* (namadicus). The proximal end of a tusk had a circumference of 75 cm. It is estimated that the creature was about five metres tall. It has been discovered that *Mastodon pandionis* teeth were found in the Krishna's upper drainage area. Remains of a rhinoceros and an unidentified bovine have been found on the banks of the Ghataprabha river near the city of Gokak in Karnataka.

Scholars, of late, have split up the Stone Age into Palaeolithic, Mesolithic and Neolithic. Subsequently, Palaeolithic has been split into three phases – lower, middle and upper. The most striking feature of the Palaeolithic industries is their immense duration from about 5 lakh to 10,000 years ago, the end of the last glaciation.

The acquisition of intelligence and skill in producing tools was the surest method to identify the early men from their fellow-animals. Man advanced to a greater level of concentration and manipulative skill when he developed the ability to make stone tools. In Punjab, Jammu, Kargil, Zozilla pass, Sirsa, Kangra, Ropar, and Chandigarh, evidence of Palaeolithic hunters and gatherers has been discovered. Palaeolithic hunters are thought to have wandered the river valleys of India's mountainous regions. Aside from game, they had enough of stones with which to construct their stone tools. In Central India, Bhedaghat near Jabalpur in Madhya Pradesh apart from Orissa, Maharashtra, Gujarat and southern Rajasthan have also yielded plentiful evidence of that Age. In Peninsular India, the tool industry of that age has been found in Kurnool, and along Kaveri and Vaigai rivers.

A striking feature of the distribution of Palaeolithic hand- tools in India is the predominance of chopper-type pebble tools in northern India, and of Acheulian hand-axes in Peninsular India. Outside of India, chopper-chopping-tools dominate the Anyathinian culture of Burma, the Choukoutienian culture of China, the Tampanian culture of Malaya, and the Patjitanian culture of Java. In South and East Africa, pebble tools can be found in the pre-Stellenbosch,

early Olduvan, and Kafuan phases. This distribution suggests that chopper-chopping tools on the one hand, and hand-axes and cleavers on the other, represent two distinct cultures even on a global scale. The Acheulian hand-axes are more primitive and older than the chopper-type.

Near rivers, tiny streams, and lakes are where Palaeolithic tools have been unearthed. The stone-age man hunted wild creatures that lived in the forests near rivers and lakes. Palaeolithic hunters had the opportunity to kill or trap them when they arrived for drinking water. Fish from lakes and rivers, in addition to wild animals, were a source of food for them. These men travelled in small groups and collected fruits, edible herbs' leaves, wild plant roots and tubers in addition to hunting. Acheulian-style pointed sticks and hand-axes were employed to dig roots and tubers.

Krishna Valley

The Early Stone Age site in Amarabad village, Nagarkurnool district, is located on the sloping mounds at the foot of the hill range to the west of the hamlet. The 749-meter-high hill range above is covered in thick vegetation and strewn with quartzite pebbles. Almost all of the pebbles in the collection (approximately 120 tools and flakes) are outstanding specimens of handaxes, cleavers, chopping tools, scrapers, points, flakes, and other tools and flakes. This site had to have been an undisturbed Lower Palaeolithic industrial site, and it had to have been inhabited by Palaeolithic man for a very long time.

Another location is Nadimipalli village in the Nagarkurnool district. After descending from the Nallamalai range to the plains, the road from Mannanur to Achampet follows parallel to the hills and crosses multiple nullahs, the Chandravagu appearing to be the oldest and widest. It is a tributary of the Dindi river. Previously, the Chandravagu had shifted its path multiple times. The land around the current road used to be the rivulet's bed. Stacks of sand, silt, and debris were accumulated during aggradation, while the river altered channel during denudation, cutting the softer bed deeper and deeper. Thus, the ancient riverbed, which was roughly 8 to

9 m higher than the current one, provided the Early Palaeolithic man with abundant raw materials for the manufacturing of his implements. Hundreds of pebble choppers, a few cleavers, and proto hand axes were discovered during the excavation. All of these tools were fashioned from river pebbles. The industry is far more basic than the one seen near Amarabad, and it can be classified as pure Abbevillian with a little Early Acheulian thrown in for good measure. As a result, combining the industries discovered at Amarabad and Nadimipalli will yield a complete chronology from Abbevillian to Late Acheulian.

On the banks of the Krishna River, Nagarjunakonda has revealed vast Early Stone Age sites (Lower Palaeolithic). On the one hand, Palaeolithic Man who lived along the Krishna River had access to a large quantity of fine riverine shingle for creating pebble tools, while those who lived along the nullah and near the hill saddles worked with Clactonian rudimentary core tools and rostrid of Victoria-West kinds. Two Early Stone Age industries and one Middle Stone Age industry have been discovered in obvious and distinct horizons in the Nagarjunakonda valley. The tools were made from riverine pebbles using a block-on-block process to separate main flakes. Cleavers were used in greater numbers in the Nagarjunakonda industry than any other instrument.

Yeleswaram, yet another early stone age site is concentrated near the nullahs, extending from Mallannagutta towards west of Yeleswaram village.

Godavari Valley

Early and Middle Stone Age antiquities, like as handaxes and flake-scrapers, have been discovered in the Peddapalli district's Allur and Jangoan villages. Haimendorf, an advisor to seventh Nizam regarding tribal affairs gathered a considerable number of scrapers and blades from Adilabad (after returning, he donated it to London University). Objects in the form of flake artefacts were also discovered. Early Stone Age implements have been discovered in the Komaram Bheem district's Pranahita valley. Middle Stone

Age objects were also discovered in the Godavarikhani area of the Peddapalli district, in factories, open air sites, and eroded bed rock surfaces. In the Peddapalli taluk, the blade burin industry was discovered.

Recent Stone Age sites are found in between 450-500 m contour lines along river Godavary from Dharmapuri in Jagtial district to Khanapur in Manthani mandal. The hand-axes, cleavers and flake artefacts are found in between Anthergoan and Manthani (west to east) in the Peddapalli district; a stretch of 35 km and Naspur of the Laxettipet mandal in Mancherial district to Ramagiri hills in the Peddapalli district (north to south), a stretch of 20 km.

In Europe, West Asia and North Africa, the flake culture was replaced by Upper Palaeolithic Blade and Burin Industries. The situation in India was presumed to be different and it was concluded that no such blade and burin industry ever existed independently in India. It was also believed that the Late Stone Age had directly evolved from Middle Palaeolithic. But sustained studies by Indians have proved beyond doubt that the blade and burin industry did exist and was sandwiched between the Middle Palaeolithic and the Mesolithic in India.

The blade and burin industry were first noticed in Godavari Khani and Ramagundam in the Peddapalli district and later at Gullakota in the Laxettipet taluk. In 1976, Thakur Raja Ram Singh discovered two important sites near Pochera waterfalls and Chittiyalpalli, on river Suvarna in the Adilabad District. Here the blade-burin industry is associated with Middle Stone Age artefacts.

Ramagundam, Godavarikhani, and Manthani in the Peddapalli district, as well as Karimnagar, Jagtial in the Karimnagar district, and Luxettipet mandal in the Adilabad district, have Late Stone Age sites. Those people lived and worked not just on the tops of hills and foothills but also ensured that there was a water supply nearby, such as a rivulet or spring. In the midst of the black soil, a few places are visible above the rocky outcrops, like, bugga (around a spring) in the Takkellapalli range's foothills, Devunipalli, Rangapur foothills,

Gopaihpalli, Kasulapalli (hamlet of Palthem), Sultanabad (among the rocky outcrops), Kadhom Kangarthy, outcrops and foothills in red or brown soils and around Peddapalli outcrops. The site at Gaurigundam is the most distinctive and abundant of all the sites uncovered so far. Hundreds of cores, blades, blade tools, and waste flakes were discovered at the site, which is located on a sandy silt plateau facing the Gaurigundam waterfalls. There are no scrapers in sight.

4.3 THE MESOLITHIC PERIOD

Mesolithic refers to the period between the end of the Palaeolithic and the beginning of the Neolithic. It began around 10,000 BCE or even earlier and lasted until the Neolithic Age, which lasted from 7500 BCE to 1710 BCE, when agriculture and polished stone tools emerged. At this critical juncture in civilization, it would be useful to have an idea regarding the size of growing population.

The estimates of the world population at this civilizational juncture are however not unanimous. Mc Evedy and Jones have estimated it to be 4 million while Thomlison has estimated it to be 1 million on the lower side and 10 million on the higher side. Taking both the estimates together, we can say that the world population would have been between 1 million and 10 million at that remote juncture during 10,000 BCE.

With these limits for the world population, let us estimate the likely population of the Indian sub-continent and by the same logic, the likely population inhabiting the land demarcated as Telangana State, just recently during the twenty first century. Angus Madisson has estimated the Indian sub-continental share in the global population at the turn of the Christian era as 30%. Let us, reasonably presume that this share sustained during the preceding ten millennia. Therefore, we can safely say that the Indian sub-continental population during 10,000 BCE would not have been less than 3.3 lakhs. Hence, the likely population within the boundaries demarcated as the present-day Telangana State would have been not less than 10,000 human beings at that distant point in time.

The Mesolithic Age is reckoned to have continued in the Indian sub-continent till 7500 BCE. The then world population, as estimated by Haub is 5 million. It would imply a population share of 1.7 million from the Indian sub-continent. Consequently, the size of the population inhabiting the presently demarcated Telangana State would have been around 50,000 human beings.

The Mesolithic era is marked by the use of microliths, which are small stone tools. The Indian subcontinent is full of microliths. Gujarat, Madhya Pradesh, and the region between the central Indian hills and the Gangetic plains are particularly rich in Mesolithic sites. Birbhanpur in West Bengal, Karnataka, and Andhra Pradesh and Telangana are also notable for their Mesolithic sites. Ancient ruins from the Mesolithic period can be found all over Maharashtra. Godavari and Wainganga River sands, Ellora Hill surfaces, Pachad and Hathkambha caves in Konkan and Ellora caves all contain microliths. More than one hundred indeterminate flake and burin types are included in the set, along with a smattering of geometric shapes like the lunate (a trapeze-like tool), discoid (a scraper), and other small chopping tools.

In Mesolithic age, the size of the population inhabiting the present demarcated Telangana State may have been around 50,000 human beings



Rock shelters and cave paintings can be found on the Adamgarh Hill in Hoshangabad, Madhya Pradesh. More than 25,000 microliths have been extracted from it. Archaic artefacts, including hand axes, cleavers, ovates, discoids and scrapers with Acheulian characteristics, were the first to be discovered. In the same deposit, flakes and cores show that the tools were made there. Carbon dating of shells from Adamgarh has established that the Mesolithic era began there around 5500 BCE and lasted until 1710 BCE.

Domestication of Animals

About 15,000 years ago or even earlier, the domestication of wild animals commencing with dog is the major achievement of the Mesolithic hunters. It was followed by the domestication of other animals like sheep, goat, horse and others.

What methods were used to tame the untamed animals? Taming the wild may be thought of as beginning by infant capture, nursing by a foster mother and raising the young in close association with man. When the man comes back with a lamb or a kid from the hills, the woman takes care of it and the children take care of the young animal as they grow up. Breeding and domestication could take place in such a peaceful environment.⁷ Goats and sheep were domesticated during the pre-agricultural period. Food production began when the nomadic man, with help from his dog, was able to bring sheep and goats under his control.

The modern dog is descended from wolves that roamed the wilds of North America. It is not uncommon for wolves to congregate around human habitations, where they feed on the remains of dead animals and scraps of food. Mesolithic hunters bred them with other local species, including wolves and bears, to spread their genetics. When you look at the fact that humans and dogs can be found in every corner of our planet, it's clear that the dog was a part of our ancestors' ecosystems.

By approximately 6000 BCE, the dog had evolved into a man's companion in northern Europe. The fact that the Harappans possessed well-domesticated dog breeds indicates that these animals were domesticated at least two to three millennia earlier. The domesticated dog had already developed two distinct races during the Harappan period. Marshall concluded from the discovery of terracotta dog figures in Mohenjo-daro that the Indus Valley cultivators had a dog resembling the pariah, another terrier, and yet another the modern mastiff. Bains Prasad identified the bones of a greyhound-type dog from Harappa, which he believes is related to *Canistenggeranus*, a species that was widespread in the Oriental region during Diluvial times and was the ancestor of the pariah-dog. According to Bains Prasad, the Harappa dog's skull shape resembles that of the Indian wolf. According to Blanford, the Indian wolf rarely, if ever, howls, and occasionally barks like a pariah-dog. Indian wolf pups are born with drooping ears and are easily tamed. Additionally, all domesticated dog breeds have teeth resembling those of wolves.

Studer derives the term pariah from the dingo, which was once widely distributed throughout southern Asia.

With the aid of their crude traps, spears, bows, and arrows, the early men hunted wild horses, deer, and wild cattle. Wolves were almost certainly their camp followers, frequenting the heaps of wild animal bones that accumulated around the early Mesolithic camps. It is likely that early men captured and tamed their cubs for amusement. Jungle wolves were kept as pets, and their utility as guardians of camps and hunters was the result of generations of enslavement and selective breeding. Due to their inherent gentleness and patience, women probably played a significant role in the development of domesticated dog breeds. These early animals almost certainly became tame enough to be harmless, but did not breed in captivity. They eventually began breeding in captivity and succumbed to selective breeding. They became truly domesticated and developed in intelligence and utility only after that.

Domesticated dogs aided Mesolithic hunters tremendously, and swift-moving animals such as deer, antelopes, foxes, jackals, and rabbits were more readily available for the camp pot. Thus, the available food supply increased significantly, which may have resulted in an increase in the population of early man. Domestication of dogs was a watershed moment in the lives of hunters and gatherers, as it opened up new possibilities for living with an abundant and varied diet.

Apart from hunting wild animals, domestication of the dog resulted in additional beneficial outcomes. As Zeuner notes, 'Once the dog became a member of human society, it became possible to control and eventually domesticate certain small ruminants that had always been an important part of the diet of the dog's ancestors'. This is the case with the goat and the sheep.

The goat was the first domesticated ruminant. Around 6000 BC, Iran had a domesticated goat. The fourth millennium sees the appearance of goats with twisted horns, which gradually become dominant. This transition may have occurred during the Chalcolithic period. By the Bronze Age, the twisted horn was fashionable.

With regards to sheep, all domestic sheep descend from Asia and Europe's mountainous regions. Domestication began in south-west Asia. Sicily, Corsica, Sardinia, Cyprus, Anatolia, and northern Iran are all home to their descendants. Other descendants can be found in the mountainous regions of Soviet Central Asia, from Bokhara to the Altai Mountains and Tibet, as well as in northern China. According to Zeuner, it undoubtedly contributed to India's and the Far East's domesticated stock. The wild sheep found in the mountains of Afghanistan and Armenia are most likely the ancestors of domesticated sheep in India and Arabia. Turkistan's people domesticated a variety of sheep. It is widely believed that all domesticated sheep descended from Turkestan varieties through selective breeding and crossbreeding.

Domesticated sheep were brought to Mohenjo-Daro and Harappa by the inhabitants. Toys depicting a ram's head have been discovered in Mohenjo-daro. Prior to the advent of domestication, fat had to be obtained from game animals. It became available in virtually any quantity required following the domestication of the sheep. Sheep fat was eventually supplanted by vegetable oils in the Neolithic, though it retained culinary value among eastern peoples. Nonetheless, the numerous technological applications of fat almost certainly advanced significantly as a result of sheep domestication. The use of wool was probably discovered when the first domesticators observed the peculiar mode of moulting in large coherent patches. It would have been simple to manufacture felt sheets from this material, and felt production has remained a significant industry in many parts of central Asia, where it is still associated with nomadic culture. Spinning and weaving were almost certainly invented using vegetable fibres.

Woven wool cloth was not readily accepted in areas with abundant plant fibre, primarily flax, and a mild climate. As a result, it developed primarily in climates with a harsh winter, and its subsequent spread to warmer zones was almost certainly facilitated by the development of finer qualities of wool. Thus, domestication of the sheep appears to have significantly improved the supply of raw materials, such as skins, hair, fat, and bones, in addition to ensuring a constant supply

of meat. All of these eventually became available from other sources, specifically other domesticated ruminants. However, wool production has remained almost entirely a monopoly of the sheep.⁸

True asses are exclusively African in origin. They are descended from an extinct North African wild race. According to Zeuner, the ass was domesticated for the first time in the Nile Valley or Libya. Baluchistan has recovered the ass's bones. The ass remains have also been discovered in Harappa, Kalibangan (Rajasthan), and Rangpur (Gujarat), all belonging to the period 1000BCE-800BCE. No animal compares to the donkey in terms of perseverance and hard work. Donkeys are used to transport loads during construction and canal digging. After a long day's work, they are simply allowed to eat whatever they find. However, the donkey's most significant contribution to animal husbandry is as the mule's progenitor. The mule is a cross between the male donkey and female horse. It is a sure-footed animal that is extremely useful for carrying loads along narrow mountain paths.

4.4 ROCK PAINTINGS

The best evidence for Mesolithic man's life and activities is found in cave paintings. In India, numerous painted cave-shelters have been discovered. Haematite paintings on rock shelters near Singanpur, Orissa, depict hunting scenes and dances with masked figures reminiscent of those at Cogul in Spain. One of them features kangaroos, which are now only found in Australia. Horse and deer representations in Singanpur cave-shelters are strikingly similar to those in Spanish drawings from the same era. Ghatsila's rock engravings, in Bihar's Singhbhum district, are remarkable for their Australian characteristics. These facts, according to Mitra, indicate the existence of an ancient Indo-Australian culture spanning the upper Palaeolithic and Neolithic periods.

Cockburn discovered numerous painted cave shelters in Uttar Pradesh's Kaimur ranges. Men armed with harpoons with stone shafts attack rhinoceroses in these hunting scenes. These paintings date from the late Palaeolithic period. In cave shelters throughout the Bellary District, over 20 groups of animal drawings and hunting scenes with men armed with javelins and shields are painted.

The most exciting discoveries of Stone Age paintings have been made in Madhya Pradesh by scholar Vishnu Sridhar Wakankar. From Obaidulla ganj, about 42 km from Bhopal in Madhya Pradesh's Raisen district, a group of fantastic rocks on the northern edge of the Vindhyas facing the plains of Malwa could be seen. They are referred to as Bhimbetaka, or Bhima's seat. Wakankar first encountered them in 1957, but it wasn't until 1972 that he began studying their paintings and stone tools. There are 754 rock shelters, more than 500 of which have paintings. Apart from Bhimbetaka, cave paintings can be found in the Mandsaur District of Madhya Pradesh at Bhopal, Jaora, Raisen, Kharwai, Narwar, Chhoti-Badi Dant, Pachmarhi, and Modi.

Fossils of Dickinsonia, which is an extinct genus of basal animal were also found there. Therefore, the history of living beings at that place predates by at least 1 lakh years.⁹ The floor of one of Bhimbetaka's caves was dug. Pebble tools and hand axes were discovered at the lowest level. Above them were cherts and jaspers from the middle Paleolithic (30,000BP to 10,000BP), followed by upper Paleolithic microliths with prominent blades and burins. The following layer dates from the Mesolithic period (10,000BP to 7,000BP) and it contains geometrical microliths and bone tools.¹⁰

Temperature difference of approx 8°C on an average between Europe & South Asia during those times could have been the reason for an earlier beginning in India

These paintings on other end of the time spectrum, stretch up to medieval period showing horse riding warriors holding swords and shields. The overall historic depth stretching deep into prehistoric time zone at Bhimbetka is indeed incredible.

The oldest cave paintings in Europe are found to be 14,000 years old. At Altamira near Santander in northern Spain, a near life sized bison is painted in the ceiling of a cave chamber. The unknown painter used several colours and exploited the natural contours of the ceiling to create a three-dimensional impact. There are cave paintings found in Lascaux in France too. A temperature difference of around 8°C, on an average between Europe and South Asia during those times



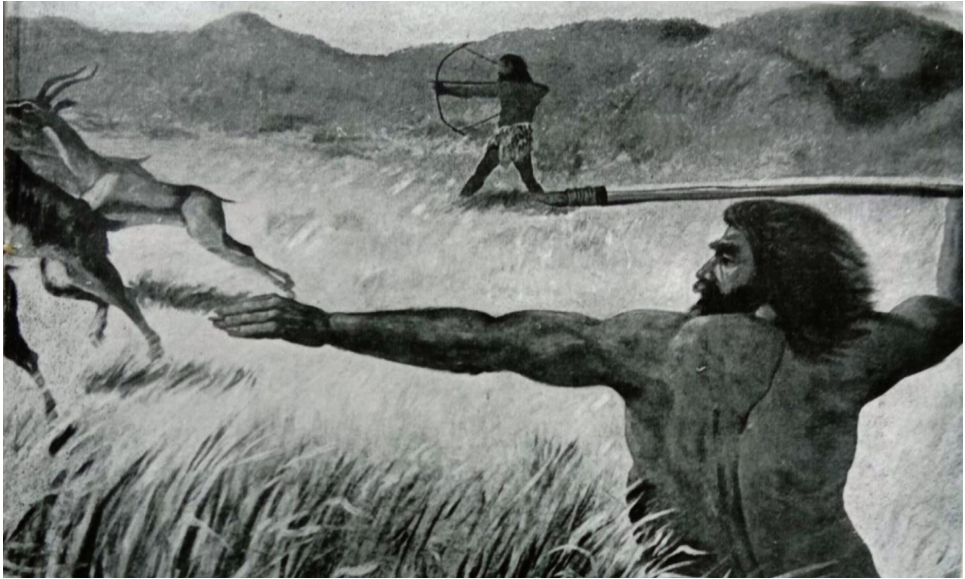
(the temperature gap is more than 10°C now) could have been the reason for an earlier beginning in India.

What is the purpose of this art, which features so many animals? It appears that it was magicalo-religious in nature in order to ensure successful hunting. Large animal representations in strategically located rock shelters, such as the horned bull of Kanwala, the boar, tiger, rhinoceros, fish, tortoise, and mythical bull from Bhimbetaka, the buffalo and elephant of Adamgarh, the bull from Ramgudiwar Talkoli in Badami, and the elephant of Edakal caves, do indicate that these animals were deified and painted oversize to inspire awe in the spectators.

Mesolithic paintings are predominantly red. They depict hunting scenes and are characterised by a sense of vitality. Human figures are elongated and are depicted holding bows, arrows, and barbed harpoons as they surround their quarry, in this case deer. A group of men are shown in a corner fleeing from an attacking rhinoceros, one of them climbing a tree. Men are either naked or wear a leaf or bark skirt. There is an obvious resemblance to the Spanish cave paintings from Cueva de Val del Gharco del Agua Amarga.

The Bhimbetaka cave paintings show us the themes of animals and are the earliest evidence of dance and hunting. These cave reveals the painting of animals they used to carry as livestock and plants or flowers which they used to sow. A cave painting from Bhimbetaka depicts a device that cave-dwellers used for hunting, which is depicted in the painting. They used to scare herds of deer by standing on ledges above a cliff with a steep drop below them. Deer are depicted falling into a chasm from the edge of a ledge in a painting. The carcasses of deer that had died or been wounded were collected and eaten after being roasted over an open fire.

A collection of paintings from Bhimbetaka depicting the occupations and social lives of these hunters and food gatherers has been released. “Lovemaking is seen in two artworks. Pregnant women are represented in another, while a baby is born between the mother’s legs in a third. There are a group of adorable children frolicking around. Paintings depicting the grief of the deceased’s



A mesolithic scene showing mesolithic hunters and food gatherers. A man is shooting an arrow tipped with sharp microlith at an antelope. The other is throwing on a deer a spear tipped with a sharpened stone. (Courtesy: Reconstruction from Museum of Evolution of life, Chandigarh)

loved ones are available. Finally, a funeral for a kid who has died is shown, along with the parents' sorrow, in this painting. The simplicity and directness of this writing screams 'contemporary'. So much information may be expressed in only a few short sentences.

The paintings of wild animals are the most intriguing. This type of white paint painting can be found on the rock shelter roofs. Herds of deer, neelgai, sambhar, gaur, buffalo, wild boar, rhinoceros, tiger, and elephant are represented. With its massive horns, the gaur bull is represented charging, while the buffalo bull's raised tail suggests that it is in a combative mood. The *Tassili-n' Ajjer* mountains in the Sahara, where similar rock drawings can be found, share numerous similarities with these paintings. There is no evidence that the painters share a common ancestor. Human development is depicted through paintings that depict how the mind operates in parallel lines at various stages of development. The cave paintings in Madhya Pradesh are among the most impressive in the world. Ostriches are

represented in the Bazar cave at Pachmarhi. They are connected to the discovery of adorned ostrich eggshells from Maharashtra. Seeing these birds, which are currently only found in Africa, represented in an Indian cave refuge is fascinating. Bhimbetaka and Adamgarh's cave shelters feature giraffes, which have Pleistocene fossils from the Siwalik hills to their credit. Shooting an arrow at a giraffe is the work of a man with a bow.

It would be appropriate to mention the age of the rock art. Carbon dating can be used to date pottery. Chalcolithic-Neolithic pottery often has a striking resemblance to some cave paintings. Wakankar uncovered a painted stone piece and a clump of haematite granules from the Mesolithic era in Modi, a location that had 60 painted rock-shelters, most of which have been drowned by the Gandhi Sagar Dam. Thus, the painting's Mesolithic period dating was determined.

In the Ajanta Hill range of Maharashtra, Patne, there is yet another remarkable discovery. Decorated ostrich eggshells were unearthed there by SL Sali. Cross-hatching and concentric circle engravings were used to embellish the shells. Archaeological evidence from the upper Palaeolithic and Mesolithic eras has been found in Bhimbetaka, which includes bone engravings and bone tools.

Bhimbetaka's green rock-paintings are the oldest on the basis of superimposition and date back to the upper Palaeolithic epoch. A few cave paintings from the Gupta era, for example, show a collection of flower-vase paintings in green and this is the only time the colour has been employed since. It's interesting to note that the green in these later images is a lot lighter than the green found in the upper Palaeolithic levels at Bhimbetaka in the earliest drawings.

Apart from the hues of the paints, the style of a painting is the most reliable indicator of its time period. There is a problem with cave paintings since the paintings of live tribes' people also bear a striking similarity to them. It's true that the two creatures bear some similarities. A trained eye can tell the difference between the current and the ancient. The vigour and energy of Paleolithic and Mesolithic paintings are unmatched by modern tribal painting. This misconception must be avoided at all costs.

4.5 ROCK PAINTINGS OF TELANGANA

Discovery of Pre-historic rock paintings in the sand stone rock shelters of Pandavulagutta near Ravulapally H/o Tirumalagiri village in Regonda mandal has put Telangana State on the map of Rock art sites of the world. These rock paintings demonstrate the extent to which the pre-historic man has developed the aesthetic urge in him inspired by his pre-occupations in the fight against the nature during the day-to-day struggle for existence. The rock art paintings consist of hunting, fighting scenes, honey collection, dancing, music, riding and other ritual representations. The animals depicted in rock painting are bison, buffalo, antelope, deer, elephant, rhinoceros, wild goat, tiger, horse, leopard, giraffe, hyena, cheetah, crocodile, scorpion, porcupine, crab, frog, crawling insects, fish, tortoise, lizard, langur, monkey, bear and dog, birds like eagle, vulture, crane, peacock, crow, beehives, butterfly. The Symbols depicted are such as honeycombs, cross, circle, swastika, fence-like, trap-like geometric designs, symbolic representations of the Sun, human figures both stick type and triangular bodies and anthropomorphic figures. Weapons such as bow, arrow, sword, and lance are also seen.

The rock art sites reported from Telangana are located in Warangal (Pandavulagutta in Ravulapalli, Devarlagutta in Bandala and Kossyagutta in Narsapur villages), Khammam (Neeladri hillocks in Ramachandrapur village), Mahabubnagar (Durgam, Dhupadugattu, Mudumala villages), Medak (Edithanur, Wargal, Sivar-Venkatapur villages), Karimnagar (Regonda) and Rangareddy (Kokapet Village). After the formation of the Telangana State, several new sites have been explored belonging to Mesolithic period. Some of them located in Mahaboobnagar and Mancherla districts are described as follows:

The rock art site is in Mannemkonda hillocks and is located at a distance of 20 km from Mahaboobnagar town. Approaching from Raichur road, one finds a heap of boulders called Podupurayigattu in front of Bodagattu Hill. There is a serpent hood like rock shelter

on the bottom fringes of the hillock. On the roof of the rock shelter there is a rare and one of the earliest rock-art of Telangana.

There are two groups of paintings - one is on the roof of the cave and the other is on the eastern wall of the cave looking towards west side plain areas. Both are in red ochre colour. The roof painting is beautiful and intact even today undisturbed for thousands of years. The measurements of the painting are about 3feet x 1foot. A series of four creepers with one to three buds each are painted.

The wall painting has been eroded by the leakage of rain water through the ages and hence we can see now only the southern and northern parts of the painting, not the central portion in between the two sides. The measurements of the painting are about 3feet x 1foot. It looks like a carnivore - either a bison or an elephant with head down and trunk up. The thick ochre colour of this painting appears to be older than the roof painting. The artist of the two paintings appears to be professional since the curves in the paintings are drawn with ease at a stretch, not drawing inch by inch.

To know the age of the paintings, supporting material remains were searched. The author picked up two pottery pieces and a finely ground stone in the loose debris of the cave. The close observation of the pottery pieces reveals that they were hand-made and baked red. This indicates that by the time of their production pottery wheel was not invented or not brought in touch with the people of this area. But the finely ground stone utilized for grinding food grains and vegetables indicates the next age of the pottery.

In view of these material evidences and the paintings which have similarities with their counterparts in the nearby rock shelters of Sanganonipalli, Potanpalli and Dupadgattu, some 5 - 10 km radius from this site, it can be said that these paintings of Mannemkonda were drawn by the people of Mesolithic Age and its succeeding Neolithic Age which existed in Telangana in between 10,000 years and 3000 years BP (before present).

Two additional prehistoric painting sites have been discovered in the Buggagattu forests, some 10 km from Mancherial's district

headquarters. This cave, known as Chittarayya Gundu in the locality, is oriented northward and is one kilometre from the Buggagattu Anjaneyaswami shrine in its north-western corner. The prehistoric drawings were created in five locations on the cave's 50-yard-long sand rock walls. There is only one petroglyph of an ox engraved in the first space, which is one foot long. The primary chittaruvulu is the second and third areas, on which tens of red ochre paintings were drawn. Animals such as horned bulls in rows, deers, antelopes, porcupine, and monitor lizard are among the most notable paintings in the spaces.

Some men were shown wielding weapons to control the oxen. A priest with a red ochre halo around his head is also depicted in the paintings. Nearby, a similar painting in a faint red colour is also discovered. The priests are known as tappetagoollu by the Naikpod tribes of the region, who worship Chittarayya for three days every three years (big dappulu in Telugu). Only faint red ochre oxen occupy the fourth and fifth spots. Fortunately, hundreds of microliths may be found in front of the cave as corroborative proof for the murals. Between 8,500 and 3,000 BCE, Mesolithic Age humans placed small chert stone chips (one inch long and a centimetre wide) into the complete cleavage of fist-fit logs to manufacture sharp implements such as knives, sickles, and other tools. Human paintings with metal weapons and physical grinding stones suggest that the cave was occupied by people during following centuries, such as the Neolithic and Megalithic.

At a distance of 2 km from the first cave, Paatha Chittarayya Gundu is found in the dense woodlands. Its northward projection is greater than that of Kottha Chitthaarayya's cave, indicating that it may have provided humans with a more secure environment. However, due to current distilleries cooking here for illegal booze, the majority of the prehistoric paintings exhibited on its wall spaces have been faded. On the cave's 30 feet-long wall space, only a half-foot-long red ochre ox figure and a foot-long white ox figure are plainly discernible. However, scientific / expert

chemical cleaning of the cave wall looks to offer every chance of retrieving multiple artworks.

Since the similar material evidences found at the Kottha Chitthaarayya cave are also attested in front of this site, the age of this cave also might belong to the Mesolithic age or it might have existed a bit earlier too, as its name Paatha (meaning old) sounds; say 12000 years BP.



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5. Agricultural Revolution

This chapter deals with a period from around 10,000 BCE till around 2,000 BCE. As domestication of animals and plants has been the dominant theme, this period may also be called as 'Agricultural Revolution'. Several aspects evolved during those prolific times. As our nomadic ancestors settled along river valleys, various populations including humans, plants and animals multiplied. Bullocks, asses followed by horses were domesticated. Technological discoveries like brick making, pottery, basketry and looms provided new opportunities to an ever-expanding population around the new emerging occupations. Fashion consciousness was reflected in ornaments and cultural awareness was reflected in paintings. By around 2,000 BCE, Telangana lands were inhabited by not less than 1,00,000 human population along with proportionate number of village settlements surrounded by crops and animals, mostly around a perennial water body.

5.1 DOMESTICATION OF ANIMALS AND PLANTS

Most people in other continents of the planet were hunting wild animals and eating forest trees' leaves and fruits at the time of agriculture's discovery in Asia, particularly western Asia. Israel, Jordan, Anatolia, Iraq, the Caspian basin and the adjacent Iranian plateau were all part of the hilly region that gave rise to the Neolithic agricultural revolution. Wild ancestors of wheat and barley have been found in this region, as well as domesticated animals such as goats, sheep and pigs. As a result, this region had all the ingredients for mixed farming, which includes both farming and raising livestock. From this region, Neolithic culture spread to the Aegean and Levant, Egypt, the Balkans and Danube Valley, Italy, France, Spain, Britain and the Indian subcontinent in a series of waves.

Animals that live in herds are more receptive to domestication than

those that live alone. It is common for a herd to be led by a lone herdsman. It's easy to catch the rest of the herd if you capture the leader first. The most common domestic animals, such as sheep, goats, cattle, and pigs, fall into this category and were the first to be domesticated. Grasslands, on the other hand, are known for their dense growth and easy control by humans. Wheat, barley, oats, and rice are all examples of grasses.



A Neolithic rural scene depicting the harvesting of wheat and Barley with stone sickles, with clusters of huts in the background. (Courtesy: Reconstruction from Museum of Evolution of life, Chandigarh)

Polished Stone-Axes

The Neolithic man's ability to gain a foothold in the forested geography was aided by a small stone-axe or celt with its edge well ground. These farmers began cultivating crops in the woodland clearings. Fire was frequently employed to burn trees, and cereal grains were dibbled with the help of sharp sticks. Stone hoes with wooden handles were later made. Women were mostly responsible for the sowing of crops, and they are credited with the discovery of agriculture. It was only after the domestication of cattle and the invention of the plough, which came much later, that woman was liberated from the toil of cultivation. In most states in India,

during twentieth century whereas ploughing was done by man, it was the woman who followed the plough and dropped the seed in the furrows.

It is the cereals - wheat, barley, rice, millets and maize - which have contributed most to the building up of the Neolithic culture. They yield nutritious food and the grains can be easily stored for a number of years. All the cereals have arisen from wild grasses, and wild ancestor of a number of them are known. The wild varieties of wheat, after domestication and mutation evolved into what is generally known as bread-wheat. It constitutes, 'the major wheat species of the world, and the one that contributes most to the annual harvest.'¹ The wild ancestor of barley is found in Palestine, Arabia, Asia Minor, Transcaucasia, Iran and Afghanistan, and in eastern Tibet. The earliest find of barley is from Jarmo.

During the Neolithic period, animals were domesticated at the same time as cereals were. This was made possible thanks to years of study into animal and plant behaviour, habitat, reproduction, and growth. Grazing animals such as sheep, goats, and cattle supply a constant supply of food and manure for the farm and the community. Milk can be produced by both cows and goats. You can make cloth or felt out of sheep and goat hair. Ploughs and other large pieces of equipment could then be pulled by animals for the first time.

There has been an increase in the domestication of wild animals due to climate change and aridity. Due to a lack of food and water, wild animals congregated around the scattered oases where human settlements had already been established. Wild animals were domesticated as a result of human interaction with them.

Wild animals were first domesticated for meat and milk production, then as draught animals and transportation, and finally as equines and asses. An early pre-pottery horizon of domesticated sheep and goat bones was found in the Belt Cave; however, the second half of the same millennium revealed pig and cattle bone remains. It is based on excavations in that cave that support this chronology.

Housing, Pottery, Basketry and Loom

Houses built from locally available materials were a distinctive feature of the Neolithic culture. Stone and sun-dried-brick walls were popular choices. The walls and floors were lined with lime-plaster and burnished with smooth stones before being plastered again. Skin curtains may have been attached to the wooden door frames.

Problems with food storage arose as a result of the rise in agricultural production. Pots were needed for cooking as well as food storage. Clay was used to make the first pots, which were all made by hand; the pottery wheel was invented much later. The baking of pots is of significance for the beginning of science. As Gordon Childe describes, "It is the earliest conscious utilisation by man of a chemical change." Cooking operations were widened by the use of pottery, which also improved human's diet.

Iraq, Iran, Palestine, and Egypt were the first places where basketry was developed. In Egypt, coiled basketry was a common craft. The abundance of flax and wool made weaving possible. In Egypt, Asia, and Europe in the early Neolithic period, flax was the primary textile-making material. Skins and furs were the only clothing available to the Danubians, the windmill people of England, and the Scandinavian settlers, according to Jacquetta Hawkes. Women are once again being credited with the spinning, weaving, and making of pots.

The invention of weaving had deeper implication. As per Bernal cleave, "Weaving is clearly a further adaptation of basket-making, and both of them involve regularities, first of all actually practised and then thought about, which are at the basis of geometry and arithmetic. The forms of patterns produced in weaving and the number of threads involved in producing them are essentially of a geometrical nature, leading to a deeper understanding of the relations between form and number."

Saddle-querns were used for grinding grain. Possibly, parched grains were used, and the grinding operation may not have been so arduous. Techniques of baking and brewing were also developed.

During the Neolithic, also known as the Polished Stone Age, man

learned to grind and polish stone implements such as the celt, axe, and adze, as well as inventing the sickle for harvesting crops. By cultivating plants and domesticating animals, he was able to gain control over his food supply. Bernal considers the invention of agricultural technology to be one of the three most significant inventions in human history, alongside the use of fire and power. Like all great transformations, it was not a single act but a process including numerous observations and inventions, all subservient to the essential achievement - the cultivation of seed-giving grasses. Apart from the discovery of agriculture and animal husbandry, other achievements of the Neolithic revolution were wood-working, and manufacture of pottery and textiles. Thus, when we speak of the Neolithic revolution, we are referring to a fundamental shift in food production techniques that gave man control over his surroundings and spared him from a precarious existence as a mere hunter and gatherer of wild berries and roots. He lived in settled settlements for the first time, and aside from the security of not being hungry, he had time to reflect and contemplate.

From the Fertile Crescent area, agriculture and animal husbandry slowly diffused into adjoining lands. It reached the valleys of the Tigris and the Euphrates, Asia Minor, Egypt, Greece, the Danubian area in Europe, Italy, southern France, Iberia and Iran before 3300 BCE along with the Indian sub-continent.

5.2 SITES AND SETTLEMENTS

The presence of a large number of stone-axes among the surface findings has perplexed archaeologists for a long time. Many Neolithic settlements have been discovered as a result of modern expeditions and excavations across the subcontinent. The habitations of the Neolithic man in Europe were of three kinds viz. (1) cave, (2) land, and (3) lake dwellings. In the Indian context so far, no Neolithic Lake habitation has been noticed, though occasionally some caves as at Bethamcherla in Kurnool district have traces of Neolithic habitation. In India the Neolithic Man preferred two types of dwellings-firstly the pits as noticed at Burzahom in Kashmir valley and Nagarjunakonda

in Guntur district and secondly over the high lands, adjoining the hills. In central Deccan, especially in the upper courses of the Krishna, Bhima and Thungabhadra rivers, a remarkable series of archaeological studies have been carried out.

The Sites and their Distribution

Le Mosurier unearthed the first Neolithic tool in India in 1860, and drew attention to his finding of ground and polished stone implements in the United Provinces' East Tons in Northern Provinces (now Uttar Pradesh). In 1876, Robert Bruce Foote uncovered evidence of the early Neolithic period in Andhra Pradesh in the shape of a sandstone adze in Vaddamanu in the Guntur district. Col. Meadows Taylor documented the first ground stone-axe in the neighbouring state of Karnataka, in Lingsugur in Raichur district, in 1852. Between 1885 and 1891, Robert Bruce Foote identified more than 50 sites in the present-day districts of Hyderabad, Krishna, Guntur, Nellore, Kurnool, Cuddapah, and Anantapur. There have been no new investigations for well over half a century. However, the excavations at Maski, performed by the Nizam's State Department of Archaeology, have yielded significant evidence of Neolithic farming settlements (Nagarjunakonda and Sanganakallu).

During the year 1976, Polakonda in Warangal district was excavated and in 1977, a minor excavation was conducted in Budigapalli. In 1978, yet another Neolithic-Charcolithic site was excavated in Chagatur in Mahboobnagar district. The distribution pattern of the sites, as outlined above, shows that the Neolithic farmers had settlements in almost all parts of Telangana and Andhra Pradesh. Arid and dry climatic conditions during the Neolithic period was evidenced by the presence of some plant remains, such as *Acacia* (thumma in Telugu) or *Dalbergia* and *Zizyphus* (ber or regi in Telugu) species from the site of Palavoy². The animal species included cattle, sheep, goat, swine, antelope, possibly horse³, gastropoda, common Indian rat, domestic humped cattle, deer, hog, wild elephant, tortoise and squirrel, etc.

Settlement Pattern

The Neolithic Man frequented the Karimnagar region, as he did other regions of India. Neolithic axes have been found occasionally in Late Stone Age sites and in the proximity of Megalithic burials, although permanent settlements are rare. Thogarrai on the banks of the Maneru, Kadambapur, also on the Maneru, and Peddabankur, all in the Peddapalli district, Budigapalli on the banks of the Peddavagu, in the Husnabad mandal of Karimnagar district, Polakonda, Kolakonda, and Deveruppula in the Jangoan district, are among the newly discovered settlements. In Thogarrai, a Neolithic manufacturing site was discovered over a granitic outcrop. The collection included a large number of unfinished tools, besides a good number of finished adzes and axes.

Kadambapur is primarily a Megalithic burial site, with a number of Neolithic stone-axes discovered on the hills' sloping plains, which border the Maneru river. The Early Neolithic man must have occupied several rock shelters and caverns found in the hills. Many Neolithic stone-axes were discovered on the surface and in unrelated cultural layers in Peddabankur. A deposit of black earth, scarcely more than 2 m deep at any point, covered the whole historical site. There are no granite hills nearby for him to hide in, and no dolerite dykes for him to make his toolkit. The tools were apparently imported from places like Kadambapur or Thogarrai, among others. Peddabankur is an example of Neolithic man settling over plains rather than a steep terrain, possibly to satisfy his farming needs.

Budigapalli

The entire Husnabad mandal and the adjoining Huzurabad mandal in Karimnagar district are studded with large number of megalithic burials. Budigapalli, a small village at about 6 km from Husnabad, is encompassed by a ring of hills, locally known as Valasagattu, Sanjivarayanigattu, Venkayagattu, etc. The granitic hills, the rock shelters and a nullah emanate from the hills. Kolakonda village, on river Peddavagu in the Jangoan district, is another important Neolithic settlement. In Devaruppala, the Neolithic settlement is

situated at about 2 km south of the village. There is a large Megalithic cemetery near the Neolithic settlement, consisting largely of pit circles and a few cist graves. A large number of polished stone-axes were discovered over the early historical site in Polakonda, a small settlement on the way from Jangoan to Suryapet in the Jangoan area.

Chronology

We have radio-carbon dates for nine sites in the peninsular areas thus far. Palavoy and Utnoor are located in Andhra Pradesh, Hallur, Kodekal, Sanganakallu, T'Narsipur, Tekkalakota, and Terdal are located in Karnataka, and Payampalli is located in Tamilnadu's North Arcot district. The earliest dates come from Kodekal (in the Karnataka district of Gulbarga) and Utnoor (in the Telangana district of Mahboobnagar). The ash mound at Kodekal has a radiocarbon date of 2365 BCE, while Utnoor has a date of 2138 BCE. Radiocarbon dating of charcoal samples obtained from the late Neolithic level at Polakonda yielded a date of 1300 BCE. If we consider the latest Neolithic phase, as stated by Dr. Allchin, who likened it to that of Jorwe in Maharashtra, we can estimate that the Neolithic period lasted almost 1500 years, probably twice influenced by external influences, once by the Chalcolithic and later by the Megalithic.

The stone-axe, composed of igneous or metamorphic rocks such as diorite, dolerite, and basalt, was discovered among the Neolithic people's material remnants that had withstood the ravages of time. Small tools, such as adzes, small chisels, picks, fabricators, hammer-stones, and sling stones, are among the less frequent forms.

5.3 THE ECONOMY, HOUSING, POTTERY AND PAINTINGS

Agriculture, animal husbandry, and hunting were all part of the Neolithic man's economic life. The Neolithic sites are characterised by the removal of natural plateaus and the creation of rocky platforms. The majority of Neolithic settlements are found around these terrace-complexes. The Neolithic man's primary concern was self-defense, which led him to build his homes on these terraces to avoid being attacked by wild animals. The terracing system had to fulfil two purposes: first, self-defense, and second, to some extent,

horticulture. With a small population and lots of food available in the form of fruits, tubers, and wild grains, his agriculture demands may not be as demanding. Aside from farming, Neolithic man relied on hunting, fishing, and whatever natural resources he could find, such as fruits, vegetables, and edible grasses or tubers. However, the widespread presence of domestic items such as querns and grinders could indicate that agriculture was practised. Grains such as horse-gram, greengram and ragi from Paimpalli in Tamilnadu, horsegram from Tekkalakota, and ragi from Hallur, all of which are geographically and culturally close to Telangana and Andhra Pradesh, suggest that similar grains were farmed or procured during the Neolithic period. With the use of stone axes and by setting fire to the thorny plants, the jungles and shrubs were cleared and land made suitable for farming. Cattle helped him with his farming and food demands. He ate short-horned and humpless cattle, sheep, goat, deer, wild dog, wolf, antelope, spotted deer, tortoise, swan, and fowl, according to animal bones discovered during excavations. For the first time, a horse was attested in Hallur.

Housing Pattern

Antelope, spotted deer, turtle, swan, and fowl are some of the animals that may be seen in the area. The horse was Telangana's physiographic and geological feature that had a significant impact on the Neolithic settlements. The first villages were frequently established on the summits of granite hills, on levelled terraces on hill sides, or on saddles or plateaux between two or more such hills. The Neolithic people, it appears, also preferred open terraces at the foothills, where natural rock shelters were accessible. Sometimes, as in Peddabankur, they chose black-soil plains. In north-western Telangana, they also lived near river banks in locations like Kadambapur, Thogarrai, and Kolakonda. On the slope and summit of the Palavoy hill, several circular and rectangular floors of varied sizes were discovered, surrounded by massive granite rocks. Piklihal⁴, Tekkalakota⁵, and others have similar features. The presence of multiple rock shelters in the vicinity of Neolithic celt or rock painting find-spots at Budigapalli and Kadambapur may indicate

that they were occupied by Neolithic man. House plans found in the Karimnagar region may be similar to those seen at other excavated sites such as Brahmagiri, Maski, Piklihal, Hallur, and others. There was evidence of split bamboo-matting walls coated with mud and supported by wooden posts in Piklihal and Tekkalakota. The roofs were made of a perishable substance, and the flooring were covered in red morrum-silt, debris, and occasionally rocks. Plastering using lime or clay, as well as manure, was observed.

The most substantial evidence on the disposition of the corpses comes from Nagarjunakonda⁶ in the Guntur district. The Neolithic people who lived in the valley left three types of funeral relics.

- a) an adult and child's cemetery;
- b) new born urns within the habitation area; and
- c) an adult male's pit

The Pottery, Ornaments, Art and Paintings

The Neolithic pottery in this region was discovered in Polakonda in the Jangoan Taluka of Warangal district. The pottery is mostly created by hand and is rustic and coarse, with a few burnished forms. The clay isn't particularly fine. Degraissant was frequently made of coarse sand. The pottery was well-burned to a grey, dark brown, or black colour, and the cloth often had an unburned centre. The pottery is largely plain, with no noticeable embellishments, whether combed, incised, or painted. We have some evidence of the type of kiln used to bake the pots at Polakonda. The kiln, despite its diminutive size, appears to have solid clay walls in which the pots were stored and burned using indirect heat. In Telangana's early Neolithic settlements, there was no indication of ornamentation. However, several steatite disc beads, terracotta beads, and a few shell artefacts were discovered at the Neolithic-Chalcolithic sites of Budigapalli and Chagatoor. A single copper spiralled ring, which must have been worn as a finger adornment, was discovered at Polakonda during the late Neolithic period.

Paintings on rocks, pottery, and terracotta, as well as brushings on rocks and rocks, have preserved the Neolithic people's social

and cultural life. Rock paintings have recently been discovered at Regonda, Budigapalli, Kokapet, and Mundamala in the Karimnagar, Hyderabad, and Mahboobnagar districts. These red ochre paintings at Regonda depict tall men, with some vertical lines intersecting with short horizontal lines at the top, indicating the human head and hands. The paintings at Budigapalli are found at the top of the hill, in a rock shelter with a ceiling that is only about 1.50 m high. There are two horses here, one with a rider on the back, and the other with a rider on the front. Budigapalli's most notable specimen is a standing bull with its tail dangling away from its body. The cow had a hefty body, a short stumpy horn, and a prominent hump. It was fully painted.

Groups of avenues and alignments of Megalithic origin can be found in Mudumala village in Makthal mandal in Mahboobnagar district. Rock brusings are found on the south-west side of the village, with a crudely drawn humped bull, with its upraised tail, the horns curving forward, and the genitals prominently displayed, on the outskirts of the village. Human figures with outstretched arms and legs are also depicted. This could be a Mother Goddess. The breasts appear to be drooping sideways in this photograph.



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6. Metal Age and Megalithic Culture

This chapter deals with a period from around 2,000BCE till about 500 BCE. Metal, especially iron was discovered in Peninsular India. Metal axe replaced stone axe which hastened clearance of jungles. Bullock drawn ploughs hastened widespread cropping. And irrigated agriculture by arresting monsoon waters in make shift bunds and using sub soil moisture created perennial water surplus. The concept of storage of grains around river valleys and transport amongst them using bullock carts became common.

Discovery of iron also led to a completely new trajectory known as 'Megalithic culture' in peninsular India. Telangana lands also witnessed a copious growth of Megalithic structures with its characteristic burials, ornaments, art, coins and religious practices. By around 500BCE, Telangana lands were hosting around 4 lakhs human population.

6.1 ENTRY OF METALS AND EARLY CIVILIZATIONS

After stone came something more solid yet malleable, metal. With this discovery, began the Chalcolithic Revolution. It is applied to communities using stone implements along with copper or bronze ones. It began in Mesopotamia in the fourth millennium BCE. Thereafter, it spread in the belt of countries between the river Nile and Ganges. Copper was not found in Mesopotamia. It was imported from Oman on the Persian Gulf. Hence, it was with the imported copper that Mesopotamians mastered technique of bronze manufacture. This new discovery substantially sharpened the stone tools, literally. Palaeolithic man was using big but crude stone tools to hack trees. The smart, sharp, metal tipped axe could slay the same tree quickly. Men could thus penetrate deeper into thick forests, clear them and use it for growing crops. The same metal cutting tools was to provide the cutting-edge during harvest time.

The transition of crops from mountains to plains was one of the most significant occurrences of the Bronze Age. The cereal-fallow system replaced the nomadic shifting farming system. The plough, which was originally only a forked branch of a tree, ushered in enormous changes. Sumerians invented it around 2900 BCE, and Harappans adopted it around the same time. All prehistoric ploughs were built of wood, and because wood is perishable, discovering a real wooden plough from those places is impossible. A terracotta replica of a plough, on the other hand, has been uncovered in Mohenjodaro. The invention of the plough signalled the beginning of the agricultural revolution. Bullocks soon began to pull the wooden plough. The rich alluvial soil began to produce monster wheat crops. A tube was eventually fitted via which seeds could be dropped. This was the very first seed drill.

The wheeled cart was another great innovation. Around 4000 BCE, ox drawn sledges came first. They were used to convey royal corpses to their final resting place. But, very soon, the locomotion on land was going to be revolutionised. It was indeed crowning achievement of prehistoric carpentry, the invention of wheel. Applied to transport, it converted the sledge into a cart or wagon. By 3500 BCE, wheeled vehicles are represented in the Sumerian art. By 3000 BCE, carts, wagons and chariots were in general use in Mesopotamia, Syria and Harappan civilisations. Now, the wheeled cart was hitched on to the bullocks. The new technology combined two critically important ideas, the use animal power and wheel. Bernal states that, "These inventions were to have enormous material and scientific consequences. The cart and the plough enabled agriculture to be spread over all open plains and so far beyond the limits of the old civilisations. The increased possibilities and speed of transport by cart and even more by ship, together with the need to know the sources of valuable materials, led to deliberate exploration and to the beginnings of geography".

Simultaneously, irrigated farming also developed. Flood waters were stored in reservoirs for irrigation and canals were dug. Therefore, Chalcolithic is also called the age of irrigated farming.

Therefore, metal axe, bullock drawn plough and irrigated agriculture are the three crucial developments powering Chalcolithic Revolution. Metal axe cleared more forests. The area thus cleared was sown and cultivated. As bullocks pulled, the plough sunk deeper and upturned the soft alluvium underneath. Application of water stored nearby and conveyed through a canal saw a bumper harvest which was cut by using metal tipped sickles. Wheeled cart was in place for local transportation. Secured by a bumper crop, season after season, the Chalcolithic man was absolutely free to pursue other non-agricultural hobbies. It accelerated his future evolution.

Metal axe, bullock-drawn plough and irrigated agriculture are the 3 crucial developments of Chalcolithic Revolution.



The life of man altered more drastically in 3000 to 4000 years than in all of the preceding 2.3 lakh years, according to Braidwood as far as the Bronze Age achievements are concerned. Prior to the agricultural revolution, man spent his working hours looking for his next meal, unless he was able to feast himself after a large kill. Man was required as well as enabled to live in greater settlements when he learned to produce food rather than gather, hunt, or collect it, and to store it in the grain bin and on the roof. The emergence of specialised non-agricultural crafts arose when human energy was liberated for a wide range of new pursuits. It's no coincidence that basic mechanical principles like weaving, ploughing, wheeling, and smelting were discovered quite quickly.

Metal Age in India

In India, the transition from stone to metal was slow but a gradual process. This is proved by the fact that stone and metallic implements are found side by side. There is some similarity in their shapes too. However, there is no uniformity regarding use of metals in different parts of India. In Northern India, copper replaced stones as the ordinary material for tools and weapons. Axes, swords, spearheads and various other objects have been discovered in Northern geographies. Only after several centuries, iron came to be known and used as a substitute for copper. Therefore, we can make a distinction between the Copper

Age and Iron Age in northern India. However, in peninsular India, Iron Age immediately succeeded the Stone Age. The Copper Age, in peninsular India has not been discovered, yet.

Bronze is an alloy made up of nine parts of copper and one part of tin. It is very suitable for the manufacturing of tools and sharp-edged weapons. Bronze implements of early date have been found in India along with those of copper. The copper age probably started around 4000 BCE. The introduction of Iron in geographical south of Vindhyas may have occurred later and quite independently.

Invention of Iron technology was an outstanding achievement of mankind. Iron ores are well widespread compared with copper. Mixing carbon to this new metal provided its characteristic hardness. Socketed iron axe gave an efficient tool to man to clear jungles for cultivation. It was with the use of fire and iron axe that Indus valley people migrated eastwards into Gangetic valley clearing thick jungles. The hard clayey soil of Uttar Pradesh and Bihar could not be cultivated easily with wooden ploughs. But, once fitted with iron ploughshare, the efficiency took a quantum leap. Virgin lands, already rich in humus and cultivated with iron plough led to bumper crops, season after season. It must have been the 'Green Revolution' of that millennium. In due course, small tools like sickles and hoes were also manufactured from iron.

Another significant development was sailing along the coast line. Sailors in ancient days sailed gently and closely to the coast. They were carrying shore birds such as crows, doves, and shallows. They would release the bird after the ship was out of sight of land. It would ascend aloft from the east, the south, the west, and the north, as well as the intermediate places. If it saw land in the horizon, it would turn around and head that way. It would, however, return to the ship if this was not the case.

Harappans and their contemporaries not only grew cotton, but also devised methods of ginning, spinning and weaving it into cloth. It was a great technological advance for that age from Indus valley to Kathiawar, Gujarat, Khandesh and Deccan. Cotton cloth was exported to Mesopotamia and in exchange came woollen garments and silver.

Technological advancements that increased food production and ensured its availability also resulted in a rise in population. Agriculture necessitates more people than hunting and fishing. Kosambi estimates that most efficient hunting and food can hardly support one person per square kilometre; pastoral life can support three, but agriculture about a hundred. Therefore, the new techniques of plough cultivation, irrigated farming and domestication of animals led to a substantial increase in population in Indus valley during third millennia. Thereafter, it spread to lands afar and covered other river valleys too.

Early Civilisations

From 10,000 BCE to 5,000 BCE, animals were domesticated, cultivation began and nomadic hordes settled down. Clusters grew into a village. Around this time, someone discovered the magic of 'irrigation'. It meant that application of water could enhance the crop yield out of the same land. This attracted population along the river valleys. Dykes were erected and ditches were dug along the riverine course. During floods, water was stored. When dry, the same water was used to irrigate crops. The rich and moist alluvium brought down along with the water flow was also deposited along its banks. People farmed. Crops grew luxuriantly. Food assured security. That attracted more people along the riverine. Then, settlements grew from village to small town. This was the first revolution on land brought about by this new activity called 'Irrigated Agriculture'.

As labour bore fruits, surplus food liberated a few people from the rigour of farming. Farming itself had liberated their ancestors from the rigour of hunting with inbuilt insecurity from menacing animals. A settled village ensured security. Assured food enhanced it. And that in turn ignited hunger for other kinds of securities. Some people became merchants, some craftsmen and a miniscule proportion turned to priesthood. As the population grew further, settlements grew into towns and then cities. People had never experienced this kind of life, ever before.

These cities needed food. It came from surplus of river valley cultivation. But they needed something more, an organization, a

system which could control, and if necessary, command the ever-rising population all around. That is when laws were made. To impose laws, the institution of kingship came along. Thus, territory defined by settled farms, population, laws and kingship combined into the concept of State. Agriculture was discovered on land. Polity was forged by people.

Between 5000BCE and 1500BCE, four great civilisations grew along the banks of great rivers. Nile in Egypt, Euphrates and Tigris in Mesopotamia, Saraswati and Indus in India and the yellow river in China were the civilizational jugulars during those times. A fertile valley along with substantial cities inhabited by several thousand people containing imposing buildings, such as temples, palaces, public baths etc., were common to them. Each civilization also evolved a form of writing. And each one of them had a strong central administration. Pharaohs in Egypt, Hammurabi in Mesopotamia, Aryans in India and Shangs in China are well known names in the ancient history of these countries. It would be appropriate to have a closer look at the fate of Saraswati Sindhu Civilisation during those millennia.

Climate change, Great floods & Migration

As already stated, the height of the last ice age or LGM (Last Glacial Maximum) was reached about 20,000 years ago. From then onwards commenced Last Glacial Period (LGP), colloquially termed as Ice Age that ended by around 9,700 BCE.¹ It resulted in melting of the polar glaciers. Consequently, the sea level rose globally, causing many floods in the sea coasts all around the world. The oldest human settlements were all located along the sea coast. When the floods occurred, the human civilizations that were settled along the sea shores migrated along the dominant rivers and moved inland. This is captured as the 'Great Flood' folklore in various cultures all over the world. These great floods were not a one-off event. "They were a continuous phenomenon, with varying intensity spanning the 9700–8000 BCE period."²

In the Indian culture, the Great Flood is associated with Manu. The Manu people migrated from the southern sea around the Gujarat

Sea shore along the river Saraswati to the north. They settled along the Saraswati river and some proceeded to further north and settled in northern lands including the Kashmir valley.

The first clan to diverge from the Manu people was the Ikshvakus.³ They settled along the course of Saraswati, from the Derawar fort (in the south) to Bhirrana (in the north). The oldest archaeological site Bhirrana is most likely the domain of eponymous Ikshvakus. The aridity from the Thar desert started spreading from south to north along the river Saraswati. As a result, the southernmost Ikshvakus spread westwards to the nearest river system, namely Satudri (Sutlej), having few of its tributary channels connected to Saraswati. From there, they migrated further westwards and settled around Taxila (the present-day Islamabad, in Pakistan).

As per the latest understanding, “Gujarat was the entry point for human migrations from Africa to India. From Gujarat, they diverged, with one group migrating southwards along the western shores to peninsular India and the other group migrating northwards along the Saraswati river.”⁴

All the branches of the Manu people migrated from the Saraswati river. This aligns with the archaeological records as are available till 2021 CE. The oldest archaeological sites are along the Saraswati river. The highest density of archaeological sites are also found along the Saraswati river. However, the average age and density of the archaeological sites along the rivers to the west of Saraswati are lesser than the average age and density of the archaeological sites along the Saraswati river system. This points towards east to west migration in the regions to the west of Saraswati, with the origin of migration being Saraswati. Bhirrana, Rakhigarhi and Kalibangan are some of the oldest archaeological settlements along the river Saraswati. Mohenjo-Daro and Harappa in the Indus system are relatively younger settlements.⁵ The latest research shows that Harappan people may have been the migrants from Kalibangan in the millennia gone by, when Saraswati distributaries were drying up. What about the migratory pattern of those who were settled on the eastern banks of the river Saraswati. As we have already stated that

archeological sites (including Bhirranna and Rakhigarhi) along the Saraswati River system are the oldest. The archaeological sites along Yamuna to the east, on average, are younger than those on Saraswati; those on Ganga, on average are younger than those on Yamuna; those on Sarayu (Ghaggar) further to the east are younger than those on Ganga and so on. The same pattern is repeated as we move eastwards and intercept successive rivers. This points to a west to east migration in the regions to the east of Saraswati, with the origin of migration being Saraswati.⁶

Saraswati Indus Valley Civilisation

The The Saraswati Indus valley civilization was stumbled upon in the early 20th century. It spread across parts of Punjab, Haryana, Uttar Pradesh, Gujarat, Baluchistan and Sind. Some of the main centres of the civilization have been discovered at Harappa, Mohenjodaro, Lothal, Ropar, Kalibangan and Rakhigarhi.

It was a town-based urban civilization. Peasantry produced enough grains. Wooden carts pulled by a pair of oxen brought them to store in granaries. Deep groves made by heavily laden carts have been found in the excavated streets of Mohenjodaro. Each city had a huge granary stocked with grains. City dwellers were traders and artisans. Art and culture were fairly well developed as may be judged from the exquisite sculpture of the bronze dancing girl of Mohenjodaro.

Town planning was one of the key achievements of those people. Roads were straight, always intersecting at right angles. City planning provided for residential, governmental and public spaces with clear demarcation. All buildings, be it multilevel houses, offices or granaries, were built with baked bricks of exactly the same size. A sophisticated sewage system was in place. The elaborate network of drains was fully covered. Public utilities like bath houses were there. In fact, this civilization was home to the world's first urban settlement equipped with a complete sanitation system.

A second aspect of the Indus civilization was the standardization of weights and measures. Seals unearthed in plenty suggest that each merchant or mercantile family owned its own seal. Goods were

authenticated. Trade was brisk and extensive. Food was their main export. Trade was carried on by ship with copper producers from Persian Gulf. Caravans from north brought silver from Afghanistan and lead from Rajasthan. Indus seals have been found in the Persian Gulf and Suez. There was trade with Sumer and similarities in art suggest that the two cultures copied each other's fashions.

This was a mature, prosperous and urban civilization. Archaeologists, through carbon-dating have established the excavated recoveries belonging to 3500 BC. Based on scientific methodology, we can safely say that 3500 BC was the point of maturity of Harappan civilization. The Saraswati River dried up during the past of Indian history. Technically speaking, it went out of site. But today, based on space imagery using satellite technology, we can safely say that a huge water body as broad as 3 km to 12 km meandered its way from the non glacial Shivalik hills of Himalayas covering present day Punjab, Haryana, Rajasthan, Sind of Pakistan and Gujarat before eventually merging with the Arabian sea, a good distance of more than 1000 miles.

6.2 ORIGIN OF MEGALITHS IN PENINSULAR INDIA

Peninsular India's Megalithic period reflects a unique culture that succeeded the primitive Neolithic-Chalcolithic culture. There are significant differences between the two civilizations. The crude stone-axe blade culture gave way to a vibrant and energetic iron culture, complete with weapons, tools, and exquisitely polished wheel-made ceramics. Whether it was a quick cultural conquest or a gradual progression, the difference is obvious. The new culture quickly swept over peninsular India, notably in the Deccan, which includes modern-day Telangana, and blossomed into a way of life of unity based on basic togetherness.

Sites and Settlement Pattern

The Megaliths were discovered in places with particular geological and climatic circumstances. The cemeteries are generally found on rocky high-grounds that are unsuitable for farming and are

close to hillocks or an irrigation tank. The location of the tombs may not have been controlled solely by the needs of agriculture, but the availability of raw materials for constructing such ornate monuments may have played a role as well. Their homes were nowhere to be seen in the vicinity of the cemeteries or the irrigation tanks. They resided far away from the graveyards, but carried their dead to a location with plenty of stone. There is no evidence that they cultivated the arable plains in the area where they were buried. Aside from the raw materials building the tombs, the availability of iron ore and other geological variables may have played a role in the Megalithic colonies' placement.

In several cases, there was no evidence of dwelling near the burial site. The burials in Kanukula, near Sultanabad, took place on red sandy silt plains. The passage chamber tombs at Peddamarur, which are situated on top of a rocky mound, are 3 km from the settlement. There is no adjacent irrigation tank, although the Krishna river is about a kilometre away. There was no sign of habitation even in Uppalapadu, which has hundreds of Megalithic tombs. The cemetery is located in Kolakonda, Warangal district, on fertile red soil plains that are presently actively cultivated. The burials' habitation may be found about 3 km away, nestled between a granite hill and a creek. The burials in the Polakonda in Warangal area are located on sandy silt plains around 1 km from the habitation.

In many cases, there was no evidence of human habitation in the immediate vicinity of the burial site. Buried beneath red sand and silt on Kanukula plains near Sultanabad were the Kanukula burial grounds. Distance from Peddamarur's rocky mound tombs, which are 3 km from the settlement, is negligible. The river Krishna, about a kilometre away, serves as an irrigation source in the absence of any nearby irrigation tanks. In Uppalapadu, where there are hundreds of Megalithic tombs, no occupants were spotted even after thorough research. Warangal's Kolakonda cemetery is located on fertile red soil, which is currently being cultivated. About three kilometres away, nestled between a granite hill and a rivulet, archaeologists have discovered the site of these burials. Over sandy silt plains

about a mile from the Polakonda in Warangal district, the burials are located.

Economy

As evidenced by sickles and plough shares, farming and hunting were the mainstay of their economy. Many scholars believe that the Megalithic people were responsible for the introduction of irrigation-based farming practises. Most of the burial sites are found near large irrigation tanks, such as at Budigapalli, Torruru, Kanukula, Kadambapur, Rajagopalpetta, Ramunipatla, Kethireddy palli, and so forth. These reservoirs almost certainly served as a source of potable water for both the people living there and crops and animals they tended. Rice and ragi appear to have been their major foods, as seen at Hallur⁷, Coorg⁸, and Kunnatur⁹. Hunting boosted their food source, as evidenced by arrowheads, spears, lances, and javelins, among other items. They tamed a wide range of animals, including sheep, goats, pigs, poultry, tortoises and cattle. For consumption, they resorted to roasting animals. The carcass was thrown into an open fire, where the flesh was cooked and the bones were roasted. Cattle and sheep were probably killed as offerings on occasion. Many bones of the aforesaid species were discovered in the tombs at Pochampad¹⁰ and Yeleswaram¹¹.

The Megalithic people of Peddabankur ate primarily cattle, as evidenced by their dietary patterns. They were familiar with dogs, wolves, hyenas, and horses. Their understanding of horses and how to use them is documented. Horse skeletons discovered in their Pochampad and Muktyala graves could show that the animal held a special position in their lives. The horse with riders is shown in many contemporary paintings. In a picture by Budigapalli, a horse is represented with zebra-like stripes all over its body. The presence of bull representations in paintings, clay sculptures (Pochampad), and skeleton remains in habitational sites attest to its status as a sacred animal. Aside from being a source of milk, bison or buffalo may have been utilised as a draught animal.

Another significant part of their daily routine was pottery. It was made

up of red, mat red and coarse red. Most of the pottery in these fabrics was created on the wheel, while the sarcophagi were made by hand.

The exterior of the pottery has some post-firing scratches of linear motifs known as graffiti. After the pots were burnt, they were most likely carved with a sharp instrument on the pot surface. They can be found on a variety of pots and are related with graves or dwelling. They may have been used to signify ownership marks. In the Gowda community in Telangana region, the tradition of etching individual graffiti on pots to be attached to palmyra trees for drawing out toddy is still popular. Swastika, the endless loop, square with loops at the four corners, and endless triangles were among the alphabets and auspicious symbols found in the megalithic graffiti. In the Satavahana and succeeding times, most of the auspicious symbols remained.

Iron Objects and Technology

Agriculture, hunting, and everyday household needs were all served by the iron artefacts. Massive deposits of iron slags provide as proof of iron smelting. Regonda, Tellakunta, and other ancient iron producing sites were discovered in the Karimnagar region. Structures discovered in plains with plenty of slag and calcium carbonate nodules at the summit of various hills in Tellakunta, Peddapalli district, are a definite sign of ancient iron smelting. Iron ore is strewn across the entire hill range. A massive tank bunded up beneath the hills is used to store water for iron smelting. Several clay furnaces with blast holes with sizes ranging from 15 to 20 cm can be seen at Yapaldev padu in the Mehaboobnagar district. They range in height from one to one and a half metres. These were found everywhere over the river Krishna's bank, along the water's edge. Some of these furnaces had a heavy layer of calcium carbonate deposited over them, as well as iron slag nearby, which could imply that they were utilised as blast furnaces.

It's thought that prehistoric man in peninsular India had no choice but to employ relatively high-grade iron ore for his hearth-stones. Iron technology is thought to have originated locally but was not imported to India from Egypt or elsewhere.

Nearly every formation from Dharwar to the Deccan trap laterites in the state contains iron ore. Even in prehistoric times, the Nirmal district's iron and steel industry was a major player. High-grade iron stone and Konasamudram steel blades once made in Armoor earned them a reputation for their durability.¹² The Kariinnagar region was probably a popular destination among Persian traders looking for this steel. Armoor, Nirmal, and Laxettipet mandals of the Mancherial district, as well as large swaths of the Chikiyala bed in Sirpur taluk of Adilabad district are all known to be rich in iron ore. In the villages that surround the Chitiyala iron hills, local iron smelting is still practised.

Iron In Peninsula

Megalithic tombs have been found in large numbers in Peninsular India to the South of Godavari. The region is marked by outcrop of granites of which megaliths are constructed. Studded with rocks of all conceivable sizes and shapes, a casual visitor is left awestruck after seeing these formations even today. Modern civilisation has devoured a fairly large number of megalithic sites. Even then, quite a large number of such sites survive across Telangana lands.

Iron implements are found in every megalithic grave. Archaeologists have unearthed axes, spears, swords, and sickles. Grave goods from megaliths appear to have the most prominent feature of a free and developed iron industry. In the sixth century BCE, like the rest of the country, the Iron Age was well established in this region. Iron spear heads, arrow heads, axes, daggers, and knives were produced in large numbers. Using iron ploughshares and sickles allowed farmers to work more efficiently. Nails were also made from iron, which was used to make chisels, which are the primary tools of the carpenter and drills. People were able to clear forests and build roads by using a large amount of iron produced for the manufacture of axes.

Regarding worship, none of the sites excavated or exposed gave evidence of Brahminical religion. The religious beliefs of those early inhabitants, perhaps centred around the local form of worship and rituals. They believed in village Gods and Goddesses, tree and

serpent cults and probably practised the worship of spirits. The cult of mother Goddess was quite prevalent. The excavations have yielded several archaic terracotta female figurines. Goddess standing naked in a lotus pool and being bathed by two elephants with pails in the trunk, a nude Goddess sitting with legs apart, with protruded and pointed breasts, another figurine without stretched hands and arms lifted, another one holding a bunch of fruits in her right hand and a parrot perching in her right-hand nudging at her breast with its beak and yet another Goddess holding her prominent breasts with her hands from below are some of the archaeological findings. A bronze sculpture of mother goddess unearthed in Dhulikatta is holding a

It proved that people in those times were fervent worshippers of and had faith in fertility cult

baby in her left hand while right hand is resting on her knees. She is seated on a pedestal. It distinctly proved that people were solid worshippers and had faith in fertility cult during those distant historical times.

With the expansion of cultivation, animals' utility was becoming paramount and therefore, cattle became sacred. The rise of new religions namely Buddhism and Jainism also discouraged Vedic practice of animal sacrifices. Now, the bullock and cow became the companion of man and farmers regarded them as



members of their own social group. But before such refinement, animals, especially small ones constituted the essential diet of our ancestors during Mesolithic times.

6.3 SITES AND SETTLEMENTS

The term 'megalith' refers to a tomb made of large stones that is either dressed or undressed in archaeology.

Peninsular India's Megalithic buildings represent a unique cultural era that followed the basic Neolithic culture. The transition from Neolithic to Megalithic looks to be swift and peaceful. Whether the new culture arrived on the west coast or by sea, it quickly expanded throughout Peninsular India and became a defining feature of the region.

These Megalithic constructions can be found in Makran, Baluchistan, Mesopotamia, Egypt, North Africa, Spain, Brittany

to Carnwall, Wales, Northumberland, Scotland, and Ireland, in addition to Peninsular India. Burials have been discovered across North India, from Sind in the west to the Assam hills in the east, and from Kashmir to Vidarbha.

Distribution Pattern in Telangana : Amarabad

A massive complex of dolmens near Rayalagandi, on the road from Amarabad to Padara, has been discovered near Amarabad. This structure is built on a granitic outcrop that covers more than 300 square metres. The compound is divided by a nullah, commonly known as Manda Vagu. Rayalagandi, a gap between the hills, is roughly 200 metres to the north. A temple dedicated to Channakesava was built during the mediaeval period on one of the hills. A few nullahs originating from the hills run south and join into the Manda vagu in the area at the foot of the hills, which is now under dry cultivation.

Gondimalla

The village is located approximately 6 km from Alampur, between the rivers Tungabhadra and Krishna. The doab, which runs from Alampur to Sangameswaram and connects the two rivers, is littered with prehistoric and ancient sites. Many Middle Stone Age and Neolithic stone implements have been discovered. There were no chipped floors of the stone ages due to the periodic flooding of the rivers. Gondimalla is a small hamlet with a large Megalithic graveyard. Megalithic forms discovered here are similar to those found in north Karnataka's Raichur, Bijapur, Dharwar, Bellari, Bidar, and Belgaum districts.

The Megalithic tombs at Gondimalla exhibit architectural similarities to Buddhist stupas, which is interesting to note. Around some of the cists, a circle of horizontally tiled shale slabs resembles the one found around the Buddhist stupa at Kesanapalli¹³. Another resemblance is the circular dry wall comprising horizontally piled shale slabs around the cist and vertically planted casing slab for the dry wall. Another element is the projections at the cardinal points in the shape of ayaka platforms¹⁴. Buddhish stupas are known for their building of ayaka platforms in the four cardinal directions.

Mudumala

Along the north bank of the Krishna River from Thengady¹⁵, a great number of stone circles and massive stone alignments were previously documented. Numerous stone circles were discovered to the west of Thengady-south of Gudabelur, one mile north of Muraridoddi, from the Krishna-Bhima confluence to beyond Mudumala and Angunda. The surrounding area is known for its stone alignments, which range in height from 14 to 16 feet and girth from 6 to 11 feet; there were 31 of them when it was visited. The alignments are colloquially known as 'Banthirallu' (ball-like stones) and 'Niluvurallu' (standing stones) in Mudumala in the Maktal mandal of Mahboobnagar district, and comprise of blocks of stone of 14 to 16 feet in height, without any chisel or drill marks.

A cluster of Megalithic port-hole cist graves with passage chambers can be found about a kilometre west of Chagatur hamlet.

Peddamarur¹⁶ is a small village on the left bank of the Krishna river in the Kollapur mandal of Gadwal district.

Black polished plates and tan ware (dark brown) bowls were common in Megalithic pottery, which were frequently adorned with concentric lines over the shoulder. Hat-shaped lids were also included in the collection, with exact proto-types in Megs - I and II. There were also red polished, black, and red and black polished ceramics in the pottery. There are also a few buff ware sherds. Vases with beaded and flanged rims, occasionally grooved at the top, are the most popular. The majority of the deep bowls are red polished, with minor soot streaks. There are black polished and black and tan ware dishes in addition to the black and red ware dishes. During the Megalithic period, dark brown or tan pottery jars were widespread. A narrow-necked vase with a flanged rim, possibly used as a lota, is another common type.

6.4 BURIALS AND THEIR CONTENTS

The megalithic tombs at Hashmatpet, about 8 km outside of Hyderabad, were first discovered in the nineteenth century. A knife or dagger, a sickle, the ring of an axe, and the prong of a hayfork

(flail) or ploughing instrument were among the iron implements. There were also three bronze ferrules of walking-stick-like devices discovered. Human skull fragments, four teeth from a middle-aged male, and calf leg bones were discovered in a very deteriorated state. Excavations were carried out once more in 1971. There were black and red wares, as well as polished black, bright red, and dull red products. The funnel-shaped lids, bowls, dishes, pots with saggy bases, and ring-stands are the most common varieties. A sickle and an iron stirrup were among the iron artefacts discovered.

There was a fairly vast area of cairn rings and dolmenoid cists, occurring in clusters, at Moula Ali¹⁷, which is 8 km north-east of Secunderabad. There was an immense burial ground, extending over several kilometres and locally known as the 'Rakshasas' burial ground, at Janampet¹⁸, approximately 32 km south-east of Mangapet in Kothagudem district. There was a huge cemetery with more than 1500 dolmenoid cists at Dongatogu¹⁹, 11 km west of Janampet, of which one was excavated. The burials pictured above appeared to be family vaults.

Exploration In the Karimnagar Region

Singapur²⁰ is located 6 km from Huzurabad in the Karimnagar district. The Megalithic site is located at the bottom of a hilltop, next to a large tank. Around 50 stone circles were discovered by the roadside in clusters of tiny and large circles.

Kolakonda is a shortened form of Kolanukonda, which is derived from the Ramasamudram tank, a hilltop reservoir. Peddagutta, a hill in the area, is home to a Megalithic burial complex with about 200 burials. Jangoan Taluk of the Warangal district is home to Polakonda, which is accessible via Mondrai, a small village on the Jangoan-Suryapet road. Near Mondrai, about 14 km away, is the small hamlet of Polakonda, which falls under the revenue jurisdiction of Ramavaram. 60 to 70 megalithic tombs can be found on the tank's south-east side.

The southern face of the Peddagutta hill is home to a large Megalithic cist-burial complex, some 200 m away. More than a hundred bodies

have been laid to rest in this cemetery. Boulder circles are the most common type. Many burials have lost their orthostats, but a few are still visible through the sandy soil.

At a distance of 6 km from the city of Husnabad, Budigapalli is an isolated village. The settlement is surrounded by three hills: Valasagattu, Sanjivarayanigattu, and Venkayagattu. At the base of Sanjivarayanigattu, a massive Megalithic burial site containing only cist graves can be found. At the foot of Sanjivarayanigattu, a cist complex, more than 50 burials were discovered. In the vicinity of a village known as Regonda (located just north of the burial complex), there is a tank. On the western bank of the Regonda tank and in the fields, there are numerous old iron-smelting sites with iron slag strewn about.

Chinna Torruru is 7 km from Palakurthi village in the Warangal district's Jangoan taluk. Between 40 and 50 tombs can be found alongside the road and on the southern slopes of a huge tank. Bodagutta is a mound located about 200 m south of the Megalithic complex. Located in the Jangoan district, Bommera is a small town. The hamlet is located to the east of a Megalithic cist structure.

A distance of 6 km separates Singapur from Huzurabad in Karimnagar district. The Megalithic site is located next to a massive tank at the foot of a hill. The roadside was littered with about 50 stone circles, ranging in size from small to large.

The Ramasamudram tank, which borders a range of hills, may be the source of the name Kolakonda, which may be a contraction of Kolanukonda. The Peddagutta hill is surrounded by a one-square-km. Megalithic burial complex that contains more than 200 graves. The Warangal district village of Polakonda, located in the Jangoan taluk, can be reached via Mondrai, a small village on the Jangoan-Suryapet road. Polakonda, a small hamlet in Ramavaram's revenue jurisdiction, is located about 14 km from Mondrai. To the south-east of the tank is a massive Megalithic complex with 60 to 70 burials.

Husnabad is just 6 km away from Budigapalli. A ring of hills encircles the village, and these are referred to as Valasagattu,

Sanjivarayanigattu, and Venkayagattu by residents. The Megalithic burial complex at the base of Sanjivarayanigattu consists entirely of cist burials. More than 50 people were buried in the cist complex at the foot of Sanjivarayanigattu. One kilometre north of the burial complex, in the vicinity of a village, is a tank, which is called Regonda. Scattered throughout the fields and along the western bank of Tank Regonda and its tributaries are numerous ancient iron-smelting sites. Chinna Torruru is situated at 7 km from Palakurthi village in the Jangoan taluk of Warangal district. There is a large Megalithic complex consisting of 40 to 50 burials, lying on the road side and on the southern slopes of a huge tank. There is a hillock known as Bodagutta, about 200 m. south of the Megalithic complex. Bommera is a small village in the Jangoan district. To the east of the village is a Megalithic cist complex.

The village Ramunipatla²¹ is 8 km away from Siddipet in Medak district. Towards south of the village and half a km. away from there is a Megalithic burial complex, which consisted of 50 burials of pit-circle type, having single and double boulder circles. The village Thummannapalli is 4 km to south of Huzurabad on the Karimnagar - Warangal high way. There are traces of Megalithic circles with scattered boulders and rubble packing. Chilpur village lies 10 km. away from Huzurabad. On the outskirts of the village is a small group of Megalithic burials. Sirisipalli is about 7 km from Chilpur in Huzurabad taluk. A huge burial complex, with 49 numbers, lies towards north-west.

Mandapalli in Medak district is situated at a kilometre away on the east of Siddipet-Karimnagar Road. There are about 45 Megalithic circles here. Palamakula is situated on the Siddipet-Husnabad road, about 14 km from Siddipet. To the north-east of the village there is an extensive megalithic complex, with only 30 burials remaining intact. Pullur is a small village about 6 km away from the Siddipet-Kamareddi road. At present there are about 40 Megalithic burials on either side of the Siddipet-Kamareddi road, many of them disturbed by the local people.

The excavations were conducted at Pochampad²², on the right bank of river Godavari in Nizamabad district on an extensive Megalithic burial site. The 3 km long stretch, along the bank of river Godavari, is marked by several Megalithic burials in the form of single and multiple cairn circles.

At Kadambapur exactly to the north of Peddabankur in Peddapalli district and at a distance of 8 km a huge burial complex, consisting of more than 500 burials, perched on the western and eastern slopes of the hills, is found.

The Megalithic burials contained a large variety of pottery, iron objects, a few stone objects and ornaments such as beads of terracotta, semi-precious stones, gold or copper, shell, etc. Sometimes ear or nose ornaments, armlets or bracelets, and diadems were noticed. Very often grains of paddy and other cereals were offered. Some burials also contain skeletons of domesticated animals such as horse, etc. The most important among the burial furnishings is the pottery, which consisted mainly of the black and red, the black polished, and red polished, coarse red wares, etc.

In Peninsular India iron objects constitute, besides pottery, one of the important features of the Megalithic burials. The repertoire of iron objects found in the Megaliths displays a wide variety pertaining to the house- hold, agriculture, and war. They include daggers, knives, wedge-shaped blades, lances or javelins, spear-heads often with barbs on one or both sides, arrow-heads both socketed and tanged and swords of single or double edge. Besides, there are objects of house-hold utility and agricultural implements such as flat-axes, often with ring fasteners, hatchets, chisels, tripods to support pointed based vessels, lamps, hooks, knives, sickles, bill-hooks, spades, hanging saucer lamps, rods with rounded heads, resembling the beams of weighing scales, hoe-blades, horse-bits, ferrules, bangles, nails, frying pans (sthali), ladles with long handle and bells, etc. The other objects to mention are horse-bits and stirrups. Copper or bronze objects are rather rare in the Megalithic burials of the Telangana region.

Several megalithic graves contained gold artefacts. Two spiralled ear-rings were found in a Kadambapur pit burial. More than 50 small cylindrical beads, 35 gold, and 18 silver spacers were found at Nagarjunakonda. Kwaja Mohammad Ahmed excavated Cromlech-B at Polichetty Cheruguda near Janampet in 1940-41 and found a gold earring, probably spiralled. Pit circles at Brahmagiri yielded gold beads in disc and long cylindrical shapes.

Beads of a wide variety were found at the burial and habitation sites. Semi-precious stones like carnelian and jasper, agate, onyx, and serpentine are among the options. Lapis-lazuli, milky quartz, amethyst, glass, terracotta, shell, and bone are just a few examples of materials that can be used in jewellery.

6.5 ARCHITECTURE, ORNAMENTS, ARTS & RELIGION

Excavations at a few of their habitation sites have provided us with the only evidence we have of their domestic architecture. Brahmagiri, Sanganakallu, Maski, and Kunattur are all worthy of mention in this context. Sites like Peddabankur, Kolakonda, Polakonda, and Budigapalli in the Karimnagar region have left us with evidence. Sites like Yeleswaram and Peddamarur can be found in the Krishna valley. There were no signs of permanent structures anywhere.

A lime-plastered floor was found in Hallur.²³ Post-holes in the ground indicated that timber was used to build domestic structures. The floor of a house was made of stone chips, morrum, and lime plastered together. A rubble floor was occasionally installed around the perimeter of the house. The buildings were either circular, oval, or oblong in shape, and the houses were usually one or two rooms in size. Several elliptical structures found in the lower strata are assigned to the Megalithic period based on the associated pottery, beads, iron objects, etc. Excavation at Peddabankur uncovered a slew of elliptical structures that had evidently served as bathhouses, temples, and homes.

Sepulchral Architecture

The Megalithic constructions are influenced by the geological context in the same way as other early cultural contexts. Quarrying

stone was a regular occurrence because of the widespread use of iron technology and its functional application in all aspects of daily life. For the Megaliths, local stone was used whenever possible, but sometimes it was brought in from a great distance. When granite slabs could not be found, conglomerate or shale slabs were used instead. They carved underground cells for the burial of their dead in the lateritic regions. They used terracotta urns when stone was unavailable. These include beads, rings, bangles, and even ear adornments that are made from many different kinds of metal. Many of the rock paintings show off the Megalithic people's talent for painting. The newly discovered paintings at Budigapalli, Regonda, and Kethavaram, and the rock brusings at Mudumala, may be the work of these individuals.

Coins of Megalithic Period up to Satavahana Times

A mention, here may not be out of place, of the coins found in Wheeler's Chandravali²⁴ excavations. Two of them are of silver, of which one is a Roman Denarius and the other a rectangular punch-marked coin. Out of the remaining coins 43 were attributed to the Satavahana dynasty, while the 10 remaining coins to the feudatories of the same dynasty.

Religion

We are still in a lurch regarding the religious beliefs and objects of worship of the Megalithic period. It is suggested that the occurrence of trident or trisula and the sulam, the spike-like object in the Megaliths have acquired a religious significance among the Hindus of Peninsular India. The trident is invariably associated with Siva and other deities like Durga, etc. The single pronged spike, or javelin is very similar to the 'Vel' the favourite weapon of Muruga or Skandha, another popular Dravidian deity.

In the rock brusings at Mudumala, there is a figure of probably Mother Goddess with hands outstretched and upraised and the legs stretched apart. This figure may be the forerunner of the Mother Goddess figurines of terracotta found in the Satavahana and later levels. The Mother Goddess figurines of the Ikshvaku period, at

Nagarjunakonda and Yeleswaram are similar to the above. Many Mother Goddess figurines found at Peddabankur are also ascribed to the Megalithic period. Interestingly, none of the excavations in South India at the early historical sites yielded any object comparable to that of a Sivalinga which obviously led to the surmise that the worship of Siva in the form of Linga was a late practice.

The orientation of the Megalithic burials either in the north-south direction or east-west direction is a positive indication that the people were sentimental about the directions and they must be worshipping the Ashta-dikpalas. This view is corroborated by the occurrence of a terracotta buffalo figurine luted to a sarcophagus at Peddamarur, where all the cists with passages were oriented towards south. Buffalo is considered to be the vehicle of Yama, the God of Death whose antiquity can be traced to the Rigvedic times.

The Pasupathi seal of Mohenjodaro has been suggested to embody both Mahisha and Mahadeva.²⁵ The Mahisha, once regarded as the pinnacle of the animal kingdom in Rigvedic times, was eventually supplanted by the lion in Puranic times. Asvamedha and other Vedic sacrifices such as those found in Megalithic burials may be indicated by the presence of horse skeletons found there. The skeleton of a horse was discovered in a passage chamber near Jaggayyapet, and that of its master was discovered in the main chamber at Muktyala. An Aswamedha sacrifice theory was floated as a possibility. Solar disc with radiating circle in the middle and enclosed by tongues of flame inside two concentric bands is stamped on an all-black dish in one of the cist-burials at Peddamarur. This could imply that they were devout followers of the Sun God. As the vehicle of Agni, the protector of the southeast, the sarcophagus at Sankhavaram in Kurnool district resembled a ram. A red ware medium-sized vase was placed in the north-east corner of Meg.III at Peddamarur. Three perforations, one at the top and two at the bottom, make the pot look like Swat Valley (Gandhara) graves' visage urns in an inverted position. Isana presides over the north-east corner, which is believed to be where Lakshmi's abode is (Lakshmithana). Mother Goddess may be depicted as a face urn in the burial.

Chronology

It has been suggested that the Megalithic culture could be dated between 1100 BCE to 100 BCE.

We also have a set of Radio-carbon dates as follows:

Sl. No.	Name of the site	TF No.	Age (half value 5370)	Dates
1.	Hallur	573	2905 100	955 BC
2.	Hallur	570	3055 105	1105 BC
3.	Payampalli	350	2350 105	380 BC
4.	Kotia	319	2200 105	250 BC
5.	Halingali	685	2030 100	80 BC

The Vidarbha and Telangana region was under the cultural sway of the Megalithic people in the first millennium BC. Analysing the above information, we may conclude that the Megalithic culture had a lease of more or less a thousand years.



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7. Evolution of Law & Jurisprudence

Geologically, from about 20,000 years before present (BP) till about 5,000 years BP, the mankind on the planet earth witnessed Upper Palaeolithic Age, Mesolithic Age followed by Neolithic Age. Climatologically, this period witnessed transition from the Pleistocene to Holocene resulting in global warming causing melting of glaciers, leading to rise of oceanic levels by around 500 feet. Vast coastal strips along with nearby Islands were gradually submerged. Separation of Sri Lanka from Indian land mass, submergence of Poompuhar at Kaveri Delta and Dwaraka town near Gujarat coast occurred during those times. It also accelerated migration of Homo Sapiens. Geographically, a vast swathe of grass lands and alluvial plains showed up, due to flooding along the course of river systems. Demographically, population exploded from less than a million to more than twenty million humans. These humans came out their caves, became hunter gatherers and domesticated animals and plants. Technologically, the period witnessed unprecedented discoveries like microliths, a wheeled bullock cart, potter's wheel, irrigated agriculture, loom, basketry, sailing boats and manufacture of uniformly baked bricks. Sociologically, our ancestors evolved from a small group to a tribal clan to pastoral nomads to eventually settle down on land and form villages. Cognitive capabilities of those Sapiens evolved from speech (vak), coupled with hearing (shruti) and memory (smrithi), to sharing information. By around 5,000 years BP, the art of writing also evolved wherein what was verbally spoken, mentally remembered and shared with the proximate group was etched in writing on a physical medium like plant leaves, earthen tablets and copper plates.

Let us take a stock of the situation obtaining in the Indian subcontinent. By about 5,000 years BP. It was populated by not less than 5 million humans. To manage multiple affairs of a growing population, certain customs and practices evolved which were commonly understood and followed by all the group members. In due course of time, a certain structure developed combining population, territory, authority and a set

of people to exercise this authority. This was called polity. Those customs and practices in due course of time became traditions. That was the first nebulae of law. We can also call it the law of 'word of mouth'.

7.1 SANCTITY OF THE WORLD OF MOUTH AND THE VEDIC AGE

During the Stone Age, humans followed some sort of legal regime even in the absence of written documentation process. "Word of Mouth" carried the same force of the contents of a document. Even today it is axiomatic that many great transactions are led by oral communications effectively and meticulously, which shows the prime mandate of law that 'what is promised must come to happen' and the sovereign should ensure that promises in between the parties shall be performed and realized. There are abundant episodes highlighting the might of oral declarations in our epical episodes and historical events. We know how virtuous king Harischandra donated his kingdom including wife and son to honour his commitment to Sage Viswamitra (Markandeya Purana); How Lord Rama ideally complied with the promise of his father King Dasaratha to stepmother Kaikeyi and walked into the forests for 14 years (Ramayana); and how Karna divested of his life saving armour (Kavach) to Indra (Mahabharata). All such stories vindicate that oral declaration is as powerful as written undertaking under law.

Justice Markandey Katju observes that all law was originally customary law, and there was no statutory law in ancient India, for the simple reason that there was no parliament or legislature in those times. The problem with custom, however, was that it was often vague and uncertain, and did not go into details. The Smritis and commentaries repeatedly stated that customs would override the written text. This principle made the Hindu law dynamic, because customs kept changing as society progressed.

The faculties of speech and memory with a growing population in due course of time gave birth to languages. The first treatise known to humanity is 'Rigveda'. In due course of time, successive treatise like Yajurveda, Samaveda and Atharvaveda came up. A succession of knowledgeable Rishis contributed by way of successive Puranas. Ramayana and Mahabharata are just a set of stories out of this

massive literature. This rich compendia of so many treatises put together laid the solid foundation of Indian jurisprudence. We had moved from the law of ‘word of mouth’ to ‘the written word’.

Aryans, who evolved insitu in the basin of Saraswati Sindhu river systems, are regarded as the authors of Vedas and were called Vedic people. An important source of Vedic period were literary sources left behind. The early Vedic society was a tribal one, with social relations being based on kinship. While primary importance was given to the tribe that was called Jana, the lowest unit of society was family (kula) and the head of the family was called Kulapa. Families together formed the villages (Grama), which must have been smaller tribal units. The society in early Vedic period was a patriarchal one. However, woman was given right to pursue education, attend assemblies, choose their partners, etc. The tribal polity was not exactly an egalitarian one and functioned with the tribal chief at the centre, called Rajan. Rigveda refers to two groups

Sabha must have been the council of select clan members and samiti must have comprised of the whole clan

- Rajanyas – those who fought wars and were regarded as the senior lineage and Vis – rest of the clansmen and were regarded as the junior lineage.

Rigveda also refers to several clan-based assemblies like sabha, samitis, vidatha, gana, etc. Sabha must have been, the council of select clan members and samiti must have comprised of the whole clan. These assemblies performed the functions of government and administration. However, one understands that there were no regular legal institutions. The legal institutions during the Rig Vedic period were custom based, were in the chief was the arbitrator. During this period cases were mainly related to cattle theft and trial by ordeal was put into practice. We do not find any reference to capital punishment during this period.



During the later Vedic period, the Vedic tribes moved from Sapta Sindh region to the upper Ganges region and adjacent regions. Later Vedic period had greater complexity in political organization, social life and economic activities. Several literary

and archaeological sources like Yajurveda, Atharvaveda, Samaveda, Brahmanas and Aranyakas help us to reconstruct the history of the period. The character of the later Vedic society and polity began to change as the society began to make a transition from pastoral to mixed farming economy. The society began to see a shift from tribal identity to territorial identity and in turn this changed the nature of the chiefship.

Tribal groups during the later Vedic period were associated and identified with a particular territory, for example Panchalas were the people who occupied the middle portion of the doab called Panchala desa. This association of a tribe with the territory, also brought changes in the status and function of the tribal chief. The chief of the tribe was now not only involved in cattle raids but was also the protector of the territory in which the tribesmen settled. Rajanyas of the Rigvedic period, now became the Kshatriyas. He received voluntary presents called Bali from his kinsmen or vis, who gave him this in lieu of the protection that the chief provided them. With the status of kshatriyas changing, the nature of the tribal assemblies too began to change. During this period, hereditary kingship began to emerge, example of which could be found in Satapatha Brahmana and Aitareya Brahmana. Both of them refer to a kingdom of ten generations (Dasha Purusham Rajyam). During this period Sabhas became more important than the samitis.

During this period Sabhas became more important than the samitis



Collection of taxes and tributes became common during this period and probably an officer called Sangrihitri, who was in-charge for its collection. However, these taxations were not the same for all classes of people. During this period, we find references to a large body of royal officials which suggests that the administrative system during this period were beginning to develop. Amongst the officers who assisted the king in discharging his duties were senani, gramani (head of a village) and Bhagadygha (Collector of taxes), etc. This list is also supplemented by Satapatha Brahmana which includes a few other officers like Kshattri (the chamberlain), the hutsman, etc.

From Satapatha Brahman we are also informed that the king wields the rod of punishment (Danda) and it appears that he himself administered the criminal justice in the region under his control. We find references to crimes like theft, robbery, adultery, incest, abduction, killing of human beings, etc. Petty offences in the villages were left to the disposal of gramayavadin (village judge). The assertion that speaking truth could save a man from death, comes from Chhandogya Upanishad, according to which if a person had committed a crime and is brought handcuffed to the place of his trial, and asked to hold a heated axe, spoke truth, his fingers wouldn't burn. When a thief was caught red handed, he would be either given death sentence or his hands would be cut off as penalty.

Our knowledge regarding the civil laws of this period is mainly confined to ownership of land, succession and partition of the property. Ownership of land for the purpose of cultivation was recognized. Eventually the individual tenure of land shifted to being tenure by a family. Communal property during this period was unknown. As humans began to settle, the concept of inheritance of landed property must have been in place. The word *daya* was used during this age for inheritance. During the later vedic period the property of the family was property of head of the family (father usually). Neither the women nor the sudras had any right to property. Only one form of contracts was known during this period which was related to money lending.

With reference to civil procedure, we find references to plaintiff (Prasnin), defendant (abhi-prasnin), arbitrator (prasma-vivaka) and Jnatri (witness in civil transactions). Trial by ordeal were very rarely used in deciding civil disputes, however there were civil cases like that of Vatsa, where he demonstrated his purity by walking through fire without being injured. King got the control of all land related transactions. Satapatha Brahmana, remarks that when a Kshatriya, with the consent of the people, gives a settlement to a man, it implied that separate holdings existed. Hence, we can understand that there was primary legal system in place by this time.

7.2 DHARMA – THE EDIFICE OF LEGAL SYSTEM

Vyavahara Dharmasastra (Legal System), as propounded in Vedas, Puranas, Smritis, etc, is embedded in Dharma. The word Dharma has many meanings, for instance, it means justice (Nyaya). It also means being helpful. Various texts have various meanings of the word dharma. A discussion between Yudhisthira and Bhisma in Mahabharata contains a discussion on this topic. When asked by Yudhisthira about the meaning and the scope of Dharma (Righteousness), Bhisma states that it is difficult to define dharma and there can be no accurate definition of the same. He declared that dharma was important for development and growth of all humans and hence anything that leads to growth is dharma. It restrains one from injuring others¹.

In order to find solutions to problems confronting the human race, which originated from natural human instincts, dharma was founded. Various works like Yajnavalkya Smriti and Shanti Parva of Mahabharata provides the essence of Dharma. “According to them there are nine-fold Dharmas of human beings irrespective of their varnas - suppression of wrath, truthfulness of speech, justice, forgiveness, begetting children upon one’s own wedded wives, purity of conduct, avoidance of quarrel, simplicity, and maintenance of dependants”².

According to Gautama dharmasutra, Vedas are the sources of dharma. While Apastamba dhamasutra states that the authority lies with those who know dharma and the Vedas. According to Narada Smriti as the standard of behaviour began to decline, the system of legal proceedings for enforcement of rights and punishment for wrongs was established. The King could decide law suits. It was during this stage that civil and criminal law that included the laws regulating the establishment of courts, their power, functions and procedure, were laid, that marked the beginning of legal and constitutional history. Hence one can understand that the word dharma encompasses rules concerning all matters like civil, criminal and constitutional laws. Having understood that the institution of kingship was important for enforcing laws, it is important to define

law according to ancient Indian jurists. According to ancient Indian jurists, law was recognized as one needed for protection of individual rights and liberties. According to Dharma sastras, dharma, that included law, was binding upon the king, who was given the power to enforce laws. These texts did not recognize any legislative powers of the King.

Shrutis And Smritis

Shrutis stands for universal, eternal, and fundamental principles and Smritis stands for a group of values derived from these principles and finding their expression in limited, temporary and relative field of social life. Swami Vivekananda said, “We know that, in our books, a clear distinction is made between two sets of truths. The one set is that which abides forever, being built on the nature of man, the nature of soul, the soul’s relation to God and so on. The other set comprises the minor laws, which guide the working of our everyday life. They belong more properly to the Puranas, to the Smritis, and not the shruti. The customs of one age, of one yuga, have not been the customs of another, and as yuga comes after yuga they will have to change”.³ Shruti, Smriti and Sadaachara made ancient Hindu law a holy trinity law and justice.

The prime authority for ‘Manava Dharma’ was articulated by Manusmriti authored by sage Manu prescribing ten rules for observance of Dharma. They are as follows:

Patience (*dhriti*), Forgiveness (*kshama*), Piety or self-control (*dama*), Honesty (*asteya*), Sanctity (*shauch*), Control of senses (*indraiya-nigrah*), Reason (*dhi*), Knowledge or learning (*vidya*), Truthfulness (*satya*) and Absence of anger (*krodha*).

It is further emphasized that ‘Nonviolence, truth, non-coveting, purity of body and mind, control of senses,’ constitute the quintessence of Dharma.⁴

Dharmashastras constituted three kinds of works – *Sutras*, *Smritis* and Commentaries/*Nibandhas/Sangrahas*. They discuss about the well-developed legal and judicial system. The important sutras that discuss about the legal and judicial system are, *Gautama Dharmasutra*, *Baudhayana Dharmasutra*, *Apastamba*

Dharmasutra, Haritha Dharmasutra, Vasista Dharmasutra and Vishnu Dharmasutra.

Various legal aspects have been dealt with in this text, for example, – Gautama Dharmasutra deals with matters related to marriage, inheritance, partition, stridhana, etc. On the other hand, Smritis, as understood literally mean remembered, and they discussed in depth regarding constitution and graduation of courts, appointments of judges, etc. Various smritis that elaborately discuss on the legal system of the period are, *Manusmriti, Yajnavalkya Smriti, Narada Smriti, Parashara Smriti, Brihaspati Smriti* and *Katyayana Smriti*. The other texts like *Mimamsas* and *Nibandhas* to provide us an understanding of various legal systems that existed in Ancient India.⁵ As mentioned earlier, the King was responsible for enforcing laws, so now let us understand the role of King and his council in ancient India.

7.3 ROLE OF KING AND HIS COUNCIL

Mahabharata clearly remarks on how should a king be. In the Shanti Purva, Utathya of Angirasa's race, remarks that a king must act in the interest of the Dharma and should not act suddenly and unaccountably to the changing moods. If a king acts according to Dharma, he shall attain the position of a god, and if acts otherwise, he would go into hell. In other words, dharma, rests upon the king. A similar understanding has been provided by Arthashastra,

“प्रजासुखे सुखं राज्ञः प्रजानां तु हिते हितम् ।
नात्मप्रियं हितं राज्ञः प्रजानां तु प्रियं हितम् ॥”

According to this a ruler's happiness lies in the happiness of his subjects. In their welfare, lies his welfare and he must consider the highest good of all and not that of his own⁶. A similar view has been put forward by Ashoka in his Rock Edict-VI, when he remarks that my highest duty is promotion of good for all (*Sarva-lok-hitam*).

Dharmashastra provides extensive details about the king and his role, like who can be a king, who can assist the king etc. Let us first look at who can be a king according to Dharmashastras. Only an individual with following can be a king – one who belong to

Kshatriya caste, who has received the vedic education, who aims to be the protector of the world, who can administer appropriate punishment for one who has behaved improperly. And after assuming the title the King must act in accordance to dharma and rules even with his enemies, impose harsh punishments even to the friends who have behaved improperly, must behave without guile and must be compassionate towards Brahmins. In dispensing his duties, the king must be assisted by a counsellors, envoy, collectors and supervisors. Dharmashastra also puts forward the pre-requisites for being appointed as counsellors, envoy, collectors and supervisors.

The primary duty of the king/sovereign was to ensure administration of justice impartially and to punish the guilty. As per Manusmriti, there must be a hall of justice (sabha) where the king, accompanied by Brahmans and ministers, would look into the disputes of the people and should decide upon the cases on daily. Manusmriti further clearly states that the king should decide cases one after the other under 18 different titles. They include non-payment of debts, deposits and pledges, sales without ownership, partner concerns and the resumption of gifts. It also includes non-payment of wages, non-compliance with agreements, disputes between the owner and his servants, sale and purchase decisions, boundary disputes, assault, defamation, theft, robbery and violence, adultery, man and wife duties, inheritance, partition, gambling and betting.

These were the topics that gave rise to lawsuits. The king would decide upon these cases with the help of principles drawn from local usage and from sacred laws⁷. On the other hand, Yajnavalkya smriti suggests that the king must in person, daily investigate law suits⁸. According to Narada Smriti, those persons should be appointed for the trial of all law suits, who had knowledge of many sciences and that any judgement passed by ten men versed in Vedas and jurisprudence or three men familiar with Vedas pass would be right and valid⁹. Dharmashastras refer to a vyavahara which means law suit or dispute in a court and the legal procedure. Several smritis

and commentators have defined the word Vyavahara, for example Katyayana smriti defines it in two ways – etymological one, referring to procedure and other in conventional sense meaning a dispute. Legal procedure, depending upon oral and documentary evidences is important to find out the truth.

Before understanding the Vyavaharas, let us first understand what the causes are, that led to disputes. “According to Manusmriti, actions that spring out from the Mind, Speech and Body, results in either good or evil. Based on them, humans are grouped as the highest, middling and the lowest. Further, Manusmriti explains about evil actions that are connected to mind; coveting the property of others, thinking of undesirable things and adhering to false. Actions associated with speech considered to be evil are abusing, not speaking truth, detracting from the merits of all men and talking idly. Lastly, evil actions associated with body are taking what was not given, injuring without sanction of law and having illicit relation with another man’s wife”¹⁰.

According to Yajnavalkya Smriti, vyavahara must include all those disputes that are brought to the court at the instance of the parties. There shall be two kinds of courts – highest being one consisting of King, a highest qualified Brahman and counsellors and the other court shall consist of 3 brahmans who were well versed with the sacred laws. Manusmriti abstains a king and his officers from causing a lawsuit to begun nor let them sit in silence when a matter was brought to the court¹¹. Vyavahara, according to these texts, consisted of four important aspects, the plaint, the reply, the proof and finally the decision.

In certain texts deliberation of the judge and other officers to verify where the burden of proof lies and as verify the method of proof was also included. There are 18 *Vyavaharas* (grounds of litigation) that have been extensively been explained in the *Dharmashastras*, like *Samaya Niyamaha* (laws related to contract), *Sambhuya Samutthanam* (Partnership), *Nikshepaha* (Deposits), *Sambhuya Samuthanam* (Partnership), etc. We shall discuss a few of these here.

7.4 LAWS RELATED TO CONTRACT (SAMAYA NIYAMAHA)

Contract is a written or spoken agreement intended to be enforceable by Law. Smritis do not include any independent topic on law of contracts. However, Manusmriti clearly states that contract entered into with any of the following is invalid. These include people who are insane, intoxicated, crippled persons, dependents, infants and persons who are not authorised by party.

The Dharmashastras laid down 16 as the age limit for entering into a contract. Apart from these, there are circumstances that have been provided in which a contract could be invalid. These include, transaction entered into by an enemy of or opposed to interest of nation. It also included contract opposed to law such as, sale of one's wife or child, giving ancestral property as a gift when the person has children and without free consent by using force or fraud or when a person is overtaken by love or anger.

Dharmashastras also says a good deal about fraud vitiating all contacts, breaching of contracts, but they do not lay any rule that are applicable for transfer of immovable property. We find similar provisions made under the Indian Contracts Act of 1872, for example Section 11 states that a person can enter into contract if he/she is sound minded and not disabled under any law. On the other hand, section 14 of the same act states that any contract entered into via coercion or undue influence or caused by fraud, etc, are invalid.

Laws related to partition of wealth (Dayabhaga)

According to Rigveda, the word Daya literally means a share or reward. However, *Taitirya Samhita* and *Brahmanas* employ this word in the sense of paternal wealth or just wealth. Under the *Vyavaharas* in Dharmashastra, two important aspects of Dayabhaga have been discussed- partition and inheritance. Two important schools of thought exist in this context- *Mitaksara* and the *Dayabhaga* school. While *Mitaksara* school prevailed in entire India, except in Bengal wherein *Dayabhaga* school of thought of partition prevailed. *Mitakshara* system was propounded by *Vijnaneswara*, which excluded females from inheritance and this

principle was terminated by the Hindu succession amendment Act of 2005. Mitakshara school is further subdivided into four schools – Benares school, Mithila school, Bombay or Maharashtra school and the Dravida or Madras school. On the other hand, the Dayabhaga school has three principal works – Dayabhaga of *Jimutavahana*, *Dayatattva* of *Raghunandana* and the *Dayakramasangraha* of *Srikrisna Tarkalankara*. According to the Dayabhaga school rights in the joint family property are acquired by inheritance. In other words, the doctrine of this school remarks that the ownership arises on death (uparamavatvavada).

Dharmashastra refers to different kinds of property, Lobha – hidden treasure, Kraya – bought and Jaya – acquired by fight. Further these ancient Legal texts refer to different aspects like who are entitled to get the partitioned property, what time should the property be partitioned and the method for partitioning and what can and what cannot be divided. In most circumstances we find reference to only sons being entitled to partitioned property but provided they had cleared certain kinds of debts that must have been taken like Pitru-runa (debts due to ancestors), Devaruna (debts due to God) and Rishi-runa (debt due to sage). Vishnu Purana entitles the son to inherit the property, but in case a person does not have son, then his brother or brother's son was entitled to inherit the property. Mitakshara school clearly stated that the disposal of immovable property (Self acquired or ancestral) cannot be partitioned without consent. On the other-hand the Dayabhaga school permitted for partitioning of the property provided the mother is unable to bear more children.¹²

These ancient Legal texts stated that the property can be partitioned (equally) only if the father and mother have died. Manusmriti, on the other hand, stated that if parents were alive, no one had the power to partition the property, whereas Gautama Dharmasutra clearly stated that if the mother has past the child bearing age, the property could be partitioned. Narada Smriti, on the other hand, suggested that the property could be partitioned if the mother has crossed the child bearing age and the sisters have been married off.

Katyayana Smriti states that grandfather's property or father's property or self-acquired property could be partitioned. Yajnavalkya Smriti states that friendly gift or gift got in marriage or acquired property cannot be partitioned. We also find that pasture land, roads, clothes on one's body, etc also cannot be partitioned. Manusmriti states that if a man tries to partition the ornaments worn by his wife during her lifetime, he is degraded.¹³

7.5 MARRIAGE AND DUTIES OF A HUSBAND AND A WIFE

We find various words that indicate marriage like *vivaha*, *parinaya*, etc. Rigveda provides various reasons for marriage, like, to be a householder, to perform sacrifices and to produce heir. A wife has been considered as half of one's self or as one who makes a home. Dharmashastras like *Yajnavalkya smriti*, *Baudhayana Dharmasutra* and other works like *Brihaspati Parasara*, provide certain conditions as to how to choose partner in marriage. Although no specific rule for age for men has been specified, yet they have to have vedic education, whereas for girls, they were to have attained the age of puberty.

Dispute between a husband and a wife cannot be brought in front of the king or other courts for adjudication. Matrimonial bond is permanent and cannot be broken, according to Manusmriti and Narada Smriti. Manusmriti states that in case a husband is going abroad for any work, it is his duty to pay maintenance to the wife. Further it states that wife can be abandoned on certain conditions like if she is blemished, diseased or deflowered or indulges into foul play, or if she indulges herself into liquor, or is of rebellious nature, etc. Manusmriti also states that a man can get a second wife only if the first wife has not born a child for 8 years after the marriage or if child had died within 10 years after the birth, if wife is quarrelsome, or has born only girls. However, it clearly states that if a man has a sick wife, she should not be disgraced. And in case a wife hates her husband, she had to wait to for a year in order to cease to cohabit. Vasishtha Dharmasutra also states that a wife could find another husband, provided the first was damsel, or if the marriage had not been consummated, or if the husband had died. Manusmriti states

that before a wife decided to marry again, she had to wait for certain period of time – like in case the husband had gone to perform sacred duty the wife had to wait for 8 years, if he had gone for learning or attain fame, she had to wait for 6 years.

7.6 CRIME AND PUNISHMENT IN ANCIENT INDIA

Crime can be understood as violation of rules and regulations that are enforced by state and society. Under law of crime in ancient India, it was important to specify offence and provide imposition of penalty by the State against a person when proven that he had committed an offence punishable in law. The origin of the concept of the offence under criminal law in ancient India, was from the word *pataka* (sin) and what was included in it depended upon the laws and moral and social values that evolved in a particular society. Manusmriti clearly states that the dark qualities of man bring into existence the concept of *pataka* (sin). In other words, every act that is contrary to *dharma* was considered to be a sin or it can also be understood as violation of rules that are contained in *achara* and *vyavahara* as a part of *dharma*, constituted wrongful or sinful act in broader sense.

Offences were classified as *aparadhas*, *padas* and *chalias*. There were 10 offences that were included in *aparadhas*, that included disobedience of royal order, murder of a woman, interference with castes, adultery, theft, causing pregnancy by a person not being husband, abuse and defamation, obscenity, assault and causing abortion. On the other hand, *padas* included 22 offences like ripping open an animal's body, destroying growing crops, rape of a maiden, destruction of public gardens, etc, were as *chalias* included offences like obstructing public road, destroying temples, etc. Any person who accords commission of an offence and reports it to the king on his own and is remunerated from the king, he is called a *stobhaka*. The king should appoint a person to detect the commission of offence and provide such information to the king is called a *suchaka*.

According to Dharmashastras the power to punish any person who is found guilty of an offence is vested with the king. Punishment,

according to Manusmriti, can alone govern all created beings and protects them.¹⁴ Dharmashastras clearly state that it was the prerogative of the king to impose penalty on the individuals for committing offence. It was the king's responsibility to ensure that he did not leave any offender unpunished, irrespective of the offenders' position or relation with the king. Further Manusmriti also clearly states that no one is above law, not even the king and that he is liable to be punished 1000 times more than an ordinary person is. We also find various forms of danda like dhanadanda (punishing with fine) or punishing with strong censure, etc. Another form of punishment was *vadhadanda* which was of 3 kinds - *pidana*, *angacceda* and *pramapana*. *Pidana*, which literally meant afflicting was further divided based on mode - like whipping or flogging, restraint of liberty by means of imprisonment, restraint of liberty by chaining, etc. *Angacceda*, is understood as mutilation of limbs and organs of the body. Manusmriti mentions 10 kinds of mutilations, whereas *pramapana* refers to capital punishment.

In ancient India, punishments were found to be more brutal than of today. In fact, king used to pronounce '*Danda*' (punishment) whereas the courts (*Kula*, *Sreni* and *Gana*) pronounce judgments. Punishments depend upon the seriousness of the crimes; severer the offence committed, higher the court pronouncing harsher punishments. In case of family disputes, the elder wise man from the family be the judge and he is free to give the punishment as he wishes, but not severe bodily punishments.¹⁵

But in a case of misbehaviour, done by any family member the judge is free to do punish the individual physically either with a rope or with bamboo, and the rule is that they are only allowed to spank them in the back not in the head or chest.¹⁶

Narada Smriti talks about the right to give physical punishment to the individual is strictly registered to the King, the Teacher, and householder of each caste in his home affairs, it is because of the term independent herein that, he (King, Teacher & householder) has persons dependent on him, and he has to make their subjects follow a right path in society.

Ancient concept of 'Danda' or punishment has two objects (i) to discipline the guilty person and (ii) to do justice with the accused. According to Manusmriti, the king is duty-bound to maintain peace and humanity in his empire using 'Danda' as a tool. But this authority conferred on the king is not to be used arbitrarily and hence 'Rajadharma' mandates that 'King should inflict punishment on those deserving punishment only after he has fully ascertained the proclivity, as also the time and place, accurately, and considered carefully the ability of the criminal and the severity of the crime.'¹⁷

Though ancient legal theory favoured inflicting of deterrent punishments consistent with the principles of natural justice,¹⁸ the kind used to consider the time and place of offence, strength and knowledge of the offender justifying the punishment to the offenders. Modern principles of criminology and theory of punishments advanced by Bentham and Cesare Beccaria owe their origin to our ancient jurisprudence. While punishment given without proper judgment may destroy the country, lenience to offenders' worthy of punishment prompts stronger to roast the weaker. In a country where punishment is not properly inflicted, the ownership would not remain with any one; the lower ones would (usurp the place of) the higher ones.¹⁹

Manu also feared that if there was no punishment then all castes (*varna*) would be corrupted (by intermixture), all barriers would be broken through, and all men would rage (against each other) in consequence of mistakes with respect to punishment. Manu provides stages of punishment for an erring person if he continues to do the crime, first by (gentle) admonition, afterwards by (harsh) reproof, thirdly by a fine, after that by corporal chastisement. However, when the offender is not able to restrain such offence even by corporal punishment, then the four modes jointly should be applied.²⁰

According to *Gautama Smirti*, 'King has no authority to adjudicate matters between Brahmanas, he should be righteous in deed and speech, he should be well trained (*abhivinīta*) in the Triple Veda (*trayī*) and Investigation (*ānvīksikī*). He should be pure, with his

senses under control (*jitendriya*), and furnished with virtuous assistants and policies.²¹

Even a cursory glance at the ancient judicial system would enlighten the reader of the impeccable excellence of jurisprudential principles transcending through the generations and the modern legal regime or jurisprudence appears to be a figment of the ancient jurisprudence. Right from the norms of contractual obligations, family moral and legal nexus to property rights and international trade law including the artificial intelligence regime hovering in modernity have their seeds and origin in ancient Indian jurisprudence.

Criminal Justice Process

Crimes are taken cognizance by the officers concerned suo-moto in criminal justice system. According to Mahabharata, 'punishment preserves *Dharma, Artha* and *Kama*' which is an acknowledged theory of punishment²². The penalties were categorized as:

- (1) *Vagdanda*-admonition;
- (2) *Dhigdanda*-censorship;
- (3) *Dhanadanda*-fine;
- (4) *Angaccheda* – mutilation; and
- (5) *Vadhadanda* – Death penalty.²³

The trial was to be conducted according to Dharma Sastras and in a manner ensuring the faith and confidence of the litigants and the public in the judiciary.²⁴

The King or his officers had to take cognize of the offence on their own motion or on a complaint from anybody. The offences were classified into three categories as:

- (1) *Aparadhas* – small offences;
- (2) *Pathakas* – more grievous offences and
- (3) *Chalas* – offences against the government and public.²⁵

Dhanda Neeti is well accepted in Sastras and it was considered to be important that without the King and his power to punish the criminals' human beings would have always been tormented by fear, insecurity and threat to life and property. It is difficult to find

people who are always pure in all aspects and a deterrent is always needed to correct the wrong doer.²⁶

7.7 IMPORTANCE OF DOCUMENTS (LEKHYAM) & TYPES OF COURTS

The importance given to necessity for having documents is clearly there as given in *Brihaspati smriti*. This work states that it is important to have transactions also in written manner so that in case a person fails to clear the transaction or has forgotten about it, the written document will help immensely. Smritis state that the parties involved in any transaction should prepare the documents in accordance with law and should be attested by a competent witness, so that it could be used as a piece of evidence in case any dispute arises between the parties.

Mitakashara classified the documents into two types:

- a) **Janapada or private**, that are further of two kinds - one which required attestation when written by a third party and other not requiring an attestation. These include deed of partition (*Bhagapatra*), deed of gifts (*Danapatra*), sale deed (*Krayapatra*), etc.
- b) **Rajakiya or public documents** - are further divided into royal edicts (*Rajashashana*), documents related to victory or judgement (*Jayapatra*) and deed expressing king's pleasure to favour a person for service rendered (*prasadapatra*).

The royal documents (*Rajakiya*) were to bear the signature of the king and must also have the royal seal. *Rajakiya* includes documents related to *Prajnapana* (request), *Parihara* (orders remitting taxes), etc. Rules have been laid for what must various documents include in them like a loan document must contain in it the amount agreed to be paid with interest, attested by witnesses, includes name of the loanee, father's name and address, etc. *Yajnavalkya Smriti* also states that if a document is lost or has become illegible or has got burnt or destroyed, then a fresh document must be made.²⁷

Law of evidence are related to law of procedure that are to be followed by the court. It also lays down certain steps to be followed by the court like examining the plaintiff and defendant, recording their declarations, testing their declaration on the basis of evidences that

are available. Further we also find certain rules and provisions which Smritis provide for admissibility and inadmissibility of evidence which fell under the laws of evidence. *Sadhya* is a term that is used for those matters that are to be proved and the means of accomplishing a matter to be proven was called *Kriya*.²⁸ There were two kinds of means used to prove a matter – human means and divine means. Trail by ordeal was one such mean to prove a matter.²⁹

Types of Courts & Jurisdictions

Our ancient courts, as enumerated in Katyayana Smriti are graded hierarchically into six types as given below:

- *Kulik* (Family Councils) – consists of learned and elderly persons in the family who would resolve the disputes within the family or group of families of same origin.
- *Shreni* (Trade or Professional Councils) – to adjudicate the dispute among traders or professional constituted by knowledgeable and elderly persons of the relevant field or trade and known for their impartial nature and disposition.
- *Gana* (Assembly of a village) – is Village Council formed by learned, elderly impartial and known for integrity and capable of deciding the disputes in the interest of the parties and the village welfare.
- *Adhikrita* (Court appointed by the King) – is constituted by the King by appointing learned scholars as judges who are well-versed in Sastras and authorised by the King for delivering the justice with stated jurisdictions. They are
 - *Pratishtitha* - which was established at a particular village or town.
 - *Apratishtitha* - a mobile court which will assemble in a particular place to try a specific case as called up on by the King.
 - *Mudrita* - was a higher level court which was authorized to use the royal seal.
- *Sasita* (Kings Court) – the highest court of law in the Kingdom, presided over by the King himself, with chief Justice called 'Pradvivaka' and groups of Judges called *Sabhyas* to aid and assist the King.

- *Nripa* (King himself) – The King was the Supreme authority in the adjudication legal process and he was guided by the principles of Dharma which he could not override.³⁰

Judges as Justice Dispensers

In so far as the selection and appointment of judges is concerned, Yajanvalkya enjoins: “The Sovereign should appoint as assessors of his Court persons who are well versed in the literature of the law, truthful, and by temperament capable of complete impartiality between friend and foe.”³¹

Lawyers

The practice of engaging lawyers called ‘*Niyogi*’ was prevalent in ancient justice system. A *Niyogi*, person well versed in law and justice system was engaged by a party to litigation and authorized to represent his case in a court, and the lawyer was entitled to collect fee or remuneration to the extent of 1/16th, 1/20th, 1/40th, 1/80th or 1/160th of the suit claim and the remuneration should be inversely proportional to the suit claim.³²



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8. Buddhist Era

This chapter deals with a period from 6th century BCE till 4th century CE covering a span of around one millennium. The basic theme running through the entire period is rise, maturity, peaking, saturation followed by decline of Buddhism in the present-day Telangana lands. A certain polity known as Asmaka Mahajanapada has evolved covering the northern borders of Telangana around Godavari, Manjira basin even prior to the birth of Buddha. This period also witnessed the existence of sixteen Mahajanapadas and seventy-seven Janapadas across the Indian sub-continent. An overview of village, headman, money, rural economy along with widespread use of iron for agriculture is presented. Thereafter, birth and percolation of Buddhism and Jainism into Telangana lands is narrated. Its rise during Mauryan times and peaking during Satavahana times is also narrated. Finally, its decline during Vakataks and Vishnukundi times along with historical causes is also explained. The chapter closes after explaining evolution of Nagarjuna from an Acharya to an institution.

8.1 PRE BUDDHA SCENARIO

During the sixth century BCE, when Buddha appeared on the scene, there was no paramount power in the subcontinent. India was a congeries of states. Rulers and heads were sometimes aligning but more often asserting among themselves for supremacy. There were monarchies as well as republics. Professor Rhys Davids, in his remarkable work 'Buddhist India' has given a list of sixteen Mahajanapads or major states during those times. They were Kasi, Kosala, Anga, Magadha, Vajji, Malla, Chedi, Vatsa, Kuru, Panchal, Matsya, Surasena, Gandhara, Kamboja, Avanti and Asaka or Asmaka. Apart from these sixteen Mahajanapads, there is mention of seventy-five ordinary Janapads. The administrative unit at the district level was called Janapada.

Magadha, Kosala, Vatsa, and Videha were powerful Mahajanapadas in eastern India. Shravasti, which has been identified as the present-day Sahet-mahet on the borders of Gonda and Bahraich districts in eastern Uttar Pradesh, was Kosala's capital. The capital of Kosala was Ayodhya, which has a long history with the Ramayana. The area of the Sakyas of Kapilavastu, where the Buddha was born, was also included in Kosala. The state of Avanti, with its capital in Ujjain, was located in the west. Panchala, Surasena, Matsya, and Kuru were states in western Uttar Pradesh and the neighbouring districts of Rajasthan and Haryana.

During those times, the Punjab was no longer as prominent, and eastern Uttar Pradesh and Bihar, where forests were cleared and land was colonised under the patronage of ruling monarchs, took centre stage. Eastern India's woods were also teeming with wild elephants. They were a source of military force for the Nanda and Maurya Kings, who utilised them in warfare after being captured, tamed, and taught. They served in conflicts in the same way that tanks do now.

The Kasis were the people who had settled around Benares. Kosala corresponded to modern Ayodha in Uttar Pradesh. Anga corresponded to the district of Bhagalpur; Magadha corresponded to the modern Patna and Gaya while Vajji included present day Janakapur and Muzzafarpur district of Bihar, Mallas ruled from Kushinagar near present day Gorakhpur, Chedi corresponded to modern Bundelkhand. Vatsa's capital was Kosambi near modern day Allahabad, Kuru corresponded to modern day Delhi and Meerut and Panchala corresponded to Rohilkhand division in western UP. Matsya corresponded to former state of Jaipur in Rajasthan, the land due south of Kurus and west of Yamuna River. Surasena country was due south of the Matsyas with capital at Mathura, Gandhara included Kashmir and Taxila. Kamboja was up in the extreme northwest with Dwaraka as its capital. Avanti corresponded to Malwa, its capital being Ujjain. All these fifteen Mahajanpads were located in the river basins of northern, western and eastern Indian geography. None was abutting any sea coast.

The sixteenth Mahajanpad was Asaka or Asmaka lying in the neighbourhood of Avanti. Its settlements were on the banks of river Godavari. Its capital was Patlia or Podhana, the present day pratishthan town in the Aurangabad district of Maharashtra state. In Vayu purana, Asmaka and Mulaka are mentioned as the scions of the Ikshvaku family. Mahabharatha speaks of the royal sage Asmaka as having founded the city of Podana. Panini makes a mention of Asmaka which was in the interior of the Deccan and watered by the river Godavari. The Buddhist Suttanipatha refers to Asmaka lying on the banks of the Godavari. It was the only Mahajanpad located on the plateau lands between Godavari and Krishna rivers. All the sixteen Mahajanpads were confined to landlocked geographies. Seventy-five other Janapads had limited territories, quite a few of them bordering sea. They included Kalinga, Andhra, Chola and Madhura among others. All these janapadas abutting sea coasts were confined to deltaic geographies lying in lower reaches of rivers like Mahanadi, Godavari, Krishna, Kavery and Vaigai.

What was the socioeconomic scenario like in those days? Well, people lived in villages with population ranging from thirty to one thousand families. Animal husbandry and agriculture were their main occupations. They lived in huts around clusters. Plentiful land with forest around provided enough fodder and firewood. Every village was practically self-sufficient. With minimum crime and maximum contentment, everybody took interest in the affairs of their village. Even women considered it a matter of honour to participate in village affairs. Jowar, ragi and rice were the staple food and sugarcane, fruits, vegetables and flowers were also cultivated. There is mention of eighteen guilds. It included workers in wood, metal, stone, ivory and leather, apart from weavers, potters, dyers, fishermen, jewellers, hunters and trappers, butchers, cooks and confectioners and barbers, garland makers and flower sellers, rush-workers, basket-makers and printers.

Even women considered it a matter of honour to participate in village affairs...



Trade was brisk. Inland trade routes were busy as merchants took their goods up and down the great rivers and along the coast in boats.

They also went in big caravans. Cities like Kaushambi, Ajodhya, Sravasthi, Kasi, Mathura and Podana were great centres of trade and passenger traffic. It is quite understandable. Strategic location of these cities acted as a nodal point, thereby facilitating trade on surface as well as water. Export to other countries was mainly through caravans trudging long distances across inhospitable land mass. Monsoon was yet to be discovered. Therefore, the trade on sea was done by boats which sailed by hugging the coast.

Money

The demand for coinage was felt rather than barter, which was a cumbersome system. Coins with punch marks became the medium of exchange. The first punch-marked coins circulated in eastern Uttar Pradesh and Bihar around the fifth century BCE. Members of the Vaisya society who were traders and merchants became increasingly significant as trade and commerce developed.

Rural Economy

The rural economy of India on the eve of Buddhism was based chiefly as a system of village communities or peasant proprietors. With plentiful of land all around, there were no landlords, nor there were landless agricultural labourers. The Jataka gives strong evidence for this. Only to the extent that the king had a right to a tithe on raw produce, paid as an annual tax, could he be regarded the ultimate owner of the soil. The king had the right to dispose of all abandoned, forest land, and this right included the reversion to the crown of all property left intestate and 'ownerless.' In addition, the royal was entitled to 'milk money,' a perquisite given by the subjects when he had an heir. He could also impose forced labour or *rajakaria* on the populace, but only within the bounds of his own estates. As a result, the peasant owners enclose a deer reserve for their king, so that they are not called away from their agriculture to hunt down wildlife for him. The tithe on produce was measured out in kind, either by the village headman (*gamabhojaka*) or an official (a *mahamatta*) at the barn dams, or by a crop survey. Some of the rice and other grains held in the special granaries were kept full in case of famine or war. The amount levied appears to have ranged

from 1/6 to 1/12, depending on the ruling power's choice or other circumstances. And a monarch may give the contributions raised in one or more gamas (villages), whether rural or suburban, to anybody he or she desired to endow, such as a daughter on her marriage, a preacher, a Brahman, or a trader. The king, once again, had the authority to remit the tithe to any individual or group. The land could be given away or sold in the kingdoms of Magadha and Kosala, respectively. A Brahman landowner donates a thousand karisas of his estate as a gift in the first case; in the second, a merchant entangles an unwilling noble in the sale of a part. We also read in the legal texts that land might be leased in exchange for a percentage of the harvest. As one generation succeeded another, the holdings of each village's arable land, known as the khetta, would be redistributed and redistributed among the families. It's unclear whether any member of a village community could give or sell khetta to a stranger. It's probable that the traditional practise of giving a portion of land as a sacrificial price, as represented in the Brahmanas—And the Earth said: "Let no mortal give me away"—survived in the village; at a communal level, to prevent any breakdown of their social and economic union. It will be observed that land-holding conditions were identical to those in the Punjab today, which is the land of peasant proprietors par excellence.

Village

A grama can refer to a group of two or three dwellings or an indeterminate number of them. It was a catch-all word for any populated village that didn't have nagara defences or a Rajadhani ruler's palace. In the Jataka tales, there were anywhere from 30 to 1,000 households living in the gamas. The dwellings were clustered close, divided by narrow streets. The hallowed grove of trees from the primaeval forests, which had remained standing after the forest clearing had been completed, was immediately adjacent. A planted field, generally a rice paddy, lay beyond this.' Around the gama, which appears to have been classified as rural (janapada), boundary (paccanta), or suburban, lay khetta, or pastures, and its woods or un-cleared jungle: primaeval forest such as the Anandvana of Kosala, the Sitavana of Magadha, and the Pacinavamsadaya of

the Sakiya Territory. The Bamboo Grove of Magadha's ruler, the Anjanavana of Saketa, and the Jetavana of Savatthi stood out among these suburban woods. Caravan routes ran through those other uncleared woodlands, where people went to gather food, fuel, and litter, and were at times difficult due to marshy passages after rain, and dangerous due to wild animals and brigands. Supplementary grazing land for herds of cattle and goats, either to the monarch or the commoner, was next to or incorporated into these wilder tracts. A gopalaka was traditionally entrusted with commoners' flocks. We find him either putting his herds up in sheds at night or bringing them back every evening and counting them out to the various proprietors, who modify the pasturage from day to day. The gama's arable land was devoid of the clustered buildings, which were surrounded by a wall or stockade with gates known as gamadwara. The khetta or gamakhetta was protected from intruding creatures and birds by fences, snares, and field watchmen, while the interior boundaries of each householder's plot were reportedly dug for cooperative irrigation. These rectangular and curvilinear dividing ditches were compared to a patchwork robe worn by a mendicant called gudri in Punjabi, at least in the Magadha khetts. The recent clearing of forest area could potentially extend the khetts' boundaries. And, while the majority of holdings were likely small, controllable solely or with sons and perhaps a hired worker, the Jatakas contain estates of 1,000 kasrisas (acres?) and more, farmed by Brahmans. The Brahman Kasibharadvajias used 500 ploughs and bound men (bhatika) to lead the plough and oxen in the Suttas, as well. There is no information on a shareholder selling or mortgaging his share of the community field to an outsider, and it would have been difficult for him to do so without the village council's permission. In the books, there are three land sales. However, in one case, the proprietor or his forefathers had cleared forest land. According to an old test, a sacrificial fee was supposedly paid in the form of a plot of land. However, it is immediately added that the earth itself responded, "No mortal must give me away," and Mother Earth was a terrifying divinity.

Headman

The gamas have a strong feeling of citizenship, as seen by instances of communal initiative. The bhojaka or headman, who was paid by dues and fines, was the nominal head of the peasant proprietors. However, the entire hamlet gathered to confer with him and each other on civic and political issues. 'Women, too, deemed it a civic honour to bear their own in common labour,' they said. 'They erected new mote-halls and rest-houses, created reservoirs and parks, and took turns at a voluntary work in keeping their roads in repair.' The Jataka idea that peasants should abandon their cultivation and work for destitute rulers provides another peek into gama-tough life's mentality.

Gamas have a strong sense of citizenship, as evidenced by instances of collective initiative. The bhojaka, or headman, was the nominal leader of the peasant proprietors, and he was compensated with dues and fines. But the residents of the village gathered to discuss civic and political issues with him and each other. Building new moates and rest houses, reservoirs, and parks as a result of the councils' recommendations was the next step. For peasants in gama-life, Jataka's sentiment that they should leave their fields and work for impoverished monarchs is a further glimpse into gama's sturdy spirit.

Use of Iron for Agricultural Implements

The iron age was firmly established in Uttar Pradesh and Bihar by the sixth century BCE. Iron spearheads, arrowheads, axes, daggers, and knives were produced in large quantities. Iron sickles and ploughshares made farming more efficient. Iron was also utilised to make chisels and drills, two of the most important carpenter's tools, as well as nails. People were able to cut down trees and create roads through undiscovered portions of the nation because of increased iron production and the manufacture of iron axes. Aside from tree felling, skilled hard wood cutting at Ujjain shows the employment of better iron equipment, such as saws. Cattle's utility was fully appreciated with the growth of farming, and cattle became sacrosanct. Under the influence of Jainism and Buddhism, the Vedic

practise of animal sacrifices was abandoned, and bullocks became man's companion in the conquest of virgin regions. Indian farmers saw them as helpmates and part of their own social group from then on.

We have no civilisation relics left. According to AL Basham, with the exception of the walls of Rajagriha, which have no artistic value there are no important architectural remnants between the Harappa and Maurya periods. This was due to the fact that there were few stone buildings during the period. The majority of the structures were made of earth, wood, and bamboo, and it is no surprise that they were destroyed over time.

8.2 BIRTH OF BUDDHISM AND JAINISM

The sixth century BCE was a socio-cultural turning point for the entire world. Profound philosophers such as Zoroaster in Persia, Mahavira and Buddha in India, and Confucius and Lao Tse in China were born around that time. In India the teachings of Mahavira and Buddha gave birth to a new religion, each with an ever-growing following. It emphasised honesty, heart purity, nonviolence, and goodwill toward all sentient beings. They taught individuals to stay away from greed, deception, blaming, hostility, and fury. It attracted a vast number of people from many castes since it was a revolution against Brahmanical ritualism and the caste system. Vardhamana Mahavira, the founder of Jainism, and Gautama the Buddha, the founder of Buddhism, were both Kshatriyas. They taught in Prakrit, the language of the people, rather than Sanskrit, the language of the nobility. As a result, their message reached a large number of people and had a significant impact on their lives. For India, the name Buddha has significant meaning. The reason is simple: common mortals aside, powerful Kings and Emperors across the subcontinent eventually accepted Buddhism. Asoka of the Mauryan dynasty and Nagarjuna of the Deccan dynasty are two such individuals who had a significant impact on the polity of the time.

Sacred Trees

Gautama was born beneath an Asoka tree, attained enlightenment beneath a Pipal tree, proclaimed his new faith among Mango gardens and shaded Banyans, and died beneath a Sal tree. Never

before or after has a religion been so closely linked to nature. The cult of tree worship was inherited by Buddhism from the country's ancient religions. The Buddhists revered the Sal, Ashoka, and Plaksha trees because they were associated with the Buddha's birth.

It is vital to know the facts about the Buddha's life in order to comprehend the link of trees with him. Gautama was a member of the Aryan Sakya Tribe. Suddodhana, the Raja of Kapilavastu, a minor principality on the Nepalese border, was his father. Green rice fields surrounded by Sal woodland, with the Himalayan snow-capped peaks in the background, offered an inspirational setting for Kapilavastu. Gautama Buddha was born here in 563BCE. Buddha's birth has been described by stating that, when the time came for Queen Mahamaya to bear the Bodhisattva for 10 months like oil in a bowl, she wanted to see her relatives and hence requested King Suddodhana, to make arrangements for her visit to Devadaha, the city of her family. The monarch gave his approval, and the route between Kapilavastu and Devadaha was made smooth and decked with jars filled with plantains, flags, and banners, and she was seated in a golden palanquin, borne by a thousand couriers, with a large retinue. A pleasure grove of Sal-trees known as the Lumbini grove was located between the two cities and belonged to the residents of both. It was filled with flowers from the roots to the tips of the branches at the time, and bees and flocks of birds sang sweetly from within the branches and blooms.

When the queen saw it, she felt compelled to spend some time in the forest. The queen was carried into the grove by the courtiers. She went to the base of a large Sal tree, hoping to grab a branch. The branch leaned down and came within reach of her hand, like the tip of a pliable reed. She grabbed the branch with her outstretched hands. She was then jolted awake by the pains of childbirth. As a result, the crowd made a curtain for her and left. She delivered while holding the branches and even while standing.¹

Hiuen Tsang, a Chinese traveller, paid a visit to the Lumbini garden. In 630 CE, he arrived in India and stayed till 645CE. He specifies an Asoka tree as the location of the Buddha's birth. He speaks about

the Lumbini (Lavani) garden some 80 or 90 Li north-east of the arrow well. The Sakyas' bathing tank, whose water is as brilliant and clear as a lake and whose surface is covered with a variety of flowers. There is an Asoka-flower tree to the north of these 24 or 25 paces, which is now rotted; this is where Bodhisattva was born.

Gautama was married to Yasodhara and had a son named Rahul. The palace was filled with women who worked as cooks and servants, in addition to his wife. Gautama's idea of renunciation of worldly life came to him when he recognised that life was not just a cycle of joys, but also had its share of sorrows, such as disease, old age, and death. King Suddodhana sent him to a garden full of lovely women, according to the *Buddhacharitra*. He was surrounded by deity of love and kama. They crowded around him, curious and wide-eyed in awe, and saluted him with their smooth palms, like the cups of a lotus flower. Udayin, a childhood friend, urged them to pursue all of their passions on the King's orders. Others, whether carelessly or feigning to be nearly carried away by their transports, allowed the gauzy draperies that veiled their youthful forms to slip aside; others swung their tempting forms on the mango-tree branches; and, finally, another sang in the prince's ear the song of the forest, full of furtive desires and of the spring emanations. But his realisation of the futility of all things put him immune to their flatteries, and he returned to the palace, determined to leave the world.² He rode out of the palace with his groom Chandaka and his favourite horse Kanthaka.

Gautama attained enlightenment under a pipal tree at the current location, now known as Bodh Gaya. In addition to Hiuen Tsang, who saw this tree and described it in the following way: "From this south-west 14 or 15 li, not far from the place of penance, there is a Pippala tree under which there is a diamond. On this throne, every previous Buddha has achieved true enlightenment, and so will all future Buddhas. Then, go to that location and pray. Pippala is the same tree as Bodhi, which sits atop of the diamond throne. It used to be several hundred feet tall back when Buddha was still alive. Despite being frequently cut down, it still stands 40 to 50 feet(12 -15 m) tall. The Samyak Sambodhi, or "tree of knowledge," refers to Buddha's

attainment of enlightenment while sitting under this tree. A yellowish-white bark covers the tree, which has dark green leaves and twigs. The leaves don't fade in the winter or the summer; instead, they shine and glisten continuously throughout the year. Leaves wither and fall on each successive Nirvana-day (of the Buddhas), only to quickly reappear as before. With no invitation required, princes from different countries and religious masses from all over the world come together to bathe the roots of the tree in scented water and milk while they raise their voices and scatter flowers and perfumes; while they keep the light of day going by burning torches, they offer their religious gifts.



According to the Vinaya Pitaka, the Buddha remained under the Bodhi tree, meditating on the chain of causation for seven nights (Saptaraatra – Saptaha), the durdinās, determined to establish the triratna – the Buddha, the Dharma and the Sangha, after which he proceeded to Vaaranasi to preach a discourse to the five monks

A large stone with an image of the Buddha with his eyes raised and looking up is located nearby in a Vihara, north of the place where the Buddha walked, on the left side of the road. He sat under the Bodhi tree for seven days, not removing his gaze from it, intending to express his gratitude to the tree by observing it with a fixed eye for that length of time.³

‘A sapling of the Bodhi-tree was taken by prince Mahindra, son of Asoka, to Ceylon, about 250 BCE and was planted at Anuradhapura. Its great branches are supported by pillars. It is the oldest historical tree in the world.’⁴

Together with the Ganges River and the Himalayan Mountains, the banyan completes the picture of India Lasse observes that it is “probably the most amazing piece of plant life on Earth”. For the sole purpose of providing ready-made shelter to the primitive human population, it grows into a vast green temple of many halls, with cool, shady bowers that are impervious to light. Even though neither its wood nor its fruits are edible to humans, it is revered by Hindus and their neighbours for the wonder of its nearly preternatural growth, its indestructible durability, and its perpetual capacity for regeneration. These characteristics, along with the mysterious gloom of its galleries and avenues, make for an especially welcome respite from the wretched summer heat. It is common knowledge that the trunk of the tree, which is at a moderate height from the ground, branches out into several large, horizontal limbs, from which slender shoots known as “air roots” grow down to the ground, where they become strong supports for the mother-limb. This is known as the “air-root system.” Branching out from the central axis is repeated at a higher altitude, and an outer circle of air-roots is formed by the limbs of the second circle. With each additional tier of horizontal limbs, the outer circle of pillars grows ever larger, forming a grove of leafy halls and verdant galleries that multiply indefinitely as the central trunk grows taller. Because of the enormous scope of this evolution, two hundred feet [61 metres] above the ground, the topmost horizontal limbs are said to grow and the entire structure is crowned with a dome of verdure in which the central trunk finally reaches its peak. Its fine green colour contrasts pleasingly with the small red figs, which are clustered close together and measure five inches by three and a half cm.⁵

Planting banyan and pipal trees was mandated throughout the country’s rural areas. In addition to providing shade, this was a preventative measure to keep birds from damaging crops and fruits.

Fig-covered banyan and pipal trees provide food for tens of thousands of birds. As a result, they indirectly protect crops and fruit trees from birds that feast on their figs for weeks at a time. To preserve a tree is to save a large number of birds that use it as a safe haven.

Asoka enshrined the Buddha's remains in a number of stupas. It was in Nagod, which is now part of Madhya Pradesh, that Cunningham found the stupa of Bharhut in 1873. Located in Bharhut is the old city of Bhaironpur, which spanned 12 kos in length. Cunningham assigned a date of 200-250BCE to the stupa. In more recent years, researchers have determined that it most likely occurred between 184 and 72 BCE. Bharhut stupa's discovery is a significant moment in Indian history. A glimpse into the religion, manners, customs, dress, and architecture of India during those times is provided by its sculptures. Gautam, the Buddha, went through a lot of hardship. Devadatta, a vengeful relative, unleashed an elephant on him in an attempt to wipe him out. The elephant trampled a man in his rage, but when confronted by the Buddha, he bowed his head in reverence. In this medallion from Amaravathi, an Indian sculptor demonstrates their skill in depicting elephants in their natural habitats. In addition, it gives us a glimpse into Buddhist architecture. Stones or bricks were used to build the lower parts of houses. From the balconies of multi-story houses in towns, women could watch the royal procession and other sweet scenes.

The status of women changed when Buddhism arrived. The Sangha of Buddha did not include any women, as is well known. After his mother Maya died, Prajapati Gotami, Buddha's aunt, became the first Buddhist nun. Buddha initially forbade her entry into the Buddhist sangha. It is said that Buddha's cousin Ananda persuaded him to admit her to the Sangha after arguing with him that woman should be given the opportunity to study and practise the Dharma. The Order of Bhikkhunis or Nuns was one of the first organisations for women that Buddha founded after much hesitation because he saw the spiritual potential in both men and women.

According to the early Vinaya-pitaka, the Buddha granted Ananda's request to allow women to become nuns. The Buddha gave nuns

(bhiksunis) eight additional rules because he believed that women face unique challenges.

The bhiksuni was revered by Buddhists. However, monks (bhiksu) were regarded as having more merit than bhiksuni. Despite the fact that the women were allowed entry, they were not given the same status as the Buddhist monks. Regardless of how old a nun was, she had to first greet a monk. When she saw him, she was to bow down before him and offer obeisance, even if he had only just been ordained. The nuns' communication with the monks was restricted, but not the other way around. Only monks can be teachers of nuns in the Buddhist tradition, as no Buddhist nun is permitted to do so. In general, Buddha was not happy about the admission of women into the Sangha. Buddha told Ananda, "But as women have gone forth, now, Ananda, the religious life will not last long... just as houses where there are many women and few men, are broken into by burglars, even so, in that doctrine and discipline in which women receive the going forth from a house to a houseless life. The religious life will not last long. Just as when the kind of disease called white boned (mildew) falls upon a field of rice, the field of rice will not last long... just as when the disease called crimson falls upon a field of sugarcane, that field will not last long, even so Ananda, in that doctrine and discipline in which women receive the going forth from a house to houseless life, the religious life will not last long. Just as a man, Ananda, might in anticipation make a dyke for a great reservoir, so that water should not overflow, even so, Ananda, I have in anticipation prescribed these eight strict rules for the nuns, not to be transgressed while life shall last". Eloquence of the Enlightened needs no elaboration.

These eight rules were as follows. Bhikkhus were always to have precedence over Bhikkhunis in matters of salutation, etc. irrespective of any other consideration. Bhikkhunis could not observe the annual retreat (vassa) in a district where there were no Bhikkhus. Bhikkhus had to set the dates for Bhikkhuni Uposatha ceremonies. Confessing transgressions by Bhikkhunis had to be done before the assembly of both Bhikkhus and Bhikkhunis. Certain judicial processes in case of

Bhikkhunis had to be undertaken by both the Sanghas. Upasampadâ initiation of Bhikkhunis should be given by the Bhikkhu sangha as well. A Bhikkhuni should never abuse a Bhikkhu. Bhikkhus can officially admonish Bhikkhunis, but not vice versa.

However, once the order of Bhikkhunis was founded, a large number of distinguished women from various social backgrounds came to adorn this order, attracted by the power of the Buddha's teaching and the freedom which the new order offered them. Many of these Bhikkhunis attained to the supreme bliss of enlightenment. The stories, sayings and deeds of these distinguished Bhikkhunis are recorded in many places in the Pali Canon, most notably in the Therigâtha, a compilation of verses uttered by these Theris when they saw the clear light of the Dhamma, and which constitutes a part of the Khuddaka Nikaya of the Sutta Pitaka.

Amongst of the best-known names in early Buddhism, recorded in the Therigatha include, Prajâpati Gotami, who was the first Bhikkhuni, Uppalavannâ and Khema, who are traditionally regarded as "foremost of the Bhikkhunis", Kisâgotami and Patacâra, who figure in the best-known stories in early Buddhism. The members of the order belonged to all walks of life. Some were former courtesans like Ambapâli and Vimala, others were of royal lineage like Sumeda and Sela. There were distinguished exponents of the Dhamma like Dhammadinnâ, scions of noble or merchant families like Bhadda Kundalkesa, Sujâta, and Anopama, not to mention those of humbler origins like Punnika the slave girl, or Chanda the daughter of a poor Brahmin.

Jainism

Vardhamana A village near Vaisali in northern Bihar, Mahavira was born in 540BCE. A Kshatriya prince and a Lichchhavi princess were his parents. Thirty years old, Mahavira gave up his life of luxury and became an ascetic, preaching non-violence wherever he went. After seventy-two years, he passed away in 468BCE at the Pavapuri near modern-day Rajgir. During the Buddha's and Mahavira's lifetimes, Magadha was ruled by Bimbisara. The Jainas turned to the professions of trade, commerce, and money lending because they believed that cultivating soil was harmful to all living things.

The majority of Jainas are traders and money lenders, as they have been for most of their history. As opposed to Sanskrit, Prakrit was preferred by Jainas, which aided in the development of the language and literature in this dialect.

With the help of Buddhism and Jainism, Telangana quickly became home to both religions. Bodhan was ruled by a king named Sujathudu, who is thought to be a contemporary of Buddha. There is little evidence of Brahminical temples, but a heavy concentration of Buddhist footprints can be found. In Karimnagar district, stupas at Dhulikatta and Pashigaon have recently been excavated. Similarly, stupas have also been excavated, in Phanigiri and Gajulabanda in Nalgonda district, Kondapur in Medak district and Nelakondapalle in Khammam district. Neminatha and other Jain Tirthankaras helped spread Jainism throughout Telangana. Many tall Jain images were carved in Bodhan using local expertise and craftsmanship and exported to other regions under the patronage of Bahubali, the son of the first Tirthankara, Rishaba.

As a result of the influence of Buddhism and Jainism, there was a trend in favour of vegetarianism. The killing of animals was looked down upon. The vegetarian food was becoming popular even among the Kshatriyas. The cow was regarded as sacred and not killed at all. Instead of killing living animals at the time of sacrifice, their images were placed there. Asceticism became popular too.

People sick of life on account of old age left the world. Even Kings who were in undisputed possession of sovereignty renounced it. Young princes, trade men, etc. preferred the life of ascetics. Takshila was the spiritual centre of India.

8.3 PERCOLATION OF BUDDHISM IN THE PRESENT-DAY TELANGANA LANDS

The year 261 BCE marks an important watershed in the ancient Indian history when the Mauryan ruler, Ashoka registered his emphatic victory over the Kalinga rulers. The consequent destruction with around two lakh deaths coupled with the human misery appeared to have transformed the Shiva bhakta Emperor into

a Buddhist crusader. Recent research is pointing to the conversion of Ashoka to Buddhism prior to Kalinga war. He despatched various ambassadors, including his own children to spread this new faith to various nooks and corners of Asia in general and Indian sub-continent in particular.

Buddhism had already penetrated the present-day Telangana lands in 5th century during the life time of Buddha. Hence in third century BCE, the Buddhist ideology was very much present here. In Suttanipata, “a book in the Buddhist Tripitikas, it is related that a Brahman by name Bavari lived at Potali on the banks of the river Godavari between the Janapadas, Assaka and Mulaka (the present-day Nizamabad district). He despatched his disciples by names Ajita, TissaMettaya, Punnaka, Mettagu, Upasiva, Nanda, Dotaka, Hemaka, Todayya, Kappa, Jarukarni, Udaya, Bhadravudha, Posala, Mogharaja and Pingiya to the holy presence of Buddha at Sravasti. The enlightened at that time was delivering a discourse under rocky shelter, known as Pasanaka-chetiya (Pashanakaka Chitya or Chitya cut into rock). It appears that out of the sixteen disciples despatched to Buddha, Pingiya alone returned to Bavari at Potali.”⁶

‘Routes of Buddhist Pilgrims to South

The routes taken by Ajita and his companions must have been one of the ancient routes connecting north and south. From Potali in Assaka, they travelled through Mahishmati, an island in the Narmada River to Ujjeni, the capital of Avanti, then to Konardha which might have been situated near Bhopal. From there they proceeded to vidisa, near Sanchi, which became one of the greatest Buddhist centres later.

From Vidisha, they took a north eastern route to reach Kosambi or Kosam, the capital of Vatsas situated on the Jamuna River towards Allahabad or Prayag. It was an important halting place for traffic arriving to Magadha from south. From Kosambi, Ajita’s companions reached Saketapura or Ayodhya which is due north of Kosambi. Instead of proceeding straight to Sravasti where Buddha was sojourning at that time, they preferred a circuitous route by reaching Kapilavastu, the birthplace of Buddha. From Kapilavastu

they might have travelled along the Gandak river to reach Vaisali situated on the bank of the same river. From Vaisali, after passing through Kusinara and Pava they trekked all the way back to Sravasti, on the Rapti river, a tributary of Ghaghara which is again a major tributary of the Ganges.

Pingiya, the only one to have returned to Potali had become the disciple of Buddha. Several Andhra converts proceeded to north and settled there. These were known as Andhakas. According to Mahavagga, 'there was one Andhaka vana near Sravasti and Andhaka-vinda near Rajagiriha, probably established by Andhras.'

On the basis of a string of Buddhist sites situated in Karimnagar, Warangal, Khammam and Nalgonda district, it may be presumed that there might be another route which the Buddhist pilgrims took between north and south. All the pilgrims desirous of entering Mulaka in Maharashtra or Assaka in Andhra reached Vidisa. Those travelling towards south east from Vidisa passed through the Pauni-Paunar Buddhist sites near Nagpur in Madhya Bharat, to reach Chandrapur, a district headquarters in Vidarbha. Then they crossed the river Godavari at Lakkisetipet to reach Kotilingala-Pashigoan. They moved on to Dhulikatta, Phanigiri, Gajulabanda, Tirumalagiri, Nelakondapalli, to Jaggayyapet. From there, they crossed the river Krishna from Ravirela near Vedadri (Paleru-Krishna confluence) or Vadapalli (Musi-Krishna confluence) to reach either Dhanyakataka or Sriparvat Vijayapuri.⁷

Condition In Telangana Lands prior to and during the arrival of Buddhism

At least half a millennia before the birth of Buddha, the Telangana land and people had already come under the influence of Vedic ideology, say by the beginning of the first millennium BCE. The majority population practiced Megalithic culture. It involved the exposure of dead bodies, collecting the important bones later and bury them in deep pits or cist. Then a circle of boulders was erected around the pit or cist. This method of disposing the dead had been just the same as was adopted for disposing the corporeal remains of Buddha later. 'The consecration of mortal remains in a

tumulus as practiced by the Buddhists was not altogether a novelty in peninsular India during the pre-Christian times. The Buddhist stupa and the megalithic burial contain the remains of the dead and are intended for offering homage to the departed. Both were enclosed by circumambulatory passages.

Language and Script

All the earlier Hindu scriptures, that included the Vedas, Brahmanas, Upanishads, Sutras and Puranas were composed in Sanskrit which was a rather difficult medium for understanding and communication by the common folk.

For the first time in India, the Mauryan Emperor, Asoka ushered a revolution, during third century BCE. He standardized the Brahmi script and popularized the same in Prakrit or Pali languages throughout the length and breadth of India. The entire literary output of the Buddhists was originally compiled in Prakrit, a language of the people, that was easy for communication. Prakrit assimilated as much vocabulary as possible from the vernaculars and it established a close rapport with the local languages. In the 6th century BCE, the Mahaveera and Buddha preferred to preach in the local Prakrits. During the 3rd century B.C. The Mauryan Emperor, Asoka and two centuries later, Kharavela addressed their subjects in Prakrit. Buddha spent most of his time in Magadha and preached his doctrine in the dialect of that region. It is but natural that the early Buddhist scriptures were composed in Magadhi Prakrit in which Buddha spoke to the people.⁸

Spread of Buddhis During Mauryan Times

After the Kalinga war, a major part of Andhra came under the suzerainty of Asoka. The thirteenth rock-edict of Asoka informs that Andhras along with Daradas, Vishavrajyas, Yavanas, Kambhojas, Nabhakas, Nabhapaniktis, Bhojas, Paithanikas, and Pulindas, were following the Dharma enunciated by Asoka.

The First Buddhist Council held in 479 CE, resulted in four factions one year after Buddha's death. By 469 CE there were approximately

16 factions, ten years after Buddha's death. The second Council in 390 BCE declared a minority orthodox (Hinayana) and the majority heretic (Mahayana). Mahavamsa recorded that at the conclusion of the third Buddhist Council, Buddhist monks were selected and deputed as missionaries to various regions. Among so many of them, Mahadeva was despatched to Mahisama mandala, the region between Godavari and Krishna rivers.

While proceeding to their respective regions, the religious missionaries sent by Ashoka must have carried the sacred relics of Buddha for enshrining them in stupas. It is not quite clear as to the place in Mahisha mandala where Mahadeva got the stupa erected over the relics. It is most likely Amaravati or Dhanakataka where the Chaityaka sect founded by Mahadeva had its base.

We have clear information from the writings of Hieun Tsang regarding the stupas erected during the Asokan times. At the time of Hieun Tsang's visit, the Buddhist Andhra comprised of five regions, namely, (1) the Kalinga or the North Coastal Andhra; (2) Mahishaka, the South Coastal Andhra; (3) Chuliya or the Rayalasima; (4) Kosala or South Kosala or the North Telingana comprising Adilabad, Khammam, Nizamabad and Karimnagar districts adjoining the south bank of the river Godavari and (5) Andhra or the southern Telangana.

Buddhism after Asoka

During the post Mauryan times, the Satavahanas at the height of their ascendancy were in control of the whole Dakshina patha from sea to sea and this extensive territory was perfectly administered by a magnificent system of roads criss-crossing the territory under their control. The surface communication was supplemented by a brisk maritime traffic between the ports on the east and west coasts of India. The sea-ports thus became busy with the indigenous traffic as also with that arriving from Middle East and Roman Empire. The maritime trade brought unprecedented prosperity to peninsular India, as the balance of trade was in its favour it resulted in the importation of large numbers of Roman gold and silver coins found in thousands.

The rock-cut Buddhist caves at Nasik, Naneghat, Junar, Kuda, Kanheri, Kondavite, Kondane, Karle, Mahad, Pithalkora, Bhaja, Bedsa, were executed during the Satavahana times. Similarly, the brick-built stupas at Amaravati, Jaggayyapet, Ghantasala, Chandavaram, Bavikonda, Totlakona and various other places were rebuilt or renovated and embellished with carved sculptures of great elegance. The artistic production was so prolific, magnificent and vigorous that it became popular as the Amaravati style and exclusively became the archetype of not only south Indian but south east Asian art as well.⁹

Buddhism during the Vishnukundin Times

The Vishnukundins succeeded the Satavahanas in the Telingana region with Keesara, (Kesarigutta or the hill of lion) in Medchal taluq of Rangareddi district, or Indrapala nagara in Nalgonda district, as their capital. They were contemporarily with the Ikshvakus of Nagarjunakonda. Govinda varma, the grandson of Maha rajendra varma and son of Madhavavarma-I was the first known king of the line. He married Parama bhattaraka Mahadevi, daughter of Prithvimula raja. He appears to be a great philanthropist who claimed to have gifted away countless villages, lands, gold, elephants, horses, cows, bulls, beds, seats, vehicles, houses, clothing, jewelry, maids, maid-servants, male servants, etc. He constructed temples, viharas, congregation halls, wells, tanks, monasteries, gardens, a great benefactor of sramanas, brahmanas, orphans, beggars, the sick, and those in pitiable condition etc.

Recently an inscription was found at Chaitanyapuri, a modern suburb of Hyderabad. It recorded a gift of a residential cell built with stone for the use of persons in charge of incense and clothing or for storing them attached to Govindaraja Vihara, evidently of the first king of the Vishnukundin line, Govindavarma, the ruler of the Telingana region. The gift was made over by Bhadanta Sangha Deva, the disciple of Vasudeva Siri Dama (Vasudeva Sri Dharma) samaha (collate or collect) vitaraga of the parampara (tradition) of the Pindapatika Dharmadhara, Brahmadeva Stavira. Stavira

Brahmadeva belonged to the Pindapatika sect that had its own Dharmas or Vinaya of Buddhism.

One of the Copper plate inscriptions found at Tummalagudem informs that Govindaraja gifted away two villages by name Enamadala and Penakaparru to the Buddhist vihara, in all probability situated at Tummalagudem. The village was known in the earlier times as Indupurraia or Indrapuri. The vihara was named after Parama mahadevi, the chief queen of Govindavarma. The gift was intended for lighting lamps, incense, sandal paste, flowers, dhvaja (flagstaff), drinking water, food, beds, seats, treatment of sickly people, provision of medicines, and repairing the dilapidated structures. Another set of copper plate inscription found at Tummalagudem recorded the gift of a village by name Vikramendra Bhattaraka, great-great grandson of Govindavarma. To the Mahavihara built earlier by Parama bhattarika Mahadevi, the chief queen of Govindavarma. The gift was intended for the enjoyment of Aryabhikshu Sangha. Thus, the same vihara received patronage from several generations of the Vishnukundin family.

Causes of decline of Buddhism in Telangana

Before considering the causes for the decline of Buddhism in Telangana and Andhra, the patronage of Vedic or Brahmanical religion liberty extended by the royalty during the post-Asokan times should be taken notice. The Satavahana Emperors have zealously adhered to Brahmanism probably till the time of Yajnasri Satakarni. The Ikshvakus of Vijayapuri though eclectic to permit their female members to go all out to patronise Buddhism, were ardent followers of Hinduism. Several temples dedicated to Pushpabhadra (Siva), Skandha, Devasena and Sarvadeva were built by them. The founder member of the Vishnukundin dynasty claimed to have established a number of Buddhist viharas. Various successors until the last powerful king Madhavavarma-III, being adherents of Hinduism were no less liberal to Buddhism.

The belief by some historians that the Buddhist centers were plundered and devastated by the Hindus is totally unfounded.

Their decay and disappearance may have to be attributed to lack of royal and societal patronage and repairs from time to time. In fact, many of the Buddhist stupas as witnessed at Chandavaram, Nandalur, Nagarjunakonda, Nelakondapalli, Jaggayyapet, Ghantasala, Salihundam, Guntupalli, Ramatirtham, Sankaram, Bavikonda, Totlakonda etc. are quite well-preserved.

The animosity towards the age-old beliefs of Hindus by such eminent Buddhist Acharyas like Arya Deva, the disciple of Nagarjuna, who hailed during 3rd century CE and another Acharya, Dharmakirti's dialectical debates with Adi Sankara, as recorded by Taranatha are but a few examples.

When Buddhism was reaching its zenith, the great Hindu epics like Mahabharata, Ramayana and Puranas like Matsya, Vayu, Brahmanda, Kurma, and others were already compiled and some others were being compiled. These puranas deal with such sophisticated topics like architecture, sculpture, painting, dance, sciences as Ayurveda (medicine), Vriksh-ayurveda, Astrology, Gaja sastra, Aswa sastra, Khadgan sastra and prescribed Vratas, for the alleviation of untoward happenings and sufferings. They became extremely popular among the public.

The endearing episodes pertaining to Vasudeva Krishna, such as his childish pranks in a typical pastoral environment, his ability even as a child to vanquish monsters, demons, evil spirits, venomous serpents; his feats as a savior of people, animals against wrath of wind and rain; as a divine musician lulling the world with his flute; his romantic adventures with Gopis; puritanical love towards Radha; liberating his parents from bondage, as an unrelenting warrior, shrewd politician, outstanding statesman, divine preacher, savior of righteousness, have had the capacity to captivate the hearts of millions of pastoral Indians even from the pre-Christian times. The contribution of Krishna cult towards the Hindu religion, philosophy, and culture is enormous. Similarly, the unbounded compassion, unswerving truthfulness, and indomitable gallantry of Dasaratha Rama endeared him in millions of Hindu hearts throughout the length and breadth of India.

In brief, these Puranas are encyclopedic in importing spiritual and material knowledge. While the vedic sacrifices, which involved huge expenditure and were mainly confined to the princely classes, the daily worship in the temples, Vratas and Nomus were universally favoured the task of resurgence of Hinduism which the Vedic sacrifices could not accomplish was successfully executed by the Puranas.’¹⁰

Nagarjuna – From Acharya to an Institution

Acharya Nagarjuna, the fourteenth in the line of Buddhist Acharyas, who propounded the Madhyamika scholar the Sunyavada of the Buddhist philosophy became popular not only in the Indian sub-continent but also in East Asia. He spent the last part of his life at Nagarjunakonda (Sripurvata). In Chinese literature, it was predicted that a Buddha mendicant by the name Nagarjuna would take birth in a village by name Bedali in peninsular India and that he would establish a new Buddhist order by name, Maharani. The Tibetan writer Taranatha informs us that there lived a Nagarjuna at Sripurvata near Dhanyakataka or Amaravathi. He was born in a Brahmin family. Experts’ opinion regarding his native place ranges from Amaravathi to Nagarjunakonda or Bapatla taluka of Guntur district. The Chinese traveller Hieun Tsang opined that he was born in South Kosala which included the districts of Adilabad, Medak and Karimnagar. About the birth date, he was born four hundred years after Buddha, most probably during the first century BCE.

His great work Madhyamika Karika provides the edifice for the Madhyamika school. Nagarjuna shines in the solitary splendour amongst the institutional galaxy of this country. He is said to have recovered several Mahayana texts from Nagaloka. One amongst them is Sidhaharma Pandavika or the ‘Lotus of the good Religion’. It is considered as ‘A tank for the thirsty, a fire for the naked, a caravan leader for the merchants, a mother for the children, a boat for those who ferry over, like a torch for dispelling darkness’. He authored several works, of which 24 are available.

In fact, he was considered to be a second Buddha, who gave a new direction and thrust to the Buddhist faith that survived till the modern times. Variously known as an Acharya, Bodhisattva, he was an extraordinary person, not one individual but an institution, a revolutionary, an eminent scholar, a great author, a crowning philosopher, a reputed speaker and an unparalleled dialectician.

Nagarjuna has been described, as the Aristotle of the Buddha lore, the Christ of Madhyamika, St. Paul of Mahayana, a magical name baffling the most-brainy in sheer intellectual power and moral force. Hieun Tsang liken him to one of the four suns, which illuminated the world. Taranatha described him as one amongst the six jewels of Jambudwipa.

In the year 405 CE, Kumarajiva authored a biography of Acharya Nagarjuna. Accordingly, he was born under an Arjuna tree and got his earlier instructions from serpents. For that reason, his mother named him Nagarjuna. According to various sources, his life span varied from 60 years to 600 years. The long span might have been computed by adding the total period in which several Nagarjunas lived.

About the first Nagarjuna, it has been estimated that he lived between 140CE to 200CE during the times of Satavahanas. The reigning rulers were either Gautamiputra Satakarni or Yagnasri Satakarini, the last great rulers of the dynasty.

Hiuen Tsang narrates, 'the king of the country then called Sadvaha or Satavahana greatly respected and provided Nagarjuna, a hut by the side of the city gate. Nagarjuna was well practiced in the art of compounding medicines, by himself consuming a preparation he extended his life span for many hundreds of years. Satavahana raja had partaken of this potion and his longevity was already several hundred years. On the request of the king's son, Nagarjuna put an end to his own life and later the king also died.'¹¹

At least two centuries later, probably during the last quarter of the fifth century CE lived Bhadanta Nagarjuna. His disciples caused an idol of Lord Buddha to be installed for attaining Buddhahood.

Siddha Nagarjuna was the inventor of the process of distillation and calcination and an authority on minerals. He describes the process of roasting iron and to prepare black sulphide mercury.

The Third and the last Nagarjuna was the Prince Siddha Nagarjuna. He was disciple of Gorakhnath and learnt various sciences. The prince Nagarjuna subsequently trained a disciple named after himself (Fourth Nagarjuna?) and taught him fabrication of various medicines. That apart, Yogasastras and other secret deeds along with nine siddhis and science of alchemy were also taught to the disciple.

This unique alchemist named Siddha Nagarjuna became universally famous as the one who could produce gold. 'He proceeded to Sripurvata with a retinue of disciples in search of a convenient spot to set up a laboratory for his researches in alchemy. Finally, he found Yelleswaram, having the nine forts, nine bathing places, nine Bhairavas, nine Nandis situated on the left bank of the river Krishna and enclosed by a luxuriant forest, as the most suitable place for his researches. He established a laboratory and started making medicines and converting mercury into gold with the assistance of a host of disciples.

Once, while Siddha Nagarjuna was moving around the hills, he happened to see a king with a downcast face. He informed that he lost his kingdom in a fierce battle with an enemy and prostrated before Nagarjuna for help. Accordingly, Nagarjuna provided the king sufficient money with instruction to build a fort on a hill situated on the other side of the river Krishna, name it after Nagarjuna and live there to accord protection to Nagarjuna and his establishment. The king then crossed the river Krishna and built a fort with nine entrances over a hill situated towards north of Yelleswaram and north-west of the Aswamedha hill. The present hill fort of Nagarjunakonda thus came up in the name of Siddha Nagarjuna, a contemporary of Gorakhnath.¹²

Thus, it was clear that there were three Nagarjunas ...



'Thus, it is clear that there were three Nagarjunas, the

first one being the founder of the Madhyamika School of Buddhist philosophy who lived during 1st century BCE, the second one, a Bhadanta Nagarjuna of the Bahusrutiya school who lived in the fifth century as mentioned in the Jaggayapet inscription, the third one being the Siddha Nagarjuna, the great alchemist who lived at Yelleswaram in Nalgonda district.¹³



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9. The First Indian Imperium

This chapter deals with a period from 4th century BCE till 2nd century BCE covering a limited span of less than two centuries. The basic theme running through the entire chapter is the Mauryan imperium, which controlled almost the entire Indian sub-continent, including the present-day Telangana lands. All aspects of governance have been covered. The political aspect of village, its headman, revenue and social security are covered. The economic aspects of farming, irrigation and animal husbandry along with veterinary services are covered. Finally, arboriculture and horticultural aspects are also covered.

By around 2nd century BCE, the present-day Telangana lands were inhabited by around 6 lakh population residing in ever growing expanse of small villages with emerging towns amidst them, mostly located at the crossroads of highways and waterways. Migration of people, ideas, goods and services along these jugulars had become a common phenomenon.

9.1 EMPIRE BUILDERS AND THE FIRST INDIAN IMPERIUM

Amongst Empire builders, names of Alexander and Asoka dazzle the brightest on the ancient historical horizon. A brief background of circumstances in which each one of them evolved and showed up would be in order.

Alexander, the Great?

Around 6000BCE, metal working was discovered in Turkey and Iran. By 3000BCE, it was a flourishing craft in Mesopotamia. Craftsmen were smelting copper and lead, and by mixing bits of tin and copper, they could produce bronze. It was a hardened metal which could be used for stronger, sharper and deadlier weapons. Tin was a vital ingredient and was mainly found along the Atlantic coast of Europe. The continent was still thickly forested. People lived in sparsely populated geography.

By now, agricultural revolution had reached Europe. The mobile hordes were settling down around their farms with cattle in small habitations. As population grew, there was conflict among groups for limited resources. Villages were fortified and fortresses were built to defend against groups of marauders. Cities rose and fell but as population continued to grow, small city states consisting of a city surrounded by towns, villages and agricultural lands began to evolve. By around 500 BCE, Athens had become the intellectual, cultural and the political centre of the Greek world. A totally new concept of controlling or ruling people was evolving. It was called democracy. Athenian citizens had the freedom to vote on all matters of Government. Any citizen could serve as a city Magistrate for a year and paid by the state. In 404BCE, Athens was crushed by Sparta, their rival city state. The feat was achieved by a small elite ruling over their subject people with the help of well-trained army. The lesson and humiliation sunk deep into the Greek psyche.

Bronze had already sharpened and hardened the armoury of Greeks, Spartans and Persians alike. Growth of population in Europe intensified the conflict for limited resources at home. The Athenian citizens were looking towards an outlet for their brimming energy. Democracy had provided Athenians the elixir of freedom. After their humiliation by Spartans, the Greeks were awaiting a commander to lead them. Alexander, the son of King Philip of Macedonia appeared on the horizon and the rest, as they say, is history. His blitzkrieg lasted for just eleven years, from 334BCE to 323BCE. He captured Thebes, crossed into Asia, defeated Persians, conquered Lydia, defeated Darius, entered Egypt, founded Alexandria, defeated Darius again, moved on and conquered Bactria, entered India, crossed Indus near Attock and humbled Punjab in the 'Battle of the Hydaspes'. This was the first example of a global warrior, who crossed three continents and was victorious, everywhere. Alexander meant victory, then.

The sharp edge of Bronze Age technology, the fury of a humbled democracy and the power of organization were amply demonstrated by Alexander. The power of an extremely

mobile cavalry was proven beyond doubt as well. He had all his equipment, tents, armament and what not carried by a massive army of thirty thousand foot soldiers and five thousand horsemen all the way from Athens to Punjab. He covered more than thirty eight hundred miles, fought innumerable battles and registered unprecedented victories, unknown to mankind till then.

By this time, the Greek army's longest march had taken its toll. Alexander made an impassioned appeal to his troops, who were hesitant to go any further. The Greeks, on the other hand, had already experienced democracy in their own country. Koinos a cavalry general became a spokesperson for the troops. He pointed out to the king that; he had sent away the Thessalians as soon as

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of the Deity
cannot be
foreseen
or guarded
against by
man"**



he saw they had no stomach for further toil. Some of the other Greeks have settled in the cities that he had established, where they are all unwilling residents; others continue to suffer hardships and dangers. They and the Macedonian army have lost some men in battle, others have been incapacitated by wounds, and others have been abandoned in various parts of Asia, but the majority have died of sickness. Only a few people survive, and those that don't have the same physical strength as before, and their spirits are still miserable. He pointed out that many Macedonians and Greeks had joined the king at the beginning, and now few of them were left. He concluded his oration with the following words: "Moderation in the midst of success, 'O' king! is the noblest of virtues, for although being at the head of so brave an army, you have fought to dread from mortal foes, yet the visitations of the Deity cannot be foreseen

or guarded against by man."

The appeals made by Koinos were greeted with loud applause. Alexander ordered a retreat after building twelve huge altars on the river Beas. A major portion of his army was sent by sea as he marched for Persia through Baluchistan. Marrying a Persian princess, hiring soldiers of all nationalities, Alexander decided to make Babylon as

the capital of his new world Empire. Everywhere he went, Greek ideas went too. But alas, in 323BC, he died in Babylonia near Baghdad, at a rather young age of thirty-three years. Buried in Alexandria, the city he founded, he could never reach his motherland. He has been projected as Alexander, the Great, by Greek historians.

The First Indian Imperium

Alexander was in India for nineteen months. He carried his victory flag wherever he went. What was the reason for his victories? The question can be asked conversely as well. What were the reasons for defeats of each one of the Indian states in spite of massive size of their armies, their bravery and heroism? The simple answer is, “lack of unifying leadership”. Let us look at the sequence of events. Alexander crossed Indus river at Ohind and rested his army for thirty days. Thereafter, marching towards Takshila, the present-day Rawalpindi in Pakistan when he was still about four or five miles away from the capital, its ruler Ambhi came out and surrendered. When the convoy reached Taxila, the ruler of Abhisara tribe also surrendered. Kings and rulers of Indian states surrendered without even thinking to fight. Only Porus, the king of Jhelum near the present day Jullendhar in Indian state Punjab territory, fought. He lost the battle, but kept his head and honour intact. Thereafter, various tribes and rulers lying between Chenab, Ravi and Beas rivers were subdued, one at a time.

If only, all these small republican states were united and organised as one single force, the results could have been different. That idea was captured by a mendicant teacher, Chanakya. And it was put into practice by a young dreamer, Chandragupta. The duo, within a short period of less than a decade, was to mould the warring states into a single Indian Imperium. This unified state, having a centralized authority with a pan Indian dimension was a unique experience for its rulers and people.

Mauryans

The Mauryan dynasty ruled for one hundred forty years from 325 BCE to 185 BCE. Founded by the great Chandragupta, it eventually

was extinguished when its last ruler, Brihadratha was killed by his army general, Pushyamitra. Chandragupta duly mentored by Chanakya, climbed from obscurity to power, expelled the Macedonian garrison, repelled subsequent attack by Seleucus, effected a revolution to unify warring rulers and established a dynasty at Patliputra, annexed a large part of Ariana, extended his dominion from Bay of Bengal to Arabian Sea and finally subdued Deccan plateau right up to Mysore in the deep south. India had never been welded into such a huge frame work with centralized authority from Patliputra ever before. The advent of the Mauryan dynasty is regarded as a passage from darkness to light by historians as chronology had become definite and precise. It also dispelled the darkness of disunity and distraction and brought the pan Indian geography under a single Imperial Sun.

Chandragupta's son Bindusaar succeeded him. He was rather given to pleasure. As provinces revolted, he sent Ashoka, his son, to put them down. He naturally succeeded Bindusaar and reigned from 273BCE to 232BCE. Asoka has become a part of folklore of ancient Indian history.

He is considered a great king, not only in the history of India but also of the whole world. Recent historians regard him as 'Not-so-Great'. He was a Shiva worshipper. Then came the famous Kalinga war which he won. It also overwhelmed him with its enormous destruction and all-round death. Recent research holds that Ashoka embraced Buddhism before kalinga war. Thereafter, he became a staunch pacifist. State officers were turned into religious propagandists. Provinces were entrusted to preachers of morality. Royal hunts and jousts of arms were abolished. War drums were hushed and the only sound that was heard was that of religious discourses. As the king got enlightened and followed Buddha's path, the people took to Sanghas in large numbers.

Recent historians regard King Ashoka as 'not-so-Great' King



Recent research holds that Ashoka embraced Buddhism before Kalinga war



But, as everyone was getting enlightened, who would fight and rule? The state of kingdom was too idyllic to last for long. Ashoka's successors were neither strong

enough to win a war like Kalinga nor were enlightened enough to be worthy followers of Buddha. They were pygmies whose shoulders were unfit to bear the weight of mighty Imperium. The Mauryan Empire had peaked during Asoka's time. In 232BCE, he died and the decline commenced. He was followed by a number of weak successors. Their grip weakened over the vast empire and it eventually split. As their authority weakened, the provinces became loose and eventually detached themselves. There was no one to pursue the policy of blood and iron of its founder, Chandragupta. The master strategist, Chanakya too was gone.

In 187BCE, Brihadratha was the emperor of this splendid Mauryan dynasty. But he was a gullible and feckless young man. Pushyamitra, the commander of imperial army invited him to review the military parade. He readily agreed and right in front of arrayed army, the ambitious general, Pushyamitra, bludgeoned his Lord, Brihadratha to death. It was a pitiful, whimpering end to a great Empire.

9.2 JURISPRUDENCE AND ADMINISTRATION

The administration of justice during Mauryan rule was hailed to be effectively ideal and ensured peaceful and prosperous coexistence of various levels of people. The king was considered as the 'fountain head of justice' and ruled on all vital matters of significance and consequences. There was decentralization in the justice system – villages presided by pradesika, maharathas with separate courts. There were two types of courts. Dharmasthaya dealing with civil matters and Kamatala Spdjama dealing with criminal cases. All major towns and district headquarters had one court and one police head office; whereas petty cases were decided by village panchayat elders. The Hindu Code of Law, as envisaged in the shastras, has been administered in civil proceedings. There was reliance on the evidence of credible people.

Criminal Justice system had very strict and draconian sanctions and even for small offences like theft, causing injury to artisans and perjury, capital punishment was awarded, 18 kinds of torture inflicted included seven whippings. The criminal code was very

harsh, terrifying and enforced strictly, with a view to deter others from resorting to crimes. Megasthenes¹ is all praise “for the Mauryan law and order”, reports that “There were few crimes; murders and thefts were almost unknown, people rarely locked their doors and the state guaranteed the safety of life and property.”

The Mauryan government was well-organized in terms of tax collection, bureaucracy, army, and police. Various departments each had its own superintendent. Agriculture, forest produce, grazing grounds, cows, horses, and elephants were among the superintendents. The superintendent of agriculture’s qualifications and responsibilities are thus listed in the Artha shastra.

The superintendent of agriculture, if he or she has knowledge of the science of agriculture dealing with the plantation of bushes and trees, or is assisted by those who have, shall collect the seeds of all kinds of grains, flowers, fruits, vegetables, bulbous roots, fibre-producing plants, and cotton in due time. He will sow the seeds on royal lands that have been ploughed frequently and satisfactorily using slaves, labourers, and captives. The afore-mentioned men’s job will not be jeopardised due to a lack of ploughs and other necessary implements, as well as bullocks. There will be no delay in enlisting the help of blacksmiths, carpenters, borers, rope-makers, snake-catchers, and other like-minded individuals.’

Because the Magadhan state began clearing jungles on a huge scale, all of these responsibilities were assigned to the agricultural superintendents. The king possessed the most territory. Sita lands were areas where land was farmed directly under the control of the crown. Sita lands, which were inhabited with shudras, provided a significant income to the state. One-fourth of the produce was given to the government’s storehouse.

Formation of Villages

The author of the Arthashastra describes how the village settlements were established.

The king may build settlements on new sites or on old ruins, either by enticing foreigners to immigrate or by causing the densely

populated centres of his own kingdom to send forth the extra inhabitants. Villages of not fewer than a hundred households and not more than 500 families of shudra caste or agricultural people, with boundaries extending as far as a krosa (1.8 miles; about 3000 metres) or two, and capable of safeguarding each other, were to be constructed. A river, a mountain, woodlands, or trees such as salmali (silk-cotton tree), sami, and kshira-vriksha will serve as boundaries (milky trees).

The king will set up a sthaniya (fortress), in the heart of eight hundred villages, a drone mukha in the heart of four hundred villages, a khar vatika in the heart of two hundred villages, and a sangrahana in the heart of ten villages will be built. Forts will be built on the outskirts of the kingdom, manned by boundary guards whose job it will be to secure the kingdom's entry. Trap keepers, archers, hunters, chandalas, and wild tribes will patrol the kingdom's interior. Those who perform sacrifices, spiritual guides, priests, and those who have studied the Vedas will be given brahmadeya lands that generate enough food and will be exempt from taxes and fines.

Superintendents, accountants, gopas, sthanikas, veterinary surgeons, physicians, horse trainers, and messengers will all be given lands that they will be unable to sell or mortgage. Taxpayers will only be granted land that has been readied for cultivation for the rest of their lives. Lands that have not been prepared for cultivation may not be taken away from those who are doing so. Lands may be taken away from people who do not cultivate them and given to others, or they may be cultivated by village labourers and traders so that those who do not cultivate them correctly pay less to the government. Cultivators may be given food, cattle, and money, which they can return whenever they want.

The king shall grant only such favours and remissions on cultivators as will tend to enlarge the treasury, and shall refrain from bestowing favours that will deplete it. Remission of taxes shall be made on the occasion of the opening of new settlements or on any other unforeseen circumstance. He will treat those who have completed the time of tax remission with fatherly care.

The King should plan to utilise timber and forests, provide facilities for cattle breeding and trade, build routes for land and water travel, and establish market towns. He'll also build reservoirs, which will be filled with either perennial or non-perennial water. He might also supply sites, roads, timber, and other materials to people who build reservoirs on their own. Whoever refuses to participate in any cooperative building must send his servants and bullocks to do the job on his behalf and share in the costs, but he has no claim to the profits. In regards to fishing, ferrying, and trading in vegetables, the king shall exercise his right of possession in reservoirs or lakes. Those who do not pay attention to the demands of their slaves, hirelings, and relatives will be taught their responsibilities.

Classification of Villages

For the purposes of fiscal management, the Mauryan government divided the villages into two categories. The villages were divided into groups based on the number of tax-paying residents, the people's caste, size, and commercial and industrial worth.

Some villages were exempt from paying taxes. These included certain newly established villages and villages granted as Brahmadeyas. Villages awarded to royal servants, such as superintendents, accountants, gopas, sthanikas, veterinary surgeons, physicians, horse-trainers, and messengers, without the power of alienation by sale or mortgage were included in this category.

Also were included, villages supplying soldiers or military equipment. The exclusively agricultural kind, as well as settlements of low caste people, paid grains, animals, gold, and raw produce as taxes and gave free labour instead of taxes. The Maurya government had a policy of establishing villages occupied primarily by shudra caste people. 'Villages should be constructed, each consisting of between 100 and 500 agricultural households of the shudra caste,' says Kautilya. Males from lower castes were selected for such jobs because they were more efficient in manual labour than men from higher castes. To protect agricultural interests in these villages, strict procedures were implemented, including the prohibition of various

types of obstructions. 'No ascetic other than one who has reached the fourth stage of life, no association other than one of the same origins (i.e, agricultural caste), and no guild committed to a different aim other than one of the same kind shall colonise a community. There will be an increase in income, labour, minerals, crops, and drinks as a result of the peasants' seclusion and attention to farming.'

The shudra families' villages were isolated, which was a Mauryan invention. It provided the farmers as a whole a distinct mark. As a result, Megasthenes was taught to assume that husbandmen belonged to a separate caste. 'The husbandmen, who appear to be far more numerous than the others, make up the second caste,' he says. They spent all of their time tillage because they were excused from warfare and other public services. Farmers were regarded as public benefactors and were protected, therefore an enemy coming upon a husbandman at work on his field would not hurt him. As a result, the land remains unspoiled and produces abundant harvests, providing the inhabitants with everything they need to live happily. The husbandmen dwell in the country with their wives and children and avoid going into town.

The different parts of a Village

Local officers kept an account of the various components of a village for the purpose of tax assessment during the Mauryan government. They included cultivated plots of land, uncultivated fields, wet lands, gardens, vegetable gardens, fenced plots, forests, altars, temples, irrigation works, cremation-grounds, feeding-houses, piasos where pilgrims could get water, pasture ground, roads, boundary plots, threshing floors, house sites, and domestic animal stables.

Arthashastra describes the partition of land for various purposes as well as the king's obligations to farmers.

It states that on uncultivable regions, the king shall provide provision for pasture grounds. Brahmans shall be supplied with forests for soma plantation, religious learning, and penance, with such forests providing safety for animate and inanimate objects and being designated after the tribe's name (gotra) of the Brahmans who live there.

For the king's sports, a forest with only one entrance, rendered inaccessible by the construction of ditches all around, with plantations of delicious fruit trees, bushes, bowers, and thornless trees, an expansive lake of water full of harmless animals, and tigers, beasts of prey devoid of claws and teeth, male and female elephants, young elephants, and bisons, shall be formed. Another game forest with game beasts, open to anyone, shall be established on the country's furthest reaches or in any other acceptable location.

Farmers will be protected from onerous fines, forced labour, and taxes, and herds of cattle will be protected from thieves, tigers, toxic beasts, and cow illness by the king. The king is responsible for keeping roads open for traffic and protecting travellers from officials, robbers, and border-guards. He should also protect the roads from livestock herds destroying them.

The Headman

The headman is typically referred to as '*gamabhojaka*' in the Jatakas. Gama bhojaka used to make money in wicked ways and harassed innocent persons, according to the Kulavaka Jataka. The village headman's position was either inherited or given by the local council. An elderman appears to have been in charge of the settlements of the industrial kind. According to the Suchi Jataka, a '*jetthaka*' stood at the head of a hamlet of 1,000 blacksmiths. It implies that iron was widely used in the manufacture of agricultural implements. Even during the Jataka period, the headman appears to have been a king's nominee on occasion. The king designated a '*amachcha*' (minister) as the headman of a village, and he collected the village's revenue on behalf of the king, according to the Kharassara Jataka. According to the Gamani Chanda Jatakas, an officer named Chanda retired from service in his old age and began farming in a community. This village was given to him as a brahmadeyya by the king (full gift). Chandathus rose to become the village's leader.

According to the Kulavaka Jataka, members of a village's thirty families gathered in the village to discuss the village's common problems. We also hear that they maintained the roads, cut down

trees that hinder traffic, created causeways, dug water reservoirs, and constructed a hall.

The local assembly was composed of the headman (gramika) and the village elders (grama-vriddhah), according to Kautilya. The village register, which comprised a complete description of the tax-paying and non-tax-paying areas of the village, as well as a record of gifts, sales, charity, and tax remissions, was kept by the headman in collaboration with the gopa, a royal official. The Gopa was in charge of five or ten villages' accounts. Villages were classified into four categories: villages exempt from taxation, villages that supply soldiers, villages that pay their taxes in grains, livestock, gold, or raw materials, and villages that provide free labour and dairy produce in exchange for taxes. 'When the headman of the village has to go on behalf of the entire village, the residents shall by turn accompany him; those who are unable to do so shall pay 112 panas for each Yojana,' Kautilya says. This demonstrates that the people aided the headman in concerns affecting the entire village. The local administration was overseen by the village elders, with the gramika at the helm. In terms of land-related matters, we see them first and foremost taking charge of and enhancing the property of new-borns or minors. They were in charge of the temple's property (deva-dravyam). 'In the absence of claimants, villages or generous persons may rebuild dilapidated religious structures. They also sold other types of buildings, as well as fields, gardens, lakes, and tanks. The property for sale was accurately represented, allowing the buyer to understand exactly what he was purchasing, and the sale was conducted via auction. In collaboration with the elders of the neighbouring villages, they resolved conflicts over land boundaries inside a village as well as between two or more villages. They also punished anyone who trespassed on border lands or desecrated boundary markers.

The headman is referred to as gramika, gamabhojaka, and gamani in the Prakrit inscriptions, as well as a committee known as 'gotthi' or 'gotti' that equated to the village assembly.²

Cultivation And Revenue

Unsworn fields may be cultivated by employing those who cultivate for half the produce (*ardhasitika*); or those who live by their own physical exertion may cultivate such fields for 1/4 or 1/5 of the produce grown; or they may pay to the king as much as they can without causing themselves any hardship, with the exception of their own private lands that are difficult to cultivate.

Although the waste land most likely belonged to the grower, the Arthashastra, Bk-II, ch. I, contains an injunction prohibiting the king from taking unprepared lands from people who are preparing them for cultivation. Those who cultivated the land clearly had the right to ownership. The owner, on the other hand, was liable to the king if he neglected to seed his land or if the crops were harmed owing to his or his servants' negligence. This meant only an economic benefit to both the landowner and the state, and it would be a mistake to assert anything other than that the king had no proprietary right on land, with the caveat that no land could be left fallow indefinitely, and that he was only entitled to a certain percentage of the gross produce as tax. Manu accepts 1/12, 1/8, and 1/6 part sizes³. It was generally one-sixth; however, to avoid over-taxation, it was made variable up to one-twelfth. The tariff was one-fourth plus an additional one-fourth water rate during Chandra Gupta Maurya's reign.

Crop-sharing system of Cultivation

According to the Mahavagga, Buddhist Sanghas sometimes cultivated private lands and received half of the produce as their share, or occasionally let out their own estates in exchange for half of the produce. It states that the Bhikku, may receive half the produce of the Sangha's paddy seedlings produced on private ground, once they have given a part to the private owner. They may use seedlings belonging to private individuals growing on Sangha property if they have provided a portion to the owner.⁴

The Artha shastra mandates that provisions be provided to watchmen, gardeners, slaves, and labourers in accordance to the

amount of work they perform.' Per mensem, they will be paid a pana and a quarter. Artisans will be paid and supplied for in accordance to the amount of work they complete. Those who have studied the Vedas and are performing penance may take flowers and fruits from the fields for worshipping their gods, as well as rice and barley for performing agrayana, a sacrificial performance at the start of the harvest season; also, those who live by gleaning grains in fields may gather grains where grains have accumulated and been removed from.

Social Security

The king gave social protection to the elderly, infirm and helpless women, pregnant women, and helpless minors, among other people. According to the Arthashastra, the orphaned, the aged, the infirm, the suffering, and the defenceless shall be supported by the king. He will also provide support to hapless women who are pregnant, as well as the infants born to them. Elders in the village must improve the property of grieving minors until they reach the age of majority, as well as the property of gods. A responsible individual, other than an apostate or a mother, who neglects to care for his or her child, wife, mother, father, minor brothers, sisters, or widowed girls, will be fined twelve panas. Any person who embraces asceticism without making provisions for his wife and sons will be punished, as will anyone who converts a lady to asceticism. Anyone who has reached the age of copulation may become an ascetic after dividing his property among his sons; otherwise, he will be punished.

Farmers were safeguarded from intruders since their labour was so important to the economy. 'No ascetic other than a vanaprastha, no firm other than one of local birth, and no guilds of any kind other than local co-operative guilds shall gain access into the villages of the kingdom,' according to the Arthashastra. There will also be no structures in the villages that are used for sports and performances. Actors, dancers, singers, drummers, buffoons, and bards shall not disrupt the work of the villagers in order to obtain money, free labour, commodities, grains, and liquids in abundance; for weak people are always dependent and bent upon their fields.³⁵

9.3 AGRICULTURE

The Greeks saw two annual harvests in India, one in the winter and one in the summer, as an indication of extraordinary soil productivity. Rice and millets were sown in the summer, and wheat and barley were sown in the winter, according to Aristobulus, who described rice production in enclosed sheets of water. They witnessed trees with a strange capacity for self-propagation, with branches curving to the ground to create new trunks, until a single tree became a pillared tent, with a ceiling of broad leaves behind which a troop of cavalry could find shade from the noon-day heat. Obviously, the banyan tree and its pillar-like aerial roots are being referenced. Two plant species in particular piqued their interest. Sugarcane, for example, is a type of reed that produces honey without the use of bees. Megasthenes appears to have made an attempt to explain the sweet nectar in a scientific manner. The plant was nearly cooked as it grew because the water it received from the soil was so warmed by the sun's heat. The cotton plant, which produces vegetable wool, was the other plant. The Macedonians used some of it uncarded as stuffing for saddles and other items. Spices were also identified with India in the Greek mind.⁶

The Arthashastra mentions the usefulness of various sites for the growth of various crops, such as lands beaten by foam, such as river sides, etc., are suitable for producing pumpkin, gourd, and the like. Lands that are frequently flooded with water for an extended period of time are suitable for pepper, grapes, and sugarcane; those near wells for vegetables and root crops; moist beds of lakes, etc, for green crops; and the marginal furrows between any two rows of crops are suitable for fragrant plants, medicinal herbs, khus-khus roots, and the like.

‘The Arthashastra mentions the following crops: *Sali* (a kind of rice), *vrihi* (rice), *kodrava*, *tila* (sesamum), *priyangu*, *daraka* and *varaka* are to be sown at the commencement of the rainy season. *Mudga*, *masha* and *saibya* are to be sown in the middle of the season. *Kusumbha*, *masura*, *kuluttha*, *yava* (barley), *godhuma* (wheat), *kalaya* (leguminous seeds), *atasi* (linseed), and *sarshapa* (mustard) are to be sown last.⁷

Regarding implements, *Srni* (sickle), *khanitra* (hoe), *musala* (pestle), *udukhala* (mortar), *surpa* (winnowing-basket), *dhanyakrt* (winnowing-fan), *chalani* (sieve), *sthivi* (granary), *methi* (the post of the threshing-floor round which cattle turn to thresh the grains out), are mentioned as tools of agriculture.

Cycle of Farming Operations

In the Kullavagga, Mahanama the Sakyan, while telling Aniruddha as to what is important to a household life, gives a short list of farming operations. "First you have to get your fields ploughed. When that is done, you have to get them sown. When that is done, you have to get the water led down over them. When that is done, you have to get the water let off again. When that is done, you have to get the weeds pulled up. When that is done, you have to get crops reaped. When that is done, you have to get the crop carried away. When that is done, you have to get it arranged in bundles; when that is done, you have to get it trodden out. When that is done, you have to get the straw picked out. When that is done, you have to get all the chaff removed. When that is done, you have to get it winnowed. When that is done, you have to get the harvest garnered. When that is done, you have to do just the same the next year and the same all over again the year after."

‘According to the Jatakas, the agriculturists sowed different kinds of grains, planted sugarcane, cotton, different kinds of vegetables, such as pumpkins, gourds and cucumbers. To scare away birds, they made use of scare crows and towards the harvest time, when crops stood thick in the fields, the peasant anxious to kill the creatures that devoured crops used to dig pitfalls, set traps, fix stakes and snares. At the sight of coming rains, they would hurry to the fields with spade and basket in hands to bank the dikes, and the women of the house make haste to carry indoors rice and crops that were spread in the sun to dry, lest the harvest should get wet. A picture shows a female slave dozing in her watch over rice spread out in the sun to dry, and of a goat waiting for a chance to eat it.

When crops were ripe, the threshing-floor was made ready and *methi* (the post of the threshing-floor round which cattle turn and thresh

out grains) was planted with care on an auspicious day. The harvest was then thrashed, winnowed and garnered after setting aside the rice of the king's tax that was measured with grain basket.⁸

Even a century ago, wheat threshing was still being done in the same way as it was during the Buddhist time. A rope is used to tether a group of bullocks to a wooden post (methi) in the threshing-center. floor's They thresh out the grain as they move around and around. After that, a farmer standing on a wooden stool and aided by his wife throws the threshed wheat straw and grain from a basket. While the dust is carried away by the wind, the grain falls near the stool, and the bhoosa falls near the grain stack.

For threshing crops, the Arthashastra recommends the following instructions. 'Grains and other crops must be picked as often as possible. Nothing, not even chaff, should be left in the fields by a wise man.' Crops should be piled high or in the shape of turrets when harvested. Crop heaps must not be kept close together, nor should their tops be short or low. The threshing floors of several fields must be close to one another. Workers in the fields must always have access to water but not to fire.⁹

Growing of Crops

Rice crops and similar crops are the best, according to the Arthashastra; vegetables are of intermediate character; and sugarcane crops are the worst, as they are prone to different pests and require a great deal of care and money to harvest.

The seeds of grains are to be exposed to mist and heat for seven nights; the seeds of hosts are to be exposed to the same for three nights; sugarcane cuttings and the like are to be plastered at the cut ends with a mixture of honey, clarified butter, hog fat, and cow-dung; bulbous root seeds with honey and clarified butter; cotton seeds with cow-dung; and water pits at the root of trees are to be burned and manured with the bones and dung of cow.

When the seeds sprout, they should be manured with a new catch of minute fish and irrigated with snuhi milk. Snakes will not stay

where there is smoke produced by burning the essence of cotton seeds and the slough of a snake.

Irrigation

Clearing jungle for cultivation and creating small embanked areas for water are two examples of brahmanas' work in the Kama Jataka. We also hear about the construction of dams on rivers for irrigation purposes. By utilising the Rohini River, which flows between Kapila Vastu and the city of Kolia, Sakiya and Koliya tribes managed to cultivate their crops, according to Kunala Jataka. Workers from both cities came together in the month of Jetthamula when the crops began to decline. The Koliyans then made the argument that even if they drew water from both sides, it would still be insufficient for them both. However, a single watering will suffice to ensure the success of their crops.¹⁰ Today, it is called 'Warabandi'.

People who discharge tank water somewhere other than the sluice-gate must pay a fine of six pana, and those who obstruct the water's flow from the sluice-gate of tanks must pay the same fine. Kautilya also mentions sluice-gates of tanks. Lower tanks excavated later on may not be used for irrigation in an area that has been irrigated by higher tanks for three consecutive years, according to another rule.'

According to Rudradaman's Junagadh rock inscription, Pushya gupta, Chandra gupta Maurya's provincial governor, built Sudarshana Lake and later provided conduits to Asoka Maurya by the Yavana king Thushaspha. The Suvarna rekha and Palasini rivers flooded in the second century of the Christian era, causing a 420-foot-long and 75-foot-deep breach in the structure. During the reign of Rudradaman, the Saka king, the Parthian amatya Suvisakha repaired it. Rudradaman's descendants continued the practise of building tanks in western India.

Those who use manual labour to irrigate land must pay a water rate (udakabhagam) of 1/5 of the produce; those who use water lifts and rivers, lakes, tanks, and wells must pay a water rate (udakabhagam) of 1/4 of the produce. Depending on the availability of labour and water, the Superintendent of Agriculture will plant wet crops, winter crops, or summer crops.

According to the Kallavagga, the Buddha explains that rice and sugarcane fields can't last long if the disease called 'mildew' or 'blight' falls on them.¹¹ Additionally, it mentions the farmers in India who were at risk of snake bites. When a farmer and his wife have two children, one son and one daughter-in-law, as well as an in-house maid, the family is complete. They had a wonderful life together. The farmer and his son were ploughing a field one day. The son went out into the field and started a fire out of the dry leaves that were lying around. A snake living in a nearby termite-hill was harmed by the smoke. When the snake bit the farmer's son, he fell to the ground and died in his rage.

9.4 ANIMAL HUSBANDRY

During this period, the phrase "animal husbandry" should be applied in a broader sense. It should include asses, horses, mules, and elephants in addition to cattle, buffaloes, sheep, and goats. During the Mauryan period, animal husbandry advanced significantly. With its emphasis on nonviolence and the sanctity of animal life, Buddhism boosted the country's cattle wealth. Suttanipata, the earliest Buddhist literature, declares cattle to be givers of food, beauty, and happiness (armada, vannada, sukhada), pleading for their protection.¹²

A supervisor of cows was in charge of overseeing milch cattle herds as well as looking after the stored milk and ghee. He oversaw the labour of cowherds, buffalo herders, milkers, churners, and hunters, among others. He made sure that the calves were not hungry and that they had enough milk. Milch cows, pregnant cows, aged cows, heifers, and calves were distributed evenly among the herds. There were special herds with handicapped cattle and difficult-to-milk cows.

The cattle and Buffaloes were classified as, Calves, steers, tameable ones, draught oxen, bulls to be trained for the yoke, bulls kept for crossing cows, cattle fit only for the supply of flesh, buffaloes and draught buffaloes; female calves, steers, heifers, pregnant cows, milch cattle, barren cattle (either cows or buffaloes); calves that are a month or two old as well as those.¹³

All of their calves over two months old, as well as stray cattle that had gone unclaimed for two months, were branded by the superintendent of cows. Then he noted the natural markings, colour, and distance between the horns before registering them.

The livestock belonged to a number of different village people. The animals were allowed loose and roamed the fields after the crop was cut. When the crops were ready to be harvested, they were herded to the grazing pastures by a herdsman hired by the hamlet as a whole. 'Knowing the general appearance of each of his charge and the marks upon it, skilled to remove flies' eggs from their hide, to heal sores, accustomed to keep a good fire going with smoke to keep the rats away, knowing the fords and the drinking places, clever in choosing pasture, leaving some milk in the udders, and with respect for the leaders of the herd,' the herdsman was an important personage.

The Holy Cow

According to the Arthshastras the killing a cow was a terrible offence. According to it, those who murder, eat, and allow the killing of cows will suffer in hell for as long as there are hairs on the body of the slain cow. One of the king's daily responsibilities is to worship the cow. 'During the eighth division of the night, i.e. very early in the morning, the king had to receive benedictions from sacrificial priests, teachers, and the high priest, and after seeing his physician, chief cook, and astrologer, and saluting both a cow with her calf and a bull, by circumambulating round them, only could he go to the court. The buffalo had become a well-known dairy animal throughout the Mauryan period. Buffaloes were among the animals that the supervisor of cows had to classify before forming them into herds. The buffalo rations are discussed, and the butter yield from buffalo milk is compared to that from cow milk.

Two buffaloes are pictured swimming in a pool in front of a hermitage in a Sanchi sculpture that depicts a Jataka narrative. The rishis' round huts, which are similar to the Navdatoli huts in design, are in the background.

The goat is described in the Arthashastra as a milch animal, and it appears to have been pretty important as well, as the amount of butter produced by her milk has been compared to that of the cow or buffalo. Once every six months, the sheep were shorn of their wool.

About breeding bulls, in the Artha shastra, it is prescribed that it should be provided for the herds at the rate of four for every ten animals, whether cows or buffaloes. The Rampurva bull capital in Tirhut shows a ferocious zebu bull. It is a symbol of Mauryan India's importance. Gajalakshmi and a bull are depicted on a torana architrave from Kausambi (first century BCE). A couple of elephants and lotuses surround the Gajalakshmi. The bull resembles the Nagori breed, which is a sign of male fertility.

When constructing settlements, it was urged upon kings to make enough provision for pastures by setting aside suitable land of sufficient extent. The gopa, or village accountant, was responsible for noting the boundaries, numbering, and registering such pastures. Hunters with their dogs guarded them against thieves, tigers, and other carnivores. Depending on the season, herds were shifted from one pasture to another.

Graziers' responsibilities have been clarified. When the cattle were out grazing, they were exposed to a variety of threats. They can become stuck in a mud or fall down a cliff. They could be struck by lightning or drown in a river. Tigers may eat them, snakes may bite them, and crocodiles may drag them into the water. A forest fire could also kill them. It was the graziers' responsibility to protect them from such threats.

It was clearly stated by the Arth sastra that the graziers, shall allow their animals to enter only such rivers or lakes as are of similar depth all around, broad, and free from mire and crocodiles. Cows should be protected when out grazing and kept safe at home within walled enclosures if necessary. Graziers were told to divide their livestock into tens of each sort and take them out for grazing in groups of ten. They were also supposed to put bells on their cattle's necks to warn

away snakes and tigers, as well as keep track of where their herds were. At the musters, all animals were given a brand mark, which was imprinted on them.

Stealing a cow or injuring one carried the death penalty. The Arthashastra states that whoever hurts or causes another to hurt, or steals or causes another to steal a cow, should be killed.¹⁴ A person was penalised if he caused a bull linked to a herd to fight another bull. If a bull was hurt, the individual who caused the injury was penalised harshly. It is the usefulness of an animal that determines whether it is sacred or not. Cattle had thoroughly demonstrated their use in the Mauryan era by the milk they offered to the people and the draught power they provided in agriculture.

In terms of feed and fodder, the Arthashastra recognises the distinction between straw and grass, and the two are individually stated in cattle feed as yavasa (green grass) and trina (ordinary dry straw). The Arthashastra makes a strong recommendation for oilcake feeding. Cows, buffaloes, mules, camels, and other animals are all given specific meals. 'Bulls equipped with nose strings and capable of carrying loads equal to horses should be fed half a bhara of meadow grass, twice the amount of ordinary grass (trina), one tula of oilcakes, ten adhikas of bran, five palas of salt, one kudumba of oil for rubbing over the nose, one prastha of drink, one tula of flesh, one adhika of curds, one drona of bar Milk can be replaced with one pala of ginger fruit. The same commodities were fed to cows, mules, and asses, but with a quarter less of each. It was twice as much for buffaloes and camels. Dogs and hogs were given buttermilk (lassi) to drink. Furthermore, the livestock were given plenty of grain and water. The amount of grain to be supplied was proportional to the amount of milk produced by the cows or the length of time spent working in the case of bullocks.'¹⁵

Milking and Milk

Graziers are instructed to milk their cattle twice a day during certain seasons, such as rainy, autumn, and the first part of winter. During the spring and summer, they had to milch the cattle just once a

day, in the morning according to the Artha shastra. This was done because the pastures had enough of grass in the rainy season and early winter, but the pastures dried up in the summer.

In terms of butter production, the difference between cow's milk and buffalo's milk was well understood in terms of its fat content. 'One drona of cow's milk yields one prastha of butter when churned; the same quantity of buffalo milk yields one-seventh prastha more; and the same quantity of goat's and sheep's milk yields one-half more,' according to the Arthashastra. The butterfat in milk was extensively used in the form of ghee, and ghee was even included in cattle diets. Ghee was provided to elephants at the rate of three prasthas each day, along with a variety of other foods.

Ghee was the best way of butterfat preservation for long periods of time. This understanding has been applied not just in everyday living, but also in the storage of supplies in forts during sieges. Giant stone cisterns were utilised as ghee storage containers. When storing ghee in cisterns, gur lumps were placed at the bottom as a preservative. This tradition is still practised in certain rural Indian families today.¹⁶ The best ghee was produced with butter that had been melted the day before. This was the type of ghee preferred by kings and the rich.

Asses and Horses

Asses were used as beasts of burden throughout the Mauryan period. Two asses stand in front of a cottage in a Bharhut sculpture depicting a Jataka narrative.

Horses were utilised for both riding and fighting in the past. They were tethered to chariots in battle. Festival chariots, fighting chariots, and travelling chariots were among the chariot kinds. Horses were tethered to carriages as well. A superintendent of horses was in charge of the royal horses, who kept track of their breed, age, colour, and provenance. The breeds of Kambhoja, Sindhu, Aratta, and Vanayu lands are the best; those of Bahlika, Papeya, Sauvira, and Taitala are of middling quality; and the remainder are mediocre, according to the Arthashastra.

In the stables, stallions, mares, and colts were kept apart. The Arthashastra gives the following instructions for constructing stables. The superintendent shall construct a stable twice as wide as the length of a horse, with four doors facing the four quarters, a central floor suited for the rolling of horses, a projected front provided with wooden seats at the entrance, and containing monkeys, peacocks, red spotted deer, mongoose, chakora, parrots, and myna birds; the room for every horse shall be four times as broad or long as the length of a horse, with its central floor paved with smoothed wooden planks, with separate compartments for fodder, with passages for the removal of urine and dung and with a door facing either the north or the east.

Horses were given regular training for warfare ie, circular movement, slow movement, jumping, galloping, and various styles of riding. 'Horses are mentioned in the Jatakas as well.' Sindh horses have a milk-white coat and are thoroughbreds. They're as white as lilies, as fast as the wind, and extremely well-trained. Parched rice, drippings, grass, and red rice powder are fed to thoroughbred horses. Sindh thoroughbred horses with mail sheaths were utilised in battle. The Valaha and Sindhu are superior-breed horses.¹⁷

Horse-dealers are prominent among the Gandhara trades, and the Vayu purana claims that the Gandhara horses were the best of all. Horse traders from the north used to bring their wares to Benares for sale. Sindh horses were accessible in Benares, and the king utilised them for ceremonial purposes. Mules are also mentioned in the Arthashastra.

Elephants

Magadha was India's first state to deploy elephants in combat on a big scale. Elephants are extremely beneficial for traversing forests and marshy areas. They might also be used to storm fortifications and break open enormous doors. The Nandas had 6,000 elephants and Chandragupta Maurya had 9,000 elephants, according to Greek sources. The elephant was a protected animal because of its military utility, and specific woods were set aside for it. The victory of kings

in battles depends mostly on elephants; for elephants, being of great bodily frame, are capable not only of destroying an enemy's arrayed army, fortifications, and encampments, but also of undertakings that are perilous to life, according to the Arthashastra.

Inside the fence were housed war elephants and riding elephants, while those with poor tempers were kept outside. Only male elephants over the age of twenty were taken. Elephants, both female and juvenile, were not taken.

'Elephants bred in nations such as Kalinga, Anga, Karusa, and the East are the best; those of the Dasarna and western countries are of middling grade; and those of Saurashtra and Panchajana countries are of low quality,' according to the Arthashastra. All of their strength and energy, though, may be enhanced with the right exercise.'

Elephant forests, separated from natural regions, were established in the country's far reaches. The elephant forest superintendent, together with his entourage of forest guards, must not only maintain the forests, but also become familiar with all passages for entering or exiting them, particularly those that are mountainous or swampy, or feature rivers or lakes. Anyone who kills an elephant will be executed.

A reward of four and a half panas will be given to anyone who brings in the tusks of an elephant that has died naturally.

'Guards of elephant forests, assisted by those who rear elephants, those who enchain the legs of elephants, those who guard the boundaries, those who live in forests, as well as those who nurse elephants, shall, with the help of five or seven female elephants to assist in tethering wild ones, trace the whereabouts of herds of elephants by following the course of elephant urine and dung, and along forest tracings, trace the whereabouts of herds of elephant. They must also determine whether any marks are caused by elephants in herds, elephants roaming alone, stray elephants, herd leaders, tuskers, rogue elephants, elephants in rut, young elephants, or elephants who have escaped from the cage. Experts in capturing elephants must follow the elephant doctor's instructions and capture only those elephants with good character and auspicious characteristics.' The captured elephants received seven types of

military training: drill, turning, advancing, trampling down and killing, fighting with other elephants, attacking forts and cities, and warfare. The elephants in training were given collars and forced to work alongside other trained elephants.¹⁸

Veterinary Services

Veterinary hospitals were state-run organisations that operated across the Empire during Asoka's reign. It is stated in a rock edict, that hospitals for men and hospitals for beasts have been established everywhere in His Majesty King Priyadarsi's dominions, as well as in neighbouring realms everywhere on behalf of His Majesty's healing herbs for humans and animals have been imported and cultivated in areas where they were previously unavailable. As a result, it is clear that provisions for the care and treatment of sick cattle, horses, and elephants were created.

Veterinary doctors, like village accountants, physicians, and horse trainers, were given free endowments of land since they were considered essential to the society. Medicinal herbs were harvested from areas where they naturally grew. They were also produced in fields in the same way that other crops were.

Slaughter houses were supervised by a superintendent. Veterinarians were able to investigate and observe the interior organs of the animals as a result of this setup.

9.5 ARBORICULTURE AND HORTICULTURE

Asoka's empire can be estimated based on his rock and pillar edicts. The inscription in Greek and Aramaic on the Kandahar rock edict demonstrates that among his subjects were Greeks as well as Iranians. In the North-West Frontier Province, there are rock edicts in Mansehra and Shahbaz garhi (Pakistan). At Girnar, Junagadh, and Sopara on the western shore, there are edicts. In front of the National Museum building in New Delhi, there is a reproduction of Girnar's granite edict. Rock edicts can be found near Siddapura and Maski in the south. The rock edicts at Dhauli and Jaugada are located in the east.

Ashoka states in his sixth big rock edict, “I have now organised it thus, my informants should keep me informed on public business at all times, whether I’m eating, in the women’s apartments, in my inner rooms, at the cattle-shed, in my vehicle, or in my gardens.”¹⁹ This injunction reveals his passion for animal husbandry and gardening. Asoka also forbade forest fires for the purpose of driving out game.

Ashoka was a strong supporter of arboriculture and horticulture. This was largely due to religious considerations. Sakya Muni personally commanded Ananda to procure a branch of the tree beneath which he had attained Buddhahood and place it in the court of the Vihara at Sravasti, saying, ‘He who worships it will earn the same reward as if he worshipped me in person.’ It’s hardly surprising that tree worship was widespread, given the historical origins of the veneration shown to the last Buddha Sakya Sinha’s pipal-trees. According to the Divya Avadana, Asoka’s favourite object of worship was the Bodhi-text.

We hear for the first time in Indian history of a monarch who promoted arboriculture and made it a state policy. Ashoka advocated for the planting of trees in gardens and avenues along highways. For the comfort of cattle and men, rest houses were built, as well as many watering stations. One of Ashoka’s pillars contains the inscription: ‘On the roadways, I have planted banyan trees, which will provide shade to beasts and men.’ Every nine kilometres, I’ve had mango tombs planted, wells erected, and rest houses built. And I’ve built a slew of watering holes for both beasts and humans all throughout the land. But this advantage is significant, and the world has benefited in many ways from previous monarchs, as well as from me. But I’ve done these things so that my people can follow the Dhamma.²⁰

The administrator of grazing grounds is also mentioned in the Artha shastra. He oversaw the construction of tanks, wells, shelter houses, and flower and fruit gardens. This type of administrative organisation for planting gardens is quite likely to have persisted under Ashoka.

Sanchi gives us a peek of arboriculture during Asoka’s reign. Sanchi lies around eight kilometres from Bhilsa, which is the current

replacement to Vidisa. Vidisa served as a crossroads for two major commerce routes: one stretched west to east from the busy seaports of India's western coast through Ujjain, Kausambi, and Benares to Pataliputra, while the other extended south to north-west from Pratisthana, Andhra Pradesh's capital, to Sravasti. Devi, Ashoka's wife, called Vidisa her home. In the third century BCE, Sanchi became a major Buddhist centre. Asoka erected the magnificent stupa in which the Buddha's bones were enshrined around 225BCE. Ashoka himself constructed the Sangharama and built this stupa not only because Vidisa was one of his empire's best towns, but also because he intended to honour it as the birthplace of the lovely Devi and a spot infused with particularly joyful memories for himself," writes Sir John Marshall.²¹ The stupa was originally formed of bricks, but it was encased in stone and the procession road was paved with stones about the middle of the second century BCE, during the reign of Sunga king Agnimitra. The stupa was encircled by a railing that resembled wooden palisades and fences. The railing was perforated by four toranas, or beautifully carved gateways. The sculpted reliefs depicting the Buddha's life and earlier incarnations were added to the stupas between 72 and 25BCE. Devotees whose names are written in Brahmi letters donated the stones for the procession path, railing, and gateways. Each gateway is made up of two square pillars topped with capitals and supported by a three-architraves-with-volute-ends construction.

Fruit-Plants

Bharhut's sculptures depict a variety of fruit plants. Plantains, mangoes, jackfruits, and grape vines are among the many fruits that can be grown. Mango appears to be a favourite fruit, as evidenced by the numerous depictions of mango-bearing branches at both Bharhut and Sanchi. One of the finest examples of Indian sculpture can be found at the Stupa at Sanchi. In Marshall's words, the vrikshaka is 'swaying gracefully from a mango-tree branch. "Curving the woodbine of her body" in a position that accentuates her breasts "like gold urn," the salabhanjika grasps the mango tree's arching bough with both hands. An unusual top-knot is formed from her

hair, which spreads over her back and ends at the crown of her head; it is similar to that of female servants and jungle dwellers. Only the pleated folds at the sides and drawn up behind her legs reveal her transparent dhoti. In spite of the fact that she has lost both of her large earrings, she has a plethora of bracelets and necklaces that are worthy of close examination. A delicate balance between court lady and forest woman is achieved with this type.²²

A common motif in Bharhut's work is the mango. A mango tree can be seen in the Jetavana monastery's presentation relief. Anatha pindaka, a wealthy merchant, visited the Buddha in Magadha and offered him the Park of Jetavana, according to Buddhist legend. It was covered in lush vegetation and bloomed with an abundance of flowers. The Buddha spoke to the people in this park.

Sanchi and Bharhut both have images of grapes. A parrot with a bunch of grapes in its beak is depicted in a sculpture from Sanchi, India. The leaves and bunches of grapes of a grapevine are depicted on a railing post from Bharhut in the Allahabad Museum. In Kashmir, the North-West Frontier Province, and northern Punjab, wild grapevines were abundant.

Palms

Bharhut and Sanchi depict a variety of palms. Bharhut's palmyra palm is depicted on a medallion. Carved to a level of accuracy that suggests the sculptors were familiar with the tree, which grows in southern and eastern India. A Sanchi sculpture depicts a wild date-palm tree. Besnagar depicts a palm with a man standing below it.

Asoka's patronage of Buddhism accelerated the spread of Buddhism in India. Later, it spread to Ceylon, Burma, Thailand, Sumatra, Java, Vietnam, China, Korea, Japan, Central Asia, Mongolia, and Afghanistan. Afghanistan, Central Asia, and Mongolia were transformed by its impact on the barbaric tribes. The experience changed their outlook on life and helped them grow as moral beings. Ajanta's great art influenced Central Asia and China, including Khotan and Tun Huang. Borobudur in Java, the world's most famous monument, is still revered for

its eloquent sculpture. It was a great way to spread a love of gardening and trees.

The political history of India, from the collapse of the Mauryan Empire till the rise of the Guptas about five centuries later, is sketchy and chaotic. Those times witnessed five overlapping but distinct arenas of political action in India. After Mauryans came the Shungas. Pushyamitra, founder of this new dynasty shifted the capital from Patliputra to Madhura. In Gangetic plains, Sungas and Kanvas, successors of the Mauryas, held sway over a truncated and progressively dwindling kingdom. Kalinga became independent under Kharavela, invaded Magadha and captured Patliputra. The northwest India in upper Indus Plain witnessed a succession of invaders; Greeks, Pahlavas (Parthians), Sakas (Scythians) and Kushanas (Yueh chi), who established their rule and sought to extend their power further into India. Sakas reigned in western India for many centuries.

Peninsular India witnessed two sets of rulers. The northern half in Deccan plateau was ruled by Satavahanas, Vakatakas, Vishnukundis and Ikshvakus. The southern half was ruled by Cholas, Pandyas and Cheras, forever grappling with each other for dominance. The Krishna river, bisecting the peninsular landmass, broadly served as a boundary between the two. Of these two regions, it is the Deccan that first emerged into history.

Peninsular India witnessed 2 sets of rulers. Northern half ruled by Satavahanas, Vakatakas, Vishnukundis & Ishwakus, wherein Southern half by Cholas, Pandyas & Cheras



From second century BCE to third century CE, when northern India was ruled by Indo Greeks, followed by the Kushans, the Deccan was ruled by a Brahmin Dynasty of Satavahanas. Kotilingala in Karimnagar district in Telangana, followed by Paithan in Aurangabad district in Maharashtra was their capital. Commencing from Telangana, gradually, their power extended over present-day Karnataka and Maharashtra, mostly sweeping the plateau lands lying between Godavari and Krishna rivers.

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10. Collapse of Mauryans & Emergence of Satavahanas

This chapter deals with a period from around 2nd century BCE till around 3rd century CE covering a span of less than five centuries. The basic theme relates to Satavahana rule who controlled the Telangana lands after the decline of Mauryans. All aspects of governance, metal technology and material life possessions are covered. Various social aspects like dress, ornaments, food habits, religion, games and amusements especially for women, burial practices and weights and measures are covered. The process of urbanization with interconnecting roads, drainage, waterways, industry, commerce, market towns and port are also covered. Finally, potteries, art, architecture and religious beliefs are covered. A rich haul of Roman coins in Telangana lands testifies to a vigorous import / export trade to faraway Arabian, Egyptian and European lands in Roman Empire, during those times. Obviously, the monsoonal behaviour was fully understood and it was used to propel sea going flotilla to carry on this vigorous trade to distant shores.

By 3rd century CE, the present-day Telangana lands were hosting around 10 lakh population.

10.1 ORIGINS OF SATAVAHANAS

The Original homeland of Satavahanas was along Vindhyan mountains in north western Deccan. Later on, they migrated towards south east around present day Marathawada Telangana lands lying between Godavari and Krishna rivers. Aitareya Brahmana, a text of around fifth century BCE, speaks of them as non-Aryan people living on the periphery of the Aryan lands. Manu describes them as the offsprings of Nishadas (outcast tribal hunters of the Vindhyan mountains) 'who dwell outside the village' and are 'slaughterers of wild animals'. They are also mentioned in the inscriptions of Ashoka.

Whatever had been their social background; Satavahanas leaned heavily on Brahminical support and were among the first rulers in Indian history to make land grants to Brahmins. In fact, Satavahanas

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claimed Brahmana descent and anchored themselves in the Brahmanical vedic tradition. The Prakrit Nashik inscription of Gautami Balasri describes Gautamiputra Satakarni as Ekabamhana (a peerless Brahmana) and Khatiya-dapa-manmadha (one who destroyed the haughtiness and pride of Kshatriyas). References to the performance of the great vedic sacrifices by Satakarni-I in the inscription of Naganika at Naneghat suggest that this was an important means of acquiring political legitimacy. The use of matronyms by the Satavahana kings is significant from the point of view of honour and respect accorded to the mother. But this does not imply that it was a matriarchal or matrilineal system.



Satavahana was a feudatory of the great Mauryan Emperor, Asoka. After Kalinga war, as Mauryans became pacifist, their grip on distant provinces slipped. Satavahana consolidated his position in Deccan and after the death of Asoka in 232BCE, paved the way for independence of his son Simukha. In 221BCE, the latter assumed power, declared his independence from Mauryan tutelage, and named the dynasty after his father, Satavahana.

The new kingdom was to last long, for around four to five centuries. In all, the dynasty saw twenty rulers. At its peak, their rule controlled lands between Narmada and Krishna rivers and stretched from the Bay of Bengal to the Arabian Sea. They rightfully prided themselves as Dakshina path-pati (Lords of the Deccan). According to Pliny, the King had 30 fortified towns and an army of 1,00,000 infantry, 2000 cavalry and 1000 elephants. Sakas in the West, Kushanas in the North and Satavahanas in the Deccan were the three major powers in India during that age.

For a while, they controlled Patliputra too. The imperial Mauryans had ruled from there for hundred and forty years. After a gap of five centuries, the golden Guptas were to rule from there again for

another two hundred years. The India they controlled substantially, covered northern lands right up to Afghanistan. But, Satavahanas straddled the time zone between the two great empires of Mauryas and Guptas known to ancient Indian history.

Safely ensconced between Godavari and Krishna rivers, the area around Marathwada - Telangana was the nucleus of Satavahana power. For nearly five centuries, they were indeed the Lords of Deccan.

Simukha

'If Satavahana was the dreamer, his son Simukha was founder of the new dynasty. He rallied various clans, invaded and occupied western Deccan.'¹ Due to its strategic location, Pratishthan, on the banks of Godavari was made the capital. His brother Kanha (198BCE-180BCE) succeeded. Pushyamitra Shunga had captured Magadha by killing Brihadratha, the last Mauryan Emperor, in 185 BCE. Around the same time, Kharavela of Chedi dynasty rose to power in Kalinga. In spite of twin upheavals in north and east, Kanha extended his empire towards west as far as Nashik.

Satakarni succeeded Kanha. Pushyamitra in the north and Kharavela in the east were his peer rivals. He continued to push boundaries. Western Malwa, Narmada valley and a part of Vidarbha were annexed, but northern Vidarbha was taken by Pushyamitra. To celebrate his victory, Ashwamedha yagna was performed. Now, Kharavela attempted to annex eastern territories. His armies reached as far as Kannabenna (Krishna river) and threatened Musikanagar. Satakarni repulsed the attack. His authority being reestablished, he performed another yagna. After his death at a rather young age, his remarkable widow, Naganika (Naga-annika, a tribal obviously), took control and left her impression upon the administration. She recorded the achievements of her husband in the Naneghat inscriptions in Nashik. After her regency, the empire was divided among her four sons. Division weakened the kingdom and Kharavela armies attacked it, yet again. They destroyed Pratipalapura (Bhattiprolu) and reached as far as Medak and Dharwad. But destiny intervened. In 149 BCE, both Pushyamitra and Kharavela died. Suddenly, the

shadow of peer rivalry from north as well as east was removed. The incumbent ruler, Satakarni-II was quite lucky.

His long rule extended for fifty-six years and became memorable for a variety of reasons. After Kharavela's death, Kalinga had come under the control of Sakas. Satakarni advanced, humbled Vidisha and uprooted Sakas from Kalinga. He moved on to Patliputra, the metropolis and power centre of ancient India. After Pushyamitra Shunga, the Magadha kingdom was full of dissention and Patliputra was easily conquered by Satakarni-II. For the first time in Indian history, a Deccan dynasty had established its sway over northern plains. Satakarni is mentioned in an inscription on the gateway of Sanchi. The successors of Satakarni-II include Lambodara, Ambalika and Megha Swathi. Very little is known about them.

From 38BCE to 24CE, Kuntala Satakarni, Pulumavi and Hala ruled. The dominions included Dakshinapatha and parts of north India. Overall, territories remained intact. But fun and pleasure engaged these rulers more than warfare. Kuntala caused accidental death to his queen Malayavati during love play. Hala married Lilavati, a princess from Sri Lanka and the love story became legendary. Hala himself was known as 'Kavivatsala' or the patron of poets. It did not take long for dominion to weaken. After Hala, the Satavahanas lost provinces of central and western India and also Magadha. They were confined to their core territories around the present-day Telangana and Marathwada area.

Gautami Putra, the Phoenix

Gautami Putra Satakarni arose in this gloomy scenario like a phoenix. The kingdom had shrunk to its core. Kushanas, a new force had penetrated the Indo Gangetic plains from the northwest, and were progressing fast. Western Deccan was in the hands of Kshartas. The foreign tribes, Sakas, Yavanas and Pahalavas had embraced Hinduism, settled in India and were busy unsettling Deccan. In such a gloomy scenario, Satakarni defeated his enemies all around. He conquered Anupa, Aparantha, Saurashtra, Kukura and Avanti. He conquered Vidharba, Asmaka and Muluka. As boundaries were

pushed, his empire extended from eastern Rajasthan to Cuddalore in Tamil Nadu and from Rishikulya in Orissa to Vijayanthi in Karnataka. His horses drank water of the three oceans indicating that his armies touched Bay of Bengal, the Arabian Sea and the Indian Ocean. Once again, the glory of the Satavahanas was established.

Gautami Satakarni ruled his empire in a unique way. His mother Gautami Balasri points out in an inscription inscribed at Nashik, Maharashtra that the King was in power similar to Mount Himavat, Mount Meru, Mount Mandara. He was obeyed by all the Kings. His chargers had drunk the waters of three oceans; and his face was lovely and radiant like the orb of the full moon; his gait was beautiful like the gait of a choice elephant; and his arms were as muscular and rounded, broad and long as the coil of the lord of serpents, [who] was unfailing in his obedience to his mother; who properly devised time and place for the pursuit of the triple goals [of life: dharma, artha, and kama]; who sympathised fully with the weal and woe of the citizens; who crushed the pride and conceit of Kshatriyas; who destroyed the Sakas, the Yavanas, and the Pahalvas; who never levied taxes except in conformity to justice; who restored the Satavahana family's glory; whose feet were saluted by all provinces; who stopped the intermixing of the four Varnas; who defeated multitudes of enemies in many battles; whose victorious banner was unvanquished; whose capital was unassailable by his foes; who had inherited the privilege of royal music from a long line of ancestors; the refuge of the virtuous; the asylum of fortune; the fountain of good manners; the unique controller; the unique archer; the unique hero; the pre-eminent Brahmin; in prowess equal to Rama, Kesava, Arjuna and Bhimsena who was the abode of traditional lore.²

A mother's pride in her son is boundless, especially when he happens to be the King. Gautami Balasri was no exception. It was indeed the high noon of the Satavahana Empire. Gautamiputra was succeeded by his son Pulumavi-II. As he concentrated on his eastern possessions, Sakas asserted their supremacy in the northwest. His brother succeeded him but twice lost to Rudradaman, the Saka ruler and his father-in-law.

Gautami Putra Yagnasri, like the last flicker of a glowing candle, was the last great King of Satavahana dynasty. After the death of Rudradaman, the indomitable Saka ruler, he invaded and reestablished his lost authority in north Deccan and central India. Nagarjuna, the famous Buddhist philosopher, adored his court and lived at Sriparvata (Nagarjuna Konda). Nagarjuna was a reputed chemist and was murdered at the behest of the crown prince. The Amaravathi Stupa was enlarged during the regime. Satavahana's decline commenced after Yagnasri's death. His three successors, viz., Vijay Satakarni, Chandrasri and Pulumavi-III lost control as feudatories asserted their independence. Trikutakas became independent in western Deccan and Ikshvakus consolidated around Nagarjuna Konda in eastern Deccan.

Later, Satavahana's rule, after extending for nearly five centuries came to an end in the early decades of the third century.

10.2 KINGSHIP, STATE AND ADMINISTRATION UNDER THE SATAVAHANAS

During the Satavahana times, just like during Mauryan times, the title Mahatalavara was borne by high dignitaries of the state. They were feudatories under the Mauryans and later Satavahanas. The feudatory Talavara may be an officer with judicial functions like the Kothwal during the Moghul times. Seva Sabha may mean a guild or union in the service of the General-in-Charge of the cavalry of the whole kingdom or a part of it. Those Sabhas or guilds were possibly entrusted with the maintenance of a fixed number of horses to be supplied to the ruler during times of war. This practice of maintaining cavalry and supply the king continued during Chalukya, Rashtrakutas, Kaktiyas and Vijaynagar times, as well.

Satavahana polity was monarchical and hereditary in nature. Although matronymic, yet they followed male lineage of succession. King was the commander in wars. Inscriptions of the Satavahanas help us in reconstructing the administrative machinery of the period. Kingship amongst the Satavahanas rulers was hereditary with one important feature attached to them that some of them prefixed

matronymics to their names. The king was assisted by various officials for the smooth functioning of the administration. According to the inscriptions the Satavahana dominion was governed by royal officials and rest by the feudatory chieftains. We find references to officials like bhandagarika, who was the superintendent of the stores and heranika who acted as a treasurer. The commander of the state forces was Mahasenapati and Lekhaka was the secretary of the state who drafted all the documents that emanated from the King.

For the smooth functioning of the administration, Satavahana empire was divided into number of Aharas or rashtras such as Soparahara, Govardhanahara, Mamalehara, Satavahana etc, which consisted of one central town called Nigama and number of villages called gramas. Amatyas, employed as governors, were in-charge of Aharas. Amatyas were inferior to the status of Maharathis. The Maharathis appear to be hereditary governors of the provinces. Satavahanahara, Pallava rashtra and Vaingeyaka Vishaya would probably denote a territorial division, not bigger than a modern-day district. Aharas, were further divided into gama which according to Saptasatakam, a work by Hala, was one under gamika. Gamika's jurisdiction extended to as many as five villages. Sometimes it's jurisdiction even extended upto 10 villages. Further we also find reference to an advisory body that comprised of Rajamatyas. We also find reference to assembly of citizens called nigamasabha, that functioned in some of the commercial centres. Terms like Mahasamanta, Mahasenapati and mahadandanayaka, suggests that the prefix maha denoted an officer of high rank. The most important duty of the Satavahana rulers was to ensure the welfare of the people, as was the case of Satakarni-II who performed number of sacrifices and practiced donating revenue to the Brahmans.

10.3 SITES AND SETTLEMENTS

The region spread over Telangana is studded with a large number of early historical sites. Intensive explorations carried out during the last century have revealed early historical maunds in almost at every alternate village. The region, especially lying in the Godavari valley

comprising the districts of Nizamabad, Medak, Karimnagar and Warangal was thickly populated during the Satavahana period. This view is reinforced by the account rendered by Yuan Che wang who had travelled southwards from Kosala for about 900 Li (240 km) to An-to-lo³, the modern Karimnagar region with its capital Ping-ki-lo. Alexander Cunningham identified it with Elegandal, about 8 km from the present-day Karimnagar. Presently, Elegandal⁴ has a late medieval fort at the top of a precipitous hill.

The name Dakshinapatha occurs for the first time in the Rigveda where it is referred to as the home for the exiled. It also finds mention in Boudhayana. In Mahabharata, Dikshinapatha is placed beyond Avanti (Ujjain) and Vindhya and towards south of Vidarbha and Kosala.

The Janapadas, situated to the south of Vidharbha and south Kosala were known as Assaka and Mulaka. We find from Assaka Jataka⁵ that a king by name Assaka was ruling from Potali under the kingdom of Kasi. According to Sattanipatha⁶, Assaka was situated on the banks of the river Godavari. In Chulia Kalinga Jataka⁷, it is stated that Assaka was the king of Potali in Assaka country, when Kalinga was ruling over the city of Dantapura in Kalinga country. Evidently, both Kalinga and Assaka regions were contiguous. Satabhu, the king of Kalinga and Brahamdatta, the king of Assaka were contemporary. Other contemporary rulers were Vessabhu, the king of Avanthi; Bharata, the king of Sonvira; Renu, the king of Videha; and Dhatratta, the king of Kasi. The Mahabharata speaks of the royal sage Asmaka as having founded the city of Podana. Panini⁸ mentions of Asmaka in the interior of the Deccan and watered by the Godavari. The commentator Bhatbreshamin identifies Asmaka with Maharashtra. All the available evidence points that the present day Pratishthan (also called Paithan) was exactly Potali or Podana; the capital of Asmaka country. Most probably, the region of Nizamabad and Karimnagar was known as Mulaka nadu.

What was the total duration of the Satavahanas rule? In the midst of different opinions, there is a general agreement among the Puranas of the fact that there were 30 kings in all, who ruled for 456 years. It includes 19 kings of the main branch who ruled for 300 years

while the remaining kings belonged to the branch line. Simuka was the first ruler of the dynasty, who flourished during the 1st century BCE, over the Deccan lands.

The population during the Satavahana period increased manifold. Agriculture undoubtedly was the main occupation of the people but the growing population did not particularly select sites in the vicinity of major rivers only. With the advent of iron and its various implements, they spread far and wide into the interior in quest of arable lands, preferring alluvial black soil in plain geographies. Most probably, dry crops such as maize, jowar and ragi besides rice formed their staple diet which was supplemented by plenty of fauna and domestic cattle. They had perfected the manufacture and usage of well burnt bricks, too well burnt to have fused by intense heat of the kiln and are as hard as a stone.

Excavations during the last century have brought to light so many sites bearing distinct signatures of Satavahana times. Kondapur in Medak district was the earliest site excavated in 1940 CE during Nizam's times. Subsequently, after independence, the departmental excavations threw open a remarkable treasure trove. Peddabankur, Dhulikatta, Chinnabankur, Venuru, Kapparnapeta, Kotilingala, Kachapur, Bodagattu, Bompalli, Rachapalli, Paidichintalapalli and Khadeem Kanagarthi are situated in Karimnagar district. Karnamannidi is in Adilabad district. Bodhan, Vadluru, Kolakonda and Polakonda are in Nizamabad district. It would appear that river Godavari provided the jugular of population settlements with high density in Karimnagar–Nizamabad region.

It would appear that Godavari river became the lifeline of the population in Karimnagar-Nizamabad region



10.4 THE CIVILIZATIONAL CHARACTERISTICS

The early historical settlers in Telangana, especially along Godavari valley had attained a very high degree of civilizational characteristics. Fortified towns with meticulous planning were adorned with gateways, forts, and ramparts in Kotilingala, Budigapalli and Dhulikatta, etc. Innumerable villages were settled for sheltering

ever growing population whose boundaries were denoted by a river, mountain, forest or caves.

Town planning was done with appropriate space allocated for worship, statecraft, commerce and defense. Different occupational groups were accommodated in different zones. The fundamental need of supplying water was ensured by the proximity of a perennial river, lake, pond or tanks. The most potent factor giving rise to towns and villages in ancient times was the presence of water in abundance. The water reservoirs were given a special treatment and the contemporary literature is replete with design, repair and maintenance along with dredging details of various structures. The settlements away from the main river were having wells maintained by a householder. At Peddabankur, as many as 22 wells were exposed during excavation. A few were lined with terracotta rings with a square brick casing enclosing the rings at the top course. Some wells have squarish plan while others are constructed using wedged shape bricks. The antiquity of bricks can be traced back to the Harappan period. Water drawing facility was such as to avoid damage to brick lining. Later on, when the wells dried up, they were used as refuse pits for garbage consisting of pottery, animal bones, ash and charcoal.

Covered drains have also been found along with some of the wells. These drains were paved with bricks and at regular intervals, vents were provided on both the sides to let out excess water. The drain was covered with brick to the full length. None of the wells were found with washing platform around. However, the sewage was allowed to percolate in a pit nearby.

Brick cisterns or troughs formed an essential feature of civic life during the early historical period. Many such cisterns excavated at Peddabankur were constructed of well burnt bricks. Adjoining this cistern was a washing floor bordered with brick. Some cisterns, located at a higher level and adjoined with a brick platform are found studded with fragments of iron slag. This could have been remnants of a blacksmiths workshop.

The towns were inhabited mostly by the king and his appurtenances, traders and service providers. However, the majority population

was living in villages and their economic life was a combination of agriculture, animal husbandry and hunting. Many of the towns and villages were raised in the arable plains of black cotton soil. Some of the lands on the outskirts of Kotilingala mud fort had a fencing of stone slabs. Some of the slabs were inscribed with Brahmi characters of the second century BCE.

The clearing of the jungles for making the land suitable for cultivation was carried out with the help of flat celts of iron, wafted with wooden handles. The weeds were removed with weeders. A large number of sickles found in excavations, most probably were used for harvesting. A spade with a scrapper must have been used for levelling the fields.

The archaeological studies about bones of cattle found testify to the extensive use of oxen in agricultural operations. This apart, many varieties of animals were domesticated for food requirements. They consisted of cattle, buffalo, sheep, goat, dog, swan and rodent. There is also a skeleton of a horse dumped in a historical brick well. The swine population, however was rather low at Peddabankur.

Besides domestication of animals, some people practiced hunting of wild animals, as indicated by a large number of iron arrow heads, lances and spear heads. Game shooting was done with arrows provided with barbs. Among the hunted animals were included deer, pig, turtle and a large variety of birds.

The carpenter enjoyed an important position in the society. Panini mentions three important village artisans known as gramsilpins i.e., the village carpenter, potter and barber. Pathanjali expands the list to five artisans in each village i.e., the potter, blacksmith, carpenter, barber and washerman.

The chief concern of a carpenter was the selection of trees for the suitable wood to be employed for fabrication. Varahimihira throws ample light on this aspect. The timber trees near cremation grounds, the river confluences, in the vicinity of a temple, by the road side, of those withered at the top, entwined by creepers, thorny, those possessing nests and beehives and those that collapsed due to thunder storm or by elephant or had fallen down in a southerly or westerly direction are prohibited.

The criterion in the selection of appropriate tree is that they should have sufficient strength for bearing the load of the structure and super structure of the building. The architecture in the ancient times mainly related to pillars, beams, lintels and door frames of timber. The entire structure of the roof was made of timber.

Excavations have brought to light a rather huge toolkit used by a carpenter. Various tools include axe, adze, chisel and saw blades. Many kinds of iron nails such as flat headed, bent headed and round topped also include unusually long nails with a length from 20 cm to 25 cm. It is indicative of utilization of that much thick plank of wood. There are also a good number of rivets. These rivets consist of nails of square cross section riveted to squarish plate on either side. Some of the rivets are 12 cm to 15 cm long. There are also many staples.

Mining and Metallurgy

During the early historical period in this region, the metal industry had reached a pinnacle of development. Iron (loha), copper (tamra), gold (survarna), lead (sisaka), bell metal (kamsya), and glass were the most widely worked metals (kacha). From the beginning of the first millennium BCE, if not before, peninsular India had knowledge of iron smelting and forging. Throughout the Deccan, there are several references in the literature to numerous iron ore production centres that produced high-grade iron. 'Iron ore was discovered and smelted in Warangal, Konasamudram, Dindurthi, Komarapalli, Brahmanapalli, Mulkanir, Nirmal, Gudkole, Mylavaram, Jagtyal, Yelchel, Rangapet, Konapuram, Kallur, Anantagiri, Lingampalli, Nizamabad⁹, and other places. The iron ores were obtained from the locations listed above and processed into fine steel known as 'wootz' in places like Konasamudram, Yelgandal, Ibrahimpatnam, Kanapur, Chintalpet, and Gudkole. The steel manufactured at Konasamudram was of exceptional quality, attracting traders from all over India as well as far-flung regions such as Persia.'¹⁰

Smelting of Iron

'An iron crucible with a diameter of 15 cm was discovered at the Dhulikatta excavations. On the concave crucible, there was a

significant amount of charred wood, leafy stuff, and dirt, as well as a large well-burnt clay cake. The incrustation on the outside and inside could indicate that it was burned beneath a massive mound of wood. A squarish cake with a centre core of solid iron, topped with quartz (crystals) pellets, and charred clay in the area of the crucible may go to show that iron and steel metallurgy was done as a home industry.¹¹ The alternative way of creating steel was to cut off cubes of iron obtained in a malleable state, each weighing around a pound.¹² These little cubes were placed in crucibles of varied sizes, depending on the intended use of the steel. With dry teak branches, bamboo, and green leaves (cactus) from diverse bushes, the fire was kept going for more than 24 hours. It is then allowed to cool down, and the crucible is set on the ground. When it is opened, a firm cake weighing around a pound and a half is discovered, which is half a pound more than the original cube placed in the crucible. The resulting cakes were used to make Damascus sword blades, daggers, knives, spears, arrowheads, and other weapons.

Forging

The excavation at Peddabankur found a terracotta forge somewhat oval in shape, measuring 20 cm in diameter at the larger axis and 12 cm at the shorter, suggesting the method of forging used in the early historical period. The uneven wall has a height of 19 cm and a thickness of 2 to 2.5 cm. It has an oblique aperture for a bellows nozzle to be inserted. There is a lot of slag incrustation on the inner surface of the wall around the nozzle hole. A rectangular brick cistern (2.37x1.42 m.) associated with the forge has four stages, the lowest of which projects outside and has rounded corners on the exterior. The cistern was flanked by two modest brick steps. The cistern's floor was packed with morrum and covered with a tile veneer. Two more tiny brick troughs stand alongside the main cistern (0.80 x0.80m.). Iron slag particles were densely imbedded in the working floor near the forge. The artefacts comprised an iron ring, a rivet, iron nails, a sickle, and an iron knife, all of which were blacksmith's finished works.¹³

10.5 THE MATERIAL LIFE POSSESSIONS

Iron objects

A vast assemblage of iron objects found in early historical sites, particularly in Peddabankur and Dhulikatta is categorized mainly into weapons of war or defense, tools and implements for agricultural purposes, carpentry and household.

Weapons of War and chase from Literature

Various kinds of weapons and missiles were in actual usage even from the Vedic period, predating the Satavahana times by at least a couple of millennia. The Attereya Brahmana¹⁴ speaks of 'chariots, yoked with horses, armours, bows and arrows.' In Satpatha Brahmana, we find reference to a thousand spiked, hundred-edged thunder bolt. The same authority states that an arrow measured five spans in length. Another tool mentioned as Swadhithi may refer to a carpenter's chisel, the chopping knife and razor. For slaughtering a horse during Aswamedha sacrifice, the knives were made of gold, iron and copper, respectively to serve different purposes. A crooked knife, a sword, scimitar, staves, sharp shovel, bows and armours were mentioned in the Brahmanas. The axe was used to cut firewood and in battles as well. In the Shukla Yajurveda¹⁵, God Rudra carries fine weapon, bow, arrow, thunderbolt, scimitar, sabre, quiver and thin arrow, etc.

In Artha Sastra¹⁶, it is ordained that canals should be constructed inside forts for hiding weapons. In those canals, there should be collected staves, spades, axes, staffs, cudgels, hammers, clubs, discus machines and such other weapons which could destroy hundred persons at once, together with spears, tridents, bamboo-sticks with pointed edges made of iron and explosives, etc. In Buddhist sculptures¹⁷ from Amravati, Sanchi and Mathura etc, we notice mace, club, hammer, spear, lance, trident, bow, arrow, sword, shield, battle, axe, thunderbolt, dagger and chakra.

The weapons of war or chase in Peddabankur included spearheads, lance heads and arrow heads, long spikes, most probably were hafted to a long wooden shaft to be used by horsemen. Arrow heads

found in Peddabankur bear similarity to the many historical sites elsewhere like Maski, Nashik, Taxila, Navadatoli and Sisupalgarh.

The agricultural implements included sickle, hoe and the spade. The sickles are most commonly noticed in Hastinapur, Taxila, Kaushambi, Piklihal, Maski and Pauni. The hoe is similarly found in the same locations. The same holds good for the spade.

Blacksmith occupied an important place in the village economy. Panini enumerates his tools as a sledge hammer, axe and tongs. The Peddabankur excavations have yielded a terracotta forge, adzes and tongs.

The carpenter was yet another important artisan those days. His tools included axes, adzes, chisel, drills, saw-blades, etc. Most of these tools along with plenty of nails, rivets and staples have been found in Peddabankur and Dhulikatta excavations. They have also yielded a rich crop of domestic implements consisting of choppers, knives, razors, tongs, fork, lamps, ladles, domestic trowels, balancing rod, keys, stylus, engraver, antimony rod, toe-ring and ferrules.

The find is not confined to iron objects. There is a considerable number of copper objects too from these excavations. It includes sewing needle, tooth-pick, ear cleaner, finger rings, bangles and anklets, amulets, ear-studs, spoon, stylised palm, jewel box and copper rattle. A bronze or copper figurine of the mother with a child in her arms may probably represent a fertility cult.

Lead Objects

Pliny¹⁸ says that India had neither brass nor lead but exchanged precious stones and pearls for those metals. According to Periplus¹⁹, lead, copper and tin were imported into Barygaza, Muziris and Nelcynda. We may therefore infer that Telangana, like other parts of India was not producing enough quantities of these metals in the early historical period but depended on the imports from Rome and other western countries²⁰ like Spain and Britain.

Lead, together with copper was mainly imported for coinage. It was also used to make into thin sheets for providing foils in the manufacture of mirrors²¹. Many coiled strips of lead have been

excavated in Peddabankur. There are very few objects made of thin foil of gold. There is a necklace with majority beads of amethyst, lapis lazuli and just a few of gold and jasper. The Kotilingala excavation however yielded a beautiful gold headed necklace. The heads are in the shape of gadroon, vajra, sundisc, nandipada, frog and tortoise.

Silver objects were also rare and represented by just a waist-band of beads. The heads are 21 in number and are hollow from inside and made of this sheet of silver.

Bone, Shell and Horn Crafts

Besides metal smiths, the artisans of bone, shell and horn led a very flourishing profession. The horn objects mainly consisted of arrow heads and beads. The bone objects of game dice and the shell objects of ornaments such as earrings, finger rings, beads and bangles, while the rich people were wearing bangles and other ornaments of gold, the common folk resorted to shell ornaments such as bangles, finger rings and earrings etc. Gem industry with a multitude of colours was also a prosperous industry. The common semi precious stones used for beads are carnelian, agate, garnet, bloodstone, beryl, jasper, amethyst, quartz crystal, lapis lazuli besides glass, terracotta and shells.

10.6 DRESS AND ORNAMENTS

We have the evidence of dress during Satavahana period from various sculptural representations and terracotta's, etc. Whether it is a male or female, the upper garment was shown in most artistic representations. Uttariya or upper garment was a kind of scarf thrown around the shoulders. It was worn by men, especially while performing a religious duty. The lower garment, or antariya corresponding to the dhoti was held in position by a waist band (kamar bandha). The upper and lower garments were known as 'Satakas'.

In Dhulikatta, many of the Yaksha and Yakshi adorn a pair of Satakas arranged in a variety of ways. Curtius Rufus stated that the Indians covered their persons down to their feet with fine muslin, shed with sandals and coiled cloths of linen around their head. Arrian also recorded that the dress worn by the Indians was made of cotton.

They wore an undergarment of cotton which reached beyond their knees, half-way down to ankles and an upper garment which they threw partly over their shoulders and partly twisted in folds round their heads.

However, if we look at art, paintings or sculptures, both males and females are dressed scantily. The subtleties of art would cover the body so profusely as to conceal the exposure of female body in an appropriate manner. There were a variety of ornaments worn from head to toe. A few of them are described as follows:

- The head ornaments (Mastaka Sabhana) consist of a jewel of the forehead and a decorative piece over the hair-knot.
- A fan strapped hair-dress made into a Makarika (Mythical Crocodile) adorns mother Goddess. Chandrakarnika is an ear ornament made of terracotta, glass, rock crystal, lead and copper.
- Chandrakundalas with pulley and grove structure adorned ears.
- Pendants, nose ornaments and necklaces were available in countless varieties and sizes.
- Bangles were worn both on hands and feet. Similarly, rings with certain inscriptions were also in use.
- Girdles or Mekhala was worn to keep the lower garment in right position. A girdle had multiple strands. Nagarjuna Konda sculptures are excellent examples of Mekhala with circular elapse over the waist of two ladies.
- Anklets are equipped with small metallic rattles so as to produce rhythmic sound along with the movement of a lady.

It is, therefore, quite evident that a host of ornaments, literally meant for every part of the body were in use in those times. It did not require much effort for an artist to literally cover a human body, including female from head to toe in a cascade of ornaments.

Food habits

Agriculture, hunting and domestication of animals were the main basis of subsistence. Cultivation was on dry as well as on wet lands. The later was made possible due to low lying topography or tank irrigation. Dry lands yielded ragi and jowar while the wet lands

yielded rice. That must have been the staple diet of the population. The hunting of wild animals and the consumption of domesticated animals, particularly sheep and goat supplemented their food requirements. The other domesticated animals included cattle, buffalo, horse, dog and swine etc. rodents were also captured for food. The food habits of Peddabankur dwellers are amply demonstrated by a large collection of bones from the excavations. The osteological study revealed that the cattle flesh mainly formed part of their diet. Sometimes, the bones are also found to be charred.

The study of animal bones at Yeleshwaram reveals the presence of sheep, goat, swine, fowl, rat, tortoise, fish and crocodile. The site is located on the banks of Krishna, at which crocodiles were commonly seen. It is not known whether the flesh of crocodile was also consumed along with those of the other species mentioned above.

Religion

During the early historical period, the religious beliefs centered around the local primitive forms of worship and rituals. The early inhabitants believed in village Gods and Goddess, trees and serpent cults and probably practiced the worship of spirit. The figure of mother Goddess dominates the metal or terracotta figurines. It also points towards the dominant mode of worship during those times.

In the early levels at Dhulikatta, the Mother Goddess is seated on a pedestal with legs dangling and holding a baby on the left hand, while the right hand is resting on her knees. The figurine, dated 2nd to 3rd century BCE represents the fertility cult.

A similar figure of the mother and child in Yeleshwaram is flanked by a humped bull. In the rock bruising at Mudumala, we find a humped bull and a mother Goddess with hands upraised. Whether the humped bull is just an animal, who ploughed the fields or represented early forms of Puranic Siva is not clear.

In Peddabankur, we have two types of Mother Goddesses. One is there with the upraised hands and the other holding a bunch of

fruits, while a parrot is nudging her breasts. The third comes from Dulikatta, where the Goddess holds her prominent breasts upright with her hands from below.

A clay seal of Gajalakshmi from the 1st century BCE has also been discovered. The Goddess gets bathed by two elephants with pails in their trunks while standing naked in a lotus pool. The elephants are standing on tall stalks that support the lotus leaves. Goddess Lakshmi is most likely the first of the gods to be depicted in clay. She can also be found in Barhut, Sanchi, Bodhgaya, Manwada, and Nandasur, among other places.

Peddabankur and Dhulikatta have also yielded a good number of archaic terracottas of human and animal figurines. The Mother Goddess are hand made with the hands depicted like pointed masses with protruded and pointed breasts. The alienated waist line broadens towards the hip. The face is featureless mass sometimes with a halo. Coomaraswamy wrote, "A nude and steatopygous type occurs throughout the most ancient world, from the Central Europe in the Neolithic times to the Gangetic valley. Quoting Coltz, he said, "She is the great mother and it is she who makes all nature being forth. All the existing things are emanations from her. She is, 'Madonna' carrying the holy child or watching over him. She is the mother of men and animals too. She even makes the plants grow by her universal fecundity, perpetuating the vegetative force of which she is the fountain head."

The worship of serpent is attested by figure of a snake made from iron from Peddabankur. The worship of snake or Naga is as old as the Vedic times. One of the principal Nagas is known as Takshaka. The Vedic hold continued unabated right up to Satavahana times. The Naneghat inscription records a number of sacrifices by Gautamiputra Satakarni. His gift of cows, elephants, money and dakshina to Brahmins prove the great hold of the Vedic rituals on their courts and entourage. The mention of various deities such as Dhamma, Indra, Shankarshava, Vasudeva, Chandra and the four Lokapalas i.e., Yama, Varuna, Kubera and Vasara (Indra) show that the Deccan was passing through a transition phase from Vedic

to Pauranic pantheon. The invocation of Dhamma in precedence to Indra and Shankar shava etc., is also an indication of Buddhist learnings and its equation with the existing Vedic and Brahminical faith. Shaivism was still evolving but by the time of Gatha Sapthasati, Pasupati, Gauri, Rudra and Parvati, Lakshmi, and Narayana have arrived on the scenes and preceded all others.

The present-day Telangana lands and its people were influenced by Buddhism long before the times of Ashoka. For this reason, this land was not mentioned among the countries to which monks were sent by Tissa, after the third Council during the third century BCE. Literary evidence of the spread of Buddhism to north Telangana (the land of Assaka) which was revealed in the Parayanavagga of Sutta-Nipata, a collection of religious discourse, speaks of Bavari, a Brahmin priest who had come from Kosala in Magadha to settle on a island on the forked streams of the Godavari River. Recent archeological evidence reinforces that Bavari may have lived where Godavari River flows in forked branches, most probably in Badanakurthi island near the present-day Nirmal district.²² If so, this was happening as early during the last quarter of fifth Century BCE; sometimes around 487 BCE.

Games and Amusements

People unwinded from the monotony of routine duties by participating in a variety of sports and pastimes, such as indoor and outdoor games and other recreational activities. The game of dice has been around for a long time. It has been referred to as akshadyuta from prehistoric times. Because the dice are inscribed with circles and pellets in the shape of an eye, the game was most likely given that name. It's possible that it's related to today's chaupara. Both men and women took part in the event. Many sculptures from the early historical periods, such as Bharhut, Bodhgaya, and Nagarjunakonda, depict the game board (dyuta phalaka). We have two types of dice from Peddabankur: one is an oblong prism and the other is a square cubical. Oblong dice make up the majority of the dice. Each one has four corners marked with circles and a dot in the middle. Bone and horn are used to make the dice. 'Another

favourite sport was hunting, which Panini refers to as *lubdhayoga*.²³ *Akhetaka* or *mrgaya* are other names for it. Bow and arrow were the most common weapons used for hunting. Hunting dogs (*visvakadru*) sometimes accompanied the party to terrify the animals out of their hiding places. *Lubdhayoga* may refer to hunting as a profession, while *mrgaya* refers to a sport. 'Kautilya has examined the advantages and disadvantages of hunting.²⁴ Deer, hare, boar²⁵ bison, bird, tortoise²⁶, and other creatures were pursued. A group of boars being assaulted with a short spear and two hounds pounce on it in the Bharhut sculptures. Hunting with long spears has been practised since prehistory.

Birds and Animals

Domesticated birds like the sparrow, *kokila* (Indian cuckoo), cock, and parrot are frequently depicted in terracotta figures. These birds were used to convey messages between lovers during ancient times. A parrot perches on the right arm of a Mother Goddess figurine crafted from kaolin. A woman and a parrot are depicted on a pillar panel at Mathura. When Agrawala describes it, "the pillar depicts the dance of an ecstatic female figure, after she has received the message of love conveyed to her by a parrot, which is God's vehicle of Love." The bird is perched on her girdle and nibbles at the knot of the girdle's bindings. Amulet plaque from Dhulikatta, India, depicts the domesticated peacock.

From the earliest times, animal fights were a popular pastime. Ram, cock, and bull fights were among the more common. Terracotta figurines depicting rams are a common sight. Vatsyayana uses the quail-fight (partridge), cock-fight, and ram-fight, as well as the mention of parrots and mainas, and dramatic performances, as pretexts for bringing a client to the residence of a courtesan's client. The fights between buffalo and elephants appear to have been common as well.

Games of Women

Women's games are largely of the indoor form, with the ball game being one among them (*kanduka krida*). This game was designed

primarily for physical activity. The girls who enjoyed gaming played until they were utterly weary and their palms swelled and turned red. The substance from which the balls were constructed is unknown. It's possible that wood balls, wool, or flowers were used in the process. The tradition of playing with balls made of various species of leaves is popular in the Karimnagar region. The girls gather leaves and roll them into balls, securing them with strings. Another approach is to fill a tiny sack with tamarind and custard apple fabric and then securely cover its mouth. The dried fruit of kapitha, wood apple, bilva, and custard apple is the other type. Other indoor activities that the girls used to play, such as hide-and-seek and run-and-catch, are graphically depicted in the Kamasutra. A number of circular potsherds found in the excavations indicate that the game of hop-scotch was also popular. Discs made of similar pottery may be found in practically all early historical and protohistoric locations. A large number of similar pottery discs have been discovered at the Peddabankur excavation.

Burial Practices

The excavations at Peddabankur and Dhulikatta have not yielded any human remains in and around the sites. One of the possibilities could have been that the dead bodies were carried to far off places for disposal at a common burial ground. Another possibility, perhaps more plausible was that the dead were cremated and therefore no semblance of human remains was left behind. The charred bones from the pyre were collected to be immersed in the waters of the rivers, especially at the place of confluence.

Some Megalithic burials consisted of post cremation charred bones besides past excavated remains. The post cremation bones are dated later than the excavated ones. The transition from excavation to cremation and subsequent immersion in river confluence clearly points to Vedic influence.

An extensive cremation ground during the Ikshavaku period at Nagarjunakonda is a decisive proof that the people had forgotten Megalithism long back. Some memorial pillars eulogizing the merits of

the dead were erected at the cremation ground. Some of the hero stones, carved the figure of the dead, such as Sirichantamala, the Ikshvaku king, with an epitaph containing a long account of the great deeds of the dead. Megalithism may have continued, not among the general public of the age but it retreated to the hilly region or forest, where such primitive rites are still continued among some tribal people.

The antiquarian remains and the structural remains at Peddabankur and Dhulikatta pertains to two phases i.e., the pre-Satavahana and Satavahana. Based on various sources like pottery, iron, coins, inscriptions and most conclusively radio carbon dating, we arrive at a chronology ranging from 3rd Century BCE to the 2nd Century BCE.

Weights and Measures

The word *prasrita* means 'handful' in the *Satapatha Brahmana*. It simply means "expanded" or "stretched out." Similarly, the term 'anjali' refers to a quantity of two handfuls. In Telugu, it is still known as 'dosili.' The word *pana*, which means "a handful," comes from the word *pani*, which means "hand." The Indian *pana* consisted of a handful of cowrie shells weighing 80 *raktika* seeds (144 grains).

The weights (*pratimand*) were typically constructed of iron, locally available stone, or a substance that did not contract or expand when wetted or heated. When a balance's lever is 72 *angulas* long and weighs 53 *palas*, it's termed *samavritta*. It's not uncommon for the balance to be graduated. According to *Varaha Mihira*, the scale pans should be 6 *angulas* in diameter and made of linen material. They were each connected to the balancing rod by four cords.

Peddabankur excavations yielded a large quantity of iron balancing rods. The larger rods were 40 cm long, while the smaller ones were 30 cm long. The rods are thick in the centre and taper out at both ends. Because many of them are damaged, it is difficult to determine their graduation grades. The centrally thicker rods could imply that the balances were double panned. Two distinct weights emerged from the excavation: one is a cubical made of black basalt, and the other is a flawless sphere made of black granite. The hexagonal

basaltic weight measured 120 grains. The top is convex and the bottom is flat. The second weight, a sphere, weighed 70 grammes and appeared to be manufactured on a lathe. It was also stamped with the Ujjain emblem, which consists of four circles joined by a cross. It was evidently granted with royal approval. It may show that the weights and measures were consistent.

The weights and measures were to be made with royal authority, according to Kautilya. Riverine shingle must have been employed as weights by common people, as a vast number of them have been discovered in the excavations. The earthen pot served as a grain scale. Two hundred palas of grain (masha) produce one drona, 16 dronas make one vari, 20 dronas make one kumbha, and 10 kumbhas make one vaha, according to Kautilya. Surprisingly, a great number of saravas or kumbhas, half-kumbhas, and quarter-kumbhas were discovered at Dhulikatta. They were discovered within the royal complex, in a brick granary. The sarava has a spherical shape with a narrow mouth and everted rim. The rim of the half-sarava is bevelled. The boats' red slip has been heavily abraded and is now only visible in spots. The straight-sided containers from the Peddabankur excavation, gently tapering to the mouth with a featureless rim and rounded base, could have also been used as cubic measurements (parimana). One pot feature three etched grooves: one at the top, 2 cm below the rim, one in the middle, 8 cm below, and one at the bottom, 17.5 cm below. The mouth measures 13 cm in diameter and stands 24 cm tall. Addas or manikas are cylindrical jars constructed of sheet iron that are similar to addas. One goni (sackful) is made up of forty such addas.

A tavva is half of an adda, a sola is half of a tavva, and a giddhe is half of a sola.

The nandipada or trident was stamped on many pots from Peddabankur and Dhulikatta. If the symbol merely had a ritualistic meaning, it would be less popular. The nandipada was most likely another royal standard mark. The symbol may represent the Mother Goddess, Dhaanya Lakshmi in this case.

10.7 URBANIZATION

During the early historical period, there are significant signs of urbanisation. During Satavahana periods, the Telangana region was distinguished by both urban and rural parts, much like today's times. Dhulikatta, Kotilingala, Vadloor, and Budigapalli, among other politically and commercially important towns, were encompassed by mud fortifications with gates at the cardinal points. According to Kautilya, defensive fortifications should be built on all four corners of the kingdom's borders to defend against a warring opponent. There were four types of fortifications: a water fortification (audaka jaladurga), such as an island in the middle of a river; a mountainous fortification (parvatha durga); a desert fortification (dhanvana durga), such as a wild tract devoid of water and overgrown with thicket; and a forest fortification (vanadurgd), full of wagtail, water, and thicket. Many of the defences in this region were found on the plains, and it is unknown whether some of these walls, known as vanadurga, were surrounded by forests, as most of the land has been deforested. However, at Kotilingala, where the mud fort is located at the confluence of the Kapparaopeta vagu and the river Godavari, we have evidence of a jaladurga. A mud fortification encircles the 50-hectare historical site, with gates at the four cardinal points. The soil dug out from outside the towns was used to create the mud ramparts, while the ditches dug out acted as moats at the same time.

During Satavahana periods, the Telangana region was distinguished by both urban & rural parts, much like India in today's time



According to the sculptural portrayal at Sanchi, these moats were full of lotus flowers. The settlements were defended by marshes, which functioned as trenches for crocodiles, according to Pliny. They are believed to have a voracious appetite for human flesh, and they have limited access to the city to only a bridge. There are evidence of a moat around the ramparts at Dhulikatta. Unlike the Kotilingala fortification, the Dhulikatta fortification was built in the middle of agricultural plains, with four gatehouses and guardrooms. Casemates or ambush niches were constructed on either side of the gate-house, which had enough space in the centre for a passage.

With a terraced roof, railings, and pillars, the gate-way had to have been one or more floors high. The centre road was rubble-paved and covered in a thick coating of sand and morrum. Wheeler's excavation at Brahmagiri revealed a 5.30 m wide street, similar to that found in the Isila town site. It is paved with debris, with flat slabs defining the boundaries. The same might be said for the major roads that run through the towns of this region. The national highways, on the other hand, do not appear to have been paved. People may have travelled long distances by boat because many communities grew up along the banks of major and minor rivers. Traveling by water was safer and significantly cheaper than travelling by road. During the wet season, the unpaved roads would be useless. Furthermore, due to the lack of all-seasonal roadways, rivers used to carry a greater volume of internal trade and commerce. Even those that were already in place had to traverse through dense woods plagued with wild animals and highway robbers. Carts driven by oxen or buffaloes were used to transport the products.

Horses were scarce, and the kings had a virtual monopoly on their use during wartime. "Mahatalavarasa Vajasamikasa Seva Sabha," reads an etched ceramic seal from Peddabankur. The figure of a horse is inscribed in the middle of the inscribed seal. The Mahatalavara refers to himself as Vajasasri, or "Lord of Horses," in this passage. Elephants were also used to transport cargo, although only in a sluggish manner. A network of perennial and navigable rivers runs through the region. Boats were used to traverse the rivers. They were fashioned of wattle and wrapped with animal skin to keep them from rotting in the water. These were referred to as bhastras. During times of conflict, these puttis even transported horses from bank to bank. The larger vessels, known as sangara, were formed of logs linked together, but those that made the journey to the Chrys and the Ganges were named Colandi, which were exceedingly enormous.

Roadways

The planning and construction of roadways was an important aspect of town planning. The royal thoroughfare was known as rajapatha, and the national highway was known as mahapatha,

according to Aitareya Brahmana. Numerous feeder roads connected the mahapathas, reaching to various sections of the country. The rajapatha was well-built and relatively free of risks compared to the mahapatha. Rubble was used to pave the rajapathas and highways of key towns. Chariot roads, royal roads, and roads going to minor forts, countryside, and pasture-land are all mentioned in the Arthashastra. However, it appears that the national roadways were in poor shape. The merchandise is delivered to Barygaza by wagons and over vast stretches of land without roads, according to the Periplus. Highways ran through Telangana from the north to the south, and from the east to the west. The caravans travelled from Vidarbha to Andhra Pradesh, then south-east to Dhanakataka and west to Govardhana country (Nasik region). The caravan followed the northern route from Akara Avanthi (Ujjain), crossing the Narmada and continuing to Bahal (district East Khandesh), from which it either headed south to Prathisthana-pura or west to Nasik. The land was surrounded by mountains and a series of trees and marshes when Hiuen Tsang travelled from Kalinga to Kosala, which is about 1800 Li. The path to Paithan through this region was thickly forested and inhabited with ferocious birds of prey. Near each end of the journey, ox-carts would be utilised, and much of the cargo would have been carried by a caravan of pack animals. "They bring their goods-laden on vast droves of trained oxen with pack saddles, like those of Castillo, and over these long sacks slung across, in which they pack their things, and behind them walks a driver who drives twenty or thirty oxen ahead of him," writes Daurte Barbosa.

Drainage and Waterways

Covered or subterranean drainage was used to transport sewage from the buildings and wells. This was demonstrated by a brick drain in Peddabankur, which was laid up in three layers with a 12 cm gap for the drain. Bricks were also used to pave the drain's floor. To ensure that there is no breakage, great care had been taken. It had a set of side-vents at regular intervals on both lateral sides for letting out water to percolate into the earth, so the drain did not have to transport the entire sewage all the way to the finish. A deep

‘V’-shaped trench was excavated at the drain’s end to catch the drain water. A terracotta soak-well was installed in another case to drain waste water from a brick well. However, it appears that none of the wells have washing platforms. The sewage was allowed to percolate through or was directed to a nearby pit, but care was taken to ensure that the percolated water did not enter the well again by lining the wells with brick and filling the space between the brick lining and the trench wall dug for the well construction with morrum and hard earth.

It was discovered in Dhulikatta that a drainage system was lined with a series of terracotta pipes that were inserted one into the other. A well inside the royal complex, on the other hand, featured a lengthy covered drain that led to a soakage-pit. A good natural supply of water was a basic requirement for any town or settlement. The majority of the cities and villages were built on the banks of rivers or nullahs with year-round access to water. The mud fort of Kotilingala is located on the banks of the Godavari River. Similarly, Dhulikatta is on the right bank of the Hussainivagu, while Peddabankur is about 10 kilometres downstream on the same nullah. During the summer, the nullah would dry up, necessitating the construction of multiple brick wells at Dhulikatta and Peddabankur. The Peddabankur excavation revealed 22 wells, the majority of which were steened with wedge-shaped bricks. There is just one with terracotta rings that is nicely maintained. Even these wells dried up with time and were eventually utilised as waste dumps where animal bones, broken potsherds, charcoal and ash, among other things, were tossed. A entire skeleton of a horse was discovered in one of Peddabankur’s wells. A vast collection of animal bones was found in a number of different wells. Large earthenware jars and brick cisterns were used to store water. Some of the cisterns at Peddabankur were bricked over the floor, but others had a hardened morrum flooring.

Industries

In contrast to now, industries were not monopolised by a few individuals back then. There is no proof that either giant industries or big business existed. The colonies were located in areas where

there was plenty of raw material. However, the industries were of the cottage variety. They were dispersed among the villages and towns, each of which was self-sufficient. Iron ore was mined and transported to towns or villages, where it was smelted and turned into weapons. Simple terracotta or brick kilns served as smelting furnaces. Even in other situations, it was only a heap of cow manure covered in green foliage, cacti, and other plants. Steel is made in a crucible that is only 10 cm in diameter. Large amounts of iron slag were found in almost all of the communities, indicating that iron smelting was a household industry.

Iron ore has been discovered in Warangal, Nizamabad's Konasamudram, Dindurthi, and Jagtial, among other places. Iron ore can be found throughout the hill range from Tellakunta to Dongathurthi, which is around 5 km from Dhulikatta. Near Tellakunta, ancient iron-working sites were discovered over a range of hills. The iron ore was collected from various locations and processed into fine steel known as 'wootz' in well-known steel producing centres such as Konasamudram, etc., which drew traders from all over India as well as from abroad. Since the ancient times, swords manufactured of good Indian steel have been exceedingly popular, and the Roman commerce in Indian iron and steel was quite important.

The Indians appear to have sent their steel in their own ships, presumably to keep the manufacture secret. Copper, along with iron, was a significant metal for money, decorations, and other uses. In fact, copper was used for the majority of early currency. Copper was shipped from Barygaza to Oman and the Persian Gulf, according to Periplus. Copper, iron, and red lead were also imported from India to the Persian Gulf and Red Sea ports for marketing, according to Pliny. Copper was discovered at Kalyan, according to Cosmos, and Ptolemy mentions various copper mines in India. However, there is no definite evidence of smelting or forging of the metal. Copper was used for the entire currency as well as many of the decorations. Lead was undoubtedly a rare metal that had to have been brought from the Roman Empire via India's western ports. A

considerable quantity of coiled strips at Peddabankur indicate that lead was imported in the shape of strips. Lead was also utilised to make thin foils for mirror manufacturing. Aside from coins, there are certain accessories such as bangles, beads, and so on.

Indians had had a deep understanding of diamonds since ancient times. Experts were stationed at the royal treasuries, according to Arthasastra, to acquire gems for the royal household. During the early historical period, gem collection was a prevalent practise. The jewel cabinet was a crucial component of every wealthy family's house, but the common people relied on glass replicas. The gems were employed in a variety of ways, including finger rings, necklaces, diadems, bracelets, and so on. Diamond, opal or agate, carnelian, sard, onyx, emerald, bloodstone, jasper, and cat's eye were among the gems. Amethyst, rock crystal, sapphire, beryl, lapis-lazuli, garnet were other gemstones. The rivers and their basins appear to have been the primary sources of diamonds. The Indian rivers were dubbed "gem-bearing" by locals.

Commerce, Market Towns and Ports

In the lives of the people, commerce played a significant role. Workers such as Kularikas (potters), Udayantrikas (hydraulic engineers), Tilapisakas (oil millers), Dhannikas (corn-dealers), Kolikas (weavers), Vasakaras (bamboo workers), Kasakams (brasiers), and others appear often in contemporary records. Each of the artisans had its own guild or Sreni. The Srenis were corporate entities with a lot of clout in the state. Sreni-dharma had legal standing. The banking services supplied by these organisations were their distinguishing feature. The craftsmen were organised into powerful guilds, according to Usavadata's epigraph "as those kahapanas were invested in guilds residing in Govardhana (as follows) 2000 at a (monthly) rate of one padika per hundred with a guild of weavers (Kolikanicaya) and one thousand at a rate of 3/4 padika per hundred with another guild of weavers (9 per cent). And those kahapanas are simply to be enjoyed, not to be repaid with interest". The kahapana of the time was made of fine silver, as evidenced by some of the Satavahana rulers' silver currency.

Guilds were formed to organise the majority of the crafts and trades. In Junnar inscription mentions a Dhamnika Senni, a Kasakarasem (Kamsyakara sreni), and a Tesakaraseni. Each guild has a sethin, a wise old man (sresthin). The guilds gathered in nigama sabhas, or town halls, to worship and do business. Paithan, Sagara, Junnar, Kashakata, Nasika, Govardhana, and Vejayanti were the interior market towns. Barygaza or Bharukacha (modern Broach) was the Dakshinapatha's northernmost port, according to Periplus. The author of the Periplus provided a graphic representation of the imports and exports. Wine from Italy, Laos, and Arabia, copper, tin, lead, coral, topaz, fine and coarse fabric, storax, sweet clover, flint-glass, realgar, antimony, gold and silver coins, and storax, sweet clover, flint-glass Spikenard, costus bedellium, ivory, agate, carnelian, lycium, silk cloth, mallow cloth, long pepper, and other items were exported.

The Satavahana port town of Sopara or Soparaka, a few miles north of Bombay was important but Kalyan, the 'Calliene' of the 'Periplus,' was the most important port in western Deccan. Danakataka was a major market town in the eastern Deccan, and Kantakossyla, Kodura, and Allosygne were port cities in the Maisoliya region.

Art

Sculpture, like architecture, had reached a pinnacle of perfection during the Satavahana period. The Buddhist Stupa at Dhulikatta was adorned with 47 curved ayaka slabs, which were discovered mostly intact during excavation. Five hooded Machilinda Naga guarded the feet of Lord Buddha on the curved slabs on the northern ayaka platform. Two ladies stand on the flanking slabs, one on the left holding a lotus bouquet in her raised left hand and the other dangling her right. She wears a cubical ear piece with a gorgeous lotus medallion, a side knot in her hair, a broad necklace with multiple strings, a broad waist belt, a series of bangles, and a beaded wristlet with a jewel in the centre, as well as gigantic anklets. The right-hand lady has a more seductive figure. Her right hand is

holding a flower, while her left hand is resting on her left hip. Her ear jewellery, necklace, armlets, bangles, and mekhla are all similar, but the diaphanous undergarment with a knot below the navel is completely different. She walks with a lovely feminine gait, her upper body slightly bowed forward, her left leg planted solidly on the ground and her right leg resting casually on the toe.

Another figure of a Yaksha is portrayed lifting a slab on which an ardha-padma is pictured with his two upraised hands. His hands, legs, and ears resemble those of an elephant. He squats on the ground, his genitals covered by a loin fabric with incised vertical lines flowing downwards. It could be the embodiment of Indra's elephant, Airavat. The Yaksha is represented on a slab that faces east, which is appropriate. A relic carving depicting the miracle of Sravasti can be seen on another pilaster at Dhulikatta, in which Buddha is depicted as a pillar of fire, standing on a stack of water and flame couches. This could be an early depiction of the Nandipada from the 2nd century BCE.

Another pilaster at Dhulikatta has a relic carving of the miracle of Sravasti in which Buddha is shown as a pillar of fire, basing over a heap like mass of water and lounges of flame. This is possibly an early representation of the Nandipada datable to 2nd Century BCE. Besides the solemn religious scenes, there is display wherein body parts are displayed with sportive themes. In one panel, a man, with his genitals prominently shown, hold the tail of a fleeing tiger. Behind is the confirmation of the scene in which a man is urging an elephant with his right hand while his left hand is stretched out. He may be chasing an elephant.

The artistic representation at Phanigiri is qualitatively less yet quantitatively numerous. During scraping operation, a beautiful limestone sculpture of Yaksha came to light. He is shown with bulbous eyes and an aquiline nose. His elongated earlobes adorn ornaments while he wears a turban around his head. Yet another dwarfish Yaksha, probably a Kubera has a protuberant belly. He also wears Chandra kundalas, broad bangles and a turban. He

also holds a long staff in his left hand. Yet another panel represents a fleeing bull chased by an elephant. The elephant is thwarted by a man standing between the two animals by showing his outstretched hand towards an elephant.

“At Dhulikatta (Plate 95V), the third type of Mother Goddess can be found. It’s made of levigated clay that’s been finely ground. The back half of the body, as well as the body below the breasts, are missing. From below, the Goddess supports her large breasts with her hands. She has a beaded yajnopavita that runs from her left shoulder to the middle of her breasts, a torque (kanthi or griveyaka) around



Head of a lion, from gateway pillar at the Amaravati Stupa, Amaravati, Andhra Pradesh, India, Satavahana dynasty, 2nd century AD, limestone. Exhibit in the Freer Gallery of Art, Washington, DC, USA. This artwork is old enough so that it is in the public domain. Photography was permitted in the museum without restriction

her neck, a crescentic ear-ornament (chandra karnika), a beaded fillet over her forehead with a crest jewel, and finely combed hairs to the right (probably made into a side-knot). The kankanas, keyuras, and lalatika (crest jewel) are in perfect harmony with the Goddess’s joyful countenance, which is shown with parted lips, narrow eyes, and bulbous cheeks. Similar Mother Goddesses can be found in Babylonian, Elamite, and Neo-Babylonian cultures dating back to the second millennium B.C. It’s possible that the Goddesses holding their breasts with their hands symbolise the Goddess providing milk or life fluid. These sculptures have been dated to the Bronze Age.

The cult of Mother Goddess in all ancient civilisations has a global imprint. Nana or Ishtar, the Babylonian Mother Goddess, is the

source of fertility as well as the Gracious Mother of Mankind and the Goddess of Love. In that sense, she is Babylonia's Aphrodite. Venus, 'the daughter of Sin,' was sometimes associated with the Goddess Ishtar. Carthage, a Phoenician Goddess, is depicted as holding her two breasts from below on one of the ivory mirrors handles from a tomb on Juno's hill. The Goddess is seen standing, wearing a long-girdled gown that reaches to her feet. According to Ananda Coomaraswamy, this form is quite close to the nude female figure with hands doubled up to touch the breasts, which is claimed to have originated in Peshawar district. Sri Lakshmi is the name given to a figure of Mother Goddess from the Kushana period in Mathura, which is now on display in the National Museum in New Delhi. With her left hand, the Goddess holds her right breast, while her right hand points to the sex. "There is a kaolin figure of a child with a turban-like headdress among the other Peddabankur images." His right hand is merely kept over the thigh, and he wears large kundalas that rest over his shoulders. There are no other decorations on the figurine. As such, it could be a portrayal of an early historical commoner boy."

Potters and Potteries

Pottery had formed one of the most essential necessities in the daily life of all the people. Metals had always been scarce and therefore, the pottery objects filled in the gap of a myriad needs of the society.

The entire range of pottery, recovered from the early historical age was mostly wheel made. Broadly, the pottery may be classified as utilitarian and ritualistic, the former being more numerous. This type includes storage jars, water vessels, carivated bowls, bowls with lid, deep bowls, dishes, globular vessels, lotas, wine vessels, lamps ring stands, small bowels, chattis, measures, lamps, lamp stands and dishes etc. Ritualistic pottery also had a limited supply. A globular vase stamped with triratna or nandipada at four places is one such item. But with three perforations, one at the top and two at the bottom, probably represents visage. The pot way represents the Mangalakalasa into which the Goddess was invoked. The dishes

with spiral design may have been used for religious offerings. Several pots, stamped with trident could have been used as a censor or offerings. Decorated pottery along with graffiti marks which includes arrow, triangle, plough, fish, circle enclosing a cross, bow and arrow, inverted trident and parallel line intercepted by another set of parallel lines have been found in good numbers.

Roman Coins

A vast quantity of Imperial Roman coins made their way to India. It was imported by traders throughout the Christian era's closing centuries. Many locations of peninsular India, including Telangana, have yielded these coins. The migration of coinage from Rome to India took two different forms. Gold coins were a need for merchants doing major deals with foreign countries, both for personal wealth and for commercial transactions. Small change was also made possible by the silver coins. Much of the Roman coinage discovered in India was carried to India by Roman subjects to buy whatever commodities they couldn't get in return for Roman goods. Pliny claims that at the lowest estimate, India, Seras, and Arabia bled a hundred million sesterces per year from the Roman Empire.

Many locations of peninsular India, including Telangana, have yielded these coins



About 47 silver coins consisting of 39 Roman Dinari and 8 punched marked coins have been found in the village Nusthulapur in Karimnagar district. Of them 13 are AUGUSTUS and the remaining 26 belong to TIBERIUS. Peddabankur have also yielded Roman coins. All the Roman coins were found in layers coterminous with the Satavahana coins of Satkarni, Gautamputra, etc. the Roman coins belong to Augustus (29BCE to 14BCE) and Tiberius (14CE–17CE). No coins of the post Tiberius period were found. It may suggest that the contacts with Roman Empire must have been ended by that time.

Stone Objects

Several stone objects found during excavations include querns, pestles, mullers, dabbers and a cup made on lathe with a featureless

rim. A big quern has a rectangular grinding face with undulations in the middle. A pestle was also found in the proximity of the quern. The big quern is made of the red sand stone and some smaller ones of granite. In some cases, the material used was yellow quartzite or dolerite. A single completely ground stone, with a knob in the middle, may possibly be the lower piece of a rotary quern.

The red stone pestle is exactly cylindrical in shape. Both the ends of the pestle were grooved and rounded to facilitate easy grip. Yet another design is cylindrical in the middle and bulbous at both the ends.

There are two dabblers or similar shape with concave sides and groined ends, the working edge being bigger than the butt-end.

10.8 THE OVERALL SCENARIO

Commencing from the Mauryan times, well into the first millennium, India enjoyed an unprecedented prosperity. It was primarily due to the spread of agriculture and improvement of farming practices. The surplus from land ignited trade which poured wealth into urban centres across the land. Expansion of trade stimulated India's contact with contemporary civilizations such as Persia, Greece,

India was then, an open society where different

followed by South East Asian littoral. India was at that time an entirely open society, where the pollen of different civilizations from across the mountains and seas blew in to cross fertilize the native economy and its culture.

civilizations came in to fuse with the native economy and culture

As economy transformed from subsistence to surplus, the societal attitude towards life also underwent a parallel transformation from survival to enjoyment. A millennium ago, cattle was the primary means of subsistence, agriculture was secondary and trade rudimentary. But now, as nomadic hoards had settled on permanent forms, agriculture became their primary



occupation. As improved technology pushed farming frontiers, an improved management system pulled them ahead. With increased productivity, came marketable surplus which in turn, pushed trade

frontiers across lands afar. Expansion of trade with distant lands brought wealth in the form of bullion and promissory notes. As the wealth poured in, its owner's attitude towards life changed as well. Wealthy families not only think differently but also provide a role model for the rest of the society.

Wealthy families think differently and provide a role model to the Society



Another aspect of economic transformation was the change of mode of craft production. Previously, the craftsmen were producing goods as ordered by their customers. In a limited cluster, demand was limited. In a sense, what they sold was service, not goods. In villages, the resident craftsman served the community as a whole, making whatever one needed without charging them individually. Later, they received a share of the produce from the village as a collective remuneration. It was a sort of, 'one for all- all for one' concept in actual practice. As commercial practices enveloped agriculture, craftsmen too resorted to making goods for sale to the public in the market. The concept of surplus i.e., 'capital' invaded non agricultural economy as well.

Another aspect of the economy was the development of the guild system. Nearly all classes of craftsmen, traders and professionals in India, even priests, thieves and prostitutes were organized into guilds. They regulated production, quality and prices of goods and services, as well as remuneration and service condition of workers.

A settled economy and a prospering society, interestingly, resulted in robust growth of village polity. Self governance in many parts of India, especially in its peninsular half was a reality. It was as democratic as it could have been in those times within the confines of evolving caste structure. Some villages even had formally adopted written constitutions. They were, in certain case as elaborate as a modern state constitution. They laid electoral rules and specified the powers and responsibilities of legislature and executive bodies.

According to Hindu law books, there are four distinct objectives that are to be pursued in life. They are Dharma (socio-religious

proprietary and duty), Artha (wealth and power), Kama (carnal pleasures) and Moksha (salvation). All the four pursuits are equally legitimate. Empowered with the religious sanction, the predominantly Hindu society adored the God of love - Kama. Enjoyment of sensual pleasures was part of the fullness of life.

This open acceptance of role of sex in life made prostitution a respectable profession. There was no stigma attached to it. Visiting prostitutes was neither a secret nor guilt. It was done openly like any other socially accepted activity such as attending concerts or soirees. It was normal for men to promenade with prostitutes in parks or frolic with them in public bathing places. During Mauryan times, prostitutes were trained at state expense and were regarded as state assets.

**Visiting
prostitutes
was
neither a
secret nor
a guilt**



Mauryan rulers, especially Ashoka, raised tree plantation to a level of state worship. It was apparently due to Buddhist influence. Gautama was born under an Ashoka tree, received enlightenment under a Pipal tree, preached his gospels under shades of Banyans and Mango groves and died in a Sal grove. Never before, or even after, has a religion been associated with vegetative growth. Buddhism adopted the cult of tree worship from the older religions which prevailed in the country.

After Gautama Buddha, the story of Ashoka succeeding to the Mauryan throne in Patliputra, his massive attack and eventual victory over Kalinga, his remorse on seeing the horrors of war followed by renunciation of violence and embracing Buddhism is the staple diet of ancient Indian history. His love for the trees and forests is well known. This was a first example in Indian history, when we hear of a monarch, who encouraged arboriculture and adopted it as a state policy.

Asoka made it illegal to burn woodlands to drive out game. He advocated for the planting of trees in gardens and avenues along roadways. For the convenience of livestock and labourers, rest buildings and water stations were built. "On the highways, I have

had Banyan trees planted, which will give shade to creatures and men,” reads an inscription on one of Asoka’s pillars. Every nine km, I have planted mango groves, dug wells, and built rest huts. And I’ve built a slew of watering holes for both beasts and humans all throughout the land. However, this advantage is significant, and the world has benefited from prior Kings’ and my attentiveness in several ways. But I did these things in order for my people to follow the Dhamma.”

Superintendent of grazing fields is mentioned in the Arthashastra. He was in charge of the construction of tanks, wells, shelter buildings, and flower and fruit gardens. Under Asoka, this type of administrative organisation for planting gardens persisted.

Under Ashoka’s patronage, Buddhism flourished fast in India. It had an impact on peninsular India, particularly Dakshinapatha, the tableland between the Godavari and the Krishna rivers. It made its way to Ceylon, Burma, Thailand, Sumatra, Java, Vietnam, China, Korea, Japan, Central Asia, Mongolia, and Afghanistan in due time. It gave the barbarous tribes a human face. It provided them a new way of thinking about life and helped them develop their moral character. It influenced Ajanta’s magnificent art, which spread to Khotan in Central Asia and Tun Huang in China. It was the inspiration for Borobudur, Java’s most famous monument, which is still revered for its noble sculpture. Above all, it instilled a passion for trees and gardening. Even now, youngsters remember Ashoka in this manner.

Far removed from the Indo Gangetic plains, the peninsular history had a character of its own. It was shaped by the border of thick forests and inhospitable terrain bordering northern boundary. The isolation from northern India endowed peninsular culture with a powerful originality. Broadly, they fell into two groups. The Tamil group comprised of Pandyas, Cheras, Cholas and Pallavas while the Deccan group comprised of Satvahanas, Vaktakas, Chalukyas and Rashtrakutas. Encouragement to agriculture was a special feature of these kingdoms.

Peninsular Panorama

By third century BCE, Iron technology had already penetrated into peninsular India. Therefore, during Satavahana period, iron implements multiplied. This gave a fillip to agriculture. They cultivated cotton and millets on high lands and transplanted rice in plain areas. The art of transplanting rice seedlings was widely practiced during the first two centuries in Godavari, Krishna, Mahanadi and Kaveri deltas. Contact with the North established during Mauryan phase helped them to learn the use of bricks and construction of ring wells.

Brahmins were the pioneers of progressive agriculture during Satavahana times. The later were the first rulers to make land grants to Brahmins. Owing to their knowledge of astrology and ability to forecast rain, they enjoyed respect among the rural people. Besides, they were the educated class of that age, and also pioneers of culture and progressive agriculture in the South. Kosambi states, "The Brahmins acted as pioneers in undeveloped localities; they first brought plough agriculture to replace slash-and-burn cultivation, or food-gathering. New crops, knowledge of distant markets, organization of village settlements and trade also came with them. As a result, Kings invited Brahmins, generally from the distant Gangetic basin, to settle in unopened localities. Almost all extant copper plates (which have been discovered all over the country by the ton) are charters which, from the fourth century onwards, record land grants to Brahmins unconnected with any temple. In addition, every village would set apart a lot or two of land plus a fixed though small share of village harvests for the cults and priests, Brahmin or not. Brahmins, however, claimed and generally received exemption from all taxes; they even claimed an especially low rate of interest on loans, and other privileges".

Coconut was cultivated on both the coastal strips, embracing the entire Indian peninsula. It provided so many necessities of life to the population. Kosambi states, "Coconut tree, which forms the basis of the whole coastal economy today, seems to be an import from

Malaysia. It was being propagated on the east coast around the middle of the first century BC and reached the west coast a century later. By 120 CE, the Saka Ushavadata, the son of Dinika and son in law of the reigning King Nahapana, began to give away whole plantations to Brahmins, each one containing several thousand coconut trees. Ushavadata was generous to the Buddhists as well, but there were no cave monasteries on the coast within his reach. The coconut, now to be found in every Indian ceremony and ritual, was rather poorly known in many parts of India before the sixth century CE. This provides a useful comment upon 'timeless and immutable' Indian customs. The wood, fibre, wine and other products of this tree are also of the utmost value; the nut itself provides 'meat' for cooking and when dried, excellent food oil used also for soap-making. The western coastal strip (where the coconut can grow well because of heavy rainfall and hot climate) could not have been profitably cleared of its dense forest, let alone settled with its present crowded population, without this tree and the heavy commodity production based upon its exploitation in full. The trade through a few passes with the upcountry gave a longer lease of life to caravans; they took salts and coconuts up to the plateau to exchange for cloth and metal vessels, as well as for the grain of the uplands".

Iron technology made great progress in the age of Satavahanas and Kushans. Indian iron and steel weapons and cutlery were exported to west Asia where they enjoyed high esteem. In India, it led to the manufacture of sturdy and sophisticated agricultural implements. A variety of hoes, sickles with curved and straight blades were in use. Some of the specimens used then are even superior to those currently in use in tribal India. The workmanship of these iron agricultural implements indicates a high level of iron technology in India from 300 BCE onwards.

Improvements in quality and strength of iron chisels and hammers led to improvement in the manufacture of stone objects, particularly the grinding mills (chakki). They are still used in villages for grinding food grains and spices. Mixies and electrical

grinders, as we know them today, are their modern day avatars. Just remove the power button, and we revert back to the good old chakkis which were powered by the hands of our grandmothers since times immemorial. Querns, mullers, pestles and mortars were also manufactured with great ease during those days.

Spread of Irrigated Rice cultivation is another important development during this period. It diffused from the adjoining area of Orissa to the coastal strip of Andhra Pradesh and Tamil Nadu during Iron Age around 300 BCE. As food supply was secured, population multiplied. It is no accident that the early Tamil kingdoms were located in deltaic areas of rivers. The contemporary Sangam literature provides information regarding various occupations followed by the population. Apart from farmers, there were shepherds, goatherds, hunters and fishermen. The village artisans included blacksmiths, carpenters, weavers, leather workers and salt workers. In towns were merchants, shippers, custom agents and horse importers. The people were entertained by drummers and dancers. The Kings were surrounded by chieftains, warriors, scholars, poets and priests.

The Tamil states were in constant conflict among themselves and nibbling at each other's territory. That is how the political history of that period is mainly remembered. However, there was considerable advancement in agriculture powered by iron technology and irrigated rice cultivation along with an effervescent culture which was of tremendous importance. In due course of time, the same factors were destined to take the Age of Guptas towards the golden threshold.

Monsoon was also discovered during those times. This was an extremely profound discovery. Till then, boats were sailing to lands afar just by hugging the coast line. But monsoon winds were able to carry the same across the oceans in straight lines. Boat sizes escalated as the journey time shrank and the countries situated afar came onto trade maps. India started trading with countries under the Roman Empire viz., Spain, Gaul, Dalmatia,

Italy and Egypt. Romans and Greek merchants visited Indian ports and established themselves in small colonies. They came in quest of spices and cotton for which India had become famous in the ancient world.



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11. Post Satavahana Polity

This chapter covers a period from around 3rd century CE till 6th century CE covering a span of around three centuries. The basic theme relates to the rule of Vakatakas, Ikshvakus and Vishnukundins who came to occupy and rule Telangana lands after decline of Satavahanas. Vakatakas were focussed in the Godavari basin covering northern Telangana and the present day Vidarbha. Ikshvakus and Vishnukundins were focussed in the middle and lower Krishna basin respectively. In all these kingdoms, a large-scale royal land grants to mostly Brahmins was the dominant theme. It brought a fresh wave of learned persons from across the Vindhyan ranges to the peninsular lands. Legitimation of the new rulers with appropriate genealogy was an important task which was ably performed by this learned lot. An outpouring of Sanskrit literature in various subjects was yet another consequence.

By the middle of the 6th century CE, the overall population of the present-day Telangana lands was around 14.5 lakhs.

11.1 ILLUSTRIOUS VAKATAKAS

Satavahanas had lorded over the Deccan for around five centuries. The power void created after their departure during third century CE could not have been filled by a single entity. Several dynasties, major and minor, arose and ruled the territory during the next three centuries or so. Vakatakas, a stable and important dynasty, filled in the power vacuum in Deccan plateau. According to Professor Dubreuil, “Of all the dynasties of Deccan that have reigned from the third to the sixth century, the most glorious, the one that must be given the place of honour, the one that has excelled all others, the one that had the greatest civilization of the whole of the Deccan, is unquestionably the illustrious dynasty of the Vakatakas”.

Vakatakas were contemporaries of the golden Guptas ruling the northern lands of Pataliputra



“Vakatakas were contemporaries of the golden Guptas ruling the northern lands from Patliputra. When the Vakataka King Rudrasena-II married Prabhavati, daughter of Chandragupta-II, their ties became familial. The two states became practically one kingdom when on the death of Rudrasena-II, Prabhavathi assumed royal power as the regent of her infant son. Being so closely interlinked, the two kingdoms rose and peaked together. Vakataka power inevitably collapsed when the Gupta Empire disintegrated during sixth century CE.”¹

Social background of Guptas and Vakataks

An assertion about the Guptas that they were Vaishyas is based on the recommendation in texts such as the manusmriti and Vishnupurana that the name with a suffix ‘Gupta’ was appropriate for members of this varna. On the other hand, some scholars have argued that the Guptas were Kshatriyas. This is based on their matrimonial alliance with the Licchavis (who were kshatriyas) and Nagas (who were presumed to have been kshatriyas). The marriage of Prabhavati Gupta into the Brahmana Vakataka dynasty would have fallen within the Dharmashastras norms of hypergamous (Anuloma) marriages. However, the alliance with the Vakatakas and the possibility that a princess of the Brahmana Kadamba may have been married to a Gupta king has been used to argue that Guptas were Brahmanas. Furthermore, the inscription of Prabhavati gupta (daughter of Chandra gupta I and wife of Vakataka ruler, Rudrasena II) describe her as belonging to as the Dharana gotra. Since the Vakatakas were known to have belonged to Vishnuvridha gotra. Dharani seems to be the gotra of Guptas. According to S.R.Goyal (2005 : 84), this was not simply a case of rulers taking on the gotra of their preceptors but a clear indication that the Guptas were Brahmanas.

Chanda Gupta I (319CE–335/36CE) laid the foundation of the Gupta empire. In inscriptions, he has the title Maharajadhiraja which signifies imperial power and status. His successor Samudra Gupta was a ceaseless warrior with a record of endless victories.

His successful military campaigns established a network of political relationships of paramountcy and subordination that extended over large a part of Indian subcontinent. He is also described as having put Brahaspati (the preceptor of Gods) to shame by his sharp and polished intellect and likewise, Tumburu and Narada with his musical performance. He is also described as Kaviraja (king among poets), whose poetry surpassed the glory of the genius of poets. Legends on Samudra Gupta's coins include epithets such as parakramah (brave), apratirathah (invincible), ashvamedha-parakramah (powerful enough to perform Ashvamedha) and vyaghra parakramah (brave as a tiger).

In conclusion, we can say that Guptas were either Brahmanas or Kshatriyas, most likely the latter. But, irrespective of their social background, we can certainly assert that those ancient rulers were visionary and strong so as to bring major portion of the Indian subcontinent under their political umbrella.

Vindhyasakti founded the Vakataka dynasty. "He increased his power by fighting great battles. He was irresistible when provoked. He was uncommon in charity and battle. He had a large cavalry with whose help he was able to defeat his enemies. He is comparable to Indra and Vishnu". That is how inscription describe him. Exaggerations apart, it gives us some idea about the founder of the dynasty.

His son Pravarasena succeeded. He enlarged the dominion with arms as well as strategic matrimonial alliances. Gautamiputra, the eldest son of Pravarasena-I predeceased him. Therefore, his grandson Rudrasena-I succeeded. He was a contemporary of Samudragupta. Rudrasena-I was succeeded by his son Prithvisena-I who annexed the territories of Kuntala.

Prithvisena-I was succeeded by his son Rudrasena-II. The latter was a contemporary of Chandragupta-II. His marriage to Prabhavathi Gupta, the daughter of the illustrious Chandragupta-II was strategic and bound to benefit both dynasties. Guptas needed the Vakatakas' help to subdue Sakas in the west. Rudrasena-II did not rule for long and was succeeded by his four minor sons. The queen mother, Prabhavathi

... we can say that Guptas were either Brahmanas or Kshatriyas, most likely the latter



Gupta, acted as regent and conducted state affairs efficiently. The sons succeeded as per seniority under the able guidance of noble mother and this reign is regarded as the golden age.

Their successors continued to enlarge dominions; Kosala, Mekala and Malwa were subdued. Thereafter, Vidarbha and Bastar were annexed. By and large, the rulers were enlightened. Sometimes, they were given to pleasures but capable ministers took care of state.

Harishena was the last valiant and victorious King. He conquered Kosala, Kalinga, Avanti, Kuntala, Trikuta (Nasik district), Lata (Gujarat) and Andhra (Godavari – Krishna area). He ruled over a vast territory from Malwa in the north to Kuntala in the south bordering the Krishna River. The Bay of Bengal in the east and the Arabian Sea in the west were the other two natural boundaries of Vakatakas. Varahadeva was the most competent and popular minister of these times. Excavations of the famous Ajanta caves commenced during this reign.

During Harishena's time, the power of Vakatakas was at its zenith. But the weak successors who followed were no match for rising aspirations of enemies all around. As powers of Kadambas and Nalas rose, the Kalachuris dealt the final blow to the glorious Vakataka power. Eventually, the rising Chalukyas subsumed them during the second quarter of sixth century CE.

11.2 JURISPRUDENCE DURING GUPTAS PERIOD

Hailed as the 'golden age of human civilization', the kingdom was vast, imposing and impressive and blooming with prosperity and benevolence. The State administration replete with intelligent and honest Council of Ministers and higher officials governed public life with judicious interpretation of freedom of constitutional concepts in public interest.

Under the Guptas, the judicial administration was much more developed than in the initial periods; scores of law books were compiled with well defined civil and criminal rules. 'Mahadanda Nayak' was the Chief Judicial Officer but the Chief Judge was 'the King Samrat. The King was the state's highest legal body and

therefore determined the conflicts, with the aid and assistance of number of judges and his decisions are absolute.

There too existed four kinds courts - kings court, poog, shreni, kulik as in the case of Mauryan period, but the severe and traumatic punishments like capital punishment, amputation were seldom imposed. During the Gupta reign, the criminal laws were not as extreme as in the Maurya period; criminal cases were taken before the central court, typically kept under the King or Royal authority. The method of appeal was exercised and the highest body of appeal was the Monarch.

No doubt, lack of systematic advocacy was a dent on ancient Indian legal system. Another noteworthy characteristic was that it was often chosen for a bench of two or three judges to conduct justice rather than for a single person to be the sole justice administrator.²

The Vakatak's Polity and Economy

For nearly two hundred years (300 CE to 500 CE), the modern regions of central India and the northern Deccan were under the hegemony of Vakatakas. Keeping in view the geographical distribution of their 37 inscriptions, the territory of their jurisdiction may be placed between the 18° and 25° northern latitudes and 74.5° and 81.5° eastern longitudes. It comprised over thirty districts of the present-day Madhya Pradesh, Maharashtra and Telangana. The rivers identified based on inscriptions are Wainganga, Wardha, Painaganga, Chandrabhaga, Purna, Dodna etc. Some major rivers delineating the landscape of the Vakatakas territory include Narmada, Tapti and Godavari rivers and their tributaries. The inscriptions do speak about mineral resources and hidden treasures in general terms. The mention of Lohanagara and Hiranyapura may be indicative of iron and gold deposits. But, as on today iron, manganese, bauxite and plentiful of coal have been mined from these areas. From agricultural point of view, the people of the land cultivate wheat, rice, millets, gram, cotton, oilseeds and groundnuts. Three districts of the present-day Telangana state, namely Adilabad, Nizamabad and Karimnagar would fall within the Vakatakas dominions. The east flowing rivers, namely Painaganga and Godavari have given rise to the terraced and scraped character to the landscape. The trap

rocks of the Maharashtra plateau on weathering have formed the fertile black cotton soil, which accounts for the high percentage of area under cultivation.

Royal Land Grants

The earliest and explicit mention of royal gifts of lands to Brahmanas is to be found in Mahabharata. In the Dhanadharm section (33.17) of the Anushasana parva of the Epic, Bhishma tells Yudhishtira that Brahmanas can deify those who are not gods and can dethrone

Earliest and explicit mention of royal gifts of lands to Brahmanas is to be found in Mahabharata



existing gods; they are the king makers, and a king can hope to retain his position as long as he enjoys their favour. The Danadharm refers to three major types of gifts - the gift of gold (hiranya – dana), cattle (go – dana) and land (prithvi – dana). The gift of land is considered the best, as it is the source of jewels, animals and grain. The Dharmashastra and Puranas likewise extol the gift of land to Brahmanas and promise that those who bestow appropriate gifts on worthy Brahmanas will attain fame in this world and happiness in the world to come.

The earliest indication that some of the Brahmana settlements established by means of a royal decree enjoyed tax exemptions and privileges comes from Arthashastra. In Brihaspati smriti, there is a clear assertion that land gifted by kings to Brahmanas should be tax free. This tradition of land grants to Brahmanas was maintained and transmitted over centuries. Even pali texts of Buddhists Bimbisara of Magadha and Prasenjit of Kosala mention gifting land to Brahmanas. The earliest recording of land grants is found in Naneghat and Nashik in the western Deccan. There was considerable increase in grants from the 4th century CE onwards. From the 5th / 6th century CE, kings all over the Indian subcontinent were making such gifts. Villages granted to Brahmanas were known as Agraharas, brahmadeyas or shasanas. Other categories of beneficiaries included Buddhist and Jaina monasteries, Vaishnava and Shaiva temples and a much smaller number of 'secular grants'. However, until about the 10th century CE, the majority of land grants were made to Brahmanas.

While the imperial Guptas did not appear to be generous land donors to Brahmanas, the Vakataks ruling in the Deccan surrounding the Godavari Valley did. There is a total of 35 “gifted villages” listed in Vakataka inscriptions. A great number of these gifts were made during the reign of Pravarasena-II - his 18 or 19 inscriptions commemorate the gift of 20 villages in all. In the grants, a variety of technical terminology are used to describe the exemptions and advantages given on the gifted land and the donees. Thirteen inscriptions specify the extent of land, ranging from 20 to 8000 nivaratnas per the royal measure. Villages have also been donated in exchange for previous donations in a few cases. Pravarasena-II's Yavatmal plates document the renewal of an earlier grant. There appears to have been a change in the site of granted villages from the eastern to the western parts of the Vakataka kingdom, particularly to the Tapi valley, beginning during the time of Pravarasena-II (Shrimali, 1987: 25). Subordinate rulers of the Guptas and Vakatakas also made land concessions. The Parivrajaka maharajas, who ruled over the Baghelkhand region and recognised the Guptas' suzerainty, and Bharatabala, a monarch of the Mekala country and a Vakataka vassal, were two examples.³

Royal land grant to Brahmanas was also given by Pallava rulers while kings were the prime donors of land, others contributed as well. There are instances of land grants to Brahmanas by private individuals and lands granted by kings at the request of other people.

Large Scale Mechanism of Land Grants

“The Vakatakas did not strike any coins.” This had perhaps been the most distinguishing feature of the Vakataka's economy. This absence of money had a certain correlation with the large-scale mechanism of land grants, growth of small village settlements and relative non-urban economy during those times.

Almost 80% of all the inscriptions are clearly land grants given to Brahmanas. None of them have any reference to money. The Satavahanas inscriptions had prolific mention of gift of cows, elephants, horses, as well as donations of villages with privileges aplenty. Therefore, the complete dissociation between the land

grants and money noticed in Vakatakas inscriptions is a very striking phenomenon. The lands were mostly given to Brahmanas for earning religious merits for the donor and his predecessors. Amongst the people to whom these grants were generally addressed included householders, brahmanas, other residents led by Brahmanas, officials of noble birth, soldiers, policemen and peasants. The responsibility of getting the land cultivated devolved directly on the donee. The extent of land granted was not uniform among all donees and at times; a single donee may have land donations for more than one village. The use of hired/wage labourers had been known from the days of Kautilya and Pali texts.

Regarding privileges of a donee, there was a general pattern. The villages donated were not to be entered by soldiers and policemen; were exempted from purchasing fermenting liquors and digging of salt; exempted from obligations to supply flowers and milk; exempted from obligation to provide grass, hides, and charcoal to the touring soldiers; not to provide cots, water pots and slaves; not to pay taxes; not to provide draught animals; right to hidden treasures and deposits and generally a donee was endowed with immunities of all kinds. The prolific exemptions in Vakataka's inscriptions number nearly twenty. Such prolific land grants along with exemptions are not to be found in records of comparable antiquity. Sometimes, obligations of donees, if they wish to enjoy the rights, included that they did not commit any treason against the kingdom, they were not found guilty of the murder of a brahmana; theft, adultery; they did not wage a war and did no harm to other villages. The grants also warned people of dire consequences if the execution of grants is obstructed and threat of punishment and fine is also made. In the ultimate analysis, if a grant was not renewed, the king retained the full ownership of land.

Impact of Land Grant on Economy

How did the large-scale mechanism of land grants impacted the overall economic lot of the realm? At least, one result seems to be the burgeoning of rural settlements, based on agriculture and animal husbandry and local trade.

The Vakatakas were one of the most important successors of the Satavahanas. It is fairly well known that the rule of Satavahanas had witnessed prolific economic activity, particularly on the point of trade stretching beyond oceans up to Roman imperium. A general picture of rich and prosperous life is borne out by epigraphic, archaeological and art remains. But, the evidence during the Vakatakas phase distinctly point to relative decline or the poor character of settlements. Some of the sites appeared to have 'dwindled' after the Satavahanas and were re-occupied in subsequent periods. Degeneration seems to have set in even during the later Satavahana period. Yet another significant evidence about Vakatakas has been the find of temples of Raj-Narsimha, Varaha, Indra Narsimha and Bhogaram at Ramtek in the present-day Maharashtra. We may possibly assume that, in the present state of our knowledge, some of these settlements may have come up for the first time under the Vakatakas. But the broader picture of burgeoning rural settlements along with non-urban economy was a reality in central India and northern Deccan during the two centuries of Vakataka's rule.

Agents of New Socio-Economic Transformation

Certain evidence regarding Irrigation facilities provided by the Vakataka rulers could have possibly caused the new socio-economic transformation. The inscriptions in the Hisse-Borala mentions about the construction of Sudershan lake. The circumstantial evidence of Ganj stone inscription of Vyagrahdeva suggests that it was engraved on the walls of a dam. The suffix Viraka means barrage/ irrigational dam and therefore the places such as Darbhaviraka, Karanjaviraka and Sidiviviraka may also suggest that care was taken to provide irrigational facilities for agricultural operations. All these aspects certainly provided a certain viability to the small village settlements.

What could have been other factors behind this transformation? That thrust could have possibly come primarily from the Gupta Imperium. Samudra Gupta in his Allahabad Prasasti is known to have made all forest kingdoms his servants, including those in central India; almost in proximity of Vakataka territories.

The growing tendency of land grants in favour of Brahmanas could possibly have invited increased immigration of people from western, northern and north-western India. These migrants arriving from the broad swathes of riverine plains, most probably introduced the process of Sanskritization (as used in sociological sense by the sociologist MN Srinivasa).



The Vakatakas, now almost forgotten in popular ancient Indian narrative, were a powerful dynasty that ruled for almost three centuries, having close ties with the Guptas

Trade

The rural-urban nexus hinges on the role of trade. It is well known that a large number of Buddhist centres in Central and western

India were intimately linked with the growth of trade. Patronage was invariably extended to these centres by traders and merchants. Sathavahan's inscriptions bear eloquent testimony to this. As far as Vakatakas are concerned, these inscriptions can be counted on finger tips. On the basis of dress and ornaments in the Ajanta paintings, Mirashi wrote 'Merchants generally appear without jewellery on their person.' Does it indicate a decline in their prosperity and perhaps status as well?

Absence of long-distance trade is of course not an indication that trade and commerce was completely absent. The donated villages indicate settlements of a fairly diversified portfolio. There are leather workers (charmarika), bronze workers and goldsmiths (kamsakaraka and suvarnakara); distillers; brick centres and artisanal settlements. But, the overall decline of urban centres is more than attested by the archaeological finds. The excavation at the Hinayana Buddhist stupa at Panini reveals that the remarkable prosperity continued uninterrupted from Mauryan times to Satavahana times. Numerous inscriptions indicate the support extended to it by non-royalty; predominantly consisting of traders, merchants, goldsmiths etc. But the excavators are certain that the monument had fallen in disuse by about third century AD, and went into oblivion afterwards, not to be noticed or referred to in subsequent times and accounts." It indicates that the trade and traders declined in this region of Vidarbha/Telangana after the 3rd century AD. This may have given additional impetus to the growth of rural settlements.

The Terms of The Vakataka Grant

The Vakataka grants bestowed many exemptions and privileges on the gifted land. The meaning of some of the technical terms is not certain. The Basim plates of Vindhyaśakti-II of the Vatsagulma branch record the king's grant of Akasapadda village to certain Atharva Veda Brahmanas. In many of the records there are various exemptions and privileges associated with the grants mentioned. The language used is a mixture of Prakrit and Sanskrit.

- *a-chand-adichcha-kalo*: to last as long as the moon and the sun [i.e., forever].

- *a-rattha-samvvinayika*: not to be entered by the district police;
- *a-lavana-kenna-kkhanaka*: exempt from [the royal prerogative] of digging salt and purchasing fermented liquor;
- *a-hiranna-dhanna-ppanayapa-deya*: exempt from the obligations to gift grain and gold [to the king];
- *a-puppha-kkhira-ggahana*: exempt from the obligation to supply flowers and milk;
- *a-parampara-go-bali-vardda*: exempt from the obligation to supply [to the state] customary cows and bulls;
- *a-chara-siddhika*, *a-chammangalika*: exempt from providing pastures, hides, and charcoal [to touring officials];
- *a-bhada-ppavesa*: not to be entered by [royal] soldiers;
- *a-khatta-chollaka-venasika*: not to provide sleeping cots, water pots, and slaves (perhaps to touring officers);
- *a-karada*: not to pay taxes;
- *a-vaha*: not to provide draught cattle (for the transport of officials);
- *sa-nidhi*, *s-opanidhi*: along with the right to hidden treasures and deposits;
- *s-ukutuppanta*: along with major and minor taxes;
- *sa-mancha-maha-karana*: along with the right to platforms and large fields;
- *savva-jati-parihara-parihita*: exempted with all kinds of immunities.

Prabhavati-gupta's donation found in the Poona Plates, also refer to the donees being granted the right to mines and khadira trees. The term *sarvva-vishti-parihara-parihritah* in the Jamb, Siwani, and Pauni plates of Pravarasena-II, the Riddhapur plates of Prabhavati-gupta, and the Mahurjhari plates of Prithivishena-II indicates that the gifted land was free from forced labour. The Siwani and Patna Museum plates have the term *sa-panchashatakah*, the meaning of which is not clear. The Siwani plates have *sa-koratah*, which has been variously translated as 'together with coconut plantations', 'together with the right to bulls', or 'along with undulating wastelands'. The Riddhapur plates of Prabhavati-gupta state that the field was granted along with

a farmhouse and four farmers' huts (abhyantara-nivesh-ena-saha karshaka-niveshanani-cha). The Pauni grant of Pravarasena-II records the gift of a village along with the habitations (saha-niveshana). Some of the grants contain the phrase a-bhata-chch-hatra-praveshya, which means 'not to be entered by regular and irregular troops' or, alternatively, 'not to be entered by soldiers and policemen'.

The imperial Guptas did not appear to be generous regarding land grants to Brahmans. Pravarasena-II's Chammak plates include an odd stipulation. The donees - 1,000 Brahmanas - were to enjoy the bestowed land as long as they did not commit treason against the kingdom, as long as they were not found guilty of the death of a Brahmana, or robbery, adultery, and high treason, among other things; as long as they did not wage war or destroy neighbouring villages. It was announced that if they participated in or agreed to any of these activities, the king would be justified in removing their land.⁴

11.3 PHANIGIRI – EPICENTRE OF TRADE DURING IKSVAKUS TIMES

After the collapse of Mauryan Empire, Satavahanas came to rule over the Deccan lands including the present-day lands in Telangana state. Phanigiri, among other towns showed up on the trade route during the period. With the collapse of Roman Empire, the trade routes via Alexandria, Berenike were replaced by revitalized networks with South East Asia. Now, Phanigiri fell en-route to the grand emporia of Amaravati, Dharanikota, Nagapattinam and Arikamedu towards the south and Kalinga, Tamruk and Chandraketugarh further north east. These coastal towns were no doubt also connected by maritime waterways to Sri Lanka, Thailand and then to Indonesia and even as far as the Mekong delta in Vietnam. Most of these trade routes, within India and other countries were traversing through forests.

These forests were controlled and the polities that spread within them used religious apparatuses which have left monumental evidence of their control. The growing urbanisation during the post Mauryan period saw a widespread development of sites

all through the north west frontier, the north Indian plains as well as south Indian trading centres to trade with south east Asia. Each one of the parts was a part of networked numismatic economy trading against bullion. The urbanising scenario had enough space for nomadic pastoralists who coexisted with traders and wandering monks in their midst. Nomads, raiders, traders, teachers and preachers were using these road networks simultaneously, some two millennia ago.

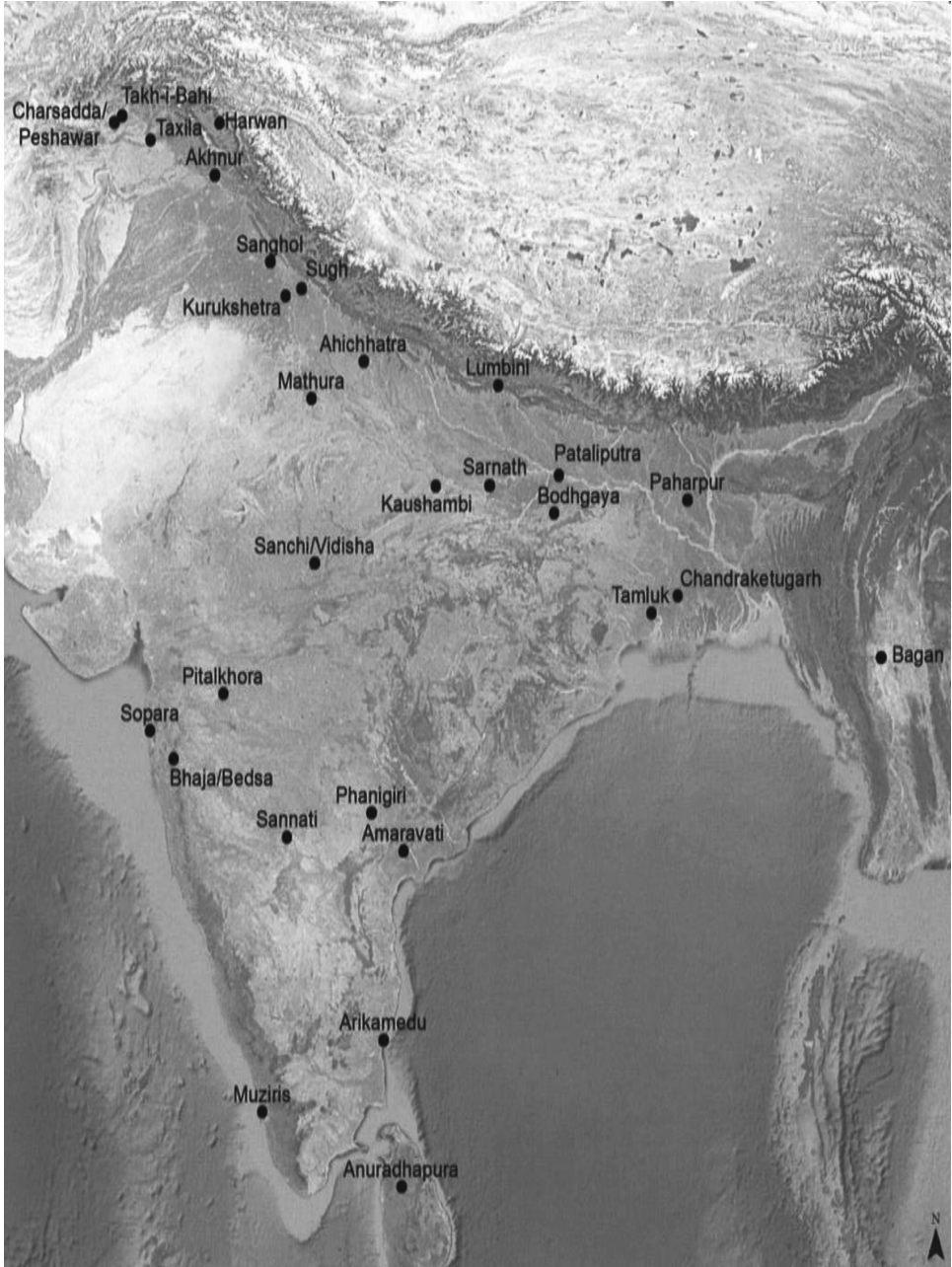
Phanigiri

Phanigiri in Telangana is one of the most important ancient Buddhist sites in India. This site along with Amaravati, Sannati (Kanaganahalli), Nagarjunakonda and so many well-known sites in Deccan region were active at the same time. The most important inscription at Phanigiri records the donation made at the time of King Rudrapurusha Datta of the Ikshvaku dynasty. This inscription, like most others are in Sanskrit followed by a few lines in Prakrit.

The site at Phanigiri lies east of Musi river that flows southwards from the highlands of Telangana and joins the Krishna river, along which are Buddhist sites such as Amaravati, Nagarjunakonda, Goli, Bhattiprolu, Jaggayapeta and Ghantasala. There have been a cluster of Megalithic burial sites at the foot of Phanigiri hill. It points to a possibility that the river valley could have been a natural route since pre-historic times.

Phanigiri and its surroundings were highly populated areas in the early historic period (C.300 BCE–300 CE) and even earlier. One of the main reasons for the development of these settlements was the area's strategic location connected the lower Krishna valley to the mid Godavari River valley. It is also positioned on the middle point between Amaravati / Dhanyakataka, the flourishing urban centres of lower Krishna valley since the third century BCE and the Karimnagar region of the Godavari valley, where sites such as Kadambapur, Peddabankur and Dhulikatta are concentrated.

Ikshvaku had replaced Satavahanas and set their capital at Vijayapuri (currently Nagarjunakonda). Their dynasty ruled Andhra until the emergence of Shalankayanas and the Vishnukundis in the early 4th century CE. This period also



Phanigiri – Interpreting an Ancient Buddhist Site in Telangana

Map – Ahuja Naman P

Courtesy: Dept. of Heritage Telangana, Marg Publications, p 11

saw the increased presence of Shaka kshatrapas from western Malwa to the Deccan. The Ikshvaku's rule seems to have relied on their strong relationship with the Shakas, forged through marital alliances. These alliances may have increased the political importance of Phanigiri and the northern Telangana region, the principal gateway connecting the ancient Andhra region to the western India. The marital alliances coupled with strategic location must have created political stability, which developed a favourable environment to develop Buddhist constructions in the Phanigiri area during the 3rd – 4th century CE.



Phanigiri – Interpreting an Ancient Buddhist Site in Telangana
Map – Ahuja Naman P

Courtesy: Dept. of Heritage Telangana, Marg Publications, p 95

11.4 VISHNUKUNDINS - A CATEGORY OF THEIR OWN

‘Vishnukundins’ might not have been as illustrious as Vakatakas, but they preserved and held their ground firmly throughout the long period. Both the dynasties were based in Deccan lands. The Telangana territories were shared between the two as friends and foes alike. Vakatakas were mainly focused towards Deccan plateau in the north and west and were consumed by rising Chalukyas. Vishnukundins looked towards coastal flanks towards the east and were consumed by rising Gangas from Kalinga on the banks of Godavari in February 612CE.

“They held sway over the region north of Srisailam in Rishika country (Nalgonda and Mahabubnagar districts). It was a part of Mauryan Empire during Asoka’s times. Thereafter, Satavahanas ruled it. The dates of the Vishnukundi rise after downfall of Satavahanas are rather hazy. Indravarma (375CE–400CE) and Madhavavarma-I (400CE–422CE) may be the first two Kings of the dynasty who ruled either from Keesaragutta (near Hyderabad) or Indrapura (Indrapulgutta in Ramannapet Taluka, Nalgonda district)”⁵

“The successor, Govindvarma (422 CE – 462 CE) was the real founder of the dynasty. Vakataka rulers entered into matrimonial alliances with Vishnukundins. It helped Vakataka ladies to offer royal prayers at Srisailam. Madhavavarma-II (462CE–502CE) succeeded his father and pushed the boundaries all around. Devasena, the pleasure loving Vakataka ruler, was pushed beyond Warangal-Karimnagar region touching Godavari. Then, he turned east, annexed Vengi, Guntur and penetrated beyond Pishtapur into Srikakulam to secure the allegiance of Ganga rulers. He helped Vakataka ruler Prithivisena and maintained cordial relations with other neighbouring rulers. It was indeed the high noon of Vishnukundin’s power.”⁶

Vikramendravarma (502CE–527CE) succeeded his illustrious father Madhavavarma-II. But, Vakatakas under Harishena struck back. The decline of dynasty had commenced. Indrabhattarkavarma (527CE–555CE) was the last flicker of the long yet fast burning candle. He organized his forces and wiped the confederacy of Mathara, Vashista, Ram Kasyapa and Pitrubhakta families out of existence.

But Nalas of Koraput and Gangas of Kalinga remained defiant. Pallavas had arrived from south and occupied Vengi for a while in 566 CE which Vikramendravarma (555CE–572CE) was ruling. To secure the southern flank, he even married his daughter to Pallavas. But, Gangas of Kalinga took away his northern possessions.

“Madhavavarma (572 CE–612CE) was the last ruler. He transferred his capital from Indrapur in Nalgonda district to TrivaraNagara (Tiruvuru) in Krishna district. He led military expedition to recover Kalinga from Ganges, crossed the river Godavari in February 612 CE and was lost forever. Nothing is known about his expedition or other members of his family till today. With his extinction, Vishnukundin dynasty was extinguished, suddenly.”⁷

11.5 A GLIMPSE OF EARLY EMPIRES

Commencing from the third century BCE, till as late as middle of sixth century CE, the European continent, the Indian subcontinent and the Deccan peninsula witnessed glorious empires. The Roman Empire rose, peaked, split and was eventually consumed by Barbarians and Huns in Europe. In the Indian subcontinent, the period commenced with the rise of the Mauryan Imperium and terminated with the golden Guptas. The long intervening stretch of four centuries was filled with the sketchy and chaotic rule of Shungas, Kanvas, Greeks, Parthians, Scythians and Kushanas in northern India. In peninsular India, the stable Satavahanas and illustrious Vakatakas were the lords of Deccan throughout these centuries. Finally, the lands due south of Krishna River were ruled by three Dravidian kingdoms; Cheras, Cholas and Pandyas, forever grappling and colliding with each other for dominance.

Several common features laid the foundations of those great empires, be it Roman, Mauryan, Satavahana, Vakatakas or Guptas. An overwhelming agricultural prosperity was the salient and most dominant factor. Cleopatra's beauty and her fatal attraction towards Roman Emperors may have excited poet's imagination. But it was the advanced agricultural practices in broad Nile delta which provided the edifice for their food security for three long centuries.

In 285 CE, Roman Empire split and Egypt was taken away by Byzantineans. The residual Empire stopped growing, and bereft of food security blanket, it was eventually consumed by Barbarians in 410 CE. Mauryans in India were great horticulturists. Buddhism is associated with the cult of tree worship and vegetative growth. Satavahanas of Deccan, as a class were educated and as astrologers, could forecast rains. As peasant based society respected them, they naturally became the first set of agricultural extension specialists. The Agricultural revolution was already under



Mithuna figure, Nagarjunakonda – These are the most impeccably sculptured and expressive. Third Century AD, Ikshvaku period

way due to widespread dissemination of iron technology during preceding centuries in Nile, Gangetic and Godavari Krishna basin.

The booming trade with multiplying wealth and prosperity was another factor underlying imperial strength. If agriculture provided stability around countryside, its surpluses were traded on a pan Indian and global basis. Trade ties with the Roman Empire during the Satavahana period is proved by numismatic evidence. Roman coins belonging from 40 BCE till 68 CE have been found in hordes. Augustus ruled as Principate and Nero as the Emperor during those times. They paid for Indian goods in gold or silver coins, which have been found all over peninsula. Besides spices and other goods, steel was exported from various places including the famous steel manufacturing centre at Konasamudram in Telangana. Pliny, the Roman historian, writing in 75CE, complained that there was no year in which India did not drain the Roman Empire of more than

fifty-five million sesterces (a silver coin of the Roman Empire). Spices and cotton from India were a craze amongst them. Spices preserved meat which excited their palates and cotton provided a soft and semi-transparent clothing, which was a rage amongst royal women. Romans were also trading with the Pandyas of Madurai, the Cholas of Uraiyur (Thiruchi) and Cheras of Vanji (Karur). Telangana exported quality steel to Rome.

Technological improvements pushed the boat's size to carry heavy cargo. Pan Indian trade was facilitated due to easy river transport and laying of road network by rulers, especially Asoka. As trade flourished, prosperity multiplied and a wealthy class of people started inhabiting ever growing towns and cities. Patliputra, Ujjain, Pratihthan, Dhulikatta, Kotilingala, Nagarjunakonda and Amaravathi became important urban centres.

A wide network of paved roads interconnecting nooks and corners of empires was another cardinal feature. They were needed for swift movement of arms to quell dissidence and keep the dominion together.

But their collateral advantages were multifarious. Movements of troops made roads quite safe. Soon thereafter, traders were using them. Trade boomed. Commercial practices developed. Material prosperity spread all over. Then, disciples of Jesus and Buddhist monks used the same roads to spread the message of the new religions far and wide across the empire. As missionaries and sanghas multiplied, more and more common folks took up the new faiths namely, Christianity and Buddhism. Roads carried raiders and traders. They also carried teachers and preachers, with unintended consequences to rulers.

Roads carried raiders & traders and also carried teachers & preachers with unintended consequences to rulers



Religious intolerance was the dominant theme in Europe.

As Christianity spread, it alarmed Roman rulers. State sponsored persecution followed and continued for three long centuries. The Indian experience was quite the opposite. Indian rulers were eclectic towards all religious and state sponsored persecution during either Mauryan or Satavahana times is simply unheard of. Gautam Buddha had already arrived in India some five centuries before Jesus's birth

in Nazareth. But religion and society interacted with each other on a bilateral basis. State as an instrument hardly interfered in it. Kings and Emperors were free to choose their faith, which they consciously did. But, they never imposed it upon their subjects. The royal Queens too were free to choose their own faith, which they did with complete freedom, even when at variance with that of their own husband. Differences in faith based on religion did not cause friction and, therefore, left royal households as well as larger society quite intact.

Difference in faith based on religion didn't cause friction and left royals & the subjects quite intact



State neutrality towards religion was observed by all rulers across Indian subcontinent throughout these centuries. But there was one solid exception. In 515 CE, Mihirakula, the son of Toramana succeeded him. He was active in central India around Malwa, and was particularly vicious towards Buddhism. Monasteries and shrines were destroyed and monks slaughtered. Kalhana, a twelfth-century Kashmiri historian writes that in him, the northern region brought produced, as it were, another God of death, Yama. People are aware of his approach because vultures, crows, and other birds fly ahead, ready to dine on those murdered within his army's reach. Thousands of slaughtered human victims encircled the king Vetala (devil) at all times of the day and night, even in his pleasure apartments. This dreadful foe of humanity had no concern for children, compassion for women, or regard for the elderly.

In 542 CE, after his macabre performance, Mihirakula eventually died in Kashmir. His death was no less gory. "He had to suffer for all that savagery towards the end of his life", continues Kalhana, "This terror of earth became afflicted in his body with many diseases, and immolated himself in the flames. And the self-immolation saved his soul. When he sacrificed his own body, there issued from sky a voice which declared; the destroyer of three crores (of human beings) has attained salvation, since he has shown no mercy for his own person either".

Hiuen Tsang has this to say, "At the time of his death, there was thunder and hail and thick darkness. The earth shook and a mighty

tempest raged. Then the holy saints said in pity, “For having killed countless victims and overthrown the Law of Buddha, he has now fallen into the lowest hell, where he shall pass endless ages”. Mihirakula was an unusual exception on the Indian landscape. He killed millions of his people, and eventually consumed himself. He was a great and uniform killer - indeed.

But who was Mihirakula? Well, he was one of the last Huns. But who were Huns? Well, the Huns were a restless short statured Mongoloid people made up of several marauding bands. They virtually lived on their horses, had their meals on horseback and rode them even in their sleep. Their original habitat was the arid steppe, north of China. But when China closed its borders against their ravages by building the great wall, the Huns turned south-westwards and by fifth century CE, some six hundred years after leaving their home land, they dominated most of central Asia from Hotan in western China to as far west as Persia. The major wave advanced into Europe under Attila, where their depredations led to final collapse

6th century witnessed eclipse of three great empires, the imperial Romans in Europe, the golden Guptas in India and the illustrious Vakatakas in the Deccan Peninsula.

of the Roman Empire. Another wave, though a minor one, swung towards Indian subcontinent and debilitated the golden age of Guptas. Hun power in India lasted for only three to four decades. In the mid sixth century, after Mihirakula's death, Turks and Persians allied together and crushed them. Hun power collapsed everywhere and nothing was heard of them as a political force. They came, they destroyed and they vanished in a trice, but not before destroying the two great empires, the imperial Romans in Europe and the golden Guptas in India.

By around the same time, during middle of sixth century CE, the illustrious Vakatakas in Deccan too were subdued by the rising Chalukyan power. Therefore, the second half of sixth century witnessed the eclipse of three great empires; the imperial Romans in European continent, the golden Guptas in Indian subcontinent and the illustrious Vakatakas in Deccan peninsula.



The sixth century witnessed the arrival of mighty Chalukyas

who swept aside Vatakatas from Deccan as well as innumerable Kings from the coastal stretch abutting Bay of Bengal. Between Satavahanas and Chalukyas, therefore, Vatakatas stand out as the illustrious dynasty who ruled Deccan. Vishnukundis, of course, fall into a category of their own.

Words like Kalinga, Andhra, Kuntala, Rishika and Asmaka meant certain definite areas during those times. The coastal flank between the rivers Rushykulya and Godavari was known as Kaling country. Coastal plains between Godavari and Krishna were called Andhradesh. Rishika included upper Krishna valley and Kuntala included middle Krishna valley of Telangana. Asmaka or Assaka included the Godavari belt covering Nizamabad and Pratishtan (Aurangabad areas).



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12. Emergence of Chalukyas & Rashtrakutas

This chapter covers a period from the middle of 6th century CE to around middle of 12th century CE, covering a span of around six centuries. During this period, the present-day Telangana land was ruled by Badami Chalukyas, Rashtrakutas and Kalyana Chalukyas for a similar period of around 2 centuries each. Each one of those dynasties witnessed exceptionally brilliant rulers with an Imperial outlook. They won vast territories, but did not win friends or allies. During their heydays, they constructed monumental temples of Durga at Aihole and Kailashnath, the marvel in stone at Ajanta and Ellora. It fitted well in the then prevailing all India pattern where rulers were immortalizing themselves with construction of massive temple complexes. Yet another novel element was the opening of trade routes across the Bay of Bengal when Arabian sea had come under the sway of Islamic rulers. Modern day Archaeological researches are discovering one monument or the other on regular basis across Telangana lands.

By around 1,000 CE, the present-day Telangana lands were inhabited by around 18.75 lakhs population.

12.1 EVOLUTION OF REGIONAL KINGDOMS

Between the sixth and the twelfth centuries, three connected but distinct dynasties rose to prominence. The Badami Chalukyas, who ruled from Vatapi (modern Badami) from the middle of the sixth century, were the first. With the decline of the Kadamba kingdom of Banavasi, the Badami Chalukyas asserted their independence and rose to prominence under Pulakeshin-II's reign. The Eastern Chalukyas founded an independent state in the eastern Deccan after Pulakeshin-II died. They ruled from Vengi till the 11th century. The

advent of the Rashtrakutas in the western Deccan obscured the Chalukyas of Badami in the middle of the eighth century, before being revived by their descendants, the Western Chalukyas, in the late tenth century. From Kalyani (modern Basavakalyan) until the end of the 12th century, the Western Chalukyas dominated. For nearly five centuries, the Badami Chalukyas (550CE–750CE), Rashtrakutas (750CE–973CE), and Kalyani Chalukyas (973CE–1158CE) ruled over territory that comprised modern-day Telangana. During their reign, Kannada and Sanskrit were favoured, but Telugu, as a common man's language, sprouted, grew, leafed, and blossomed throughout these areas.

The Telangana part was under the control successively of the main authorities like the Chalukyas of Badami, Rashtrakutas and the Chalukyas of Kalyani or under their subordinates like Chalukyas of Vemulwada, whereas some provinces were under the Vengi subordinates like Chalukyas of Mudigonda. Sri Vijay, a court poet of Amoghvarsha of the Rashtrakutas in 'Kavirajmarga' described the extent of Kannada kingdom, from river Kaveri to river Godavari. In fact, during those centuries, major portions of the present day Telangana were a part and parcel of the present-day northern Karnataka and Marathwada.

Acceleration Of Royal Land Grants

The phenomena of Brahmadayas (land gifted to Brahmanas) increased significantly during C 600 – 1200 CE. The settlements were created by royal order and the right of Brahman donees were declared and confirmed by royal decree. This period was marked by the proliferation of state polities at the regional, sub regional and trans regional levels, within a broader economic context of agrarian expansion. Land grants to Brahmanas were one of the integrative and legitimizing policies adopted by kings. The increase in the wealth and power of a section of Brahmanas and institutions such as temples did not take place at the expense of royal power. Brahmanas, in turn emerged as ideologues and legitimised the political power by crafting royal genealogies and performing

prestigious sacrifices and rituals. These genealogies linked lineages with the epic purana tradition and assigned kings a respectable varna status. This reinforced the symbiotic relationship between kings, Brahmans and temples.

A sustained migration of these closely knit Brahmana groups across the sub continental geography is yet another phenomena evident during this period. This phenomenon intensified during the eighth century. The immigrants from the heartland of Madyadesha into the areas of Maharashtra, Bengal, Madhya Pradesh, Orissa and southern territories was the dominant stream. The fanning out of Brahmanas into different parts of the subcontinent created two broad divisions, namely Panch Gauda (the northern group) and Panch-Dravidas (the southern group). The former included the Sarsvata, Gauda, Kanyakubja, Maithila and Ulkala Brahmans. The Panch dravida group included the Gurujjaras, Maharashtrias, Karnatakas, Trailingas and Dravidas.

As always, the migration of a certain social group is the resultant of push and pull factors. The push factor may have been related to the decline of sacrificial oriented religions practices in north India during the Mauryan and post Mauryan phase when Buddhist influence was dominant. However, later on, the proliferation of several kingdoms in various part of the subcontinent provided fresh opportunities to these groups of learned and well-informed persons. The emerging political elite needed legitimisation and an administrative infrastructure and this opened up opportunities and avenues of employment for learned and literate Brahmans. Most of them belonged to the Sanskrit-Vedic tradition which was the prevailing preference at the ruler's level. The evolution of the regional languages like Marathi, Telugu and Kannada etc., was the preferred choice in the lives of ordinary people. The gap proved a useful legitimizing basis for elite groups who were keen to highlight their loftiness while maintaining aloofness from the masses. The two major phases of Brahmana migration coincided with the major phases of state formation.

The process of land grants to Brahmanas also witnessed an enormous output in the sphere of Sanskrit literature. The Brahmana were employed in the administrative structure of proliferating royal courts. Their learned society also nurtured scholars, poets and dramatists who were patronized and feted in these courts. Security of wealth coupled with socio-political salience provided a safe ambience for their sustained intellectual activity. The writings of Medhatithi, Parashar and Kashyapa provide us a rich window of agricultural knowledge and practices during those times spread over ninth century CE to eleventh century CE.

Process of land grants to Brahmanas witnessed enormous output in Sanskrit literature



12.2 SOCIAL BACKGROUND OF CHALUKYAS

“The Badami Chalukyas claimed Brahmana origin as Haritiputras of the Manavya gotra. Pulakeshin-I (535CE–566CE) established the independent power of this dynasty. He built a strong fortress at Vatapi (Badami) and is described as having performed a number of shrauta sacrifices including the Ashvamedha.”¹

The Chalukyas of Badami

In AD 550, Pulakesin, the lion hearted laid the foundation of Chalukyan dynasty. He was an army chieftain, who rose to sovereign power in Deccan after the Vakatakas were eclipsed during second quarter of sixth century. Ruling from Vatapi or Badami near modern Bijapur in Karnataka, the dynasty ruled for two hundred years. Chalukyans were unique in several ways. They were the first to cross the Vindhyas and defeat north Indian rulers. They broadly followed the victory route taken by Samudragupta, some three centuries ago. Sweeping along the eastern board, they appointed their kin as rulers. Known as eastern Chalukyas, they were to rule from Vengi for over four centuries. Eventually, Badami Chalukyas penetrated south and befriended Cholas, Cheras and Pandyas to form an axis against Pallavas, their sworn enemies. During most of their dynastic rule, Badami Chalukyas and Kanchipuram Pallavas

kept on colliding and debilitating each other across Tungabhadra River for supremacy.

They won vast territories, but did not win friends or allies. Their own kinsmen in Vengi rarely came to their rescue. Finally, the Badami Chalukyas were over powered, paradoxically not by Pallavas but by Rashtrakutas. In 750 CE, Kirthivarman-II, their last ruler was defeated by Dantivarman. As the latter laid the foundation of Rashtrakuta dynasty, the Badami Chalukyas stood eclipsed, for the time being.

Being such a unique dynasty, legends abound regarding their origin. "They are related to Chandra Vamsa (Lunar royal line) and Surya Vamsa (Solar royal line) simultaneously. Then, Brahma himself appears to have poured them out of his water pot (chulka) on Indra's request to create a dynasty on earth to suppress evil doers. Bilhara, the court poet of Chalukyas had narrated all this in eleventh century. He must have known the whole truth. But, historians' limited belief is that Chalukyas rose from local army chiefs to sovereign power in northern Karnataka under Pulakesin (lion hearted). He was the first Maharaja in the family who ruled from about 535 CE to 556 CE. He built a fortress on a hill at Vatapi (Badami) and celebrated his accession by performing Ashwamedha Yagna (horse sacrifice)."²

His son, Kirtivarman took the next step and reportedly defeated the rulers of Vanga, Anga, Kalinga Vattura, Magadha, Kerala, Ganga, Mushka, Pandya, Dravila, Choliya, Aluka and Vaijanti. He is also described as "Night of Destruction" to the Nalas, Mauryas and Kadambas. After all these conquests stretching from Bengal to Cape Cameron, he declared himself a universal monarch. He was succeeded by his brother Mangalesa who humbled Kalachuris and conquered Revatidvipa. Kalchuris were finally defeated in 602 CE and entire central and western Deccan came under Chalukyan control. A civil war ensued wherein Mangalesa lost his life and his nephew, Pulakesin-II, the son of Kirthivarman-I, became the King.

"Pulakesin-II (610 CE–642CE) inherited the Chalukyan throne,

‘when the whole world was enveloped in the darkness that was the enemies’, states Aihole inscription. Pulakesin set out on his campaign, the inscription continues, ‘with his six-fold forces, the hereditary troops and the rest, who flaunted spotless chowries, hundreds of flags and umbrellas’, and were ‘elated with the sentiments of heroism and energy’. The dust raised by this immense army on the march turned the day into night, states the inscription. Pulakesin first turned southward, to secure his rear by subduing the chieftains in southern Karnataka, then advanced north into Maharashtra and annexed it to his kingdom. Next, he crossed the Vindhyan barrier into Madhya Pradesh and Gujarat, but there his path was barred by Harsha, the ruler of Kannauj and dominant power of north India, who was also advancing into Madhya Pradesh and Gujarat at this time. In the ensuing battle, fought on the banks of the Narmada, Pulakesin routed Harsha. ‘Harsha, whose lotus-feet were arrayed with the rays of the jewels of hosts of feudatories, prosperous with unmeasured might, through him (Pulakesin) had his mirth (Harsha) melted away by fear, having become loathsome with his rows of lordly elephants fallen in battle’, gloats the Aihole inscription. The defeat of Harsha in the battle is indirectly admitted by Hsuan Tsang, who writes that though Harsha had set out to subdue the Chalukyas with a vast army, ‘he has not yet conquered their troops.’³

It is rightly pointed out that the struggle between the Kings of Madyadesha and Dakshnapatha was inherent in the attempts of both to extend their power over Aparantha (Gujarat region) of India. Whatever the motive, the young Pulakeshin-II raised his kingdom to the dominant power in the entire peninsula. By defeating an emperor of Harshavardhana’s fame, he became the first and perhaps the last monarch from Deccan to humble a northern ruler in the entire history of India.

Pulakesin then marched into eastern Deccan, conquered Orissa and the lower Godavari Krishna valleys. The fortress of Pishtapur (Pithapuram, East Godavari district) and another fort on the Island in Kunala (Yanam) were captured. The ruler of Pistapur was deposed and Pulakesin-II put his younger brother, Kubja (hunch

backed) Vishnuvardhan in charge of the new territory. In 640 CE, that is how the dynasty of eastern Chalukyas was founded. It was to last till 1070 CE, for almost four and a quarter century and ruling the coastal territories sandwiched between Kalingas in north and Cholas in south abutting Bay of Bengal.



The Nava Brahma temples of Alampur, renowned as the Dakshina Kaasi (Vaaranasi of the South)” are present on the banks of Tungabhadra river in Mahaboobnagar district. This sculpture of Mithuna couple is present in Swarga Brahma Temple, 7th century AD, Chalukya period

“Pulakesin continued to push along the eastern coast. He confronted Pallava King, Mahendra Varman-I but did not occupy his capital Kanchipuram and proceeded southwards, crossed the Cauvery, befriended Chola, Chera and Pandya Kings as his allies, presumably as an axis against the Pallavas.

On his return march, Pallavas resistance was swept aside and their northern provinces were annexed. Safe and back in his capital Badami, Pulakesin justifiably assumed the title of “Lord of the eastern and western waters.”⁴

Pallavas, on the other side were down but not out. Mahendra Varman’s successor, Narsimha Varman mounted attack and sacked Chalukya’s capital Badami. Pulakesin-II fell in the battle and Badami remained in Pallava hands for many years. From 642 CE to 655 CE, the Chalukyan throne remained vacant. But, Pulakesin’s son, Vikramaditya-I recovered the capital and regained southern province by engaging three successive Pallava Kings to a long drawn-out war. Vikramaditya occupied Kanchipuram and claimed the title of lord of the earth. But, counter claims of Pallavas assert to have razed Badami and ‘Vikramaditya took flight, covered only by a rag.’ As the battle on the ground and the war of words razed on for over a century between neighbouring kingdoms across Tungabhadra River, the truth became the ultimate victim. But, throughout these conflicts, Badami rulers got no help from their eastern kinsmen in Vengi who were enthroned there just a decade ago by Pulakesin-II.

“Vikramaditya’s son Vinayaditya too claimed grand victories and tributes from Srilanka and even from Persia. He was succeeded by Vijayaditya who fought against Pallavas, conquered Kanchi and levied tributes. The next ruler Vikramaditya-II continued the tradition of hostilities against Pallavas. He entered Kanchi, but did not destroy it. He appears to have subdued Chola, Kerala, Pandya, Kalabhara and other Kings, till the victory pillar was erected on the shores of the Southern Ocean.”⁵

Then came Kirthivarman-II, the last ruler. Dantidurga, the Rashtrakuta King defeated him in 750CE. The glorious rule of Badami Chalukyan dynasty, lasting around two centuries, was obliterated from Deccan lands.

12.3 THE AIHOLE INSCRIPTION OF PULAKESHIN

The Meguti temple in Aihole, Karnataka's Bagalkot district, sits on a hill with a panoramic view of the surrounding landscape, including a big crop of megaliths nearby. A 19-line inscription in Sanskrit verse, written in the southern script typical of the 7th century, is carved into the eastern wall of this Jaina temple. The inscription is from the year 556 (of the Shaka era), which corresponds to 634-35 CE. The composer, Ravikirti, was also the one who ordered the temple to be built. The inscription is a prashasti of the Chalukyas, particularly of the ruling monarch Pulakeshin II, also known as Satyashraya (the abode of truth). It not only offers many facts regarding this dynasty's history, but it also has excellent literary merits. These facts imply that when Ravikirti describes himself as the equal of Kalidasa and Bhasa in verse 37, he wasn't bragging. The following are some translated passages from the inscription (pronouns beginning with capital letters - He, Him, etc. - allude to Pulakeshin-II):

The holy Jinendra, who is exempt from old age, death, and birth, is victorious, and the entire world is made up of islands in the sea of his knowledge.

The unfathomable, huge ocean of the Chalukya family, which is the birthplace of jewels of mankind that are ornaments of the earth's diadem, is next, and it has been victorious for a long time.

Satyashraya is triumphant for a long time because he does not follow the law of numerical correspondence when conferring gifts and honours on the brave and the learned, both together on either side. Up until the reign of Pulakeshin-II's uncle Mangalesha, a chronicle of the early kings of the Chalukya line is given.

Then, after the subversion of that (i.e., Mangalesha's) reign, which had been engulfed by adversaries' darkness, the entire globe gained light again, as if invaded by the lustrous rays of His (i.e., Pulakeshin's) overpowering splendour. Or when did the sky stop being dark like a swarm of bees with thundering clouds, flashes of lightning dancing like banners, and the edges shattering in the rushing wind?

When Appayika and Govinda approached with their elephant soldiers to capture the land north of the Bhaimarathi after spotting an opportunity, the one in combat via His armies tasted terror, while the other immediately obtained the prize for his services rendered.

When He was besieging Vanavasi, which had for a girdle the rows of hamsa birds that play on the high waves of the Varada, and which, by its wealth, rivalled the city of the gods, that fortress on land, having the surface of the earth all around covered with the great sea of his army, appeared to the onlooker to be instantly transformed into a fortress in the water.

The Ganga and Alupa lords, tamed by His grandeur, were always intoxicated by drinking the nectar of attentive attention upon him, even though they had already obtained happiness by rejecting the seven sins.

The impetuous waves of the energies guided by Him washed away the rising wavelets of pools - the Mauryas - in the Konkanas.

When, radiant like the destroyer of Pura [i.e., Shiva] He beseiged Puri, the Fortune of the western sea, with hundreds of ships in appearance like arrays of rutting elephants, the sky, dark blue as a young lotus and covered with tiers of massive clouds, resembled the sea, and the sea was like the sky.

The Latas, Malavas, and Gurjaras were humbled by His splendour and became teachers of how feudatories should behave when conquered by force.

Harsha, whose lotus feet were arrayed with the rays of jewels of the diadems of hosts of feudatories prosperous with unmeasured might, had his joy [harsha] melted away by fear, having become odious with his rows of lordly elephants fallen in battle, had his joy [harsha] melted away by fear through Him.

While He was governing the planet with his vast army, the gleam of the various sandbanks of the Reva showed even brighter in the vicinity of the Vindhya, which had to be avoided by his elephants because they seemed to match the mountains in bulk.

He achieved the sovereignty over the three Maharashtrakas with their nine and ninety thousand villages by means of the three powers, gathered by him according to rule, and by his noble birth and other great attributes.

The Kalingas and the Kosalas were made to manifest signs of terror by His troops, thanks to the excellencies of their homeowners conspicuous in the pursuit of the three objectives of life, and after breaking the pride of other rulers of the earth.

Hard pushed [pishta] by Him, Pishtapura grew into a stronghold with easy access; amazing (to relate), the Kali era's ways were completely inaccessible to Him.

The river of Kunala, ravaged by Him, was like the cloud-covered sky in which the red sunset dusk had dawned, tinged with the blood of men slaughtered with numerous weapons and the ground within it overspread with arrays of painted elephants.

He caused the splendour of the lord of the Pallavas, who had opposed the rise of his power, to be obscured by the dust of his army, and to vanish behind the walls of Kanchipura, with His six-fold forces, the hereditary troops and the rest, who raised spotless chauris, hundreds of flags, umbrellas, and darkness (i.e. dust), and who churned the enemy elated with the sentiments of herois

When He set out to conquer the Cholas, the Kaveri, who had darting carps for tremulous eyes, had her current blocked by a bridge built by his elephants, whose rutting-juice was flowing down, and avoided coming into contact with the ocean.

He was the hot-rayed sun to the hoarfrost—the Pallava army—and brought enormous wealth to the Cholas, Keralas, and Pandyas there.

While He, Satyashraya, endowed with the powers of energy, mastery, and wise counsel—having conquered all quarters, dismissed the kings with honour, paid homage to the gods and Brahmanas, and entered the city of Vatapi—is ruling this earth, which has the dark-blue waters of the surging sea as its moat.

The intelligent Ravikirti, who has earned the highest favour of that Satyashraya whose rule is restricted by the three oceans, has caused

the construction of Jinendra's stone palace, a mansion of every type of splendour.⁶

Ayyavole Guild

Inscriptions form a major source of information regarding the guilds of early medieval South India. Most of them are on stone, a few on copper plates. The stone inscriptions are often associated with temples and usually record donations made by guild members. A few refer to public services performed by them, or agreements between rulers and merchants regarding the setting up of a mercantile township. Guild inscriptions frequently include a prashasti of the guild, which throws light on its relationship with the state and other organizations, as well as the religious affiliations of guild members. Lists of commodities involved in trade are also often given.

Aihole, located on the banks of the Malaprabha river in the fertile Raichur doab in Bijapur district, Karnataka, is known for its magnificent Chalukya period temples. The Ayyavole guild seems to have originated in this town. It was probably founded by a group of Brahmana mahajanas (traders) of this place in about the eighth century. The earliest inscription referring to this guild is found in the Lad Khan temple at Aihole. Several other Aihole inscriptions, ranging from the 8th to 12th centuries, mention it as well. The town of Aihole was also known by other names such as Ayyavole, Aryapura, and Ahichchhatra. Inscriptions refer to members of the Ayyavole guild as 'ornaments on the brow of that great lady, the city of Ahichchhatra', or as 'the 500 svamis [lords] of the illustrious town of Ayyavole'. Inscriptional references to the Ayyavole range from the 8th/9th century to the late 17th century. During the early medieval period, against the background of expanding trade and urban settlements, the activities of this guild expanded.

Given the large area that the Ayyavole operated over (Karnataka, Tamil Nadu, southern Andhra Pradesh, and parts of Kerala), one of the questions that arises is whether it functioned as a loose federation of units or whether it had a centralized organizational structure. Opinions on this issue vary greatly. Meera Abraham

suggests that the organization consisted of a sort of federation of units, each operating over fairly large areas.

The Ayyavole had close links with various ruling elites and enjoyed royal patronage. The Cholas had a close relationship with this guild. According to tradition, the Pandya kings invited the Nattukottai Chettiers, members of Ayyavole, to migrate from Kaveripattinam to their territory. The Ayyavole had links with other, smaller merchant associations such as the Valanjiyar, as well as close links with agraharas and agrahara Brahmanas.”⁷

The Durga Temple at Aihole

“The ‘Durga temple’ at Aihole is named after a nearby fort, and is now dedicated to the goddess Durga. It was probably built in about 725-730BCE, during the reign of the Chalukya king, Vijayaditya.

The Durga temple is an enigmatic structure.

The mystery, concerns the deity to whom this temple was dedicated. Over the years, it has been variously connected with Shiva, Vishnu, Brahma, and Aditya (Surya). It has also been argued that it was a Buddhist shrine, taken over at some point by the Shaivas. This view is no longer accepted.

The sheer variety of the sculptures makes it difficult to identify the cultic affiliations of the temple. Shaiva temples of this region usually depict a variety of deities, but have a Nandi mandapa (a pavilion enshrining the Nandi bull), which is absent here. Therefore, it does not seem to be a Shiva temple. As its sculptural programme does not privilege the goddess, it does not seem to be a goddess temple. Vishnu temples of this region and period tend to have exclusively Vaishnava sculptural themes, so this was not a Vishnu temple. The view among many art historians today is that the Durga temple was dedicated to Aditya (Surya). There is an image of this deity above the entrance, and a gateway inscription refers to it as a temple of Aditya. Several representations of the sun god have been found elsewhere on the structure as well. However, even if it can be understood as a Surya temple, in

many respects, the form and style of the Durga temple at Aihole remains unique.⁸

12.4 LAJJA GAURI; FERTILITY CULT & MOTHER GODDESS WORSHIP

Female fertility worship was a universally accepted practice in ancient cultures. Almost all such cultures have yielded a good number of female figurines identified as the mother Goddess. Right from prehistoric times, as society and culture evolved, such practices came into existence as a part of social and ritualistic beliefs. Fertility worship as mother Goddess worship became one of the important practices in the Neolithic and post Neolithic cultures in India. The Saraswati Indus valley cities have contributed a good number of figurines resembling mother Goddess images. In spite of their varying forms and types, the figurines have voluptuous or slender physique, wide pelvis and prominent breast portions. The head portion has decorative features like flowery headgear, dotted ear ornaments and necklaces. The figurines are quite small in size and probably symbolized the worship of 'Yoni' in ancient periods.

One such figure has been identified by the scholars as 'Lajja Gauri'. The headless figure with lotus and stupa like form with a pot like belly is found at several locations adjoining Telangana and Karnataka border



Lajja Gauri was a mother goddess worshipped between 6th to 8th Century. She fell in disuse after 12th Century

in and around Krishna Tungabhadra basin. The sizes range from two or three inches to life size figures carved in stone. The best example of Lajja Gauri was found at Badami site at Naganathakolla near Mahakuta which is preserved in the ASI museum in Badami. The image is in seated posture and may be considered as sublime face yet provocative in appearance. The legs are bent up and spread apart. The posture is identified with giving birth. It is identified as 'Kabandha' posture. In some places, the belly portion appears like a

**Buddha
(Siddhartha)
was a late
issue to his
parents.
Royal
parents
sought the
blessings
of 'mother
goddess'
were not
disappointed**

pot (kumbha). Kumbha with a lotus directly associates the figure with Purna-ghata, which symbolizes fertility and auspiciousness.

These images of Lajja Gauri worship date back to 2nd-3rd centuryCE to 10th-12th centuryCE. The earliest figures, found at Sannati have simple features which go beyond Buddhist beliefs. Fertility was a common issue then and even now. To get better offspring, people would pray to the Goddess and also submit votive objects. Even Buddha, born as Siddhartha was a very late issue to his parents. The royal family having sought the blessings of 'mother Goddess' were of course not disappointed.



The Badami Chalukya period was very rich in the worship of LajjaGauri. Aihole, Mahakuta Naganathakolla, Huligemmanakolla and Siddhanakolla (all in the present-day northern Karnataka) and Alampur temple complex is located on the northern banks of the river Tungabhadra in Jogulamba district of Telangana. The original female deity, known as mother Jogulamba was known at least from 742CE onwards during the reign of Badami Chalukyas. Essentially, it is sought after by women for a sure and safe motherhood. The cult of female fertility is at the core of these locations. Over centuries, the area witnessed increased attention by devotees, which in turn provided for diversified features like multi-dimensional Bala Brahma in the vicinity. Bahamanis Sultanate, an Islamic polity ruling these areas from 14th centuryCE caused destruction to several deities in the complex. The worship of mother Jogulamba, nevertheless continued unabated. After

Indian independence, the complex got attention of the state government and now, with the realisation of Telangana state, the attention of state, as well as devotees has accelerated. Alampur (in Gadwal district of Telangana) are places quite away from the regular habitation in the broad river valley. The images are carved right on the boulders and are worshipped, even today. Local beliefs and myths are closely connected with tantric practices of 'yoni-puja'. In the post Badami-Chalukya period, the cult of Lajja Gauri started sharing space with Narsimha Brahma Shivalinga, Nandi and Conch. Such plaques have been found in Telangana, Karnataka and Maharashtra. The Goddess 'Lajja Gauri' remains a tireless divinity with her unique features directly associating her with the fertility cult and worship.⁹

12.5 THE RASHTRAKUTA EMPIRE

The political history of Deccan between C753– 975CE was marked by the ascendancy of Rashtrakutas. "In certain copper plate grants, the Rashtrakutas claim descent from the lineage (vamsha) of Yadu. In the Epics, Yadu was the son of Yayati and the brother of Puru and Thirvasu. Krishna was supposed to be a descendent of Yadu. Various inscriptions elaborate upon this mythical story of origin, stating that the Rashtrakutas belonged to the Satyaki branch of the Yaduvamsha, mentioning an eponymous ancestor."¹⁰

**The
Rashtrakutas
belonged to
the Satyaki
branch
of the
Yaduvamsha**



Rashtrakuta means the 'Chief of a Rashtra'. The word occurs in inscriptions of several dynasties from about the fourth century CE. They, most probably belonged to a class of provincial officials in the beginning. As the central authority of Badami Chalukyas weakened, the emerging power vacuum was filled in by 'Rashtrakutas' from 753CE onwards.

**None
of these
assertions
carry any
historic
gravitas ...**

Theories abound regarding the origin of Rashtrakutas. Fleet thought them to be connected with Rathikas of Ashokan inscriptions or descendents of Rathods from north. Burnel thought them to be connected with with the Kannada-Telugu Reddy caste. None of these



assertions carry any historic gravitas. Rashtrakutas appear to have migrated from the Latur (in the present-day Maharashtra) to Ellichpur (near the source of Tapi, in the present-day Madhya Pradesh) in 625 CE. Here, they carved out a principality and ruled for several generations as feudatories of the Chalukyas. They assumed an independent status under Danti Durga, who ascended the throne in 733CE. He won many military victories and assumed imperial rule.

'Rashtrakuta' literally means the chief of a rashtra (division or kingdom). It is possible that Rashtrakutas were originally a group of officials who eventually came to occupy power with the decline of Badami Chalukyas. The origin of the dynasty can be traced to Kannada speaking area. They achieved spectacular military successes in north and south and at some point, in time, they defeated the powers like Gurjara Pratiharas, Palas, Eastern Chalukyas and even Cholas. However, they were not able to hold on to their northern conquests for long.

Dantidurga (literally meaning he whose elephant is his fortress) founded the dynasty and started expansion all around. He was followed by equally ambitious successors with expansionist mindset. The magnificent Kailashnath temple at Ellora was built during the reign of Krishna-I. Amoghavarsha (814–878CE) built a new capital city of Manyakheta (the modern Malkheda). He was a patron of literature and a scholar himself. He wrote Kaviraj marga, the earliest Kannada work on poetics. Subsequently, Rashtrakuta kings captured Kannauj and achieved victories against Cholas, but there were several reverses as well. Towards the end of 10th century, the Parmars sacked Manyakheta and this event signalled the decline of Rashtrakutas dynasty. In 950 CE, the vacuum was filled up by Chalukyas (this time Kalyan Chalukyas) who ruled for the next two centuries or so.

Let us start the story from the founder, Dantidurga. He plunged head long into war and defeated Kanchi, Kalinga, Kosala, Srishaila, Malwa, Lata and Tank. In AD750, all these victories were celebrated by performing Hiranyagarbha ceremony at Ujjain. By now, distant arms inspired by a new Ideology of Islam had reached from

Arabian Desert right onto the doorstep of India. Mohammed Bin Kasim had humbled Sind. As a reaction to these new forces, Dantidurga took part in the campaign against the aliens. Arabs were defeated, never to invade Gujarat again. Finally, he subdued Kirtivarman-II, the last Chalukyan ruler and became the master of entire Deccan lands.

With the fall of Kirtivarman-II, the original home of Chalukyas at Badami came under the influence of Rashtrakutas in 754CE. The rise of this new power posed a new challenge to the eastern Chalukyas based at Vengi from central Deccan. Till then, there was no fear of attack from the west since Badami Chalukyas were their kinsmen. Vengi Chalukyas had never come to the rescue of their kinsmen. Both however, assisted each other in their wars against the Pallavas of Kanchi.

Krishna-I succeeded Dantidurga. He finally obliterated Badami Chalukyan Empire by defeating Kirtivarman-II by about 760 CE subdued Gangas ruling Mysore and then humbled eastern Chalukyas of Vengi. Over time, Dhruva (780CE–793CE) succeeded him. An ambitious man with an eye upon northern India, he registered victories all around. Vatsa Raju, the Pratihara rulers and eastern Chalukyas of Vengi were humbled. Then, he moved beyond and defeated Dharmapala of Pala dynasty. Palhalva rulers were made to submit. Territorial conquests reached its zenith during the reign of Dhruva.

Govinda-III (793CE–814CE) came next and continued Dhruva's tradition. He advanced as far as Himalayas. Dr. Altekar says, "Govinda-III was undoubtedly the ablest of Rashtrakuta kings. He was unrivalled in courage, generalship, statesmanship and martial exploits. His invincible armies conquered all the territories between Kannauj and Cape Camerin and Benaras and Broach." For a while, virtually, the whole of India was acknowledging Rashtrakuta supremacy.

Amoghvarsha, the thirteen year old son of Govinda-III succeeded and he had a long and prosperous reign stretching from 814CE to 878CE. Sulaiman, an Arab merchant, who visited Rashtrakuta

kingdom has described him as one of the four great monarchs of the world, the other three being, the Khalifa of Baghdad, the Emperor of China and the Emperor of Constantinople.

His rather long reign was bound to generate dissensions in the royal family. They were overcome but Vengi rulers sought their revenge and dethroned him. He recovered, turned the tables on Vengi and occupied it for twelve years. However, conflict with Gangas forced Amoghvarsha to come to terms with them. The King was also famous as a great patron of Jainism and the Jain work, *Ratnamalika* is attributed to him. Dr. Atlekar says, "His name will endure as a ruler who established peace and order in his kingdom, encouraged art and literature, practiced the principles he preached and did not think even from offering a limb of his body by way of sacrifice, what he thought that public welfare demanded it." He ended his life by taking Jal Samadhi in the Tungabhadra river.

During his long rule, the hard victories in the battle field had given way to soft aspect of art, literature and public welfare. The high noon of Rashtrakutas was over by now. Amoghvarsha's son Krishna-II succeeded him. Pritiharas and eastern Chalukyas humbled him. His efforts to put his grandson on the Chola throne also failed. Successive rulers had mixed fortunes. One of them was a tyrant. He was removed.

Krishna-III (940CE-968CE) was ruler of some substance. He invaded Cholas, subdued them finally and led his victorious march up to Rameshwaram where he built a pillar of victory. He led an expedition to Malwa and then to Buldelkhand into northern India without success. Dr. Atlekar says, "Krishna-III may not have been as successful in his campaigns in northern India as Dhruva or Govinda-III, but it cannot be denied that he was the Lord of the whole of Deccan. He possessed a large part of Chola kingdom. He was one of the ablest monarchs of the Rashtrakuta dynasty."

As, rulers followed in quick succession, the situation worsened. Prestige was gone and the empire was hollowed out by now. Taila-II, a feudatory of Rashtrakutas revolted in 973CE and defeated Karakka, the last ruler of the dynasty. By 975CE, as Taila became overlord of Deccan, the Rashtrakuta's disappeared into history.

Atlekar sums up the Rashtrakuta's times, "The period of Rashtrakuta ascendancy in the Deccan from about 753CE to 975CE constitutes perhaps the most brilliant chapter in its history. No other ruling dynasty in the Deccan played such a dominant part in the history of India till the rise of the Marathas as an imperial power in the eighteenth century. No less than three of its rulers, Dhruva, Govinda-III and Indra-III, carried their victorious arms into the heart of north India and by inflicting severe defeats upon its most powerful rulers, changed the whole course of the history of that region. Their success in the south was equally remarkable and Krishna-III literally advanced as far as Ramesvaram in the course of his victorious career. All the great powers of India, the Pratiharas and the Palas in the north, and the eastern Chalukyas and Cholas in the south, were subjugated by them at one time or the other. They, no doubt, suffered reverses at times, but on the whole their military campaigns against powerful adversaries were repeatedly crowned with brilliant success."

Hundreds of inscribed and uninscribed memorial stones are found in peninsular India. A majority of them "are viragals (memorials for heroes), mostly honouring men who died in the course of cattle raids, either as defenders or attackers. However, an interesting memorial stone found at Kembalu records the death of a queen who led her men in such a raid. There are memorials to those who died while protecting their womenfolk from molestation and rape at the hands of enemies, those who perished while helping or rescuing friends and relatives, and those who gave their lives defending their lord or their land. Some memorial stones record the bravery of people who died defending their town or village from kings, princes, robbers, and oppressive officers. There are also memorials in memory of those who died while fighting wild animals such as elephants, cows, boars, tigers, and even horses. Sometimes, only the name of the hero is inscribed, with no mention of the circumstances of his/her death."¹¹

Western Chalukyas of Kalyani

By 973 CE, another Chalukyan dynasty re-emerged on the Deccan horizon, known as Western Chalukyas. Ruling from their capital at

Kalyan (in Bidar district of Karnataka), they played a dynamic role, exhibiting vibrancy and tenacity in expanding their frontiers. They remained invaders and interventionists throughout their rule for around two centuries. Thanjavur Cholas, remained their peer adversaries. Romila Thapar has observed, “The political history of the Deccan and further south evolved a pattern based on geopolitical influence of a region, a pattern which remained unbroken until recent times. It resulted from the conflict of the geographical regions of the Western Deccan and Tamil Nadu, the vast plateau areas enclosed by mountains along the coasts on the one hand and the fertile plain south of Madras on the other. The division of the peninsula into plateau kingdoms on

The conflict was as much dynastic as it was geographic, and consequently, continued through centuries despite the rise and fall of particular dynasties

the west and coastal kingdoms in the east increased the desire of each to control the entire waterways particularly the Godavari and Krishna Rivers. Vengi, lying between the Godavari and the Krishna deltas, was frequently the bone of contention. The conflict was as much dynastic as it was geographic, and consequently, continued through centuries despite the rise and fall of particular dynasties.”

Tanjavur Cholas remained peer adversaries of Kalyan Chalukyas. As incessant conflicts weakened latter, several power centers arose in the evolving power vacuum. In Telangana region, Kakatiyas emerged powerful and decisive. In 1158CE, they declared their independence. Others followed. Eventually, Yadavas of Deogiri in western Deccan and Hoyasalas in south subdued the Chalukyas and eradicated their dynasty by

around 1190CE.

Kalyan Chalukyas claimed their descent from the Chalukyas of Badami. The founder of the dynasty was Taila-II. He defeated the last Rashtrakuta King Karakka and ruled for twenty-four years from 973CE to 997CE. His sovereignty was eventually acknowledged by all the vassals of the Rashtrakuta Kingdom. Telangana region, hitherto under the Chalukyas of Vemulwada had come under Kalyana's hegemony. Taking his arms forward, Taila embarked upon an invasion of south to confront Cholas of Thanjavur.



This ignited conflicts between Kalyana Chalukyas and Thanjavur Cholas for mastery over Deccan lands. It would last for more than a century and a half and devastate the area which is present day Kurnool district. Conflicting claims apart, Krishna and Tungabhadra rivers remained the dividing boundary while Vengi region in the East continued to pendulate between the two warring Kingdoms. Chalukyan arms however were more successful in securing northern boundaries up to Narmada and Western territories abutting coast.

Among those who followed, Vikramaditya-VI needs special mention. On 11th February 1076CE, he ascended the throne and initiated a new era called Chalukya Vikrama. His peaceful rule for fifty years ensured loyal feudatories who, in turn stabilized the Kingdom. The glory of Kalyana, the capital, and the ruler are inscribed as – “There has not been, there is not and there will not be, on the surface of the earth, a city like Kalyana; and never was a monarch like the prosperous Vikramaditya seen or heard of.”

During this period, Telangana was ruled by several chieftains. Kakati Prola had obtained Anumakonda Vishaya and Sabbi as a fief. Mudigonda Chalukyas ruled over tracts around the river Godavari in Khammam, a buffer region to Vengi. The Polvasa chiefs ruled the areas around Jagtiala in Karimnagar district. The Kanduru Chodas ruled an extensive territory called Kandurunadu with capitals at Koduru and Panagallu. The tract west of Anumakonda Vishaya, Kollipaka was conferred on Paramara Jagaddeva. All of them were loyal and staunch followers of Vikramaditya-VI. In 1117CE, Vikramaditya invaded and subjugated Vengi. And, the Chalukyan dream of hegemony over entire Deccan land was realized. From coast to coast, it was indeed the high noon of the Empire. But, soon, the decline was to set in.

Hegemony over Vengi was contested by Cholas and their loyalists. As territories couldn't be protected, Chalukyans were driven away in 1135CE. As decline got accelerated, several forces emerged and struck more confidently. In the Telangana region, the Kakatiyas emerged powerful and decisive. Taila-III, the younger brother of

Jagdekamalla ascended the Chalukyan throne a decade later in 1149CE. The Kakatiyas declared their independence in the central Deccan in 1157CE. The Silaharas from north and the Hoysalas from the south embarked on their pursuit of independence. In the emerging adverse scenario, Taila-III died in 1162CE.

By now, the pith and substance of Chalukyan dynasty had melted away. Finally, the Yadavas of Deogiri and Hoysalas under Vir-Ballala attacked the Chalukyas and eradicated their dynasty by around 1190CE. The Chalukyan flame after illuminating Deccan lands for more than six centuries stood extinguished, forever. Their heritage, especially in temple architecture has survived in Adilabad, Karimnagar and Warangal districts, till date.



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- 7) Abraham, 1988 & Singh Upender (2009), *A History of Ancient and Early Medieval India*, Pearson India Education Services Pvt.Ltd., Noida, p 603
- 8) Tartakov, 1997 & Singh Upender (2009), *A History of Ancient and Early Medieval India*, Pearson India Education Services Pvt.Ltd., Noida, p 612
- 9) By R.H.Kulkarni, Professor : Department of History, College of Fine Arts, Karnataka Chitrakala Parishat (rhkulkarniarthistory@gmail.com)
- 10) Singh Upender (2009), *A History of Ancient and Early Medieval India, from the Stone Age to the 12th Century*, Pearson India Education Services Pvt.Ltd., Noida, p 555
- 11) *Ibid*, p 557





13. Knowledge Frontiers by 1000 CE

This chapter covers a long span of around half a millennium from around 500 CE till around 1,000 CE. The dominant theme relates to various dimensions of knowledge frontiers witnessed during this illustrious period. Astronomical and mathematical discoveries were illuminating across pan India kingdoms. Medical knowledge including surgery was way ahead compared to any kingdom or empire across the globe. Metal technology, known since millennia was forging ahead. And the most important of all, various aspects of agricultural sciences, technology and management including vegetables, fruits and forests were certainly at the most advanced stage, when compared to any part of the world.

A settled economy with perennial agricultural surplus resulted in large scale trade which saw an emergence of a host of towns. Traders were exporting these commodities to lands afar, especially through Bay of Bengal and Arabian sea. Population was bound to increase and it did so across the various kingdoms in the Indian subcontinent. So far as the present-day Telangana lands are concerned, it inhabited some 7.5 lakh people during the beginning of Satavahana rule in around 200 BCE. It went upto around 14.5 lakhs by the time Vatapi Chalukyas arrived on the scene in 550 CE. By around 1,000 CE, the same Telangana lands were hosting about 18.75 lakh people. That was the year when the seeds of future Kakatiya Imperium were planted in Telangana lands during the regime of western Chalukyas by granting Anumkonda vishaya to the Kakati lad, Garuda Beta.

13.1 ASTRONOMY AND MATHEMATICS

Aryabhata-I is the earliest known historical astronomer in India. He wrote two works – Aryabhatiya, a text which deals with astronomy and mathematics and Aryabhata Siddhanta. He was a native of Asmaka country (on the banks of Godavari) and lived in Kusumapura (Patliputra). He was aware about the ideas and

methods of his predecessors, but struck his own course. “I dived deep in the ocean of astromical theories, true and false, but rescued the precious sunken jewels of true knowledge by means of the boat of my own intellect” (Aryabhata, 449).

Aryabhata believed the planets travelled around the earth in circular epicycles and had an earth-centric view of the universe. He was the first astronomer to explain eclipses scientifically. In addition, he was the first to notice that the earth spun on its axis. He also discovered trigonometry's sine function and applied it to astronomy. He devised the right equation for calculating a planet's orbit and calculated the length of a year to be 365.2586805 days, which was extraordinarily accurate. Unfortunately, nothing is known about the experiments or the methodology used by that genius, Aryabhata in arriving at such a momentous and precise conclusion, some fifteen centuries ago.

Varahamihira was a 6th century astronomer and mathematician who belonged to Avanti (in western malwa). On *Pancha-siddhanta*, he summarised the five astronomical schools prevalent at that time. His *Brihat-samhita* is an encyclopaedic works dealing with diverse topics such as how to sharpen swords, how to ascertain the value of precious metals and stones, how to make tree bear fruits out of season, how to distinguish the good breed of animals and how to divine the location of ground water. It also discussed the nature and structure of temples, palaces and houses. It also explains about seasons and the correlation between the clouds, winds and amount of rainfall.

Brahmagupta was a late 6th-7th century astronomer and mathematician who wrote the *Brahmasputa Siddhanta* (628 CE) and the *Khandakhadyaka* (665 CE). These works gained a lot of traction in India, and Arab translations and modifications brought Indian astronomy to the Arab world. The *Brahmasputa siddhanta* is also the first surviving Indian work to explain astronomical instruments and methods for estimating astronomical components from readings taken with them (Sarma, 1986). Accessories, astronomical instruments for measuring time and observing celestial bodies, devices that spin automatically for one day, and eternally rotating instruments are among the instruments. A pair

of compasses (*bhrama*), a plumb-line (*avalamba*), hypotenuse (*karna*), shadow (*chhaya*), mid-day (*dinardha*), the sun, and the local latitude (*aksha*) are among the accessories (*samsadhana*). The text mentions nine astronomical instruments – *chakra* (a circular wooden plate graduated into 360°), *dhanus* (a semi-circular plate), *turyagola* (a quarter plate), *yashti* (staff), *shanku* (gnomon), *ghatika* (clepsydra), *kapala* (a horizontally placed circular plate), *kartari* (two semi-circular plates joined together at different levels), and *pitha* (a horizontally placed *chakra*).

SR Sarma points out that the instruments, made of wood or bamboo, are very simple in design and could not have provided much precision in measurement. This suggests that astronomers probably relied more on their superior computing skills. However, Brahmagupta also referred to complex automatic devices called *svayamvaha yantras*, which reflects an awareness of the idea of perpetual motion.”¹

The roots of Indian mathematics can be traced in the *Shulva-sutras*, appendices to *Shrauta-sutras* (Hayashi, 2003). *Shulva* means measurement and *Shulva-sutras* are manuals for preparing the site where vedic sacrificial rituals are to be performed. Among other things, these manuals contain one of the earliest expressions of the principle which came to be known as Pythagoras theorem in geometry. There are also suggestions for squaring a circle i.e, to construct, using only a ruler and a compass, a square whose area is equal to that of a given circle.

In later times, the term *Ganita-shastra* was used for mathematical science. The decimal system of notation was the seminal discovery of our creative ancestors which made the modern system of numbers amenable to simplified arithmetical calculations. The oldest datable evidence of this system is found in a third century work on astrology called the *Yavanajataka* by *Sphujidhvaja* (Hayashi, 2003:366). This work does not however mention the Zero. The zero symbol, a mere dot, was used in metrics (*chhandas*) by *Pingla Chhanda-sutras*, a pre-second century BCE work. Varahamihira’s *Pancha siddhantha* is the earliest datable text to give zero both as a symbol and as a number.

The decimal system of notation was used by Varahamihira and Aryabhatta to extract the square root and cube root of numbers. Clearly, Indian mathematicians were using this simple yet smart method of decimals in the fifth century CE. Europe, sunk in dark ages was still using the old cumbersome method of Roman numerals till twelfth century CE. In the meantime, the Arab writers such as Ibn Mashiya, Al-masudi and Al-Biruni gave credit to 'Hindus for the discovery of decimal system, before this seminal discovery was transmitted to Europe.

Primarily an astronomer, Aryabhatta dealt with various aspects of mathematics. His work regarding rules of involution and evolution deals with arithmetical progression of numbers and their squares and cubes. In geometry, he describes various properties of circles and calculated the value for pi (π) correct to four decimal places at 3.1416. He is also regarded as the father of Algebra. His work solves a number of complex simultaneous equations. In trigonometry, he calculated the ratio of sine (called Jya in Sanskrit) for angles from 0° to 90° at intervals of $3^{3/4}$ degrees. He perfected the method of finding in integers certain types of indeterminate. Subsequently, Brahmagupta (early seventh century CE) and Bhaskara-II made contributions in this sphere. None of those Indian mathematicians, unlike their Greek counterparts left any proofs or methodology to arrive at the seminal conclusions.

Mahavira (ninth century CE) was a famous mathematician of Karnataka who lived in the court of Rashtrakuta king Amoghavarsha Nrupatunga of Manyakhata. He wrote a book called Ganitasara sangraha which dealt with various mathematical problems. He also gave formulae for the area and circumference of an ellipse. Bhaskara-II (twelfth century CE) believed that though the formula, he gave for the area of an ellipse was incorrect, but the one for the circumference was correct. Bhaskaracharya-II (1114-85), was a great mathematician as well as a skilful astronomer was born in Karnataka and has made immense contribution to the fields of arithmetic, algebra, trigonometry, calculus and astronomy. His works are known for their systemisation and use of improved

methods. Bhaskaracharya's magnum opus, 'Siddhanta Shiromani,' is divided into 4 parts, 'Lilavati,' 'Bijaganita,' 'Grahaganita,' and 'Goladhyaya.' He had a beautiful and intelligent daughter named Lilavati and the first part is dedicated to her. 'Lilavati' includes a number of methods of computing numbers such as multiplications, squares and progressions, with examples using kings and elephants, objects which a common man could understand.

He writes,

*Whilst making love a necklace broke.
A row of pearls mislaid.
One sixth fell to the floor.
One fifth upon the bed.
The young woman saved one third of them.
One tenth were caught by her lover.
If six pearls remained upon the string.
How many pearls were there altogether?*

(Translation by, Henry Thomas Colebrooke, 1817, *Algebra, with Arithmetic and mensuration, from the Sanscrit of Brahme Gupta and Bháscara, stanza 54, Chapter 3. Published by John Murry, London*).

Medical Knowledge

Ayurveda (literally, knowledge for longevity) is one of the most important traditions of ancient India of which the charaka and sushruta samhitas are its earliest surviving texts. Ayurveda does not owe anything to Greek medicine, but experts like Konneth G. Zysk (1991) believe that the roots of Ayurveda lie in the milieu of the Buddhist monasteries of early historical India. The evolution of medical knowledge and the practice of monks gradually spread beyond the confines of monasteries. The tapestry of medical texts is interwoven with the ancient India philosophical ideas like Sankhya, Vaisheshika and yoga.

Ayurveda does not owe anything to Greek medicine



Let us take Charaka-samhita first. The origin of the work may go back to 3rd-2nd century BCE and it contains several chronological layers. Charaka was considered a medical authority in the early fifth century CE. The main body of the text contains the knowledge

received by Agnivesha from his teacher, the Sage Atreya. Charaka seems to have edited the Agnivesha text. The text was edited yet again in the 4th or 5th century CE by Drividhala. The Charaka-samhita consists of 120 chapters broken into eight divisions. “Pharmacology, diet, specific diseases and their treatment, doctors and quacks, and numerous philosophical concerns are all covered in the Sutra section. The second segment (*Nidana*) delves into the causes of eight major ailments. The third (*Vimana*) section covers topics including taste, nutrition, pathology, and medical research. The fourth section (*Sharina*) covers anatomy, embryology, and philosophy. After that, there are sections on diagnosis and prognosis (*Indriya*), therapy (*Chikitsa*), pharmacy (*Kalpa*), and a general discussion of therapy (*Siddhi*).”²

The Sushruta-sutra contains multiple chronological strata as well. The original text of the sushruta sutra, like the Charaka-samhita, was written in the last centuries BCE. However, commentators on the text indicate the name Nagarjuna due to addition and edition throughout several decades until around the fifth century CE. “The first (*Sutra*) portion covers topics such as medicine’s origins and components, a doctor’s education, therapeutic ingredients, food, surgery, wound therapy, and splinter extraction. The second (*Nidana*) is concerned with disease symptoms, pathology, prognosis, and surgery. The third (*Sharira*) is concerned with embryology, anatomy, and philosophy. Chikitsa is concerned with therapy, while *Kalpa* is concerned with toxins. The *Uttara* section addresses issues like as eyes, teeth, child care, and ailments linked to demons, among other things.”³

The Sushruta-samhita describes surgery as the most beneficial field of medical science and provides information on ancient Indian surgical procedures and practises. The author explains a surgeon’s education and provides a full explanation of his instruments. Surgical operations such as dislodging the eye lens for cataract surgery, cutting for a stone in the bladder, removing splinters and arrows, and suturing are described. Plastic surgery is briefly mentioned in the text, with a flap of skin being grafted to mend a severed nose (rhinoplasty) and the repair of damaged earlobes. It also goes into how to learn human anatomy using corpses.⁴

“Vibbhata’s *Ashtanga-hridaya* (Heart of Medicine), a thorough and systematic presentation of Ayurvedic medical knowledge, which may date from c.600 CE, is another important Ayurvedic text. The same author is credited with another important text, the *Ashtanga-samgraha* (Tome on Medicine). Kashyapa’s compendium focuses on women’s and children’s ailments, is another old Ayurvedic treatise. Although some elements may be based on older material, it is thought to be from the seventh century. The Sharangadhara-samhita, written in the 14th century is a brief but concise overview of Ayurveda. The Ayurvedic pharmaceutical industry still uses its recipes.”⁵

The ideas of Ayurveda had an impact outside the Indian sub-continent as well. The major texts were translated into languages such as Arabic, Persian and Tibetan, whereby the pollens of knowledge fertilised and enriched Islamic and Buddhist cultures. There is evidence that Ayurveda idea influenced botanical science in Europe as well. Ayurveda, the knowledge of longevity has pretty deep roots in ancient Indian tradition; no wonders that it has survived this long and continued into our own times as one of the several traditional alternatives to the allopathic system of modern medicine. There was also some attention to veterinary science. The Hastya-ayurveda of Palakapya is a work consisting of 160 chapters. It deals with the diagnosis and treatment of the major diseases of elephants through medication and surgery.

Major texts were translated into languages such as, Arabic, Persian and Tibetan...



The hospital structure

The Chinese pilgrim Faxian refers to houses dispensing charity and medicine in the cities of north India. The Charaka Samhita gives details of how a hospital should be equipped: ‘*Now I shall set forth the chapter which starts with the preparations to be made,*’ said the Venerable Atreya.

“I’ll go over the various supplies in a little more detail now. As a result, a building specialist should first construct a worthy structure. It should be sturdy, out of the wind, and open to the elements in some areas. It

should be convenient to get around in and not depressing. Smoke, sunshine, water, or dust, as well as unpleasant feelings, tastes, sights, and scents, should be kept out. A water supply, pestle and mortar, lavatory, bathing area, and kitchen should all be included’.

The Staff

“Following that, the staff of soup and rice chefs, bath attendants, masseurs, persons to assist patients with getting up and sitting down, and herb grinders should be chosen. They should be pleasant, tidy, well-behaved, obedient, practical, and religious. They should have nursing experience and be well-versed in all therapies. They should not be averse to working. The guests should be able to sing, play instruments, and recite verses, songs, legends, and ancient lore, as well as verses, songs, legends, and old lore. They should be nice to be around and anticipate your needs. They should know where things are and when they are happening, as well as be friendly in general.

Supplies

“There should be bustard-quails, grey partridges, hares, black-buck, Indian antelope, black-tails, chinkara, sheep, and a nice, healthy milk cow with a live calf and good arrangements for grass, shelter, and drinking water.

“There should be dishes, cups, water barrels, jugs, pots, pans, saucepans, large and small jars, bowls, platters, spoons, straw mats, buckets, oil pan, churns, leather, cloth, thread, cotton, wool, and so forth. There must be beds and seats, and so on, with vases and receptacles placed near them. Their coverlets, quilts, and pillows should be neatly made, and they should have bolsters. These are to make it easier to apply treatments involving lying down, sitting down, oiling, sweating, massage, balms, showers, massage ointments, vomiting, purges, decoctionenemas, oil enemas, purging the head, urine and faeces. There should be smooth, rough, and medium grinding stones with well irrigated uppers. Knives and their accessories must be supplied, as well as pipes for smoking [i.e, for fumigation of the nose and mouth], tubes for enemas and douches, a brush, a pair of scales, and a measuring instrument.

There must be supplies of ghee, oil, fat, marrow, honey, sugar-cane treacle, salt, kindling, water, mead, molasses rum, liquor, fermented barleywater, fermented beanhusk, blended liquor, spirits, curds, sour cream, watered buttermilk, fermented rice water and urine. “There must also be supplies of shall rice, sixty-day shell rice, mung beans, green gram, barley, sesame, poor-man’s pulse, cottony jujube, grapes, white teak, phalsa, myrobalan, emblic, belleric myrobalan, as well as the various kinds of drugs used during oiling and sweating. There should be drugs for throwing up, soothing, and those which have both effects, as well as medicines well-known for constipating, for kindling the digestion, digestives, and those which remove wind. All these supplies, as well as anything else that might be needed in an emergency, should be reckoned up and provided for the purpose of treatment. And items of food over and above the prescribed diets should also be laid on”⁶

13.2 METAL TECHNOLOGY

Metal technology in the Indian subcontinent has had an impressive and evolving tradition dating all the way back to the fourth millennium BCE. The beginnings can be traced back to the Saraswati Indus Valley civilisation and the tradition continues to this day. The Kalibangan and Harappan metal smiths undoubtedly knew the art of using copper, bronze, lead, silver, gold and electrum (the alloy of gold and silver). The copper technology came first. Then, it was discovered that adding tin to copper, we get an alloy harder than copper but easier to cast. It was also resistant to corrosion. The new alloy was hardened further by adding nickel, arsenic or lead. The evolving alloys of copper bronze mix were shaped as axes, dagger knives, spears, arrowheads, short swords, chisels, drills, fish hooks and metal mirrors and so on. A remarkable tool was saw where teeth were crafted in a long iron blade which enabled it to cut through a log of wood, instead of merely gashing the surface. This specialised tool to split wood was unknown elsewhere in the world at that time.

It has had an impressive tradition dating back to 4th millennium BCE. It can be traced back to Saraswati Indus valley civilisation



Tools and implements apart, the bronze was used to craft human and animal figurines. The bronze figurine of a dancing girl, foot and anklet, bull and so on at Mohenjo-daro and other sites are quite well known and admired. These figurines were cast by the lost-wax process. The initial mould was made of wax and it was thickly coated with clay. The ensemble was fired; the wax melted away or was lost. As the clay hardened, into a mould, the molten bronze was poured into the hollow. Subsequent cooling and removal of mould showed up the desired figurine.

With the passage of time, technology improved further. By the Gupta period during the reign of Chandragupta Vikramaditya (375CE–414CE), an iron pillar with a height of more than 7.2 m and a diameter of 40.6 cm was erected at Udaygiri near Sanchi in the present-day Madhya Pradesh. The solid marvel weighing more than 6,000 kg was translocated subsequently by Delhi Sultans in 1233 CE and brought to its present location in Delhi's Qutub complex. Thousands of men

Are we talking about phosphorus coating using 'Nano Technology' 1500 years ago?



and animals hauled, this over a long distance covering 800 km interspersed with rivers, valleys, plateaus and plain lands, some eight centuries ago. Thousands of tourists visit this rustless wonder every day. Experts, of late have opined that phosphorus together with iron interacting with oxygen from the air contributes to the formation of a thin protective coating on the surface. Are we talking about phosphorus coating using 'Nano Technology' some fifteen hundred years ago in the Indian subcontinent?

There are other iron pillars as well. There is an iron pillar around 87 m tall and weighing around 500 kg located at Adi Mookambika temple in Kodachadri hill area in Karnataka. It is a *dhwajasthambha* (flag staff) of the temple, another example of ancient Indian metallurgy and dates back to around 600CE. Yet another iron pillar located in Dhar town of Madhya Pradesh is actually fragmented into three parts. The fourth part is missing. It was the victory pillar erected by the Paramara king Bhoja. The total length of the three fragments is 13.21 m (43 feet 4 inches) and the combined weight is estimated to be 7,300 kg. Far heavier than

the Delhi pillar (or sanchi pillar), it was probably the largest forge welded iron pillar in the world.

“Yet another metal masterpiece is the huge bronze statue of Buddha. The impressive statue, with a height of 2.3 m and width of 1 m weighing over 500 kg was made between 500CE–700CE in Sultangunj by the same ‘lost wax technique’ that Harappans used some 3000 years earlier. It was translocated by British rulers in the nineteenth century and is presently preserved in the Birmingham Museum in UK. The same technology continued to be used to produce marvellous bronze statues in South India during Cholas period. Quite a number of those divine marvels like Shiva Nataraja at Chidambaram and other temples were made by Indian metallurgists more than a millennium ago. Quite a few of them have been translocated to far away lands in museums and private collections.”⁷

13.3 THE BOUNTIFUL AGRICULTURAL SCENARIO

The writings of Medhatithi, Parashar and Kashyapa provide an elaborate edifice regarding Agricultural knowledge and practices recommended for peasants, kings, ministers and society alike. Medhatithi was a Kashmiri scholar who lived during the period from 825CE–900CE. He stresses the importance of irrigation works so as to make people less dependent on rains. As regards taxation, he stresses light taxes on small holdings and heavy on those which yield large profits. About drinking, gambling and hunting, he is quite pragmatic and says that it is neither possible nor desirable to prohibit them. Parashar, a probable author of Krishi Parashar and Parashar Smrithi is regarded as the authoritative account on agriculture in Kali age. It was probably authored during 950CE–1100CE. In the tenth verse of Krishi Parashara, the sage states, farming depends wholly on rainfall. Obviously, this meant that there was no canal irrigation or well irrigation system developed for sustaining the crop production in this area. He had

The writing of Medhatithi, Parashar & Kashyapa provide an elaborate edifice regarding Agricultural knowledge and practices recommended for peasants, kings, ministers & society alike



a good astronomical knowledge and he makes full use of this for predicting the availability of rainwater during the different stages of crop growth. His book also enables us to study his concepts of clouds and rainfall. He also emphasises on good management in farming along with the management of cattle. Kashyapa authored

... **his idea**
obviously
was to
inculcate
dignity
of labour
and
ensure
food
security
for all



Krishi Sukti, a comprehensive text on agricultural science probably before 10th century. Kashyapa begins with a basic question, Why agriculture? And answers saying, “Because it sustains life on earth”. He gives a religious justification to agriculture by stating that Gods are propitiated only if the grains used in the rituals are holy (healthy) and for producing such grains everyone must work hard. Kashyapa has repeatedly stressed that agriculture is a virtuous profession and all people regardless of their status should practice agriculture. His idea obviously was to inculcate a dignity of labour and ensure food security for all people. Kashyapa had stressed that all the people irrespective of caste, who practice agriculture should possess good values of life.

Farmers should be free from jealousies, be mutually helpful, truthful, compassionate, animal lovers, hospitable to guests, devoid of anger, laziness and excessive desires, happy with children and relatives and loyal to kings. He states that farming activities should be planned and undertaken in every community, in every country, in every rural part and in every table land. When describing rice culture, he not only exhibits keen insight, but he also specifically mentions Kosala by name. Tropical fruits and vegetables like arecanut, coconut, and bread-fruit are also mentioned. Recognising the importance of agriculture, Kashyapa urges rulers, advisors, and officials to put it into practise in order to better understand the challenges farmers face. According to Kashyapa, all bipeds and quadrupeds on this planet are doomed if agriculture does not exist. Therefore, the king should take a keen interest in agriculture in order to please the gods and protect the people. Priests, Brahmanas, and ministers, in particular, should engage in agriculture. Ironsmiths and goldsmiths in the villages and cities should prepare the various war-weapons and agricultural implements based on the iron, copper, gold, silver,

and red ochre that the king has mined. Armed forces can protect cities, palaces, forts, and other landmarks by distributing the first and keeping the second at the army's headquarters.

Management: In agriculture, Kashyapa emphasises the significance of effective and efficient management. By keeping a close eye on their paddy fields, cultivating their fields methodically, as well as taking care of their livestock, cultivators are able to reap greater rewards and peace of mind,' he says. As a result, seasoned farmers who are friendly with one another and committed to growing two crops a year should prioritise protecting their livestock, servants, seeds, waterways, reservoirs, tanks, lakes, etc, spades, sickles, etc, threshing floors, fences, and fields, all the while practising the abundant art of farming according to local custom.

Trees: Kashyapa advises planting certain trees on the banks of the water reservoirs and on the other sources of water. He mentions, "Veta, vata, plaksha, Khadira, tinduka, tintrini, bhurjara, venu, nimba, kadamba and also pansa, amra, rasala, punnanga, malti, kunda and Champaka are trees for the plantation of which special efforts should be made." Trees according to him are the destroyer of disease causing agents. Trees are also to be indicators of ground water. He describes four types of canals and the details for their planning and construction. He also describes the construction of wells in great details. Bullocks, elephants or human beings are to be employed for the purpose of pulling the "ghatyantra", for watering the crops.

Crops: Procuring and preserving seeds of various crops was considered as one of the most important activities. In order of importance Kashyapa lists rice and other cereals as the first pulses and other grains as the second, vegetables (including fruits) the third and creepers and flowers as the fourth. He mentions three varieties of rice. Kalama is slightly thick, white with a surplus sap. Shastika is made tasteless by the creator. Sali rice is said to have twenty six varieties depending on the quality of land in different regions. Sali rice varieties were more flavoured than the other two. Kalama was small grained and Shastika was clearly the inferior type. Vrihi is considered to be the oldest name of rice. We find the mention

of Shukla vrihi-9 white rice mentioned in the Krishna Yajurveda (3000 BC). Apart from rice, Kashyapa mentions other crops. He says, 'Cultivation of beans and pulses like masha (*Vigna radiata*), chana (gram), *mudga* (*Vigna mungo*), *kuluttha* (*Dolichbiflorus*), *tila* (sesamum), and of seeds of pepper and ciraka should also be done at some places.

Marketing: Knowing the importance of marketing, Kashyapa says: "The King should collect the produce of vegetables and grains and other seasonal foods and store them for the benefit of the people in shops or market-places, stalls or other places specifically built on crossroads and provided with a large yard and a shed."

These and other necessities, such as blankets and cloth as well as curds and milk as well as food like jaggery and oil should be placed in the market-places of the rural areas as well as towns and cities, especially in the capital city. For the sale and purchase of these commodities, he should appoint wealthy vaishyas who are well-versed in the trade.

Rice: Accuracy in Kashyapa's rice-growing observations is remarkable. It all begins with setting up a nursery, where he shows how seedlings are transplanted, weeded, fed, and protected from pests.

For Kashyapa, the varieties of rice come first, followed by pulses and then vegetables as cultivable commodities. Ghee, milk, curds, and the like come in at number four. The entire food supply is made up of these four types of products. All the gods' happiness and the well-being of humanity can be achieved through the consumption of this material. Brahma created this at the beginning of creation and it provides nourishment, health, and long life for all living things on the planet.

In countries like Kosala, where the fields are irrigated by river water, the sages have said that paddy cultivation is best done. As a result, farmers who plan to grow rice varieties like Kalama and Vrihi should first irrigate their fields using channels drawn from reservoirs and rivers and then use oxen to till their fields.

Transplanting Seeds: On an auspicious hour, the cultivator should order the uprooting of the wisps of paddy seedlings that

have already been grown closely in a separate nursery, and then have them transplanted by servants in rows evenly in the paddy field in which the clay has become softened by tilling and has been carefully dressed with cow or goat dung or decayed vegetable matter.

After then, just a limited amount of water should be allowed to remain on the field, and extra water should be channelled away.

After seven or ten days, the Creator (ie, Nature) causes the paddy seedlings transplanted in rows in a well-ploughed paddy field full of water, in a village, town, forest, or woodland, irrigated by a canal and provided with several outlets for draining away the surplus water, to take root, and then the new shoots sprout forth and make their blessed appearance. The earth then bursts forth with that alluring bloom that can be found on parrot feathers or a damsel in distress's body.

At the end of the first month, the slow expansion of the paddy blades may be seen. Shoots are sprouting everywhere, and the plants are becoming more attractive as they consume water on a daily basis and promise a plentiful harvest.

Weeding: As a result, growers should take out wild grass and weeds, as well as other harmful rushes like munia, from their fields in a systematic and diligent manner. It is better to eradicate wild grasses, rushes, weeds, and other noxious weeds that stifle grain growth and diminish crop yields from the ground up. Fill the paddy fields with water first, then gradually pull out the weeds, etc., row by row, according to an expert person. Alternatively, have the bug eliminated by the staff on a daily basis. The farmers' fields become shiny and luxuriant after the weeds have been removed.

The cultivation of all the various kinds of rice like the white Sali, red Sali, Kalama, etc, which have been enumerated above is done in the same manner.

When the ears at the top of the rows of plants become solid, full of milky-juice (or sap), and appear twisted, they should be covered, especially from parrots. This warning is applicable to all countries.

Irrigation: The juicy grains in the ear would then become firmer at the core over time, eventually ripening into rice. Regular irrigation

of the crops is recommended and useful till then; otherwise, crop loss would occur.

As a result, farmers should continue to monitor the growth of sap on a regular basis and water their crops at the appropriate periods to increase the sap.

Protection against pests: Pest control is provided. 'If the crop is protected against rodents, locusts, parrots, and other pests, it is tremendously advantageous.'

The ripe paddy, which is so beneficial to living beings, should be honoured with circumambulations by those who live on it, and then preserved by them after determining the period of life of the grain from its appearance, the stamina of its seed, and the quality of the soil from which it is produced, or from personal experience.

Therefore, the cultivators should be alert to protect their crop at the time of ripening against all sorts of depredations.

Harvesting: Water should not be allowed into the fields until the paddy ears have gradually matured according to their distinct maturation times. This is agricultural specialists advise, and it should be followed in the case of all paddy fields.

When the tops of the plants' ears ripen, the stalks of the plants bend very low to the ground. When the husbandman notices them bending so much, he should either protect them in the field directly or through his employees for a period of twenty days. When the stalks are ripe and golden in colour, the cultivators should harvest them with sickles and other tools. They can have the harvest mown in a single day or over several days with the help of their dependents and servants who work together.

However, reaping would be beneficial provided precautions were taken to ensure that the stalks were not injured during the processes, and the harvest was not destroyed by rain or stolen by criminals.

Threshing: With the help of their slaves and attendants, the cultivators should stack the reaped plants with their ears on threshing floors. It is recommended that the crop be left on the threshing floors for three to five days. The grains fall on the threshing-floor

and shimmer like piles of sparkling pearls when the ripe stalks from which the ears loosen are threshed. The leftover grain falls to the ground during the second round of threshing, which is done by having the crop trodden through by bullocks and buffaloes. After the paddy has been threshed in this manner on the threshing-floor, the cultivators should collect the thick and substantial assorted stuff.

Selection of Seed: Seed selection is important. Using winnowing-fans, etc, cultivators should thoroughly separate the superior grain from the poor grain and collect the former in a heap. After that, a smart man should dry them in the sun and clear them of contaminants. He (farmer) should then maintain the remaining paddy stock in his own house, having given one share to the gods, one to the king, one as a gift to a brahmana versed in the Vedas, and one for the support of the slaves.

The farmer should then divide the paddy stock, giving one share to God, one to King, one to Brahmana and one to the slaves

Storage: He has a lot of storage. According to local custom, the farmer should carefully keep the grain in suitable receptacles such as kathinya, well-baked clay pots, sturdy glass vessels, or containers braided of ropes and plastered with mud. The farmer should construct a trench in the hard clay in some locations, provide descending steps, and store the paddy in it, making sure it is protected from moisture, thieves, parrots, rats, and other nasty creatures.



Vegetables: 'Despite the different varieties of rice and other provisions like adhaka, etc, hunger is still felt all throughout the world.' Hence Kashyapa says that farmers should cultivate vegetables, particularly, delectable vegetables such as, jatika, rasijatika, valhika, vanavalika, patolika, eggplants, savaka, pumpkin-gourd, kalata, kustumburu, surana sakula, turmeric, ginger - both cultivated and wild - as well as a variety of other sweet plants for cooking. These, in the writer's opinion, are the most important veggies. In their various cultivation locations, growers should plant vine, Indian spikenard, cardamom, and other spices.

Parasitic vermin can occasionally be found on the leaves of vegetables such as eggplant, patolika, valte, savaka, cucurbits, kalatas, surana,

sakuda, turmeric, ginger, etc, so, ashes, dust, or lime-water etc, should be sprayed on plants to kill the vermin, as per local custom.

To gain delectable delicacies, wisemen should cultivate patolika, eggplant, gourds, jambir (citron), lakuca, cardamom, vine, date-palm, and other plants according to local custom and season. Leaves, flowers, fruit, unripe fruit, or bulbous roots are plucked from these vegetables and used during the beginning, middle, or end of the efflorescence, depending on the situation.

Some of the fruits are tasty to eat, while others are useful for sucking their juice. The roots, stem, flower, unripe fruit, and ripe fruit of the plantain tree are all pleasant and agreeable to eat. The sages advocate it as a wonderful dish.

Cultivators should practise cultivation in their homes, pleasure groves, land, field-beds, on the sides of ponds and lakes, below water-reservoirs, or near their sluices to perpetuate the art of agriculture. Plantain, arecanut palm, punnaga (*Rothleria tinctoria*), coconut, mango, breadfruit, cardamom, vine, and rnalati (jasmine), as well as egg-plants, valte, and gourds, should all be grown properly.

Garden Crops: Kashyapa lists several different types of garden plants. ‘In a low field, a garden, or a pleasure forest, a clever man may grow plantain, sugarcane, piper-betel, and arecanut,’ he says. In the house-orchards, gardens, or on high or low terrain, he may also grow

The King should also have a garden specifically for the enjoyment of his harem ladies.

the plantain (*Musa paradisiaca* [*M. Sapientum*], mocha), bread-fruit (*Panasa*), likucha (*Artocarpus lakoocha*), rasala and amra kinds of mango, rose-apple (jamun), and coconut trees.’

According to Kashyapa, “a prudent king should plant a pleasure grove or a garden in an appropriate location in the village, city, and especially in the capital.” ‘He should grow a tree grove outside or inside the town.’ He should also have a garden planted specifically for the enjoyment of his harem ladies. He might have a woodland with a grove of trees growing in it.

He should give material for house-building for his subjects by cultivating trees like the sara (sal) and sandal.



He should plant a variety of lovely and fruit-bearing trees in his palace garden, such as numerous types of plantain (rambha, mocha, etc.) and citron (jambira, matulunga, etc.) and the Indian spikenard. He should also promote the production of various grasses (such as kusa and kasa), basil, wood-apple, and aromatic and seasonal flowers that can be used for worship and domestic medicines.

He should have a garden established on the temple grounds inside or beyond the hamlet for religious festivals, depending on land availability and local custom.

In his palace, he should have a wonderful pleasure grove connected to the gynaecium, full of lovely trees and flowers like the malati. He may also have one of these groves planted outside his city to divert people's attention.

Forests: Kashyapa also recommends that the king promote forestry. 'They should create woods brilliant with numerous kinds of trees in their precincts and on the tops and slopes of the hills,' he argues. He should also direct the preservation of all kinds of tree seeds there.

People obtain flowers, fruits, and timber for the construction of their homes from these trees.

As a result, the king should plant trees and plants such as *karanjaka* (*Pongamia glabra*), *bhurjaka* or birch (*Betula utilis* [*B.Bhojapatra*]), *arjuna* (*Terminalia arjuna*), *kadamba* (*Anthocephalus chinensis* [*A.Cadamba*]), *sigru* (*Moringa oleifera*).

In this way, he should have vast forests, ablaze with groves of trees planted by cultivators and others on riverbanks and in various countries such as Gandhara, Kunti, Panchala, Kashmira, Avanti, Sindhu, Nepala, Nishadha, Kosala, Anga, Dhurjara (Gurjara), and Saurashtra, on fertile land dotted with tanks, canals, and ponds. For the sake of the people, he should have them well guarded by valiant soldiers and combatants.

Mango, pomegranate, jack, banana, date, vilva, kapittha, rose-apple, jujube, mascot, and coconut were among the most prevalent and tastiest fruits found in the jungles. In the Punjab and the North-West Frontier, vines, dates, and palms were grown in particular. Panini describes Kapisa as India's premier vine-growing region.⁸

We have covered a wide range of crops growing in our country,

including grains, fruits, vegetables, garden crops, and woods. The total description is quite overwhelming. The depth of detail, the breadth of coverage, and the laser-like precision are just astounding. Just think about it! From seed to seed, a detailed account of rice farming is provided. Thinkers in India propagated the practise of landowners and servants growing vegetables to supplement food, preserving seeds and the art of cultivation, planting gardens for the diversion of ladies of the harem, encouraging forestry on hill slopes and guard trees by brave soldiers and fighters for the benefit of the people; all of this practical knowledge was available more than a thousand years ago in our country. A millennium ago, India's subcontinental knowledge frontiers were unquestionably the most advanced compared to any other portion of the world.

13.4 URBAN PROCESSES IN THE FIRST MILLENNIUM

Roughly, twelve centuries separate the end of Mauryan Imperium (187 BCE) and the year 1000 CE. During this prolonged period, the peninsular India witnessed a slow yet certain demographic, economic and political evolution. Our focus would be on the present-day Telangana lands which are mostly confined between the Godavari and Krishna River systems. It was a period of agrarian expansion with a corresponding increase in overall population. It was bound

Demographic growth, agrarian expansion & emergence of new states was a symbiotic phenomenon which was bound to witness the new capital cities.

to reflect in proliferation of states with new polities along with the development of new capital cities. First came the Satavahana imperium from about 187 BCE to about 300 CE with its capital at Pratishthana and possibly Kotilingala and Amaravathi. It was followed by Vakatakas who were conjoined with the Gupta Imperium in the north. From the mid sixth century CE till about 1000 CE, we witness Badami Chalukyas with their capital at Vatapi, followed by Rashtrakutas with their capital at Manyaketa. Finally, we see the re-emergence of Chalukyan dynasty known as western Chalukyas with their capital at Kalyana (near the present-day Bidar) from 950 CE onwards. They continued to rule well into twelfth century over the



present-day Telangana lands when in 1158 CE, they made way to Kakatiyas with their capital Anumkonda followed by Orugallu.

Demographic growth, agrarian expansion and emergence of new states was a symbiotic phenomenon which was bound to witness the new capital cities. The erstwhile capitals like Pratishtana and Kotilingala gave way to Vatapi, Manyakheta and Kalyana followed by Anumkonda and Orugallu. This phenomenon of decline of certain urban centres and emergence of new ones was in fact an all-India phenomenon. Xuanzavy suggests that during the first millennium cities like Kaushambi, Shravasti, Vaishali and Kapilvastu were in decline while the new ones like Thaneshwar, Varanasi and Kanyakubja were flourishing. Some ancient cities like Anichchhatra, Atranjikhhera, Rajghat and Chirand continued to be inhabited through this period of flux.

Merchants played an important role in the administrative organization of the Chalukyas. They occupied important civil and military posts such as those of ‘Mahamatya and Dandadhipati’.

“Many of the traders of western India were Jainas. Jaina texts such as the *Shatsthanaka prakarana* of Jineshvara Suri (11th century) laid down the ethical code that Jaina merchants should follow. Merchants of Gujarat made their mark not only as patrons of learning but also as writers of works of *kavya*, poetics, philosophy, and grammar. Hemachandra, who wrote several important Jaina texts as well as works on subjects such as grammar, metrics, and philosophy, was the son of a merchant of Dhandhuka. Gujarat merchants made generous grants to support the building of temples, wells, and tanks. The temples at Mount Abu and Girnar reflect such patronage. Inscriptions from this region also refer to tolls and taxes that were due from merchants being transferred to religious establishments for their maintenance and for the celebration of festivals.”⁹

Traders of the subcontinent, particularly from Peninsular India were part of a wider world of trade interactions which connected, Europe, Africa and various parts of Asia. The first half of the first millennium is known for a brisk trade between various kingdoms in peninsular India with the Roman Empire. Between the sixth and seventh centuries, there was the rise of Islam in Arabic and soon it

expanded to politically dominate northern Africa, Medelemanean, central Asia and Sind. Their territorial conquests gave them strategic control over the Indian oceanic trade. Arab traders emerged as lead players in trade along the overland as well as maritime routes which connected the peninsular India with west Asia onwards to Europe.

The texts of 9th century, such as *Ahbar As-Sin Wa'I Hind* describe the long maritime journeys made by Arab traders from parts of Oman to Quilona (Kollam) in Kerala and on to China via the port of (Kalah-bar probably located north of Singapore) and the Malacca straits. K.N.Chowdhuri (1985; 37-41) has shown that by 11th century, the Indian ocean trade was divided up into smaller segments. "The stretch from the Red Sea and Persian Gulf to Gujarat and Malabar; from the Indian coast to the Indonesian archipelago; and from Southeast Asia to East Asia, great trade emporia emerged at the junction of these three segments, providing merchants with cargo, shipping services, and protection. They included Aden, Hormuz, Cambay, Calicut, Satgaon, Malacca, Guangzhou, and Quanzhou. Chaudhuri highlights the importance of silk, porcelain, sandalwood, and black pepper in the Asian trade during those times. These commodities were exchanged for various items such as incense, horses, ivory, cotton textiles, and metal products. India's maritime networks were strongly oriented eastwards, towards China and East Asia. Sri Lanka was an important hub of Indian Ocean trade.

Ranbir Chakravarthi (2002:187-219) highlights the importance of mandapikas in the trade circuits of early medieval India. These were, for the most part, local centres of exchange that constituted an intermediate level between the small, periodic markets (hatta, hattika) and larger trade centres (pattana). The mandapikas were integrated into their rural hinterlands, and functioned as nodes of exchange of various types for edible staples and cash crops. They were also centres for the collection of commercial tolls and duties. They were analogous to the penta in the Deccan and the nagarams further south. Chakravarti also draws attention to the tradition of raja-shreshtis (royal merchants). Although the references to such merchants go back to the 4th/3rd century BCE, they are mentioned

more frequently in the early medieval period, especially in the Deccan and South India. These royal merchants may have procured luxury items and war animals for rulers. It is not certain whether they also collected revenue at trade centres on king's behalf. The analysis of the literary and epigraphic sources of western India (c.1000-1300 CE) by V.K.Jain (1990) indicates that traders of this region were carrying on business in luxury goods as well as in staples such as food grains, pulses, salt, oil, ghee, jaggery, coconut, betel leaf, are canut, spices, textiles, pottery, animals, fragrances (eg., sandalwood, camphor, musk, aloe, and saffron), ivory, and gold. Jain suggests that Indian traders of western India tended to confine their operations to coastal and internal trade, leaving the operations further afield to the Arabs and others. The main imports into western India included metals (both base and precious), silk, gems, spices, wine, frank incense, and horses. As far as exports are concerned, there was a change during the 11th–13th centuries. Before this, India's exports mainly comprised luxury goods such as fine textiles, silk, and spices. From the 11th century onwards, although these items remained important, there was a significant expansion in the range of exported items, which came to include sugar, cotton and flax cloth, buckram, tanned leather, leather goods, and weapons such as swords and spears. Hoards of gadahiya/gadhaiya coins of the 7th – 12th centuries have been found in various parts of western India, indicating the use of money as a medium of exchange. Traders also used hundikas or bills of exchange, which facilitated large-scale transactions without the use of money. Inscriptions often mention toll houses (shulka-mandapikas), and commercial taxes were an important source of state income".¹⁰

Commercial taxes were an important source of state income



The western coast of the peninsular India came to be increasingly dominated by the Arab traders from 7th century CE onwards. This was the time when Indian trade with the Southeast Asia and China also grew from the eastern coast of peninsular India. Various kingdoms like Chalukyas, Pallavas, Cholas and Pandyas extended their trade

arms to embrace all lands towards the east. Buddhism had embraced China and streams of Buddha monks were moving between India and China. Demand for Buddhist ritual items went up in China. On return journey, the China exported fine silk, porcelain, hides, vermilion, frits (such as pears and peaches), camphor, lacquer and mercury. There is also mention of metals like gold, silver and copper coming from India. The items exported from India to China included textiles, sandalwood, spices, sulphur, ivory, cinnabar, rose water, rhinoceros' horn and putchuk. The expanding trade between China and India was using both overland route as well as maritime route. Tamralipti in Bengal, Khalaka patna in Orissa and Coromandel coast abutting the Bay of Bengal were important trade emporia of those times.

Evolution of these trade routes over centuries saw migration of communities involved in trade. The earlier ones were Arabs and Persian traders who settled on the western coast of Gujarat, Konkan and Malabar. The Islamic expansion in the west Asia also witnessed the expulsion of Christians, Zoroastrain Persians (Parsis) and jews from their homelands. All of them, without exception arrived at

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trade
flourished
abroad;
but their
roots
remained
intact in
their birth
place**



Indian shores from time to time and made this country as their permanent home. However, the Chettiars on the coromandel coast fall in a unique category of their own. They were the frontline traders from the Tamil country who spread their wings beyond the Bay of Bengal to cover Burma, Thailand, Vietnam, Sri Lanka, Singapore, Malaysia and Indonesia. After trading in off share lands lasting full season, they returned loaded with wealth to invest in palatial homes, tanks and temples back at home. Their exotic homes flaunted of pillars crafted from Burma teak, marbles from Italy and mirrors from Germany. Their trade flourished abroad; but their roots remained intact in their Janma-bhoomi (the birth place).

13.5 POPULATION DYNAMICS IN THE FIRST MILLENNIUM

Roughly, twelve centuries separate the end of Mauryan Empire (187 BCE) and the year 1000 CE. The population trend during these centuries was basically a continuation of previous trends. In

particular, “there was migration into river valleys, where people slowly cleared forests, drained marshes, brought new land into cultivation and, little by little, populations expanded. Given the slow build-up of concentrated agricultural populations, new urban centres emerged only gradually, in the south and the east. The chief cities of what seem to have been rather modest urban networks became the foci of various ‘kingdoms’. And these entities tended to rise, struggle, and fall, with relatively little being known about them today. However, from time to time the people of these kingdoms must have experienced severe demographic crises and cutbacks.”¹¹

George Erdosy has compiled tentative estimate of the land area of several north Indian cities, mostly in the Ganges basin at the end of the first century CE. It is tabulated as follows:

Table – Estimated land areas and populations of various northern cities, c.100 CE¹²

Site	Approximate area in hectares	Population (000s) (central estimate & associated range)
Mathura	300	69 (36-102)
Vaisali	240	55 (28-82)
Kausambi	225	52 (27-77)
Ujjain	190	44 (22-65)
Ahicchatra	180	41 (22-61)
Sisupalgarh	144	33 (17-49)
Taxila-Sirsukh	137	32 (16-47)
Balirajgarh	70	16 (8-24)
Sringaverpur	40	9 (5-14)
Jhusi	30	7 (4-10)
Tilaura-kot	20	5 (2-7)
Bhita	19	4 (2-6)

Notes: The populations have been rounded to emphasize their crudeness. They are based on a central density assumption of 230 persons per hectare, while the ranges use figures of 120 and 340 respectively. The density assumption used by Erdosy is 160 persons per hectare, which may be more realistic, especially for smaller cities.

Source: For the land area estimates see Erdosy (1987: 1-2) & Dyson Tim (2018), *A Population History of India*, Oxford University Press, New Delhi, p 37.

What the table suggests is that around the year 100 CE, the large urban centres like Mathura, Vaisali, Kaushambi, Indraprastha, Rajgriha, Ayodhya and Kashi, may each have contained more than 50,000 people.

There was no central authority in the subcontinent during the period of these twelve centuries. The Gupta Empire (320CE–454CE) and Harshvardhana period (606CE–647CE) being partial exceptions didn't change the overall dynamic of political fragmentation across the subcontinent. In the peninsular India, we see Satavahanas followed by Vakataks and Vishnukundis controlling the lands between Godavari and Krishna River system. From 6th century CE onwards, we witness further fission between Vatapi Chalukyas and Vengi Chalukyas followed by Rashtrakutas. Yet again, western chalukyas and eastern

**The Krishna
Tungabhadra
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chalukyas appear on the horizon. In fact, none of the kingdoms, either in the northern areas beyond vindhyas or from the southern areas beyond Krishna River system held any sway in these Deccan lands. There were of course periodic battles for the control of fertile lands and the people along with resources that went with it. **The Krishna-Tungabhadra Doab had been at the centre of this periodic conflict, all too often.**

The peninsular kingdoms had trade links with the Roman world for about 500 years – ending in the 5th century CE. Roman coins have been unearthed in copious quantities across the peninsular India.

Malaria and Cholera were both established by the time of the Mauryan Empire and almost certainly, the same applied to tuberculosis. As the towns and cities of growing kingdoms got interconnected through trade and travel, these infections also were spread over these new populations. If a population hosts a certain percentage of these infections, a periodic epidemic of infectious diseases such as measles and pertussis became inevitable. Some diseases may also have entered the human population through greater contact with animals, both wild and domestic.

It is believed that before the fifth century CE, smallpox was either

not present in the subcontinent or, if it was present, it was only a mild disease. By about the eighth and ninth century, the smallpox was widespread and very lethal. The spread of irrigation probably assisted the transmission and dissemination of diseases, just as mixing of people due to invasions, trade and religious pilgrimages helped to spread infections such as dysentery and typhoid, both within the continent and further afield.

The 'plague of Justinian' had killed a substantial population of both middle east and southern Europe during 542–543CE. The crisis impacted Persia as well. Did this tragedy impact in Indian sub continental population also? There is no definitive answer. However, Hsuan Tsang, who visited India during C630–644 noted that the eastern kingdom of Kalinga had experienced a massive depopulation and that in the lapse of many years since that event, it has gradually become inhabited again, but still had scanty population. It certainly underscores the demographic crisis and population reductions during the mid-first millennium.

Population density was certainly not uniform within a kingdom or across kingdoms. Various river rallies were better populated, especially due to the location of its capital on the river banks. But, the periphery of a kingdom was thinly populated, especially the plateau and mountainous areas. Hsuan Tsang was interested in visiting Buddhist sites. His chronicle describes going through heavy jungle and other unpopulated land, particularly when he travelled outside the Ganga basin.

The Size of Population in 640 CE

Josiah Russell has estimated the size of the subcontinent's population near the end of Harsha's rule, in around 640CE. Including amendments, it comes to about 58 million. It is surprisingly close to the estimated population by McEredy and Johns who arrive at a figure of 53 million for around the same time. The population in around C250BCE was in the vicinity of 15–30 million. A tentative implication is that there had been considerable population growth during the intervening nine centuries from 250BCE to 650CE.

What was the population of the Indian subcontinent in 1000 CE? Angus Maddison has estimated it to be 75 million. The world population in 1000 CE has been estimated by Maddison to be 267.6 million. It implies that the Indian subcontinent was hosting about 28.02% of the global population in 1000 CE. By then, the new world of North America and South America were yet to be discovered and populated due to the global migration later.

**Present-day
Telangana
land
inhabited
7.5 lakh
people in
Satavahana
period,
increasing
to 14.5
lakhs in
Chalukyan
time & by
1000CE,
it hosted
18.75 lakhs**



What about the population inhabiting the lands constituting the present-day Telangana state? During 2014 CE, it constitutes around 3% of the present Indian population. Taking the south Asian sub continental countries into account, it may account about 2.5% of that population. It implies that the present-day Telangana lands during the beginning of Satavahana rule inhabited some 7.5 lakh people. It increased to around 14.5 lakhs by the time Vatapi Chalukyas arrived on the horizon. By around 1000 CE, it was hosting about 18.75 lakh people. It was the year when the seed of the future Kakatiya imperium was planted in Anumkonda during the regime of western Chalukyas.

13.6 PENINSULAR INDIA IN THE SECOND HALF OF THE FIRST MILLENNIUM

The political history of this period was marked by a proliferation and expansion of states in various parts of the subcontinent, especially in peninsular India. Land grants to Brahmanas played an important role in the legitimisation of political power and had a significant impact upon agrarian relations. There was agrarian expansion in various parts of the subcontinent coupled with technology of harvesting water for irrigation purposes. That brought rural prosperity along with social stratification amongst multiple occupational groups. In urban areas, crafts added value to raw materials available locally, trade guilds flourished and a symbiotic commercial relationship networked towns and cities in the peninsular India and lands afar reaching upto China and Southeast Asia. Devotional worship was a marked feature of religious thought and practice. Temple functioned not only

MAJOR DYNASTIES OF PENINSULAR INDIA (700 CE – 1300 CE)



Source: Singh Upender (2009), *A History of Ancient and Early Medieval India*, Pearson India Education Services Pvt.Ltd., Noida, p 556.

as a place of worship with its sacred space; it also provided a focus to the growing urban centres and political symbols. They attracted patronage of aspiring and diverse social groups. The cultural sphere was marked by production of a wide range of texts in Sanskrit along with evolution of several regional languages like Marathi, Telugu, Kannada and Malayalam.

Tamil, being the most ancient language also underwent considerable enrichment due to the sustained support from

Pallavas, Cholas and Pandyan rulers. There was an efflorescence and refinements in temple architecture and sculpture with the signature of distinct regional styles. The overall picture of peninsular India during this long period of six centuries presents a throbbing culture with pulsating regional variations.

Cultural Effervescence in Peninsular Kingdoms(600CE-1200CE)

The Peninsular India witnessed the rise and fall of several kingdoms during this vast stretch of six centuries. For the purpose of understanding, these kingdoms can be broadly divided into two groups segregated by the Krishna-Tungabhadra River system. The Chalukyas and Rashtrakutas were in control of territories north of Krishna-Tungabhadra river system. The Pallavas and Cholas were in control of territories between Krishna and Kaveri River system.

The cheras and pandyas were in control of the southernmost territories. The eastern chalukyas were in control of the eastern

Yet another important feature of these kingdoms is the simultaneity of their rise and fall

coast abutting the Bay of Bengal lying between the river Godavari and Penner. The shailodbhavas were in control of lands between Mahanadi and Godavari while Somavashis and Kalchuris were controlling the inlands covering the present-day Bastar and northern part of Chattisgarh state. The adjoining map broadly depicts these various kingdoms which evolved in peninsular India during that period.



Most of these kingdoms lasted quite long ranging from two centuries to five centuries. Yet another important feature of these kingdoms is the simultaneity of their rise and fall.

For example, Badami chalukyas and Pallavas were contemporaries during sixth to eighth centuries. Similarly, western chalukyas and cholas were contemporaries during ninth and eleventh centuries. Even, at the pan Indian level, we talk about the tripartite struggle among Rashtrakutas, Gurjana Pratiharas and Palas during 750CE to 950CE. Therefore, a synchronous evolution and decline of these kingdoms is another important feature of those times. Each of these kingdoms witnessed its own cultural effervescence, interspersed with a sprinkle of victories and defeats. It would be appropriate to

have a glimpse of the cultural achievements of various kingdoms during those times.

Let us take the period from 600CE–900CE first. It was marked by internecine warfare between the chalukyas of Badami, Pallavas of Kanchi and Pandyas of Madurai. All three rose to power in 6th century and by the mid eighth century, Badami chalukyas made way for Rashtrakutas of Manyakheta. The Badami rulers expanded their kingdom in all the directions which are described in an inscription at Aihole. These included the victories against the kadambas of Banarasi, Alupas and Gangas of Mysore. Expeditions were despatched into the eastern Deccan, south kosala and kalinga. One of their most important victories was against Harshavardhana, a north Indian ruler on the banks of Narmada River. Pulakesin successfully attacked the pallava kingdom, but was killed soon thereafter by a Pallava army that attacked and captured the capital, Badami. Pallavas control over Badami and southern areas of the Chalukyan empire continued for several years till mid eighth century when they were overwhelmed by the Rashtrakutas.

Overall Indian Scenario

The overall Indian scenario during the second half of the first millennium presented a multidimensional kaleidoscopic picture. If one looked from economic angle, it was dazzling and at the apex of global packing. From socio cultural perspective, it reflected a robust and diversified picture. However, from political angle, it was a period of endless fission leading to a fragmented, fragile and unstable polity. Bereft of any central control, the polity was quite indigenous without any strategic intervention from outside.

Economic dimension was most dazzling. There was no sector in its sweep across the world which was not flourishing in India then. Agriculture and its management, as we have already seen in the previous chapters was superb. Industries like textiles, metals and handicrafts were vigorous in domestic as well as exports market. A detailed description would be in order.

Frontiers of Knowledge

Frontiers of knowledge were not merely confined to agriculture. They swept across several fields like astronomy, mathematics, medicine, architecture and science and technology. In 476CE Aryabhata, born in Kerala migrated to Kusumapura in Magadha Empire, not far from the celebrated Nalanda University. He produced two works viz, Aryabhatiya and Aryabhata Siddantha. They include astronomy, trigonometry and arithmetic. Brahmagupta was a mathematical genius and an accomplished astronomer. He worked in Ujjain, the seat of King Bhoja who is famous for his famous Navratnas, which included celebrated

There works were translated by Islamic rulers in Baghdad into Arabic from where, they got transmitted to Europe

poet Kalidasa. Bhaskaracharya was another famous astronomer and mathematician. Their works were translated by Islamic rulers in Baghdad into Arabic from where, they got transmitted to Europe. Building construction, especially temple architecture was well known and fairly developed. Soil testing, making of bricks, mortar, assembling pillars, selecting stones were known in fine details. No wonder, an array of marvellous temples were built by the rulers across the subcontinent. The name of Vighata is well known in dealing with paediatrics and gynaecology. Of course, Charka in medicine and Sushruta in surgery had



already made their contribution before the millennium itself. In view of all these achievements, it's just no wonder that India was known as 'The Golden Bird' with rivers of 'milk and honey' flowing aplenty.

Industry And Trade

Textile manufacturing is one of India's oldest industries. Woolen hempen yarns, silk clothes, and sheep or goat wool clothing were all common. Weavers, tailors, and dyers are all referenced in current literature. According to Medhatithi, wives who are left unprovided for by their husbands should engage in such unobjectionable occupations as spinning (kartana) and lace making (jalika-kartana), while widows forced to fend for

themselves should engage in the same. Metalworking was also pursued with great success. Copper, brass, iron, lead, tin, silver, and, of course, gold is all on the list. In the Agni Purana, five sword-making centres are listed, along with the unique features of their goods. Ibn Haukal identifies the city of Debal in Sindh as a sword-making centre. "Having mined iron, copper, gold, silver, red ochre, etc., the King should have the various war weapons and agricultural implements prepared by expert ironsmiths, cutters, and goldsmiths in the villages and cities. He should distribute among the soldiers and also keep at the army headquarters for the protection of towns, palaces and fortresses, and the latter he should distribute among farmers and village people." Evidence of Persian wheel in a Hindu sculpture has come from Mandor, near Jodhpur in Rajasthan. It is ascribed to the eleventh century which is pre-Islamic. Therefore, the so-called Persian wheel is an Indian wheel and is not an import from Iran.

Trade was carried with the outside world by land and sea. Enterprising Arab merchants from southern Arabia, by this time, had built up extensive trade relations with India and with the countries in far east, as far as China. According to Mas'udi, ships from India along with those from Basra, Siraf and Oman, from Djawaga and Champa ascended the Khanfu River to reach Khanfu (Canton) at a distance of seven days journey from its junction with the sea. Reminiscences of voyages by daring Indian merchants to the rich lands of Southeast Asia are found aplenty in contemporary literature.

Books

Socrates was asked as to why he did not compose books. "I don't transfer knowledge from the living hearts of men to the dead hides of sheep" was his reply. In the early times of Islam, most of the writings used to be on hides. In fact, the treaty between the prophet and the Jews of Khaibar and his letter to Kisra was written on hides of sheep. The copies of the Koran were written on the hides of gazelles. Pharaohs knew the art of writing since ancient times. Papyrus, a plant grown in Egypt was beaten flat and used for writing purposes. Its advantage was that you could neither rub out nor change anything

on it, because, thereby it would be destroyed. In course of time, paper was first manufactured in China. Chinese prisoners introduced the fabrication of paper into Samarkand, and there upon, it was made in various places, so as to meet the ever-increasing demand.

About Hindus, Alberuni states, “The Hindus are not in the habit of writing on hides like the Greeks in ancient times.” He continues, “They have in the south of their country a slender tree like the date and cocoa nut palms, bearing edible fruits and leaves of the length of one yard, and as broad as three fingers, one put besides the other. They call these leaves tari, and write on them. They build a book of these leaves together by a cord on which they are arranged, the cord going through all the leaves by a hole in the middle of each.”

Splintered Polity

What was the political scenario like in Indian subcontinent during that phase? As fission was the dominant feature, the overall polity was fragmented, fragile and unstable. It infected almost all the kingdoms. Marauding Huns had destroyed the two great empires, the imperial Romans in Europe and the golden Guptas in northern India. Vakatakas in Deccan peninsula had strategically allied through matrimonial links with Guptas. Therefore, they too declined, along with Guptas by the middle of sixth century.

After Guptas, north India slipped into disintegration and political chaos, endless wars between petty kingdoms and a sudden rise and fall of numerous dynasties. This continued till 1000 CE. Except for a brief but dazzling reign of Harsha during the seventh century, there is no comparable ruler to talk about during this period. Contrary to north Indian experience, the peninsular kingdoms evolved slowly but lasted much longer over several centuries. Barring some temporary eclipses, Satavahanas had lasted for nearly five centuries. Western Satraps had lasted for as much. Then Chalukyas ruled Deccan lands for over six centuries. Pallavas sustained for over six centuries and down south, beyond Krishna River, Chola and Pandyan kingdoms sustained for as long as a thousand years.

Towards the close of eighth century CE, three power centres emerged in India, the Gujarat Pratiharas in the north, and Palas in the east

and Rashtrakutas in the Deccan. The struggle for supremacy over each other is known as tripartite struggle. Pratiharas were generally successful against Palas, but seldom so against Rashtrakutas. The ultimate aim of the struggle was to possess the coveted city of Kannauj, the symbol of sovereignty. Around the end of tenth century, the powers of Rashtrakutas, Palas and Pratiharas declined almost simultaneously. Kalyan Chalukyas tried to fill the power vacuum in Deccan but Kakatiyas got a foothold in central Deccan around Warangal by 1000 CE. Overtime, it got firmed up and by 1158 CE, it assumed imperial dimensions. Kakatiyas were to rule central Deccan with Telangana at its core for around three centuries. Yadavas were their contemporaries who ruled western Deccan from Deogiri.

Struggle for supremacy over each other is known as tripartite struggle.



Though polity was in flux, but socio religious environment presented a picture of peace, tranquillity and tolerance across kingdoms. Palas founded the famous Buddhist monastery at Vikramsila. It became second only to Nalanda in fame as a centre for higher learning. By then, the fame of Nalanda University had spread all over the world. Then, Chandelles of Bundelkhand built the famous Khajuraho temples. Sculpted erotica was as much exposed to public gaze as sunlight, because none was considered sinful. Vimala Vasahi temple at Mount Abu has survived till this day. But, Rashtrakutas ruling Deccan were a class apart. They not only patronized Saivism and Vaishnavism but also Jainism, Buddhism and even Islam. They gave India its most extraordinary monument, the great Kailasanatha temple at Ellora. It is carved out of a single outcrop of rock, and considered to be the largest sculpture in the world.

Sculpted erotica was as much exposed to public gaze as sunlight, because none was considered sinful



About their patronage to Islam, the Arab traveller Masudi testifies, “There is none among the rulers of Sindh and Hind who in his territory respects the Muslims like Raja Balhara (of the Rashtrakutas). He continues, “In his kingdom, Islam is honoured and protected. And for them, mosques and congregational

mosques, which are always full, have been built for offering prayers five times. The Rashtrakutas even had an Arab provincial Governor. Another Arab, Abdul Rahman served the Pandyas as their minister in charge of customs and this office was later occupied by his son and grandson. Arabs had their presence as merchants and shippers at the western sea ports of India from early historical times. Though Islamic arms had reached Sind in

They were not on friendly terms. Conflictual engagements kept them busy all too often

712 CE, but they were repulsed by successive rulers for almost five centuries thereafter. In the mean time, they continued their business as usual on commercial lines. They built their mosques at the Indian ports, practiced their religion, maintained their lifestyle and carried on their profitable trade without any tension or conflict. This was possible only in India and certainly not in Europe, during those times.



Social peace and religious tranquillity notwithstanding, the process of political fission continued unabated. The end of first millennium witnessed innumerable Rajput dynasties capturing bits and pieces of Indian sub-continent. Some of the dynasties who ruled and followed were Gahadavalas of Kanauj, Paramars of Malwa, Chandellas of Khajuraho, Chauhans of Ajmer, Kalachuris of Tripuri, Chalukyas of Deccan, Tomar of Delhi, Shahiyas of Punjab, Senas of Bengal, Ahoms of Assam and Kesaries followed by Gangas in Orissa. None of these rulers were inspired by a pan Indian vision. They were not on friendly terms. Conflictual engagements kept them busy all too often. They were too weak to defend themselves individually. And at the same time, they were too arrogant to come together to save themselves against the tidal waves of invasions which were to hit them from northwest frontier in not too distant a future. There was no Chandragupta Maurya on the horizon, nor a clever Chanakya with an all-India vision. Alexander had already shown the path to potential invaders some thirteen centuries ago.

And now, with the advent of second millennium, military adventurers, fired by the new faith of Islam were going to follow the

same route. In a couple of centuries by 1206 CE, they would get a political foot hold in the Indo gangetic belt around Delhi. However, the peninsular kingdoms protected by the Vindhyan barrier would remain safe for yet another century before the Islamic flag got planted in these lands by 1324 CE.



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14. From Eighth Century to Fourteenth Century

This chapter covers a period from the early 8th century CE to early 14th century CE covering a long span of around six centuries. The dominant theme relates to a sustained and successful repulsion of Islamic invasions, mounted immediately after the death of Hazarath Mohammad in 632 CE. Arab invasion into western India began with a naval expedition to Thana near the present-day Mumbai in 637 CE. It was followed up by expeditions to Brooch and Debal, a part of present-day Sind, without any decisive territorial gains. However, Mohammad Bin Kasim was able to get a foot hold in Sind in 712 CE. Emir Junaid mounted an attack in 738 CE but he was decisively defeated by a confederacy of Nag Bhat I and Bappa Rawal on the borders of modern-day Rajasthan and Sind. That was not the end of war. Bappa Rawal pushed the Arab wave westwards towards Makaran right up to Iran. On the return journey, he established the town of Rawalpindi, the present-day city of Pakistan. The impact was such as to keep the north western borders of Indian subcontinent free from invaders for the next two and a half centuries, till 1,000 CE. The second decisive victory was achieved by Suhail Dev over Salar Masud on 15th June 1,034 CE in Baharaich located in the present-day Uttar Pradesh. Salar Masud was the nephew of Mohammad Ghaznavi who had plundered and taken away the wealth from various temples of India by mounting repeated invasions from 1,000 CE till 1,027 CE. Salar Masud had accompanied his uncle and was naturally inspired to continue his mission as a 'Ghazi'. Suhail Dev not only defeated Masud's army; he was killed as well. The impact of Suhail Dev's decisive victory was such that north western borders of Indian subcontinent remained safe for the next one and a half century till 1,191 CE.

The third decisive victory was achieved by Naiki Devi, the great Chalukyan queen in the battle of Kayadara upon Mohammed Ghori in 1,178 CE. The impact of this victory was such that the invaders from Afghan lands abandoned the idea of penetrating the Indian subcontinent from the western frontier. They went back to the historic gap through Khyber Pass to penetrate Punjab and arrive

at the outskirts of Delhi. The victory of Prithviraj Chauhan in 1191CE, followed by his defeat and liquidation by Mohammed Ghori in 1192 CE laid the foundation of Islamic rule from 1206 CE onwards. It took yet another century or so for the Islamic wave to cross the Vindhyan Mountains and arrive and subjugate Peninsular India, which included the present-day Telangana land by 1323CE.

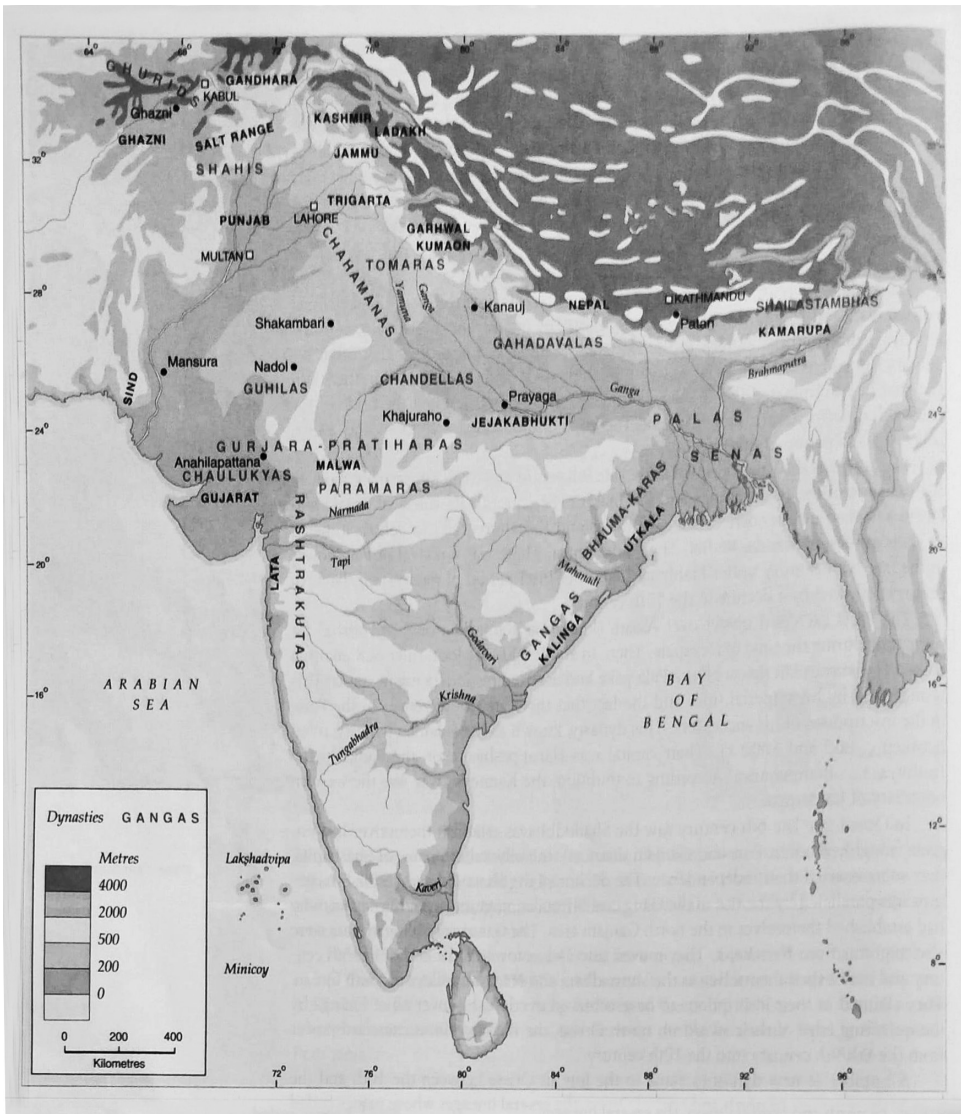
A long span of more than six centuries kept the bulk of Indian subcontinent free from any outside threat. The peaceful realm witnessed illustrious kingdoms across the subcontinent. We have covered only a few, namely Kashmir, Orissa, Telangana and far south. A brief note also explains the status of women in Indian society during those times. A cursory glimpse regarding maintenance of law and order and legal framework is also provided.

14.1 REPULSION OF ISLAMIC INVASIONS

Hazarat Mohammad, the founder of Islamic faith died in 632CE. Immediately thereafter, the Arab inroads into western India began with a naval expedition to Thana near Mumbai in 637CE. Abu Bakr, the first Caliph had died in 634CE and Mohammad Omar, the second Caliph was incharge of Islamic lands and their armed expeditions. The expedition to Thana was followed by expeditions to Broach and Dohal, a part of Sind. None of these expeditions resulted in any decisive territorial gains. However, the Arab armies under successive caliphs continued their protracted campaigns against the kingdoms of Zabul and Kabul in Afghanistan and they also launched several campaigns resulting in the conquest of Makran. They finally succeeded in getting a foothold in Sind, when Al-Hajjaj, the Governor of Iraq despatched an army under his nephew and son-in-law, Mohammad Bin Kasim. The capture of Debal was followed by the annexation of Nehrun (Hyderabad) and Simistan (Sehwan). In 712CE, there was a decisive victory over the Hindu king Dahir Shah at the fort of Roor, not far from the latter's capital Alor. Later on Alor, Brahmanabad and Multan were overtaken. All these events are recounted in the Chachnama, an early 13th century Persian translation of an old Arabic history of Bin Kasim's conquest of Sind. Later on, Junaid came to rule Sind and tried to

make inroads towards Malwa. That is where he was thwarted by a confederacy of Hindu rulers “namely Pratihara Nagabhata-I, Chalukya Pulakeshin-II and perhaps also by Yashovarman.”

REPULSION OF SUCCESSIVE ISLAMIC INVADERS (700 CE – 1100 CE)



Major Dynasties of Northern Central and Eastern India, C.700-1100 CE

Source: Singh Upender (2009), *A History of Ancient and Early Medieval India*, Pearson India Education Services Pvt.Ltd., Noida, p 566

Names of Islamic invaders, namely Mohammad Bin Kasim (712CE), Mahmud Ghaznavi (1000CE–1027CE) and Mohammad Ghori (1191CE–1192CE) spread over almost five long centuries are etched deep in the ancient Indian History books. Did these incursions leave any lasting impact upon those lands and people? What about their immediate successors? Did they continue to sustain the victory march of the Islamic flag? Or, were they comprehensively defeated by the confederacy of local rulers? A brief look at each one of these three invaders trajectory would be appropriate.

Nag Bhat-I and Bappa Rawal

These are rather unknown names in Indian history. But, their confederacy in 738 CE defeated the Arab forces commandeered by Emir Junaid decisively on the borders of the present-day Rajasthan and Sind. Let us see the turn of events from 700CE onwards. The Ummayed dynasty was ruling Arab lands with its capital at Damascus. Abdul Hajjaj, the Caliph was keen to spread his wings towards Sind and Hind. Several incursions were made which were thwarted by Dahir Shah, the Hindu ruler of Sind. But, in the year 712CE, Mohammad Bin Kasim, the nephew of Abdul Hajjaj defeated Dahir Shah and killed him. After his return to Damascus, the successive Caliphs continued to thrust deeper into Sind.

The Arab governor of Sindh, Emir Junaid, led a huge army of infantry and cavalry, totaling 50,000 to 60,000 men, in 738CE. When the Indian monarchs learned of the approaching invader, they resolved to form an alliance to combat the enemy. The Arab force was made up of Syrian and Iraqi cavalry, as well as troops from Sindh and mercenaries.

Nag Bhat I, king of the Gurjar Pratihara Empire, was chosen to lead the Indian alliance against the enemy, which included soldiers from the Rashtrakuta, Guhil, Chalukya, and Gurjar empires. This was a union of rulers from North and South India. Vikramaditya II was the Chalukya dynasty's king at the time, and Bappa Rawal of the Guhils.

Nag Bhat I commanded a force of 30,000-40,000 soldiers, chiefly cavalry and infantry. He was a superb military commander who

divided his cavalry into sections on the wings to organise his force. The battle-hardened soldiers were in the centre, with reserve cavalry and possibly war elephants in the rear as a backup.

The conflict took place on the modern-day borders of Rajasthan and Sindh. Along the route, the Arabs ravaged the countryside, demolishing numerous temples and forcibly converting many people to Islam. The Arabs made a sprint for the Hindu lines, expecting to split the army in half and reach the monarch directly. However, the infantry held out, and the ensuing melee allowed Nag Bhat-I's cavalry to outflank the Arab force. After being completely out-flanked, the Arab sides crumbled and absolute confusion reigned supreme.

The Arab cavalry was unable to withstand the Indian cavalry's impetuous attack, and a rout ensued. Emir Junaid tried everything he could to rally his troops and stop the rout, but the charge was too overwhelming. Junaid was murdered in the ensuing melee, and the Arab army dispersed without a leader.

The Arab armies were spread like hay by the hoofs of the Gurjar king's horses and his alliances, according to Suleiman, an Arab writer.

A battered Arab army crossed the Indus on the other side. They later built Mansurah, a new city in Sindh, and gave up all hopes of conquering India. The devastation was so severe that Arab chroniclers referred to the Gurjar ruler as the world's worst adversary of Islam in their histories.

Inscriptions commemorating this major victory have been discovered in a number of locations, including Gwalior, Madhya Pradesh. It's anyone's idea why this pivotal war was left out of Indian history."¹

That was not all. Bappa Rawal pushed the Arab wave westwards towards Makaran right upto Iran. From there, he turned towards Afghanistan and established forts under the control of Hindu kings at Ghazni, Kabul, Peshawar right upto Rawal Pindi (the city in the present-day Pakistan is named after the Hindu victor, Bappa Rawal). In 753CE, Bappa Rawal took sanyas (Renunciation) from the stately activities.

The impact and consolidation done by Bappa Rawal was quite profound. It kept the north western border of the Indian subcontinent free from invaders for the next two and a half centuries till 1000CE.

Suhaldev

Similarly, the name of Raja Suhaldev, the ruler of Shravasti who killed and defeated General Salar Masud on 15th June 1034 CE is also unknown in Indian history. Let us see the turn of events from 1000CE onwards. The second millennium for the Indian subcontinent is ominously inaugurated by the successive invasions of Mahmud Ghaznavi from 1000CE till 1027CE culminating in the cataclysmic plunder of the famous Shiva temple at Somanatha. After the death of Mahmud Ghaznavi, his mantle was shouldered by nephew, Salar Masud, who was yet another religious warrior (Ghazi).

Suhal Dev, ascended the throne at Shravasti in 1000CE. “The ancient city of Shravasti carries forward a legacy of several thousand years. King Shravasta from the Vedic period founded this kingdom. It was one of the major cities that flourished during the time of Gautam Buddha. It was the capital of the Kosala kingdom that drew its lineage from Shri Ram. Shravasti was the place where Buddha first came, at the invitation of Sudatta, a rich merchant, who was also known as Anathapindika. Sudatta bought a piece of land from Jeta, the then king of Shravasti, for building a vihara. The king donated valuable wood for the construction of the vihara; hence the place where the vihara was built was also called Jetavana Vihara. It was here where Buddha spent the longest period of time. Over time, Buddhist followers from Myanmar, Thailand, Sri Lanka, South Korea and other countries donated for the construction of stupas, viharas and monasteries in Shravasti. Today, Shravasti is an important Buddhist pilgrimage centre and home to several ancient Buddhist monuments.

Raja Suhaldev ruled the kingdom of Shravasti wisely. He was the emperor of the region with several small kingdoms, each under

It kept the North western border of the Indian subcontinent free from invaders for the next two and a half centuries till 1000 CE



a chief under his emperorship. He was known far and wide for his skills in warfare and leading armies to victory. Like Krishn's Mathura, Shrivasthi and neighbouring kingdoms were home to great

**Suhaldev
initiated
measures
for the
protection
of cows**



number of cows. Suhaldev initiated measures for the protection of cows. He was a patron of saints and a staunch follower of Vedic rituals.

Ghazi Saiyyad Salar Masud, also known as Ghazi Miyan, was the nephew of Sultan Mahmud of Ghazni. During Mahmud's conquest of parts of India in the early 11th century, Salar Masud accompanied him during the expeditions. He was with Sultan Mahmud when the latter destroyed the Somnath temple, looted the temple treasury, and killed hundreds and thousands of Hindus.

Ghaznavid campaigns in Indian subcontinent were a success in Multan, Delhi and Meerut under the leadership of Salar Masud. To further expand the Ghaznavid influence in India, Masud set up his headquarters at Satrikh in the Barabanki area of Uttar Pradesh. From here he dispatched separate forces to capture Bahraich, Gopamau and Benares. The Bahraich expedition was led by Salar Masud's father Salar Sahu, who died at Satrikh in 1032CE. Salar Masud then himself led the Bahraich expedition in 1033CE.

Several kingdoms shared their local boundaries with Bahraich. Salar Masud camped at Bahraich. Who isn't familiar with Sultan Mahmud's loot and plunder of the Indian cities and razing of temples to the ground? Mahmud and his followers took women as slaves, raped them, destroyed temples, converted many to Islam, killed those who refused to convert, and their list of atrocities goes on. Mulla Muhammad Ghaznavi in his book *Tawarikh-i-Mahmudi* wrote about Sultan Mahmud, "And in the work of religious war, he had planted the banners of Islam and had pulled up the roots of tyrants." Salar Masud exactly followed Sultan Mahmud's footsteps in all of his military expeditions in India.

With an aim to subjugate all of the kingdoms in and around Bahraich, Salar Masud started encountering several rulers one by one. A year passed by, but he was not able to vanquish all of the rulers.

At Bahraich, he saw the ruins of a Hindu temple dedicated to Surya Dev with a sacred reservoir adjacent to it. The site was once an ashram where Balark Rishi lived. Masud decided to construct a mosque at the site after his military expedition of Bahraich was complete. According to an account by William Charles Bennet, Salar Masud wished to destroy the shrine and reside there thenceforth.

Meanwhile, Raja Suhaldev invited the rulers of his neighboring kingdoms to his court. The defeated rulers as well as those who were ready to face Salar Masud in battle assembled at Shravasti. As decided, the combined forces of the Hindu rulers led by Suhaldev were to face the Ghaznavid forces at Chittora near Bahraich. Suhaldev strategized on the military formations and other tactics so as to defeat Salar Masud and his forces. The Shravasti king's army consisted of not only infantry but also cavalry, war horses and elephants.

Salar Masud came to know about the plan of Suhaldev. Both parties had entrusted spies to know about the ongoing plans. Masud was well aware that Suhaldev revered cows. Hence, he hatched a plan. He decided to put a huge herd of cows in front of the Hindu army in the battlefield. And he knew that Suhaldev would not harm cows and hence he and his army would retreat. And then as they would retreat, the Ghaznavid forces would attack and subjugate them. Masud's men captured huge number of cows from the area. Suhaldev came to know about this. A few hours in the night before the great battle was to start, the Raja's men quietly released all the cows.

A fierce battle took place between the combined forces of Suhaldev and Salar Masud at Chiottra near Bahraich on 15th June 1034CE. The Ghaznavid forces made a dash at the center of the Hindu army lines hoping to dissect the army into two and directly reaching for the king. But, the Hindu infantry held on and the resulting melee gave enough time to the cavalry of Suhaldev to outflank the Ghaznavid army. Once out flanked, what followed was a total carnage as Ghaznavid flanks disintegrated. Confusion prevailed amongst the Mohammedan forces. Salar Masud's army could not

withstand the furious charge of the Hindu army. There were major casualties from Masud's side.

Suhaldev himself marched ahead in the battlefield and attacked Salar Masud. The Ghaznavid general was no match to the fierce Hindu king who struck terror amid the Muslim army. In the ensuing fight between the two, Salar Masud was heavily wounded. Before he breathed his last, he asked his followers to bury him near the sacred reservoir in the Surya Dev temple premise.

Hindu kings have a track record of following the rules of Dharma in

It kept the north western borders of the Indian subcontinent free from invaders for at least next one and a half century till 1191 CE

warfare. They took care of the injured at the end of the day. They never interfered into the religious affairs of the followers of other religion. So did Suhaldev. Salar Masud was allowed to be buried at Bahraich. More than 200 years later, Sultan Firuz Shah Tughlaq turned it into a dargah, which emerged as an important pilgrimage site for the Muslims.”²

The impact of the decisive victory of Raja Suhaldev upon Salar Masud, the successor to Mahmud Ghaznavi in 1034 CE was quite profound. It kept the north western borders of the Indian subcontinent free from invaders for at least next one and a half century till 1191CE.



Naiki Devi

Just like Nag Bhat-I, Bappa Rawal and Suhal Dev, the name of Naiki Devi is rather unknown in Indian history. She was the great Chalukyan queen from Gujrat who defeated Mohammad Ghori in 1178 CE. A brief description would be appropriate.

Naiki Devi was the daughter of Paramardin, the Kadamba chief of Goa. Naiki Devi was married to king Ajayapala of Gujarat. He belonged to the Chalukya (Solanki) dynasty and ascended the throne of Gujarat in 1171 CE. The Chalukyan kingdom included parts of Gujarat and Rajasthan with capital at Anahilavada, modern Patan. This dynasty was founded by Mularaja in 940 CE after supplanting Samantsimha, the last ruler of the Chapotkata dynasty. The Chalukyas here were also known as Solankis and Agnivanshi Rajputs.

Ajayapala's rule was short lived. He died in 1175CE. His elder son Mularaja II became his successor. But as he was a minor, his mother Naiki Devi acted as the Queen Regent. She looked after the complete administration and military affairs of the kingdom. Besides, she herself was well versed in the art of warfare to lead possible future battles.

During this time, Mu'izz ad-Din Muhammad of Ghor, also called Mohammad Ghori, was the Sultan of the Ghurid Empire in Afghanistan. The Ghurids were originally Buddhists but converted to Islam after Mahmud of Ghazni conquered Ghor in 1011CE. Mohammad Ghori ruled Ghor along with his brother Ghiyath ad-Din Muhammad.³ In the year 1173CE, he subdued Ghaznavids in Afghanistan. In 1175CE, he captured Multan and Uch forts. His next target was to subdue Anhilwara Patan, the prosperous capital city in the present-day Gujarat. In the 8th century CE, Vanaraj from Choptokata dynasty had established Anhilwara Patan as the capital of Chalukyas (also known as Solankis). An American historian Tertius Chandler has opined that this Citadel in 1000BCE was the tenth largest city in the world, with a population of around 1 lakh. Mohammad Ghori had heard a lot about the wealth and riches of India, and he was reassured that the widow mother Naiki Devi and her rather too young son as a ruler would not be able to resist his armed fury.

Citadel in 1000 BCE was the tenth largest city in the world, with a population of around 1 lakh



With base at Multan, Mohammad Ghori marched with a huge army to Uch, the southern part of Pakistan's Punjab province. From there, the Muslim army crossed the desert and started marching towards Anhilwara, the Chalukyan capital in 1178CE. 13th century Persian historian Minhaj-i-Siraj wrote about Muhammad of Ghor advancing towards Anahilavada, the Chalukya capital through the routes of Uchchha and Multan. Ghori did learn about Gujarat being ruled by a boy. Little did he know that the Chalukyan army would offer stiff resistance under the leadership of the boy's mother, Naiki Devi!

Meanwhile, Naiki Devi heard from her spies about the advancing Muslim army towards her capital. She also heard that their forces

were huge⁴. Her request for help from Prithviraj Chauhan and other neighbouring rulers was not met with enthusiasm. But she got assistance from smaller kingdoms, namely Jalor Chahamana ruler Kirtipala, Arbuda Paramara ruler Dharavarsha and Naddula Chahamana ruler Kelhanadeva.

The combined forces at Naiki Devi's command were, numerically speaking no match for Ghori's army. That is where her strategic thinking in strategic formation came into play. She chose a rather difficult and inaccessible forest terrain in Gadaraghatta territory. Kasaharada village near Mount Abu in the present day Sirohi district was chosen as the place for confrontation. Before joining the battle, the Ghori's army was softened by the unfamiliar hilly terrain surrounded by thick jungles before arriving at Kasaharada.

Mohammad Ghori from his camp sent a messenger to the court of the Chalukyan queen with a condition that he would not attack, loot and plunder Gujarat if the queen herself surrendered to Ghori along with her sons and handed over to him all of the gold and women of the Chalukyan kingdom. The queen pretended to agree. Mohammad Ghori waited in his camp for the arrival of the queen, her sons, gold and women. Naiki Devi approached towards the camp on a horse with her minor son Mularaja II tied to her lap. Approaching hoofs alerted the Ghurid Sultan. He was overjoyed that the queen easily accepted surrender and accepted his conditions. Soon, sound of more hoofs followed and then it was unending.

The combined forces of the Chalukyan army led by Naiki Devi surrounded the camp of Mohammad Ghori. A fierce battle ensued between the two forces. Soon the Battle of Kayadara witnessed major casualties from Ghori's army. Swords and spears clashed amid war cries. Naiki Devi tore into the enemy forces killing the enemy soldiers on either side with her sword. As she fought, her son watched the fast-dwindling enemy forces from her lap! Firishta, a Persian historian from the 16th century mentions how the ruler of Gujarat defeated the Muslim army "with great slaughter". Ghori's army was badly defeated. The Sultan and the remaining Muslim army fled from the battlefield. Chalukyan army chased them out of the territories of Gujarat.

Besides Firishta, Minhaj-i-Siraj also wrote how the huge Chaulukya army with elephants defeated Ghori. In his words, “the army of Islam was defeated and put to rout”. 16th century Muslim historian Badauni also mentions Ghori’s defeat. He also mentions how the ‘remnant of the defeated army’ returned to Ghazni out of great difficulty. Mohammad Ghori was so badly defeated in this expedition that he did not think about attacking India until 1191! Never again did he attack Gujarat in his life!⁵

Naiki Devi’s victory is chronicled in several documents. A Gujarati poet Someshwara has sung the peans of Bala Mularaja (the child king) whose army defeated Turks and Mlechha (foreigners) army had to retreat. Another poet, Udayprabha in his Sukrita Keerti Kallolini wrote that how Naiki Devi’s army defeated Mleccha’s army who were covered with a defensive gear covering them from head to toe. A stone plaque during Chalukyan times mentions as to how a woman during Bala Mularaj’s time could defeat invaders. A Persian historian, Minhaj-e-Shiraj in thirteenth century mentions about the Chalukyan victory. He mentions that the Ghor of Muhammad proceeded to Naharwala (Anhilwara Patan) via Ucca and Multan. Naharwala was a small kingdom but the battle was fought with a large army with the help of elephants. The army of Islam was defeated and the invader has to retreat without any achievement.

In 16th century, Badauni has also mentioned about the defeat of the invader, adding that they could return to their motherland with great difficulty. However, the battle of Kasahrada is chronicled in details in Jain chronicles of Merutunga. It is mentioned that how Naiki Devi defeated Mlecchas in Gadadhad. Her indefatigable courage and determination have sunk deep in the soil of Anhilwara Patan.

Apart from their proven valour in the battle field, our ancestors during Chalukyan times were constructing unique water storage structures which had survived the millennium. The place also boasts of ‘Ranika Bav’ (the queen’s well). It is a subterranean water storage system with seven storied deep construction during Chalukyan times (Solanki). It has 500 plus statues and more than 1000 tablets on its walls.

Impact of Naiki Devi's victory over Ghory was such that invaders from Afghan lands gave up the idea of penetrating the Indian subcontinent



The impact of the victory of Naiki Devi upon Mohammad Ghori was such that the invaders from Afghan lands abandoned the idea of penetrating the Indian subcontinent from the western frontier. They went back to the historic gap through Khybar pass to penetrate Punjab and arrive at the outskirts of Delhi. The victory of Prithivi Raj Chauhan in 1191 CE, followed by his fatal defeat and liquidation by Mohammad Ghori in 1192 CE in Tarain (near Karnal in the present-day Haryana) laid the foundation of Islamic rule in the Indian subcontinent from 1206 CE onwards.

14.2 KASHMIR

Despite the fact that Kalhana begins the history of Kashmir with Gonanda I in the 7th century of the Kali Era, the accurate chronology is established during the Karkota Dynasty. Its most famous ruler, Lalitaditya Muktapida (697-733CE), is said to have expanded the Karkota Empire from the Caspian Sea's edge in the north-west to Pragajyotisha (Assam) in the east and the Rashtrakutas' (Deccan) border in the south. He was followed by Vignaditya, whose reign witnessed Arab raids into Kashmir. Jayapida was one of the most powerful king who claimed to have defeated the kings of Gauda and Kanyakubja. The Karakota dynasty came to an end in 855-856CE.

The Utpala and Lohara dynasties succeeded the Karkotas and ruled till 1315CE. The Utpala dynasty was founded by Avantivarman. He took major steps to prevent the flood waters of Mahapadma (Wullur) lake from damaging crops. Another ruler Shankara-varman led military campaigns into the Punjab and Gujarat. Later years of this dynasty were marked by political intrigues. Power changed hands frequently and successors of the Utpalas included kings such as Yashaskara and Parvagupta.

The Karkota, Utpala, and Lahara dynasties reigned over a period of remarkable renaissance in art, literature, science, mathematics, spirituality, and logic, as well as overall material progress.

Abhinavagupta, the greatest polymath, shines as Kashmir's brightest gem, having lived there in the 10th and 11th centuries. He is also recognised with bringing Kashmir Shaivism to the pinnacle of its practise. He was also a brilliant scholar in a variety of subjects.

Changes in kings and a great deal of instability characterise the period between 1315 and 1339CE. Suhadeva, the Lohara dynasty's last stable king, reigned till 1320CE. He, like many other monarchs throughout India's history, made the same error. Shah Mir from Swat Valley (although other stories contradict this origin), the Chaks from Dardistan near Gilgit, and Bulbul Shah and Rinchan from Ladakh all received sanctuary and positions from him. The Kashmir Valley was thrown into disarray after a Turkish invasion in 1320 and the death of Suhadeva. The Valley was brought to its knees by scheming aliens. For a time, Queen Kota Rani, the widow of Suhadeva's brother, Udayanadeva, fought back. Her death has been described in a variety of ways. She married Shah Mir and died on the wedding night, according to the common storey among Kashmiri Pandits. It's unclear whether she was assassinated by Shah Mir or committed suicide. In 1339CE, Shah Mir ascended to the throne.⁶

Kota Rani married Shah Mir and died on the wedding night, as per the story told among Kashmiri Pandits



The political history of Kashmir indicates the important role played by powerful queens. The best known is Didda, who dominated Kashmir politics in the second half of the 10th century. The Rajatarangini description of the 12th century history of Kashmir mentions three women rulers, Yashovati of the Gonanda dynasty, Suganda of the Utpala dynasty and Didda of the Yashaskara dynasty. Didda is a respectful term for an elder sister, still used by Kashmiri pundits. She had the longest and most powerful stint exercising political power for almost 50 years. Kalhana, the author Rajatarangini, refers to Didda founding towns, temples and monasteries. She is also credited with repairing many temples dedicated to the Gods. The same

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author, also disapproved of her as deficient in moral character, merciless by nature and as one who was easily influenced by others.

The same author also reflects the direct and indirect influence of courtesans and women of low birth in the harem. All in all, women were sovereign rulers as well as power behind the throne. At times, they also played an important role in founding as well as destruction of lineages.



14.3 EASTERN INDIA – ORISSA

In the late 6th century CE, Shailodbhavas established themselves in Kongoda (roughly modern Puri and Ganjam districts). By the 8th century CE, they declined and Gangas of shvetaka came to occupy north Ganjam area. Similarly, Gangas of Kalinga nagara established themselves in the Vamsadhara and Nagavali valley in south Orissa. Both the Gangas of shvetaka and kalinga nagara were migrants from Karnataka.

The rapid expansion of the Ganga kingdom began in the 10th century CE and culminated in the unification of north and south Orissa, with the river Mahanadi bisecting the two territories. The Ganga king Ananthavarman Chodaganga was responsible for displacing Somavamshi ruler in lower Orissa in the early 12th century. The military expansion of the imperial Gangas may have been assisted by their strategic alliance with the Cholas. The mother and one of the queens of Ananthavarman was Chola princess. This did not, however rule out military conflict – Kulottunga-I twice sent armies against Kalinga. Similarly, Ananthavarman made inroads into Bengal as well.

Genealogical accounts throw some light on the origins of certain lineages. Shailodbhavas were of tribal origin. Somavamshis and imperial Gangas used gotra designations, indicating claims to Brahmana status. There is also evidence of migration of lineages. Ganga lineages were migrants from Karnataka. The somavamshis came from south kosala (Chattisgarh and western Orissa).

“Regarding their worship, Shailodbhavas were solid worshippers of Shiva. Most of their inscriptions have the Shiva bull motif on the

seal; many of them begin with an invocation to Shiva and describe the king as Parama mahadira. Shailodbhavas inscriptions also eulogize the Mahendra Mountain, referring to it as a Kula-giri ie, a tutelary mountain.”

“The Somavamshis and imperial gangas anchored themselves in the epic-puranic tradition. The Somavamshis claimed to belong to the lunar dynasty. The Vizagapatnam plates of the Ganga king Ananthavarman Chodaganga give the most grandiose account of all, tracing the ancestry of the dynasty back to the god Vishnu.”⁷

Narsimha Deva – The Aggressive Kalinga Ruler

Narsimha deva I of Orissa invaded and defeated Tughan Khan, the Nawab of Bengal in 1244CE at Lakhnor fort, near Lakhnvati. A brief summary of events are as follows:

Narsimha deva was the son of Kasturi devi and Ananga Bhimadeva III. This Ganga dynasty was founded in 11th century by Ananthavarman Chadaganga deva whose mother Rajasundari was the daughter of Chola king Vira Rajendra Chola. Initially, territories of the dynasty were confined to southern part of Kalinga but subsequently, the empire expanded and by the time Narsimha deva I ascended the throne in 1238CE, it extended from the river Bhagirathi ganga in the north upto Gautami Ganga or the river Godavari in the south. Narasimha deva was also known as Lingala Narsimha deva because of some of his bodily deformities.

Malik Fazzuddin tughril-i-Tughan khan was the Nawab of Bengal and he established his supremacy by ascending the throne of Bengal in 1233CE. Even prior to this, the Bengal Nawabs were making repeated attempts to occupy Orissa. Narasimha deva-I was well aware of these motives and Maneourness of the neighboring Afghan rulers. Realising the ever-present threat, he strengthened his military power and decided to attack Nawabs of Bengal and create terror in their minds. The strategy was not only to check their immediate advances, but eradicate any idea in their minds to attack Orissa in future.

In 1243CE, Narasimha deva-I invaded Bengal with his large army and advanced upto Lakhnor and seized Katasin fort. The Nawab's army, stationed at Lakhnvati advanced upto Katasin. Tughan

Khan, the Nawab himself was leading it and on 15th April 1244, he found out that there is no resistance. Ganga army has retreated as a tactics and concealed themselves in the thick jungles and bushes surrounding the fort and remained in hiding.

Finding no visible resistance, Tughan Khan's army retired for a midday meal and started relaxing. From nowhere, the warriors of Ganga army sprung in all the directions and attacked the relaxing Muslim army. Taken by surprise and unprepared for the battle at that moment. The Muslim army could not offer any stiff resistance. Persian historian Minhaj-i-Shiraj mentions in his book *Tabaghat-i-Naistri* as to how a section of the Ganga forces made a sortie from the directions of the fort and simultaneously, another detachment of two hundred footman and fifty, horsemen stole their way from behind the cane jungle and fell upon the Muslim forces. This was followed by heavy casualties from Tughan Khan's army.

Tughan Khan lost his nerve and could not continue with the battle. Most of his men were killed. Defeated, he fled to Kakhnavati, his capital. The Ganga army of Narsimha deva pursued their adversaries for beyond the fort of Katasin. With this, the Ganga dynasty extended their territories upto the river Damodar in the north.

In 1245CE, Narsimha deva attacked Lakhnor, another principality of the Nawab of Bengal. Fakhar-ul-Mulk Karim-ud-din Iqbal was the commander of the fort of Lakhnor. The Ganga army easily defeated then and captured the fort. Then they advanced upto Lakhnavati fort, laid siege to it at the base and threatened the Nawab.

Meanwhile, Tughan Khan sought the help from Delhi Sultans. It arrived as the Nawab of Kara, Manikpur and Nawab of Oudh advanced towards Lakhnavati. On April 30, 1244 CE, the massive forces arrived and the Ganga army vacated the siege of the Lakhnavati fort and retreated.

Tughan Khan was expecting that the two forces together would pursue the Ganga army out of his territories in Bengal. That did not happen. The duo, had developed distrust in Tughan Khan and seized Lakhnavati instead. Tughan Khan was forced to flee from his kingdom. Thus, Narsimha deva's strategy not only shattered the

dream of Tughan Khan but also snatched back the territories in the present-day Bengal and Bihar from the Turkic's Afghans to establish Hindu supremacy.

Narsimha deva built the famous Konark Temple dedicated to Suryadeva in Orissa. He erected a victory pillar designed as a war chariot. The structure commemorates the victories in the battles against the Muslims.

**Narsimha
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14.4 THE FAR SOUTH

“The term ‘Far South’ as understood in geo-historic terms refers to the territories of the peninsular India lying due south of the river Pennar. The other important rivers are Kaveri and Vaigai. Along these river systems, the political history was dominated by Pallavas, Cholas, Pandyas and Cheras.

Pallavas were associated with Tondaimandalam, the land between the Pennar and Vellar rivers. They rose to power in the last quarter of 6th century when Simhavishnu asserted his authority by conquering lands upto the Kaveri. Mahendravarman (590CE–630CE) succeeded him and came in conflict with Badami Chalukyas. The latter’s army led by Pulakeshin-II reached perilously close to the Pallava capital Kanchipuram and annexed the northern parts of that kingdom. The subsequent ruler Narsimhavarman-I Mahamalla (630CE–608CE) managed to settle scores by winning several victories against Chalukyas, climaxing in capturing their capital, Badami. The Pallava king claim to have defeated the Cholas, Cheras and Kalabhras. Two naval expeditions to help Sri Lanka ruler Manavarma were successful.

The Pallava–Chalukya conflict continued during the subsequent decades interspersed with some peaceful interludes. The Pallavas also came in conflict with the Pandyas to the south and Rashtrakutas to the north. In the early 9th century, the Rashtrakuta Govinda-III invaded Kanchi during the reign of Pallava Dantivarman. The latter’s son Nandivarman-III managed to defeat the Pandyas. The last known imperial Pallava king was Aparajita. Aided by the western Ganga and Chola allies, he defeated the Pandyas at a battle at Shripurambiam.

Finally, in C 893, the Pallavas were overthrown by the Chola king Aditya-I, and thereafter, control over Tondaimandalam passed into the hands of the Cholas.

A look at the background of Cholas would be appropriate. Vijaiyalaya was the founder of the dynasty. He established his power in the area around Uraiyur, captured Thanjore and extended his kingdom along the lower Kaveri. Vijaiyalaya accepted the overlordship of Pallavas. Aditya-I (871CE–9007CE), the successor of Vijaiyalaya expanded the Chola kingdom by entering in a dynamic strategic alliance. First, he joined hands with Pallavas to defeat the Pandyas in the battle at Shri Purambiam and obtained some territories near Tanjore. He then went on to defeat and kill his Pallava overlord Aparajita in 893 CE. Flush with the victory and control over Tondaimandalam, he conquered Kongudisha (corresponding roughly to Coimbatore and Salem districts) from the Pandyas. He also claims to have captured Talakkad, capital of the western Gangas. Aditya I entered a matrimonial alliance with Pallavas by marrying a Pallava princess.

Parantaka (907CE–953CE) succeeded Aditya-I and by striking strategic alliances with western Gangas, Kodumbalur chiefs and the ruler of Kerala. He conquered Madurai, the Pandyan capital. He defeated the combined armies of Pandyas and the king of Sri Lanka at the battle of Vellur. These victories were however overshadowed by defeats at the hands of Rashtrakutas in 949 CE. The army of Krishna III defeated the Chola army at the battle of Takkolam. The Cholas gradually recovered their power, during reign of kings such as Sundar Chola Parantaka II (957CE–973CE). By the time Uttama Chola came to the throne in 973 CE, most of Tondaimandalam had been retrieved from the Rashtrakutas.

The peak of Chola power was reached during the reign of Anumolivarman, who assumed the title of Raja Raja on his accession. From the Raja Raja's reign (985CE–1014CE) all the way upto 13th century, the Cholas remained the major political power in the deep south of peninsular India. A succession of military campaigns broke the confederacy of the Pandyas, rulers

of Kerala and Sri Lanka. A successful naval expedition to Sri Lanka led to the destruction of Anuradhapuram and a Chola province was established in the northern parts of the Island. Raja Raja also achieved victories against the western Chalukyas and Rashtrakutas. The Maldives was conquered towards the end of his reign.

The juggernaut of Chola's victories continued to roll under Raja Raja's son and successor Rajendra-I. Achieving all round victories against Sri Lanka, Pandyas, Kerala and the western Chalukyas, he built a new capital at Gangai-Kondacholapuram. In 1025CE, a successful naval expedition subjugated the kingdom of Srivijaya in the Malay peninsula. It had great strategic importance in Indian ocean trade. Military conflicts continued and Cholas held their sway till Koluttunga (1070CE–1122CE). His long reign saw the despatch of an embassy of merchants to China while trade with Malay continued to flourish. Although his long reign was relatively peaceful, during the second half, the kingdom faced hostility from the Chalukyas and Hoysalas. There was some recovery during the rule of Vikram Chola who managed to re-establish Chola control over Vengi. Later rulers like Kulottunga-II, Raja Raja-II and Kulottunga-III came and went and eventually the Cholas dynasty came to an end in the 13th century.

The Pandya dynasty with its epicentre at Madurai on the banks of the river Vaigai (meaning a river with swift flow of water) has left its imprint from 6th century CE to 10th century CE. The first two rulers were Kadungon (560CE–590CE) and his son Maravarman Avanishulamani (590CE–620CE). The latter is credited with ending Kolabhra rule in the area and reviving Pandya power. They were involved in internecine wars with the Pallavas and other contemporary powers like Cholas. King Rajasimha-I (735CE–765CE) had the epithet Pallava Bhanjara (breaker of the Pallavas). The empire expanded during his reign as well as during his successors Jatila tarantaka Nedun jadaiyan (756CE–815CE) and Srivallabha (815CE–862CE). The Pandyas were completely overpowered by the Cholas in the 10th century.

On the south western strip along Kerala coast, the Cheras continued to hold sway in spite of the fact that several Pallava, Pandya, Chalukya and Rashtrakuta rulers claimed military successes in the area. One of the last king of the line was Cheruman Perumal about whom legends abound. Different sources describe him as a Jaina, Christian, Shaiva or even a Muslim. It is possible that he renounced the world, dividing his kingdom among his kinsmen or vassals. His reign ended in the early 9th century CE.

Rulers of all these dynasties be it Pallavas, Cholas, Pandyas or Cheras connected themselves with the epic-puranic tradition. They also legitimized their power through the performance of sacrifices such as the Ashvamedha and Rajasuya. The inscriptions also mention rituals such as Hiranyagarbha and Talapurusha. The gifting of lands to brahmanas and in addition, gifting various other things to temples were other important activities linked to the legitimation of royal power.

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On linguistic front, the north Indian tradition of Sanskrit coexisted with the indigenous Tamil tradition. For example, kings of Pandya dynasty claim to have had their twin fish emblem carried on the peak of the Himalayas or mount meru. They also claim to have been anointed and taught Tamil by the sage Agastya, and as having built the great city of Madurai and establishing the sangam there. Yet another aspect of linguistic coexistence is evident in the copper plates.

In Pandya royal grants, the Sanskrit is followed by the Tamil. The two portions are not identical, the Tamil are being sometimes more detailed. In Chola and Pallava inscriptions, the royal prashasti is usually in Sanskrit and the rest is in Tamil.

Almost all the rulers of each one of the dynasties in far south during 600CE to 1300CE were great builders of massive temples and large irrigation canal networks. Each one of the capital cities of those rulers, be it Pallava's Kanchipuram, Chola's Thanjur and Thirichirapalli or Pandya's Madurai abound in huge and numerous

temple complexes. In fact, a temple was the fulcrum around which grew a city. Temple complex was like a soul to the broader body of a city. Then, there is the tradition of constructing massive irrigation works across the river Kaveri, be it in Thirichirapalli or Thanjavur. A well laid out canal network carried the life giving water to quench the thirst of land, animals and people. The consequent abundance of grains, milk and gold is captured in folklore and rich Tamil poetry.”⁸

14.5 JURISPRUDENCE DURING CHOLAS

“Supremacy of Justice” had been the life blood of Chola dynasty and equality and equity enjoyed the highest pedestal in social, economic and political spectra, and the modern justice systems should learn and have to bow down before the sovereign integrity and their efforts to render justice to all during those days. Tamil King Ellalan of Chola dynasty, known as ‘Manu Neethi Cholan’ lead the mantle of justice to shine on the royals and the commoners with all equanimity. King Ellalan had executed his own son Veedhividangan for driving a chariot in the busy and densely populated commercial street causing the death of a calf of cow; the cow said to have pulled the rope and rung the bell in the palace of king claiming for justice. The king has ordered the death of his son being driven under a chariot in the same way the calf was killed. Even the descendants of Chola king were made to follow the same path.

The Sangam period (300BCE–5th Century) known for civilised society with legal culture contributed first law books in Tamil authored by poets through Tamil literacy examined by Tamil Sangam (Courts), Council of Ministers and the Kings, with lots of debates, interpretations and finally approved or rejected for further modification. The approved law literature was published by Tamil Sangam known as “Arangatram.”

One may be surprised to find the justice system of the modern present days with legislations, debates on Bills, assent by Presidency etc were in very much vogue with all transparency in South India as highlighted by Tamil culture. Tirukkural, authored by Tiruvalluvar, is the first law book written around 300BCE with three major

divisions – (i) Arathupal (Justice), (ii) Porutpal (Socio-economic and government) and (iii) Inbathupal (Sexual Life) with 133 sub divisions and 1330 Law proverbs. Tiruvalluvar, born in times of poly-religious environment was never inclined towards religion alone, but became ‘Ulaga Pothumarai’ (World Law) which is accepted by one and all even today. His famous Tamil treatise covers many subjects including domestic virtue, ascetic virtue, royalty, human qualities, the ruler and government, social and economic life with concealed sexual life. This legendary book was translated into English first by

Dr Nagaswamy established the sublimality of this great Tamil classic with Dharmasutras like Vedas and Manusmriti

Lazrus followed by George Uglow Pope, a Christian missionary working for East India Company in 19th century. Now, it has more than 100 editions. Recently, works of this historic legend have been translated with fresh scientific insights by Dr. Nagaswamy, a renowned Tamil scholar, an archeologist and a Padmabhushan awardee.⁹ He has established the sublimality of this great Tamil classic with Dharmasutras like vedas and Manusmriti.



Maintaining Law and Order

Maintenance of law and order by ancient rulers across their kingdom or imperium was achieved by upholding Dharma, as described in the traditional Indian texts. The rulers unabashedly boasted of their tradition of upholding justice at all times and ensuring fair trials. All the polities located in peninsular India followed these principles. The Chola inscriptions have captured several incidents throwing light as to how the legal framework functioned.

Local courts were as powerful as the erudite professors who ran the local administration. Smiriti texts and Dharmasana Bhattas experts were identified and appointed as interpreters of the codified manuals on Dharma and its practise. Individuals were allowed to defend themselves because there were no lawyers to plead their arguments. There was no distinction between civil and criminal matters, and all trials were conducted by jury. The jury will hear the plea and question witnesses and testimonials in collaboration with Dharma

shastra translators. Even in cases involving serious crimes, the king or other notable people in power were rarely involved. The idea of appealing to higher courts was mostly unheard of, and the sabha's word was assumed to be final. The following are a few examples gleaned from inscriptional data.

The ultimate punishment was presumably property seizure and banishment from the country. Crimes like rioting and annoying the general population drew such harsh penalties. There is a thorough record of crime and punishment given to two individuals for rioting and instigating public annoyance during the reign of Kulottunga-III from Kilayur, a village near Thanjavur. The offence included upsetting the Brahmins, Vellals, and the temple in the area. The municipal court sentenced them both to 1,000 kasu in fines. Due to their lack of funds, their properties were seized and auctioned for a total of 1060 kasu. The extra money was accounted for as a penalty for not paying the fine on time. Following that, a royal order was issued warning the public that subsequent offences could result in fines of up to 20,000 kasu. The authorities established an acceptable deterrent.

Another fascinating case was a woman who was found guilty of not paying her pending tax debts by the local administration unit. The woman, however, rejected the claims, but she was charged in front of her relatives and neighbours in a public trial. She committed suicide because she couldn't stand the humiliation any longer. The administrative unit's Dharmasasana Bhattas were found guilty and unfit to continue the investigation. Scholars and Dharma Adhikaris from various regions and districts were called in to help with the problem. A committee of such experts debated the matter for a long time before imposing a fine of 32 kasu on the one who was most guilty for humiliating her during the public trial.

Common offences including cattle lifting and petty thefts were investigated, with the punishment ranging from the penalty to be paid to confiscation of property. Endowments to burn perpetual lamps in temples seem to be the most popular way of punishing culprits. The standard chart of offerings gives a choice of 96 sheep, 64 cows or 32 buffaloes as donations to maintain one perpetual

lamp. The cattle thus donated to the temple are leased to the local cowherds and they in turn are required to provide oil to burn the lamp. In return, they can make an income through other dairy products but had to ensure that the cattle count was never less than what was provided by the temple. This can be understood more as a means to repent for the crime than one to be endured as punishment. Surprisingly, homicide cases where there was no premeditation were also dealt with similarly. The accused proven guilty was imposed a fine of one or more temple lamps in a temple. During the times of Kulottunga I, a juvenile offender was charged with murder of another juvenile while cutting wood with a sickle. The local jury, after enquiry ordered the murderer's father to create an endowment to burn half a perpetual lamp. During Kulottunga III's reign, two men were punished in the same manner for beating a buffalo to death while it was grazing their fields.

Imprisonment, corporal punishment or death penalties were not popular practices at the village or district level courts. Serious cases like harming the members of the royal family, indulging in acts that cause riots or instigating rebels against the government have led to confiscation of property of the offender and his family and sometimes the extended family too. The property was then auctioned in public and the money deposited in the coffers.

“In general, a case was tried not on face value thereby treating it as an isolated event. All the circumstances that led to the final event were taken into consideration. After interpreting as per Dharma Shastras, the final punishment was imposed to uphold Dharma rather than focussing on punishment. The overall approach encouraged repentance rather than retribution.”¹⁰

Dealing with Temple Thefts

Temple thefts were also common in this period. In ancient India, the law of the land was as swift to deal with such (un)divine misappropriations during twelfth and thirteenth centuries CE. The punishment imposed was severe upon the guilty; be it noblemen, priests, administrators or tenants living in the temple premises.

Some of the abominable temple burglaries recorded during those times, gleaned from inscriptions are as follows.

In 1152 CE, a grand temple complex at Thanjavur dedicated to Siva as Pasupateeshwara witnessed a succession of burglaries. A royal order given and a special committee formed to undertake a thorough investigation. The committee comprised of religious leaders, scholars and practicing shivaite among others. The temple priests were found guilty. They were sacked with immediate effect and banished thereon from serving in temples. The inscription even documents the family details of the priests and their individual names.

The Chola king Rajaraja III heard and pronounced the judgement relating to misuse and theft in Thirunakeshwaram temple. Temple accounts were handled by three officials, two of them brothers. They were found to have failed their moral code of conduct. They misused temple funds, stole silk garments offered to the deity and used temple bricks to extend their residences. Found guilty, the king pronounced that their properties be seized and sold in auction. The inscription records that 40,000 kaasu thus realised were deposited with the temple.

In 1194 CE, certain land donated to the Siva temple of Govindhaputhur to grow area palm trees was misappropriated by the manager of the temple. He felled the trees, sold them and shared the profit with his relatives. Donations collected were also not accounted for and when an enquiry was setup, he disappeared from his residence. The accused was proven guilty; his properties were confiscated and his house demolished. In its place, a temple for Vinayaka was built and the deity was named Koluthunga Chola Vinayaka Pillaiyar.

In 1213 CE, a certain Manager had managed to pilfer the jewel that adorned the forehead of the deity. He was promptly caught by the guard on duty. Enquiry revealed that forefathers of the Manager had instituted several endowments to benefit social and religious causes. Notwithstanding his past, the accused was tried and found guilty. His property was confiscated; he was forcefully removed from his residence located in the western quarters of

the temple. He was labelled as a traitor. His property was sold off and proceeds were used to build a hundred pillared hall in the temple premises.

The same temple complex witnessed yet another theft a couple of centuries later during Vijayanagar Rule. The suspects were temple administrators and a priest. They had managed to break open the store vault, steal the jewels of the deity and lock and seal the vault back. A few suspects managed to escape and the priest was not doubted, initially. After a long time, the case was reopened and the bewildered priest confessed his role in the crime. His properties were confiscated; his sixteen and a half day of rights to perform puja in the temple was nullified and was distributed amongst other serving priests. Those who managed to escape were not forgotten either. Their own property was confiscated and declared as the temple property. The kith and kin of those escapees were punished by confiscation of the family property. Thus, a forgotten case was reopened to ensure that justice prevails.

All these instances prove that while dealing with temple burglaries, it was Dharma which was always applied to ensure uniform punishment to anyone and everyone found guilty in a temple theft. In fact, the power of Dharma was upholding justice. What could be mere humiliating than getting once name recorded on stone as a convict who burgled temples?¹¹

14.6 WOMEN IN ANCIENT INDIA

As the time passed, the position of women underwent changes in all spheres of life. From prehistory to history, we see the shift is clearly marked in the Indus valley civilization, where archaeology has revealed the preeminent position of men. Another great transition is from the early Vedic to later Vedic society showing the shift from pastoral to agrarian society. This becomes more hardened during the period of the Smriti literature, when we see the rise of the private ownership in land followed by the writing of the Grihya Sutra and the Sruta Sutra, where women call the husband as Swami or Lord. The holder of the land is also referred to as Bhu Swami or Land holder.

Changes in the mode of food gathering and food production established male domination step by step. The process began with hunting, probably with the invention of spear and in the post hunting age with the people that developed pastoral economy and male supremacy came to be established because stock rising was a man's work. But in societies where agriculture predominated over hunting in providing food, it raised the status of women because agriculture was their invention and business. But with the development of higher forms of agriculture, more especially with the introduction of cattle drawn ploughs, this equilibrium was disturbed.¹² Indications of a change in status can be noticed in the early texts referring to the origin of the notion of state. The context is that of peasant societies, who having lived through a halcyon period of coexistence and peace, began to erupt as centers of violence and lawlessness with the stealing of each others wives and the crop from each other's fields. Property and women, it is implied are the source of trouble. To establish law and order, not only are the institutions of private property and marriage recognized, but a person is selected, or alternatively, requested to become the arbiter of law and thus maintain harmony. It is from this point on that the status of women begins to deteriorate as is evident from the narration of texts like Digha Nikaya of the Buddhist Canon and the Mahabharata.¹³ Hence patriarchal order became gradually established with the transition in the mode of production and the establishment of distinct socio-cultural and economic developments. Some other systems like the Republican states known as Gan Rajya and tribal oligarchies where the women's position was not subservient continued to coexist side by side.

Women held very important positions in ancient India. The plethora of goddesses in ancient period was created in respect of women. Atharvaveda observes that a maiden can succeed in her marriage only if she has been properly trained during Brahmacharya. Bhramvadinis were life long students of theology & philosophy and used to aim at a very high excellence in scholarship. Beside studying

Vedas, many of them used to specialize in Purvamimansa which discussed the diverse problems connected with Vedic sacrifices. Sadyodvahas used to study Vedic Hymns till their marriage at the age of 15 or 16. The Rig Veda contains hymns written by 27 women scholars. Of these, the prominent Brahnavadinis are Lopamudra, Ghosha, Gargi and Maitreyi. Shrutavati – a daughter of Rishi Bhardwaj remained a brahmacharini all her life and entered into deep study of the Vedas. Shrimati – a daughter of Mahatma Shandilya, led a similar life. Sulabha - an authority on the Vedas, entered into Vedic arguments with King Janaka.

The Rig Veda contains over a thousand hymns, around ten of which are attributed to Maitreyi, a female seer and philosopher. She aided in the development of her sage-husband Yajnavalkya's personality as well as the blossoming of his spiritual ideas. Maitreyi received the philosophy of the soul and Yajnavalkya's understanding of immortality from Yajnavalkya. Gargi, who was born into the family of Garga, the Vedic prophetess and daughter of sage Vachaknu, wrote a number of poems questioning the origins of all creation. She was one of the attendees in the 'brahmayajna,' a philosophic convention centred on the sacrament of fire. She peppered the philosopher Yajnavalkya with perplexing questions about the soul, or 'atman,' which perplexed the knowledgeable man, who had previously silenced many great scholars. Even the renowned Vedic masters of learning were perplexed by her questions. As a result, the literature demonstrates that women took part in learning and rituals.

Women exercised freedom of choice in marriage. A woman could choose her own husband by a process called Swayamvar. In Swayamvar, grooms assembled at the house of bride and she used to choose the one whom she liked. Not only royal women but the common women were also given the same rights. In the marriage hymns of Rig Veda there is a hymn "May you be Grahatni" i.e, not just the wife of an individual but the first lady of the house. Most religious functions had to be performed by both husband and wife together. A widower or widow ever could not do this.

The word for wife is also “Bharya” - one who must be fed and supported.

Women held a significant status in ancient India. “Sakthi” was her given name. Shakti, or feminine strength, was the source of all male power. The idea or notion of equality between the male and the woman, between the husband and his wife, was explained in a verse from the Rigveda. “Because the wife and husband are equal halves of one substance in every regard,” the Rigveda says, “both should cooperate and take equal portions in all activity, holy and secular.”¹⁴ Hindus have practised dual worship from the Vedic era, with Siva worshipping Sakthi, Vishnu worshipping Lakshmi, Rama worshipping Sita, and so on. In a manifestation known as Ardhanariswara, the half-man, half-woman incarnation of God, Lord Siva appears united in a single body with Sakthi, his spouse; he on the right side and she on the left. Although monogamous marriages were encouraged in society, polyandry and polygamy were also practised. Women were regarded as having superior intelligence, determination, loyalty, and leadership qualities. “A teacher who imparts accurate information is more essential than instructors,” Bhishma Pitamaha stated. The father is more valuable than ten such true knowledge professors, and the mother is more valuable than ten such fathers. “Mother is the greatest guru there is.”¹⁵

Each of the three principal Gods Brahma, Vishnu and Siva in the Hindu pantheon, is accompanied by a Sakthi, which is both his female double and his power of manifestation. No life is possible without this duality. From 4th century onwards, the lower status of woman in the family was codified in texts. Later Smrtikars like Manu and Yajñawalkya did not favor the free movement of a wife. She was to be confined to the house and household duties, so that she does not go astray. A wife could be superseded if she gave birth to daughter only or if she was barren. However, infanticide was not practiced. Destruction of the embryo was regarded as a heinous crime. Yajñawalkya says “When without a husband she must not be without the

company of father, mother, son, brother, mother-in-law, father-in-law or the maternal uncle, otherwise she might become liable to censure". Kalidasa says in *Abhijyana Sakuntala* that a girl should behave towards the other wives of her husband as if they were her dear friends.

Though it has been claimed that the position of women was much better in the Vedic period and that things began to deteriorate with the arrival of Muslims, and the often-cited examples of Gargi and Maitreyi who participated in the Sabha and Samitis, it cannot be denied that in spite of certain rights given to women, ancient societies were patriarchal simply because the dominant structure and values of society were patriarchal. We may make the case that this process continued in medieval times since there is no evidence of a severe structural disjunction that would have brought patriarchy to a halt. In reality, there is continuity in modern times, which is one of the reasons why social reformers and freedom fighters took up this subject as one of the unfinished businesses of Indian social reform, and it is on the agenda of the post-independence women's movement.

Most historical records from the previous time, as has been pointed out, generally allude to the elite group, the king, the court, and wealthy merchants. From oblique references, we must deduce information about other aspects of society. Aristocratic women were seen to be gentle beings who bore future kings. Marriage was commonly used as a cover for a political connection, as well as a way of family mobility for individuals of lower social standing. The aristocratic lady lived in seclusion and comfort. Women from respectable houses walking around veiled can be traced back to the early centuries CE and Islam's purdah furthered women's seclusion.¹⁶ Women from artisan families and peasant families lived in a more strenuous environment. Where leisure was restricted and women joined in men's professional employment, the pressure was not so much from societal mores as it was from the need to survive economically. Those who had a specific economic position and had individual access to

local marketplaces were perhaps the most self-reliant among peasant women. The divide between different classes of women emerges, with royal women needing protection and lower-class women having more freedom. In the area of religion, this divergence can also be noticed. The demure goddess, such as Lakshmi or Parvathy, is considered consort, whereas the ferocious goddess, such as Kali or Durga, is considered independent of a man.

The demure goddess, such as, Lakshmi or Parvati is considered as consort, whereas the ferocious goddess, like Kali or Durga, is considered independant of a man

Temple Women in Chola Incriptions

Leslie Orr's study shows that the 'temple women' of the Chola period were very different from what we understand about the devadasis of the 20th century. In fact, although there are a few earlier occurrences, but the term devadasi seems to have really come into vogue only in the early 20th century.



The words used for temple women in the Chola period inscriptions were *tevaratiyar* (devotee of God), *tevanar makal* (daughter of God), and *taliyilar* or *patiyilar* (woman of the temple). The identity of these women was not based on birth, caste, professional skill, or ritual function. It was based on their connection with a temple, deity, or place.

These women were not generally connected with performing rituals or management roles in the temple. There are a few instances of their performing minor, sometimes menial services, for the temple. There is also an increasing number of temple women who were slaves functioning within the temple context. But by and large, temple women were connected to temples, especially those located in their native villages or towns, through their donations. They appear prominently in this capacity in inscriptions, especially in the 12th and 13th centuries, more so in the northernmost and southernmost parts of Tamil Nadu. Temple women were distributed all over Tamil Nadu, and although they were closely associated with certain towns such as Kanchipuram, they were more often associated with small temple establishments. In the late Chola period, these

women acquired certain privileges and honours in exchange for their donations. These included, for instance, the honour of being given a place close to the deity in a procession or the right to sing a certain part of a hymn before the deity. Such honours seem to have gradually become hereditary. Temple women of the Chola period do not seem to have been married.

In the early Chola period, temple women mostly made gifts to defray the cost of maintaining perpetual lamps. In the late Chola period, they also made gifts to support services in the temple on a daily basis or on festive occasions, to support temple personnel, build temples, or make and install images. In these respects, their gifts were similar to those made by other categories of donors, male or female.

Inscriptions indicate that women in the Chola period had access to and control over economic resources of their households. Orr suggests that while women in general become less visible as donors in Chola inscriptions, temple women remain constantly visible.

On the other hand, the modern devadasi phenomenon is marked by hereditary transmission, professional skill, and

Those women were neither temple dancers nor prostitutes temple dedication. None of these were operative in the case of the temple women of the Chola period. Those women were neither temple dancers nor prostitutes. They were not married to the god, nor is there any indication that their sexual activity was exploited or confined in the temple context.

Their history in the Chola period cannot be seen as a story of degeneration or decline - in fact their position got strengthened and well-established over time.¹⁷



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15. The Kakatiyas

From the very beginnings of the second millennium, commencing right from 1000 CE onwards, intermittent invasions by Islamic armies had destabilized North Indian polity. Innumerable kingdoms collapsed during the next three centuries or so (1000CE–1300CE). But Peninsular India and its kingdoms stood safe below the Vindhyan mountain barrier during this period. Naturally, the evolution and status of polity and economy on either side of the Vindhyas was bound to diverge. The North Indian polity evolved around a single command centered at Delhi, while the polity in Peninsular India evolved around multiple power centres. More than three long centuries (1000CE–1300CE) of relative peace allowed them to continue to construct innumerable irrigation tanks and temples. A vast seaboard and a number of ports on the Indian sub-continental coastal rim connected its trading routes with foreign lands. As agriculture boomed, its country side developed. As its trade flourished, the towns and cities prospered. As prosperity grew, the society's religious faith enriched its temples. As the kingdoms grew wealthy, their name and fame reached far beyond the peninsular border. Wealth attracted envy and attention of the rulers of Delhi. The lure of loot apart from an urge to plant the Islamic flag in the Deccan lands was an important factor, which eventually brought Islamic arms to Peninsular India.

Yadava kingdom in Devgiri and Kakatiya kingdom in Warangal were prominent in the Deccan. Further, the Hoysala, Pandya and Chola kingdoms were important in further south. The Kakatiyas of Warangal had evolved as one of these important kingdoms. As the second millennium began, they established their foothold in central Deccan, almost at the same time when Mahmud Gaznavi commenced his raids across North Western India. By mid twelfth century, as Kalyan Chalukyas declined, the rising Kakatiyas filled in the vacuum. They ruled for one hundred and sixty-five years (1158CE–1323CE) from Orugallu (the present-day Warangal), as their capital. Kakatiya period is reckoned as the golden age in the history of Telangana during the second millennium, not unlike the golden age of Guptas in North India during the first millennium. The golden glow was too good to last. The first quarter of the fourteenth century saw the

repeated invasions of Islamic armies across the Vindhya. Within a brief span of a couple of decades, most of the peninsular kingdoms were destroyed, including the Kakatiya kingdom of Warangal.

This chapter deals with the political history of the present-day Telangana lands from 1000CE till 1323CE. Prior to 1000CE, this land was ruled by the Kalyan Chalukyas (also known as western Chalukyas) with Kalyan (situated near the present-day Bidar in Karnataka) as their capital. The entire period can be divided into two political watersheds. A brief description of each phase would be appropriate.

The first phase can be considered from 1000CE to 1158CE. Prior to 1000CE, the present-day Telangana lands were ruled by various tributaries while the apex was controlled by the western Chalukyas. Around 1000CE, the Chalukyan emperor bestowed Anamkonda Visaya (meaning a certain territory with connotation of a district) upon the young Kakatiya, Garuda Beta. There were other feudatories as well controlling different Visayas, like Mudigonda (in the present day, Khammam, Koravai), Polavasa (in the present day, Jagtial), Sanigram (in the present day, Karimnagar), Kanuduru (in the present day, Nalgonda) and Kollipaka (in the present-day Alair, Bhongiri). Chalukyan imperium had been facing sustained pressure from its neighbouring rulers. By 1158 CE, the western Chalukyas were overpowered by Silaharas from the north and Hoysalas from the south. The local chiefs had also developed fluid loyalties. During the interregnum, the power struggle for supremacy positioned Kakatiyas in a commanding position in the present-day Telangana lands.

From 1158CE, commenced the second phase. The successive Kakatiya rulers expanded, consolidated and brought imperial glory to this land and its people. New dominions were added towards western, eastern and southern directions. This period is reckoned as the golden age in the history of Telangana. From 1300's onwards, the Islamic armies penetrating from across the Vindyan Mountains directed by Delhi Sultanate hammered it repeatedly. First, the Khiljis' armies made Telangana rulers as their tributaries. They were followed by the Tughlaq's armies, who changed their policy from imposing tributes to annexing territories. As repeated armed onslaught continued, the Kakatiyas were conclusively defeated in 1323CE before becoming a part of history.

15.1 FROM FEUDATORIES TO SOVEREIGNS

The Kakatiyas, like Satavahanas were one of the major dynasties based in central Deccan Plateau that ruled over extended territories including the present-day Telangana and parts of Andhra Pradesh. These lands were ruled by Rashtrakutas, who controlled

the deccan plateau, with Manyakheta (the modern Malkheda) as their capital between 753–975CE. Originally, the successive generations of Kakatiyas, working as army commanders, served as vassals under the Rashtrakutas during ninth and tenth centuries. After the decline of the Rashtrakuta power, they served as vassals of the Kalyani Chalukyas. After the decline of the Chalukya power in the twelfth century, they assumed sovereignty by suppressing other Chalukya subordinates in the Telangana region. From 1158CE onwards, the imperial Kakatiyas ruled the substantial geography of the present-day Telangana and Andhra Pradesh lands. In 1323CE, Kakatiyas were extinguished by the Islamic armies from Delhi.

It is important to delve into the social background of such an important dynasty who ruled the present-day Telangana lands for so many centuries.

Socio-political background of Kakatiyas

Kakatiyas have been described by various sources to be belonging to 5 lineages: Vishti vamsa, Kakati vamsa, Durjaya vamsa, Chaturdha vamsa and Surya vamsa. Khazipeta Darga inscription described Gundiya Rashtrakuta whose kulapuram was Kakatipuram¹ which is figured out by some historians as Kandhara near Nanded and by some other scholars as Gandhara near Mancherial. Kumara Somapeethi, commentator on Prataaparudra Yashobhooshana of Vidyanatha, elaborated that Kakatiyas acquired that name since they worshipped Kakati as their family goddess who is the incarnation of goddess Durga.² Therefore, we can infer that initially, Kakatiyas were related to their family deity, Goddess Kakati. Orugallu itself is referred

They were out-and-out an indigenous power sprang from the fourth caste

to as Kakatipura in several inscriptions by virtue of being the capital of Kakatiyas.

Bayyaram inscription mentioned Durjaya as their predecessor. But the same was claimed by several dynasties. Similarly, they were also described as hailing from chaturdha kula. Based on this, several authors have inferred that “They were out-and-out an indigenous power sprang from the fourth caste.”³



By the middle of 12th century, Kakatiyas assumed imperial dimensions. The entire span of 13th century witnessed the climax of their political power. Now, the inscription of Ganapatudeva in 13th century claim Kakatiya's genealogy from Surya vamsa.⁴ The enhancement of political power witnessed diversification of matrimonial alliances. Ganapathi's daughter Rudrama devi was married to the Chalukyan Prince named Virabhadra, son of Indusekhara of Nidadavolu. She had three daughters, Mummamma, Rudrama and Ruyamma. The eldest was married to a Kakatiya Prince named Mahadeva, the second daughter to the Yadava Prince Ellanadeva and the last to the Induluri chief, Annaya. Rudrama was followed by Prataparudra, the last ruler of Kakatiya dynasty. His sons had suffixes of Reddi - Veerabhadra Reddy and Gonka Reddi.

In conclusion, we can say that during the earliest stages, Kakatiyas were identified with the Goddess Kakati, their family deity. Subsequently, as they evolved politically as vassals of Rashtra kutas and Kalyan chalukyas, they were identified as belonging to Chaturtha vamsa (fourth caste). As their power grew, they identified themselves as belonging to Surya vamsa. At their political climax, ruler's progeny established matrimonial relations with diversified communities like Yadavas and Brahmins. The progeny of the last ruler suffixed Reddi to their names. They, however never ruled the Kakatiya kingdom as by 1323 CE, it was extinguished by the Islamic rulers.

Apart from Kakatiyas, there were three other feudatory families neighbouring the Kakatiya domains. They were Chalukyas of Mudigonda to the east; the Polavasa chiefs to their northwest and the Choda chiefs of Kanduru to the south. The region to the west of Anumkonda vishaya was under the direct control of the Chalukyan king and it was being administered by his officers from Kollipaka. "The relations of the above chiefs with the Kakatiyas were mostly hostile"⁵ A brief account of each one of these families, with particular reference to their evolving political equations with the early Kakatiyas is given ahead.

Relations of the above chiefs with the Kakatiyas were mostly hostile



Chalukyas of Mudigonda

The Chalukyas of Mudigonda were located in the present-day Khammam district and the adjoining areas like Korvai. “The Korvai epigraph of about 935CE informs us that these Chalukya chiefs were enjoying a sort of independence in this territory. For a long time, they owed their allegiance to the Eastern Chalukyas of Vengi, in preference to the Rashtrakutas, who held sway in Telengana at that time.”⁶ During 930CE–936CE, a chief of Mudigonda family named Gonaga sought asylum in the court of the Vemulawada king.

**Kamavasini,
wife of
Viriyala
Erra took
up the cause
of young
Garuda
Beta**



Gonaga’s younger brother, Niravadya with the help of Western Chalukya, BhimaII (934CE–944CE) became the king of Korvai. He was followed by Kusumayudha and Betaraja. The next ruler, Bottu Beta, after some political uncertainty was reinstated by Viriyala Erra. Bottu Beta died during a campaign leaving behind his young son, Garuda Beta. Kamavasini, wife of Viriyala Erra took up the cause of young Kakati Garuda Beta. “Her appeal worked and the Chalukyan emperor bestowed Anumkonda-visaya upon Garuda Beta. The

Kakatiya line was re-established in around 1000CE.”⁷

From about 1000 CE, the Bottu chiefs were in possession of Korvairajya and Kakati Garuda Beta was in possession of Anumkonda vishaya. Both were subordinates of the Chalukyas of Kalyana. The Kakatiya chiefs did not trouble Korvai rulers till about 1170CE. But, when Kakatiya Rudra proclaimed independence, he deputed his general Recherla Rudra to subdue the Bottu chief of Korvai, who led his army into their territory and put them to flight. “Kukanur copper plate tells us that, “Due to upheaval (Bhu-Praghattana), they had to leave with their bag and baggage to other neighbouring territory (Paramandala), eating roots and fruits in the forest; They took refuge in Vengi region for about twelve years before returning to their original territory, Visurunadu (Mudigonda and Korvai territories are also known as Visurunadu). With the closure of the twelfth century, we do not hear anything about these Mudigonda chiefs. By then, Visurunadu was under the firm grip of Kakatiyas, ruling from Anumkonda.”⁸

The Polavasa Chiefs

The Polavasa chiefs were located in Polas or Polavasa in the present day Jagtial district to the north west of Warangal. Like the Mudigonda chiefs, they also played an important role during the time of the early Kakatiyas. The Thousand Pillar Temple inscription and other epigraphs refer to Medaraja of the Polavasa family as an enemy of Rudra, the Kakatiya ruler. Medaraja, with his feudal principality extending from Polavasa to Narsampet was a close neighbour of early Kakatiyas, in particular Prola-II and Rudra. The close proximity between Polavasa and Anumkonda territories was bound to affect relations between the two neighbours.

To start with, both the families of the Kakatiyas and Medaraja, shared the same background as Rashtrakuta subordinates. Around 950 CE, the Rashtrakutas were overpowered by the Kalyani Chalukyas. Political changes notwithstanding, the new rulers allowed both the Kakatiya and Medaraja chiefs to continue as Mahamandaleshwara with their respective domains intact, lying adjacent to each other. Though relations were cordial in the beginning, it did not remain so in due course of time.

The Banajipet epigraph of 1004CE and the Polavasa epigraph of 1030CE belonging to Medaraja-I describe the happy state of the Chaukyan kingdom. It would appear that Kakatiya Beta-II donated some gifts to the Jain temple built by Medaraja. This indicates that the rulers in Polavasa and Anumkonda, apparently at that time had a peaceful relationship. By 1108CE, both the rulers were also having similar alignments with their overlords. After Betaraja I's death, his son Jaggadeva succeeded him. But his active career appears to be of a short duration between 1110CE and 1117CE. Jaggaraja had two sons, Medaraja-II and Gumdaraja. "The former appears to have made some gift of land to Padmakshi temple in Kakatiya territory. The epigraphical evidence goes further and states that Medaraja's minister Nagaraja installed the image of Parasvanth and both brothers made gifts to the temple." Exchange of gifts, lands and idols between the Polavasa and Anumkonda rulers, during the early twelfth century appeared to be normal and friendly.

The epigraphical evidence also tells us that Medaraja-II and Gumda raja, the Polavasa chiefs, appeared to flout the authority of the Chalukyan overlords. Medaraja-II joined hands with the rivals of Chalukya king Bhulokamalla and revolted. Bhulokamalla's successor, king Jagdekamalla-II, soon after his accession led an expedition to put down the rebellious Polavasa chiefs. Prola-II and Rudra taking advantage of the disloyal behaviour of Medaraja and his brother Gumdaraja stood by the side of Jagdekamalla II and helped to suppress the revolt by killing Gumdaraja and making Medaraja-II flee from their domain. "The Polavasa town was burnt down and that was the end of the Medaraja's family. The same incident has been described at length in the Thousand Pillar Temple inscription of Rudra which describes the victories of Prola-II also. The event took place in the first half of the twelfth century."¹⁰ Annexation of Polavasa desa to Anumakonda vishaya was one of the most glorious achievements of Rudra. He soon asserted his independence. "The religious leanings of Medaraja-II were clearly towards the Jain faith, though they also donated to Hindu temples."¹¹

The Kanduru Chodas

From about 1060CE to 1160CE, the Chodas ruled over Kandurunadu, comprising Jadcharla and Achampet talukas of the present day Mahboobnagar district and Nalgonda and Miryalguda talukas of the present-day Nalgonda district with Koduru and Panugallu as their capitals. "In 1091 CE, its ruler Bhima Choda-II died and his ashes were carried all the way to Gaya for immersion in Ganga along with offerings of Pindas. During his life, he had obtained the fief of Kanduru vishaya from Vikramaditya VI, on account of his help to him in wresting the throne from Someshwara-II."¹² Bhima-II had two sons, namely Tondaya-II and Malla. The actual history of these chiefs with reference to Kakatiyas begins from Tondaya-II, the eldest son of Bhima-II. "Tondaya's wife Mailambika had three sons named Udaya, Bhima



and Gokarna. In 1124CE, she gifted a village, Pittamapalli for the merit of her second son, Bhima III, who seems to be the king of Panagallu at that time.”¹³

“After 1124CE, there arose differences between the two brothers, Bhima III and Gokarna. Kandurunadu was the Yuvaraja vritti (appanage) of Kumara Tailapa, the young Chalukyan Prince. He distributed his appanage between the two Choda brothers; Kanduru Vishaya in Mahboobnagar to Bhima III and Panugallu Vishaya to Gokarna Choda. This arrangement continued till the emperor, Tribhuvanamalla was alive. In 1126 CE, he died and was succeeded by Bhulokamalla Someshwara III. The new ruler was not able to win the loyalty of Bhima III and his followers. However, the Gokarna’s loyalty to the new Chalukyan ruler remained intact.”¹⁴ In the ensuing power struggle, Gokarna Choda lost his fief and later his life.

“Uday Choda, the son of Gokarna and the only remaining chief of the family succeeded and remained a feudatory of Chalukyan kings. After nearly two decades, he acknowledged the supremacy of Kakatiya rulers, who by then had declared their independence. Uday Choda seems to have lived upto 1176. His two sons Bhima IV and Gokarna as subordinates of Kakatiyas had become virtually insignificant by 1178. The members of the family, however continued to serve for a pretty long time, simply enjoying their fiefs.”¹⁵

Maha Mandaleswara Parmara Jaggadeva

This province, west of Anumakonda vishaya, with its capital at Kollipaka, consisting of 7000 villages was administered by a Maha mandaleswara, directly appointed by the Chalukyan sovereign. Jagaddeva, a prince of the Paramara royal family of Malwa was its governor from 1104CE to 1108CE. Within less than a decade, the rise and fall of Jaggadeva from power needs some close analysis.

Jaggadeva was the son of Udayaditya and grandson of Gondala, the paternal uncle of Bhoja, the famous Malwa ruler. After Bhoja, his son Jaysimha succeeded to the throne of Malwa in about 1054CE. During his time, Malwa was invaded by the king of Gujarat. Then Udayaditya with the help of Vikramaditya-VI, the Kalyan

Chalukyan ruler not only repulsed the aggression but managed to capture the throne and ruled till 1081. Being much impressed with the good qualities of Jaggadeva, the Chalukyan king Vikramaditya-VI brought him to his court and treated him with fatherly affection. In due course of time, he was offered governorship of Kollipaka as Maha mandaleshwara, which he held from 1104CE to 1108CE. In 1106CE, he seems to have defeated the kings of Vengi, Dravida, Chittrakota and Mahira.

The Idyllic scenario for Jaggadeva was too good to last. The Chalukyan overlord, Vikramaditya-VI perceived a certain expansionist tendency in Jaggadeva's design of carving a principality of his own, extending on either side of the Godavari river. The formidable barrier, for quite some time had formed the boundary between the Chalukyan and Parmara kingdoms. With this suspicion, the king appointed his son, Kumar Someshwara as the Maha mandaleswara of Kollipaka. Jaggadeva was forced to leave. The Kakatiya prince Beta-II, seizing this opportunity, aligned himself with the new Maha mandaleswara, Kumar Someshwara.

“Deprived of his position, Jaggadeva retaliated against the Kakatiyas by making alliance with the Polavasa chief, Medaraja. The later was already disgruntled and had refused to make any reference to the king as his overlord from 1108 CE onwards. The disgruntled team of Jaggadeva and Medaraja made an attack on Anumkonda, the capital of the Kakatiyas. But they were utterly defeated by Beta's son, Prola II. The event has been graphically eulogized in the Anumkonda records of Rudradeva, the first Imperial ruler of Kakatiyas.”¹⁶

Struggle for Supremacy

In 1116CE, Prola II assumed power with the full support of the Chalukan king, Vikramaditya-VI. His succession was not peaceful due to political disturbances that took place during the preceding decade, beginning from 1106CE. The trouble shooter was Parmara Jaggadeva, the ambitious Maha mandaleswara governing Kollipaka. The Kakatiyas availed this opportunity in gaining not only the new additions to their principality but also emerged as political potentates in Telangana by 1158CE.

Parmara Jaggadeva governed Kollipaka from 1104CE to 1108CE. His rule was cut short due to his vaulting ambition to carve out a principality of his own, as this incurred the displeasure of the Chalukyan king. To realize his ambition, Parmara Jaggadeva invaded the Kakatiya capital Anumkonda. Prola II defeated him and forced him to retreat to the north of Godavari. Kumara Someshwara succeeded Jaggadeva as Maha mandaleswara of Kollipaka Prola-II, with his un-failing loyalty to the king, assisted Kumara Someshwara in suppressing further revolts.

Kumar Tailapa held the province of Kandurunadu as Kumara vritti (Crown Prince) since the time of his father, the Chalukyan king Vikramaditya-VI. In 1127CE, Bhulokmalla, the elder brother of Kumar Tailapa ascended to the Chalukyan throne. While his father was alive, the Kanduru Chodas were quite loyal. Since Bhulokmalla's accession, this unified loyalty among the chiefs cracked up. All the Choda chiefs of Kandurunadu directly owed their allegiance to Kumara Tailapa. Bhima-II, the original fief holder of Kandurunadu was succeeded by his three sons, namely Uday, Bhima-III and Gokarna. Subsequent to Uday's death, his kingdom was temporarily bestowed upon Gokarna by Kumar Tailapa, the master of the region.

"Thereafter, there arose differences among these chiefs. Bhima-III along with his nephew Sridevi Tomdaya encouraged Kumar Tailapa to become independent, throwing off the yoke of subordination under his brother & King Bhulokmalla. Kumar Tailapa did not reveal his prospective insubordination. He, however, indirectly encouraged these chiefs not to acknowledge the sovereignty of Bhulokmalla. But, Gokarna as a loyal subordinate and perhaps with an ambition to secure Panagallu region for himself, superseding Sridevi Tomdaya with the approval of the King did not join hands with Bhima. In the collision of multiple ambitions, Bhima killed Gokarna on the pretext of protecting Sridevi Tomdaya's claim. The Manillapalli's epigraph indicates that Gokarna died owing to his failure to join the conspirator."¹⁷ Subsequently, the Panagallu region was restored to Sridevi Tomdaya by 1128CE.

Sridevi Tomdaya was not the only one to have been offered Panagallu rajya. Govind Damdesa, another loyal and reputed general of Bhulokmalla was also involved in the power struggle. A part of Panagallu region was bestowed on Govindaraja by Kumara Tailapa, in order to ensure the general's support, in case of an armed conflict with the King. Kumara Tailapa, the prince was therefore fortifying his position in Kandurunadu. Udaychoda-II, who was deprived of his father's fief, approached King Bhulokmalla and complained about the treacherous activities of the insurgents. The King with a view to avoid direct conflict with Kumara Tailapa instructed Prola-II to reinstate Udaychoda-II. Accordingly, Prola-II ousted both Tomdaya and Govind Damdesa, restored Panagallurajya to Gokarna's son, Uday Choda-II. "This event took place in about 1131 CE."¹⁸

Udaychoda-II was reinstated in the Pangallu vishaya, but the authority of Govind Damdesa was dented. Kumara Tailapa vengeful of Prola-II, instigated Medaraja and his brother Gumda ruling Polavasa on the northern borders of the Kakatiya territory to create trouble. These Polavasa chiefs were already showing their disloyalty to the King by not making any reference to him in their inscriptions. In 1138CE, Jagdekamalla-II succeeded his father Bhulokmalla and by this time, there was revolt owing to Kumar Tailapa's designs to assert his independence.

The Kakatiyas had continued their unfailing loyalty to the Chalukyan King. Soon after his accession in 1138CE, King Jagdekamalla-II turned his attention to Kanduru Nadu. He led his army personally and marched there. Prola II, the only loyal subordinate in the region stood by his side against his uncle Kumar Tailapa. The latter was captured and forgiven. However, he was deprived of his rights over Kandurunadu, which he had enjoyed for more than a quarter century. After 1137CE, Kumar Tailapa's records are not traceable in this region. Jagdekamalla's records are found for the years 1141 and 1143CE, representing him as a sovereign king.

The Kumara Tailapa's silent revolt against his brother, King Bhulokmalla right from the latter's accession in 1127CE explains his ambition which always entertained the deep hidden designs

of revolt. Prola II, as we have seen, intervened twice on behalf of his king. In 1130-1136CE, it was to restore Udaychoda as the Panugallu chief. Next, it was to help dispose off Kumara Tailapa himself. The unfailing loyalty of Prola II's to his overlords, laid the solid foundation based on trust of a future empire.

After settling the Kandurunadu, it was time to tackle Polavasa. Jagdekamalla-II marched against Medaraja and his brother Gumda. In this campaign also, Prola II took an active part displaying his valour in subjugating these chiefs. Gumda was beheaded after his head was shaved and chest marked with the symbol of Varaha as a mark of humiliation. Edaraja, another chief of the same region fled from the battlefield and did not come back to offer any resistance, even though he was challenged by Prola-II. "The event has been described in multiple epigraphical records."¹⁹ It seems to have occurred between 1138 and 1141CE.

Sammakka and Sarakka - Voice of the Forest

Samakka and Sarakka, both had a royal pedigree. Samakka was the daughter of Raibandini Raju, the king of Bhuplapatnam in Orugallu. Sarakka was the daughter of Medaraja-II, the ruler of Polavasa kingdom in Elgandala. The marital bonds between the two ruling families, belonging to the same Koya tribe had reinforced

Samakka & Sarakka, both had a royal pedigree.



their political alliance. The Tripurantakam Inscription dated 1290 CE mentions about tribal communities like the Koya, Pulinda, Boya and Lambadi at that time. There, the Boyas are referred to as traders.

The north eastern boundary of Kakatiya kingdom was flanked by an extended forest region, spread along the river Godavari and its innumerable tributaries. It would broadly cover the present-day Bastar region in southern Chattisgarh, eastern Maharashtra and north eastern Telangana. The natural unevenness of terrain, caused by interceptions due to hills and rivers rendered the area secure for the ruling by local tribal chiefs. It also provided safety to these forest kingdoms from the acquisitive tendencies of the rulers from plains like Orugallu, Mudigonda and Panugallu.

When these feudatories in the plains were at peace, everyone including tribal kingdoms used to rule in tranquillity. However, Prola-II had an imperial ambition. In 1138CE, ruling from Anumkonda, in a bid to expand his kingdom, he fought with the local kings, namely Medaraju and Pegididdaraju. The neighbouring allies tried to help the tribal chiefs but eventually, their kingdoms were subsumed by the rising Kakatiyas. In 1159CE, Rudra-I, the son of Prola-II also attacked Medaraju and defeated him.

At this juncture, Sarakka, the daughter of Medaraju-II comes into picture. The defeated tribal chief had refused to give his daughter's hand to the victor. He fled into Nandukonda forests located beyond the river Godavari. Subsequently, both the families migrated to Boyyakapet-Medaram forests in Orugallu and established their new kingdoms there. The rising Kakatiyas were determined to subjugate the new power center. Medaram was attacked but Koya forces resisted them. The battle continued for ten days near Dayyalamadugu (a small tank). Samakka's son, Jampanna, after putting up a brave resistance died in the battle. Samakka and Sarakka continued to resist the Kakatiya forces before eventually succumbing. Their sacrifice did not go waste. They fought to protect the freedom of their people. In turn, the grateful tribals have immortalized their war heroines as 'Veeragallu'. Their idols have been found in and around the temples of Naganuru in Karimnagar.

Samakka and Sarakka have remained in the fond memories of people, not only because of their bravery but also due to their benevolent rule. Samakka was an expert in herbal medicine. She treated people suffering from snake bites and all kinds of diseases. She also built tanks and dug wells for the use of her people. One such tank was Burrikunta and well was Jilakambaavi in Bayyakkapet. Some of the Sammakka's ancestors (Chanda clan) had also dug tanks in Dharmaram in Medaram. These tanks have

1 A couple of veeragallus a woman's and a man's had been found near Jampannavaagu in recent times. The idols may be that of Sammakka and Jampanna

2 One Shasana was found near Gujjal Tadwai in Nizamabad district by Dyanapally Satyanarayana which gives the details of the donations made by Dommaraju

served the irrigation and drinking water needs of the people and their livestock, especially during droughts.

‘Chanda clan (vamsham) ancestors also constructed temples. They were devotees of Lord Shiva and the Mother Goddess (Matru Devata). Dommaraju, of Kashyapa gothra of the Chanda clan, constructed the Edaraju, Someshwara and Nageshwara temples and donated lands along with other emoluments for their maintenance and encouraged scholars’. Sammakka’s husband Pegididdaraju also laid villages for settling their people. These villages were named after him. Three such villages by name Pegidipally could be found in and around Dharmaram and Medaram in Warangal.

The conflict between Koya tribes based in the forest region and Kakatiyas ruling in the plains was essentially a struggle for political power. The former endowed with rather limited resource base were eventually overpowered by the imperialistic impulses of the rising Kakatiyas, who commandeered far more resources. The conflict between the forest dwellers and the plain population has most often followed the same pattern. The voice of forests is either silenced or co-opted by the victors.

Conflict between forest dwellers & the other population followed the same pattern. The voice of forests is either silenced or co-opted by the victors.



Power Struggle in Chalukyan Headquarters

“In 1151, Tailapa-III dethroned his elder brother, the crowned king Jagdekamalla-II. We learn from Sanigaram epigraph that upto 1149, Prola-II was quite loyal to his overlord Jagdekamalla-II, whose “Padapadmopajivi” (living at his lotus feet) he is stated to be.”²⁰ Tailapa-III was a weak king who could not consolidate his position in the capital. Prola-II still considered the ousted king Jagdekamalla-II to be his real overlord. The conflict between Tailapa-III and Prola II became inevitable. The latter emerged supreme in the ensuing conflict and Tailapa-III was reportedly captured in the battlefield. The victory achieved by Kakatiyas was remarkable.

After reigning supreme in Telengana, Prola-II attempted to conquer the coastal Andhradesa. ‘According to an epigraph at Daksharamam, he was slain by Chodayaraja of the Kota family and the Haihaya

chiefs Satya and Mallideva of the Kona country. A chief named Mahadeva raja, a subordinate of the Eastern Chalukya king, Malla Vishnuvardhana, bearing the title 'The submarine fire to the enemy named Prola', claims credit for killing Prola-II.²¹

'Prola-II's wife was Muppamamba, sister of Natvadi Durgaraja. He too was a subordinate of the Chalukyas and was having his fief near Inagurti in modern day Mahboobabad taluka, Warangal district. Among Prola's sons, Rudra and Mahadeva are prominently known, whereas, his other sons Harihara, Ganapathi and Repolla Durgaraja are known only by references in the inscriptions.²² The former two, namely Rudra and Mahadeva were to raise the Kakatiya dynasty to imperial glory.

15.2 THE IMPERIAL GLORY

In 1158 CE, Rudradeva succeeded his father Prola-II. By now, there were several claimants to the Kalyan Chalukya's throne. The power conflict had hollowed the empire from within. Determined strikes from the Silaharas from the north and Hoysalas from the south wrecked it further. In the prevailing mist of uncertainty, Rudradeva did not want to be subordinate or feudatory to any one of them. He asserted his independence and that is how, the Imperial Kakatiyas inaugurated their arrival from 1158 CE onwards.

Rudradeva was the eldest son of Prola-II from the Chief Queen, Muppamma. A man of praiseworthy deeds, he was associated with the administration during the life time of the previous rulers. He was the favourite, as per the tradition, to succeed Prola-II. He vanquished several of his enemies, before they could unite, within very first four years of his accession. Dommaraja, a leader of an aboriginal tribe of sabbimalam, headquartered in Nagunur in Karimnagar district was the first enemy. Medaraja-II, the ruler of Polavasa desa (the present day, Jagtial) was the second enemy and Mailagideva, probably a Kalachuri prince, was the third enemy.²³ All the three formed a confederacy, probably based on their common Jain faith. 'But Rudradeva, a staunch Shaivaite; "Shattered more than once with ease Domma, who was skillful in riding the best of prancing horses and who was full

of the best valour, and again having made him fly by him hundreds of shining arrows as Arjuna did regarding Karna and obtained the village and city having all excellence.’²⁴ The defeated King crossed the Godavari River and escaped into jungles. Sabbimalam came under the firm control of Kakatiyas. Vellanki Gangadharam, the minister and general of Rudradeva, the architect of the victory, was made its chief, with headquarters at Naganuru.

‘The same minister, Gangadhara, in Hanumkonda inscriptions had stated about Rudradeva, “That Medaraja-II offered his daughter to Rudradeva and gave up pride and family tradition for peace.’²⁵ Maligideva, the Kalachuri Prince appears to have retreated to Kalyani. However, territories only up to Zaheerabad were incorporated into the growing Kakatiya Empire. The sharp gradient of the plateau land with inhospitable geography beyond Zaheerabad, probably limited the Kakatiya’s westward expansion. The results of the war proved very devastating for Rudradeva’s enemies. Both Dommaraja and Medaraja were removed from the scene and the eastward expansion of the Kalachuries was halted.

Having consolidated the northern and the western borders, Rudradeva looked south towards Kanduru and Palamuru. His enemies were a group of six recalcitrant chiefs; namely Bhima-II, Gokarna, Udaychoda Padma, Tailanripa and Sridevi, the step mother of Bhima. Bhima and Gokarna were brothers who belonged to the Kandur branch of the Telugu Choda family. The inscriptions, always poetic, state that, ‘Gokarna was killed like a rat in the house caught in the darkness by a powerful kitten low born serpent. Uday Choda died in battle, whose body was frittered by the flashing missile, namely, the bewilderment born of the fear produced by the prowess of Rudradeva. Tailapa died with body completely overcome by dysentery, even Bhima’s kingship proved momentary.’²⁶

Rudradeva launched an expedition against Bhima, who declared his independence. ‘Rudra having taken three or four steps in his march against Bhima, offered the city of Vardhamana as an oblation to the fire of his anger.’²⁷ Bhima was unable to offer resistance from his capital and took shelter in a forest accompanied by his

brother, mother and wives, leaving behind all his treasure. Rudradeva burnt his capital city Vardhamana i.e., Vaddamana in the present day Mahaboobnagar district of Telangana. Sridevi was the second wife of Bhima II and step mother of Bhima-III, both in illicit relationship.

‘Then Rudradeva attacked the city of Chodadaya i.e., Kandur and burnt it “like Hanuman set fire to Lanka.”²⁸ It was protected by forests and fort. He destroyed the forest and fort and constructed a big tank

Victorious achievements followed by acts of nobility were to make Kakatiyas immortal



in the middle of the city and settled their new families. In this way, he captured Udaya Choda wealth and everything i.e., Lakshmi (Padma). Padma, probably the daughter of Uday Choda but surely the Goddess of fortune became the consort of Rudradeva. The victor commemorated the occasion by constructing a big irrigation tank, Rudrasamudram at Panagallu. The victorious achievements followed by acts of nobility were to make Kakatiyas immortal.

The ambitious Rudradeva now looked towards the east to extend his empire. He, considered himself to be the political successor of Kalyani Chalukyas who had extended their sway over this territory. Apart from this, he had to take revenge of his father’s death in that land. He allied with Rajaraja II and penetrated the Godavari delta and established his hold without any resistance. He placed his younger brother Dugga Bhupa as incharge of the region. But, the Velanadu rulers using force restored the original order. ‘Rudradeva’s authority over this region suffered an eclipse.’²⁹

Around these times, civil war broke out in Palnadu. The causes of wars are not known. ‘Wilson thinks that the war in Palnadu originated in a dispute amongst petty land holders of Gurijala Macherla during a cock-fight.’³⁰ But, others, think that causes were located in social and political divides. It was a fratricidal war, which spread amongst several princes. It further weakened the internal conditions of the eastern Andhra. This was the moment of opportunity for Rudradeva. He advanced and subjugated Dharanikota but refrained from annexing it. He gave the fief to Kota II, the son of Bhima III, who had lost his life while opposing Rudradeva. Rudradeva next set out for

the subjugation of the Kondapadumatis. ‘The war was fought on the banks of Krishna River, very close to the western frontiers of Vengi. Kondapadumatis were completely routed. However, the period of Kakatiya invasion and victory was very brief.’³¹ ‘It didnot leave any permanent mark by annexation of the territory. But, in a short period of a decade or so, it “trembled at the feet of Rudradeva. It paved the way for his successors to invade and subjugate it again.”³²

’Rudradeva’s glorious reign ended in the year 1195.’³³ He had no sons. He was succeeded by his brother, Mahadeva. Both were born to the same parents, namely Prola-II and Muppaladevi. ‘Mahadeva was



In the middle of Warangal fort majestically stands four black granite gates, which are also known as Keerti Toranalu (Gates of fame), which are rich in sculpture and architecture 12th century CE, Kakatiya Rudrama Devi period

probably a patient of “white disease” (Leprosy).³⁴ ‘The relationship between the two brothers might have been strained.’³⁵

Mahadeva invaded the Yadava Kingdom and secured some early successes. It may have been because the Yadavas were engaged in a war

with their southern neighbour, Hoysalas. But, Mahadeva perished as having fallen asleep in the great battle on the two temples of the female elephant, the foremost among the warriors awoke on the breast of a distinguished nymph of heaven.³⁶ He ruled just for three years.

With Mahadeva's death, the conditions in the Kakatiyas Kingdom became uncertain. The Yadavas of Deogiri were even able to control the administration of the Kakatiya territory from Deogiri. Feudatories revolted and chaos and confusion prevailed all over the Kakatiya region. But Recherla Rudra, "a hero, loyal to his lord, right resolute of mind, when the fortune of the Kakati monarch passing through error had among many sharp thorns and for the moment, the triple lore was disturbed, himself by the might of his arms forcibly crushed and removed those thorns and very firmly established that fortune in security."³⁷

Ganapathi Deva, the young son of Mahadeva, had accompanied his father in the war with Devagiri. While the latter perished, the son survived and was imprisoned and remained in Deogiri for some time. The news convulsed the kingdom. Many feudatories rose in revolt. The Kakatiya rule appeared to be extinguished. But then, once again a miracle happened. The faithful commander Recherla Rudra proved his worth and kept the throne intact by suppressing all rebellion, just as Ganapathi Deva's ancestors had kept their loyalty intact towards their Chalukyan masters. The prince Ganapathi Deva ascended the throne after safely returning to his kingdom in 1209 CE. Building upon the solid foundations of loyalty and devotion, Ganapathi Deva ruled for sixty long years. During his reign, the kingdom was destined to see a glorious future.

The Kakatiya Empire at its Zenith

Ganapathi Deva ascended the throne in 1209 after his father's death. He had two brothers, namely Rudra and Bhadra. They may have died at an early age as we do not hear anything about them. So Ganapathi Deva was the sole surviving male issue in the Kakatiya family.

After his imprisonment by Yadava rulers, why was he set free? The Yadava records state that 'Jaitugi, an ocean of compassion, fetched Ganapathi Deva, the speech of whose mouth was sweet, out of

prison and made him lord of the country.³⁸ In fact, Jaitugi followed the traditional policy of Hindu rulers, which recommends that a conqueror should reinstate the existing rulers as their subordinates or place a relative of the deceased upon the throne.

‘The compassion of Yadava rulers may also have been necessitated by the prevailing triangular relationship among Kakatiyas, Yadavas and Hoysalas. Jaitugi, the Yadava ruler, could have killed Ganapathi Deva. But, the conditions of Kakatiya Kingdom had deteriorated and if anyone could have controlled it effectively, it was Ganapathi Deva, the only legitimate successor in the neighbourhood. His release would ensure peace and gratitude. Keeping in view the rising power of Hoysalas in the south who were pressing Yadavas hard, the compassion coupled with political expediency, made the decision obvious. Ganapathi Deva was released with an understanding that in case of Deogiri’s conflict with Hoysalas, the Kakatiya ruler would help him. Kakatiya general, Racharla Rudra, approached Jaitugi for negotiations. The mission succeeded, the prince was released and was then enthroned. The faithful general was naturally honoured by several appropriate titles.’³⁹

After establishing himself on the throne, Ganapathi Deva embarked upon his mission to realize his forefather’s dream. His matrimonial relations with the contemporary powerful families proved to be immensely helpful. ‘To establish his hegemony over the Velanadu territory, once conquered by his forefathers, he first invaded Bezawada, the eastern frontier of Kakatiya Kingdom in 1201 CE.’⁴⁰ In spite of the strong fortifications, General Chamunda conquered Divi and plundered its treasury. For diplomatic reasons, the territories were not annexed and Ayya chiefs were allowed to continue their rule. ‘In bargain, the ruler’s two daughters, namely Naramba and Peramba were married to Ganapathi Deva and his son Jaya or Jayapa was taken in Kakatiya’s service, who later became famous as Gajasenapathi.’⁴¹ The cherished desire of Ganapathi Deva’s ancestors was accomplished through the annexation of Divi Island, which brought the Kakatiya kingdom upto the sea shore.

After conquering Divi, Ganapathi Deva set his sight on Velanadu. However, in 1208, the Cholas invaded Kakatiya Empire. Ganapathi Deva had to withdraw his army from Velanadu. After tackling Cholas, he returned with renewed vigour to defeat Prithiviswara, the ruler of Velanadu, who was killed in 1210. The credit was taken by Telugu Choda King of Nellore, Ganapathi Deva and Ballaya Chola. The Ganapathi Deva inscription states that, “The King carried to his city a mass of handsome women, fine men, excellent elephants and horses and various kinds of precious stones, which he had seized throughout the Velanadu country.”⁴²

After Velanadu, Ganapati Deva looked towards Kalinga. In 1212, a partial victory was gained against Kalinga. His forces marched up to Aska near Berhampur. But his hold was not sustained. ‘In 1217, after the death of Eastern Ganga King Rajaraja, his energetic and warlike son, Ananga Bhima III, ascended the throne and regained the territory up to Draksharama.’⁴³ The successive rulers of Kalinga and the Kakatiya ruler Ganapathi Deva were engaged in a series of inconclusive conflicts. Eventually, the Kakatiya power remained unchallenged in the former Kalinga region only upto Draksharama during the remaining period of Ganapathi rule.

Relations between Kaktiyas and Cholas had been mostly conflictual.

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The former’s desire to dominate Velanadu region pushed Ganapathi Deva to south where Koluttunga III, the Chola ruler was bound to oppose it. One inscription says that, “Koluttunga III having subdued the Vadugu (Telugus) who were fierce in war and thus brought Vengi Mandalam under his sway. He was pleased to shower gold and enter the golden city of Urangi (A Tamilized name of Warangal).”⁴⁴ The year of the war between Kakatiyas and Cholas was perhaps 1208. ‘Yet another inscription says that Ganapathi Deva pursued Koluttunga III till Nellore, where the latter’s feudatory was defeated and replaced by TikkaI to the throne of Nellore by 1208.’⁴⁵

By around 1216 CE, the Chola monarchy was moving towards its extinction and the balance of power was shifting in favour of

Hoysalas. As the Chola hold over Kanchi became vulnerable, Ganapathi Deva intervened in its affairs on the Chola side and defeated the Hoysalas. Yet another inscription of 1228 states that, “Ganapathi Deva was the destroyer of Lada, Choda and Kataka.”⁴⁶ The victory restored Tikka Ion the throne of Nellore. Later on, Ganapathi Deva subjugated Telugu Chodas as well. Yadavas of Addanki were also brought under his Vassalage.

In 1248, Tikka I died. His successor’s hold on Nellore became weak. Ganapathi Deva had to intervene in the emerging vacuum yet again in 1249. An epigraph states, “That Kakatiya army set out on an expedition charged with the conquest of southern Kingdom. It reduced Nellore to ashes and played a ball game with the heads of the opponents and having entered Dravid Mandala, captured Koluttunga Rajendra Chola and received a gift of elephants from the King of Nellore.’ War being over, the Kakatiya general Samantha Bhoja got busy in constructing a temple in the ensuing peace.”⁴⁷



Rani Rudrama Devi 1259 to 1289 CE, was one of the most prominent rulers of the Kakatiya dynasty on the Deccan Plateau, being one of the few ruling queens in Indian history. She shines gloriously in the medieval history of South India. She was the only child of King Ganapathi Dava who ruled at Warangal the capital of Kakateeya Dynasty that had sway over entire Telangana.

In 1249, the Cholas may have been subdued by Kakatiyas, but in the ensuing years, the power vacuum was quickly being filled up by the Pandyans. ‘The decisive victory of Jatavarman Sundara Pandyan’s over Ganapathi Deva in Mattukur in Nellore district was the watershed in Kakatiya’s affairs in those parts of the country. As Pandyas performed Virabhisheka ceremony, Ganapathi Deva fought the last battle and suffered his first defeat.’⁴⁸ The entire political

**Ganapati
Deva fought
the last
battle and
suffered his
first defeat**



set-up was disturbed and local chiefs started defying the Kakatiya authority. The Pandyan influence had come to the frontiers of Kakatiya Empire. ‘To retrieve the situation, Ganapathi Deva sent his army to the frontier under the command of renowned generals, namely Induluri Gannaya, Jannigadeva and Natavadi Kumara Ganapathi Deva in 1259. The success, if any was partial and ultimately, Ganapathi Deva started withdrawing himself from the administration.’⁴⁹

‘In or about 1269-70 CE, Ganapathi Deva joined the company of Lord Shiva.’⁵⁰

The Grand Queen

Ganapathi Deva had no male heirs from his chief queen. ‘He had two daughters, namely Rudramba and Ganapamba.’⁵¹ Rudramba, the elder sister, was chosen by her father to succeed him. **Poets did not find it difficult to justify it as God’s will.** ‘Vidyanaatha stated that without the blessing of God, a woman could not rule at all. The poet had already informed that Lord Shiva had taken birth in the Kakatiya family in the form of a woman.’⁵² Poetic justification apart, Ganapathi Deva’s domestic situation during his rule was complex. Ganapathi Deva’s chief queen was Soma. The daughter Rudramamba was born to this couple. After his Divi victory, the vanquished ruler’s daughters, namely Naramba and Peramamba had also become Ganapathi Deva’s wives. Ganapamba, the second daughter of Ganapathi Deva, was perhaps born to one of them. She became a widow at an early age. Her husband, Kota Betaraju’s kingdom was a part of the Kakatiya Empire. As a father, Ganapathi Deva, might have thought that it was better to entrust the administration of that territory to Ganapamba.

These adjustments might have compelled Ganapathi Deva to involve Rudramba in his administration from an early age. In due course of time, she would have become a familiar figure in the affairs of state. Thereafter, stepping into the shoes of her father after his demise must have made the transition natural. From as early as 1240, Rudramba was actively associated with the state affairs, during her father's lifetime. From 1259 onwards, she began to rule as joint monarch, under the name of Rudradeva Maharaja. With proper grooming and rich experience, she ascended the throne in 1262. A woman of immense courage and wisdom, she took charge of the Kakatiya Empire when it was tottering owing to Ganapathi Deva's defeat at the hands of the Pandyas. The delicacy and social reluctance to accept woman as a ruler was not allowed to obstruct her in discharging the sovereign duties. The brave queen not only rescued the Kakatiya Empire from a possible eclipse, but also retained its imperial prestige intact throughout her reign and, at last, she even died in battle.

The early days of Rudramba's reign were critical. Both internal and external dangers threatened the security of the throne. Ganapathi Deva's sons by other queens revolted and seized the capital. Some of the nobles of Kakatiya Empire were unwilling to pay homage to a woman and submit to her authority. They took up arms against her and attempted to throw off her yoke. Records tell us, "That when Rudramba had gone to a village called Mogalicherla to worship the deity Ekavira, her two step-brothers, namely Harihardeva and Murarideva closed the gates of Warangal fort and defied her authority. She appealed to the loyalty of her people and brought the two brothers around tactfully."⁵³ Army generals, accustomed to receive orders from her since the reign of her father, supported and sustained her rule just as Recharla Prasaditya, a Velama chief had helped her during accession. Having entered the fort, she severely punished the rebels.'

In 1262, Rudrama's first brush with external threat came from the Kalinga's territory. The Kakatiya's army under the general ship of Prolaya nayak defeated Kapperunjanga and compelled

him to acknowledge Kakatiya's suzerainty. A couple of years later, in 1265, the Yadava King Mahadeva waged a war against their eastern neighbour. From Yadava's point of view, 'that Andhra placed a woman on throne for fear of Mahadeva⁵⁴ was a good enough reason, to wage a war. We are also told that "Mahadeva took several instruments from the ruler of Telangana, including five musical instruments (symbol of power and status) but left the ruler Rudramba as he refrained from killing a woman."⁵⁵ But, on the contrary, the Kakatiya records tell us that Mahadeva was badly defeated. 'Mahadeva invaded the Kakatiya Kingdom and laid siege to its capital Warangal. The queen fought against him for one full fortnight and destroyed three lakh of infantry and one lakh of cavalry and fully repelled the Yadava army. She pursued the retreating army upto Devagiri. Mahadeva was compelled to sue for peace and offered her a crore of gold coins as war indemnity, which she distributed among the commanders of her army. After that, she set up a pillar of victory and returned to her Kingdom.'⁵⁶ On the basis of other evidence, it is reasonable to accept that Mahadeva suffered defeat at the hands of Rudramba.

Annexing Bidar, collecting ransom, assuming the title of Rajagaja Kesari and thanking God by constructing a temple in Warangal fort were the obvious follow up to this victory. Rudramba remains the only Kakatiya ruler to have annexed portions of the Yadava kingdom. Some members of the Yadava royal family left their native country and settled in Telangana under the protection of the victorious queen. The western frontier was saved. However, the control of eastern and southern territories became fluid. In 1274, Vengi was invaded by Gajapathi rulers of Orissa who came upto Draksharamam. Yet again, the queen despatched her army under the general Prolaya nayak. The victory over Kalinga was brilliant, but the conflict against Kalinga rulers and their allies was not over. 'To put an end to this threat, Rudramba sent her powerful generals Induluri Annayya and Kolam Rudradeva with an army of twelve thousand cavalry, four lakhs of infantry, together with six thousand lancers.'⁵⁷ Even discounting for exaggeration, the

fact remains that no further incursion occurred from Kalinga side into the Kakatiya territories.

After Ganapathi Deva's defeat at Pandyan's hands, both sides were itching for a decisive war. Ganapathi Deva was able to retrieve some of the territories. After his death, the Pandyas, smelling an opportunity due to a woman on Kakatiya throne penetrated into the Kakatiya territories. 'The Pandyan ruler was advised not to go north, because a woman was ruling under a masculine name.'⁵⁸ Vikram Pandya raided but was repelled by the queen in 1288. Rudramba may have subdued Vikram Pandya but a far more insidious challenge was brewing up in her territories in and around the present day Cuddapah district. A Kayastha ruler, Jannigadeva had regained this area which after his death, passed on to Tripurarideva. He was loyal to his Kakatiya sovereign, but his reign was short lived. He was succeeded by Ambadeva who was very ambitious and most powerful among the Kayastha rulers. From the beginning of his career, he was planning to carve out an independent principality for himself.

In 1289, Ambadeva defeated Sripathi Ganapathi, a feudatory of Kakatiyas. It provoked the queen. She concentrated her power to attack Ambadeva. He was not sitting idle either. The sworn enemies of Kakatiyas, namely Yadavas of Devagiri and Pandyas were befriended. 'As the queen's army approached, Ambadeva appealed to his allies for help. Inscriptions confirm that help did arrive. The Pandyans sent elephants and a "fleet footed horses" as auxiliary forces to his assistance. The Yadavas sent him 'presents of golden jewels set with gems.'⁵⁹ "In this fierce engagement, the Kakatiya troops were defeated. Tripurantakam inscription dated 1290-91 speaks of the crushing defeat of the Kakatiyas. It is claimed that Ambadeva cut off the heads of seventy-five princes. Probably, it refers to the seventy-five Nayakas in the service of the queen."⁶⁰ Tragically, the Kakatiya queen Rudramba too died on the battlefield in the midst of fighting. Her general Mallikarjuna, too perished in the same battle. 'Ambadeva is said to have deprived him of "his seven limbs". Here "seven limbs" or "sapta-angas" mean the seven constituent parts of a kingdom namely

Swami, Amatya, Suhrit, Kosa, Rastra, Durga and Bala (king, minister, friend, treasury, territory, forts and forces).⁶¹

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In the midst of gloom and tragedy, poets were able to find some divine light. “The city of Orugallu show illuminated by the rays of the crescent moon adoring the head of Shiva, even during the dark fortnight. The implication is that by the grace of God Swayam Bhu, the people of Orugallu were not perturbed, even during the dark period of tragedy. The sorrows due to Rudramba’s death were lingering in the hearts of the people of Orugallu.”⁶² The poetic consolation, however, also confirms that the queen died in 1289.

Rudramba devi was undoubtedly one of the greatest rulers of Telangana and adjoining areas. The Venetian traveller, Marco Polo was deeply impressed by her active and wise administration of the kingdom. She, attired in male garments, presided over the court, gave interviews to foreigners, listened to secret service reports, held consultations with her ministers, generals and other high dignitaries of state and advised them on how to promote best interests of her people. When required, she took to battlefield in person, astride on a horse and led her troops against the enemy. She was a valiant and courageous fighter with great ability as a general to lead her men in war and in peace.

Seven centuries and a quarter have lapsed since the brave Kakatiya Queen fell amidst the battlefield while fighting. But, her memory refuses to dim amongst her people. She reminds one of Rani of Jhansi, Laxmi Bai who astride on her horse in full battle gear too fell amidst the battlefield while fighting against British in 1857. Queens who sacrifice their lives for their people never really perish. They continue to rule over the minds and hearts of their ever-loyal people, forever.

15.3 SETBACKS AND COLLAPSE

In November 1289 CE, Prataparudra ascended the Kakatiya throne after the demise of Rudramba. The early years of his reign were

crowned with success and splendour but the later years of his rule witnessed incessant attacks from the Delhi Sultanate. After successive assaults, the Kakatiyas Empire was finally extinguished in 1323CE.

As already said, “Rudramadevi was married to the Chalukyan Prince named Virabhadra, son of Indusekhara of Nidadavolu. She had three daughters, Mummadamma, Rudramma and Ruyamma. The eldest was married to a Kakatiya Prince named Mahadeva, the second daughter to the Yadava Prince Ellanadeva and the last to the Induluri chief, Annaya. Her grandson, Mummadamma’s son Kumararudra i.e, Prataprudra succeeded her to the throne.”⁶³ Born in 1254, he was, in fact, adopted by his grandmother as her successor. From an early age, he had been participating in administrative affairs of the empire. He had assisted his grandmother in military undertakings and the government. By the time, he ascended the throne at an age of thirty five years, his knowledge about statecraft was bound to have been quite mature. The nobles of the kingdom and enemies did not dare to rebel against the young monarch after his accession.

His first military enterprise as crown prince had been against the ambitious military chief, Ambadeva. The latter was defeated, but his ambitions survived. His hostility had been responsible for the death of Rudramba. His aspirations were bound to collide head on with the Kakatiya rule. In 1291, Pratapa Rudra planned a three-pronged attack towards Nellore, Thripurantakam and Adoni. The triple alliance between Pandyas, Ambadeva and Yadavas was broken by intercepting their individual forces before they united. Isolated in this manner, Ambadeva fled from Thripurantakam towards Cuddapah during mid 1291 and his seventy-two forts were captured during a single onslaught. Adoni was captured and Raichur Doab was brought under Kakatiya’s control. Before the close of thirteenth century, Pratapa Rudra was able to establish his authority towards the southern and south-western territories.

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In the past, Ambadeva had helped Manamagandagopala in getting the throne of Nellore. “Prataparudra’s task was cut out. In the 1291 campaign, he killed the Nellore ruler. After ‘cutting the head of Munamagandagopala.’”⁶⁴ Rajaganda gopala was put on the Nellore throne. The new ruler had amicable relationship with Prataparudra to start with. However, in succeeding years, he became recalcitrant, overthrew the Kakatiya suzerainty and entered into an alliance with the Pandyas by accepting their lordship. In 1297, the Kakatiya monarch liquidated him to re-establish their suzerainty.

The Yadavas, the western neighbours of Kakatiyas, had mostly been hostile. Prataparudra ensured that “The mighty army of Kakatiyas brought crushing defeat for the Yadavas. After capturing forts, the army entered the city of Raichur. A strong stone fort was constructed with the sole objective of protecting the captured territory and its inhabitants.”⁶⁵ By the closing years of the thirteenth century, the Kakatiya monarch, Prataparudra, was able to establish his firm hold in south-eastern, southern and western directions. None could challenge his authority, at least from those flanks.

But, local victories in Deccan lands were soon to be swamped by a gathering storm from the north. Fresh arms inspired by a new militant faith astride on hordes of swift fleet of Arabian and Persian horses had already crossed the Vindhyan barrier. In 1296, the Yadava kingdom of Devgiri was already overwhelmed by the Governor of Kara. He was none other than Allauddin, the son-in-

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law of Jalaluddin Khilji, the Sultan of Delhi. Its wealth was looted and as Devgiri lay in ruins, the victor returned to Kara, liquidated his father-in-law and, quite naturally, ascended the throne of Delhi.

As power shifted in Delhi, Pratapa Rudra got alarmed. He was hardly able to consolidate his conquests in the south. Danger was imminent and he could smell it. He reorganized the defences of his kingdom, toned up the Nayankara system, and said to have mustered an army of nine lakh



archers, twenty thousand horses and hundred elephants. As he awaited the impending calamity, Allauddin, the Sultan of Delhi did not disappoint him either. His logic was simple. He had not sacked Devgiri completely. The Raja there had parted only a fraction of his wealth. If rumours are to be believed, Warangal was even wealthier than Devgiri. People said that Telengana, of which Warangal was the capital, had gold and diamond mines. Therefore, Warangal after Devgiri was the most obvious and coveted target for the Delhi Sultan.

In 1303, Allauddin directed his first invasion of Telengana. Malik Fakhruddin Juna and Jhaju led the expedition by way of Bengal and Orissa and met Kakatiya arms at Upparapalli in the modern-day Karimnagar district. The attack was repulsed by the Velama chief, Venna, son of Recharla Prasaditya and Potuganti Malli, the two commanders of the Kakatiya army. The ever-loyal Velama commanders reportedly destroyed the invading army. But it was only the beginning of the northern onslaught.

The End Game

Allauddin just could not accept defeat. In 1309, to avenge the disaster, he dispatched a larger army, with Naib Malik Kafur and Khwaja Hazi as its commanders. They were suitably instructed that, "O my talented warriors, I charge you to march towards Telingana with a large army and move swiftly, doing one stage a day; on your arrival in the suburbs of Telingana, you should subject the whole area immediately to effective raids. Afterwards, you should lay siege to the fortress and shake it to its foundations. Should the Rai of Telingana submit and presents wealth in money and elephants, you should ask him to be under my sovereignty and restore his dominion; you should give him a robe studded with jewels and promise him a parasol on my behalf with due regards. This done, you should return to the capital in good cheer. If the Rai wavers and delays his submission, you must draw out your dagger and demolish his fortress completely, kill him and send his head along with his elephants and riches to me."⁶⁶

The march commenced and lasted for more than three months. Amir Khusran had given a graphic description about the entire expedition. 'Malik Kafur started on expedition against Telinga (Telengana) on 31st October 1309 with a red canopy. Roads were not comfortable and the army had to pass through hills, rivers and forests. The army crossed the five rivers - Jun, Chambal, Kummari, Niyas and Bhanuji and waded through forests, before it could reach Sultanpur. There, they halted for four days. After that, the army resumed its march towards its destination through hazardous route. After thirteen days, they reached Khandar. There, they took rest for fourteen days. There, they reviewed their army.'⁶⁷ "After being fully satisfied about their condition, the Maliks, the pious and celebrated persons in the army assembled under the royal canopy and offered common prayers."⁶⁸

"Again, the invading army resumed its march through hill roads which were high and low. Every day, they crossed new rivers. They came to the great river Narmada which looked like a flood. They managed to cross it and after eight days reached Nilakanthe, which was on the border of Devagiri. On their approaching Devagiri, Rai Ramadeva came forth to meet the army with respectful offerings to Sultan and presents to the generals. While the army was marching through the territories of Deogiri, Ramadeva and his officers went out to the camp headquarters and rendered every assistance. He made the bazar people attend to the army and gave them strict orders to supply goods to the soldiers at cheap rates. When the army resumed its march, Ramadeva sent men forward to all the villages on the route, as far as the borders of Arangal (Warangal), with orders for the collection of fodder and provisions for the army, and giving notice that even if a bit of rope was lost, they would have to answer for it. He added to it a force of Maharathas, both horse and foot. He himself accompanied the army on its march upto several stages." In fact, the loyalty and hospitality offered by Ramadeva is attested by Ferishta too."⁶⁹

"The imperial army marched towards Telengana through a very difficult path which was narrow and at the same time, led to gross

greenery hills. Passing through Basirgarh, the doab of two rivers, the Yashar and the Baruji, the army reached the fort of Sarbar or Sirpur, on the northern borders of Telengana. Ala-ud-din's army used the difficult route via Sirpur-Tandur to descend on Warangal."⁷⁰

Sirpur was an important fort, functioning as a protective barrier for the Kakatiya Empire. Malik Kafur, the commander of the Imperial army, ordered the attack. The Kakatiya's army fought valiantly, but losing hope of victory, everyone threw himself with his wife and children, upon the flames and departed life (to hell). While the fire was yet blazing, an attack was made on the fort and those who escaped the flames, became the victims of the sword. "The Governor of the fort was killed and his brother was made incharge after securing a promise of loyalty and the accumulated wealth was seized."⁷¹

After capturing fort at Sirpur, the victorious army resumed its march to Warangal. "In order that the pure tree of Islam may be planted and flourish in the soil of Tailang and the evil tree, which had struck its roots deep might be torn up by force."⁷² On 20th January 1310, the Muslim army reached in the neighbourhood of Warangal. One thousand warriors were deployed to collect information and two chiefs with forty archers were sent to capture the hill of Anumkonda (Hanmakonda), from where the gardens of Warangal were visible.

The hill of Anumkonda, located strategically some four miles before Warangal Fort was captured. The city of Warangal, fortified by double wall of mud and stone of seven miles circumference was surrounded by invaders. The outer wall was made of mud and the inner of the black granite stone. Khusran writes, "The wall of Arangal (Warangal) was made of mud, but was so strong that a spear of steel could not pierce it, and if a ball from a catapult was to strike against it, it would rebound like a nut which children play with."⁷³

The siege began and continued for twenty-five days. "Trees of the sacred grooves were cut with axes and felled, notwithstanding their

... the pure tree of Islam may be planted and flourish in the soil of Tailang and evil tree, with its roots struck might be torn up by force



groans. And the Hindus, who worshipped trees, could not at that time come to the rescue of their idols, so that every cursed tree that was in that capital of idolatry was cut down to the roots; and clever carpenters applied the sharp iron to shape the blocks, so that a wooden fortress was drawn round the army, of such stability, that if fire had rained from heaven, their camp would have been unscathed. It was carried on with great fury in spite of an obstinate defence. The outer part of the fort was protected by seventy bastions, each of which was under the protection of a general (nayak). Several sorties were repulsed and in one, the whole party was slain and, the heads of the Raouts rolled on the plain like crocodile's eggs. At length, the outer wall was taken.”⁷⁴

The invaders pressed from the outside. The besieged offered a stubborn resistance, while remaining confined within the four walls of the fort with their treasure. It was the time, when the local population, wanting to help Prataparudra, waged a guerrilla war. It destroyed the postal system which had been arranged by Alauddin for the purpose of quick information. It might have made Alauddin anxious but, Malik Kafur did not lose his nerve. He ordered his army to shower a reign of arrows upon the inmates ceaselessly, day and night. The fort was overcrowded. So, no arrow missed its mark. Prataparudra, seeing no alternative lost his courage. He sent messengers for negotiations.

Negotiations were over. He was ordered to give up the whole of his treasure, and a general massacre was threatened, should he be

- a hundred
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found to have kept anything for himself. “Malik Kafur took from Prataparudra all the treasure which he had accumulated in course of many years – a hundred elephants, seven thousand horses and huge quantities of jewels and valuables. He took from him in writing a solemn promise acknowledging to send annually treasures and elephants.”⁷⁵ Prataparudra, the Kakatiya ruler became a tributary to the Sultan of Delhi.



The following day, Malik Kafur lifted the siege. In March 1310, Malik Kafur left Warangal with his army,

with a thousand camels groaning under the weight of the treasure. On reaching Delhi, he presented treasure to the Sultan. The Muslim penetration of the Deccan had completely changed the political balance of power in south of Vindhya. The harsh and humiliating defeat of Prataparudra at the hands of Alauddin Khilji weakened his authority. An atmosphere of chaos and confusion gripped various Kakatiya feudatories.

In 1311CE, Allauddin attacked the Pandyan kingdom of Madurai and sought the help of the Kakatiya ruler. As Pratapa Rudra's authority in Nellore and Gandikota was challenged by local feudatories, he found himself supporting Allauddin, reluctantly to assert his own authority there. Kakatiyas might have established their authority in Nellore, but Allauddin's shadow continued to linger till his death in 1316CE.

Taking advantage of the power vacuum, Hoysalas occupied Kanchi. Pratapa Rudra expelled them. But now, Pandyas laid siege to it. Thereupon, Pratapa Rudra took the command, and brought Kanchi under Kakatiya control. After establishing his authority in Nellore and Cuddapah regions, Pratapa Rudra visited the famous temples at Srisailem and Tripurantakam. Area was thickly forested. Large tracts of lands were cleared and new villages were colonized by the people from Telengana. Srisailem region was constituted into a Nayankara and assigned to Videmu Kommaraju, a local subordinate.

In 1316CE, Alauddin was liquidated by Malik Kafur, his trusted general and architect of the Deccan conquests. Soon after his succession, Malik Kafur ordered the gouging of the eyes of two of Alauddin's sons. In 1317CE, he himself was killed while asleep due to palace intrigues. His successor Khutb-ud-Din Mubarak Khan, the third son of Alauddin Khilji was the only survivor. Due to tectonic shifts of power in Delhi and the prevailing confusion, Prataparudra decided to stop sending the annual tribute to Delhi. At around the same time, Devagiri rulers also revolted against Delhi. The Sultan Mubarak Khan, promptly dispatched a prompt expedition under

... Malik Kafur left Warangal with his army, with a thousand camels groaning under the weight of the treasure



his trusted general, Khusrau Khan, to demand payment of annual tribute. The shadows of Delhi Sultanate were lengthening over Deccan, with ominous consequences to Kakatiya rulers.

The Finale

The chosen general, Khusrau Khan, promptly marched to Deogiri and crushed its ruler Harapaladeva. Thereafter, he resumed his march for Arangal (Warangal). After reaching Warangal, he drew the army in battle array and sent a courier with a letter to Prataparudra. The text of the letter, as described by Isami, a Deccan historian was, "O wise and talented Rai! You are the pride of the intellectual Rais. The emperor has sent me to your territory backed by enormous troops. If you send the fixed amount of the tribute soon, it will be to your interest in the end. If you do not accept this, your territory and countryside will be damaged. As soon as you take cognizance of this letter, you must either pay the tribute or show cause for non-payment. You must not delay this matter, for thereby you will be setting the region Telingana on fire."⁷⁶

Prataparudra received the letter with much cordiality, honoured the messenger and sent a reply conveying his regret and seeking apology in the following words:

"I am a slave of the emperor; I am devoted heart and soul to his army chiefs. I myself was intending to send the tributes to the capital, but since the distance is great and roads are infested with miscreants' right through, I kept the matter in abeyance. I hope that His Majesty will accept my plea. Now your Excellency has arrived right in, I shall whole heartedly send the tribute with proper presents."⁷⁷

Soon after this, Prataparudra sent the tribute which was received by Khusran Khan

Soon after this, Prataparudra sent the tribute which was received by Khusran Khan. He, in accordance with the orders of the Sultan, sent be jewelled robe together with aparasol and durbash to Prataparudra. With the submission of Prataparudra, Khusrau Khan accomplished his task and returned in triumph.



"After the departure of Khusran Khan, Prataparudra was involved in a war with Kampili. It was under the rule of Kumara

Rama. He is said to have visited the court of Prataparudra and appealed for help against the Hoysala king, Ballala. The guest was honoured but no help could have been extended on the ground that Hoysalas were Prataparudra's friends. Kumara Rama got angry and captured some southern territories of Kakatiyas. The later were able to assert their domination when Prolaya Annaya recaptured the same soon thereafter.”⁷⁸

“Khusrau Khan took his victories in Deccan as a stepping stone to the throne at Delhi. As if driven by some invisible force, the trusted general, liquidated his own master. He occupied the throne under the title Nasir ud Din. Soon thereafter, he was beheaded by Turkish noble Ghias ud Din Tughlaq. The later wept after witnessing the scenes of the Khilji's family's destruction. After showing formal reluctance, he mounted the throne and founded a new dynasty, under the title of Ghiasuddin Tughlaq Shah in September 1320.”⁷⁹ The arrival of Tughlaqs, on Delhi throne had even darker consequences in store for Tilangana lands.

These quick political upheavals in Delhi made Prataparudra forget to pay his tribute, yet again. He also reoccupied Bedarkot and other places ceded by him to Khusrau, the Khilji governor. How could Delhi ruler, whosoever it was, could ever tolerate it? “The new ruler Ghiasuddin was an energetic ruler and a man of strong will. There was a difference between him and Alauddin Khilji. The latter was satisfied only with the treasure. But, Ghiasuddin Tughlaq wanted territories as well as treasures.”⁸⁰ After consolidating his position in the north, he sent an expedition against Prataparudra under the command of his son Ulugh Khan. “He was accompanied by troops from Chanderi, Badaon, Malwa and a number of veteran soldiers of both, old and new dynasties. On his way to Telingana, the Prince halted at Deogiri. After recruiting some more troops, he ultimately reached Warangal. According to Ferishta, Pratapa Rudra opposed the advance of Muslim army with spirit, but was obliged in the end to retreat to his capital, which was immediately besieged by Ulugh Khan. Siege was indeed protracted and fierce. The fighting extended beyond Warangal. Majir Abu Riza was engaged in besieging Kotagiri at the same time that Ulugh Khan

was vainly attempting to capture Warangal. It is quite likely that other places of importance in the Kakatiya country were also attacked by various detachments.”⁸¹

’The capital Warangal remained under siege for six long months but could not be captured. Defenders were running low on their fast-depleting resources. A rebellion broke out in the invader’s camp owing to the machinations of Ubaid, who is variously spoken as a poet and an astrologer. As Ulugh Khan retreated homewards, Kakatiya arms pursued him. They attacked, plundered his baggage and followed him until he reached Kotagiri. Majir Abu Riza who was engaged in besieging the fort came to his rescue and saved the army from destruction.

The consequent loss to the Muslim army gave a fresh impetus to Prataparudra. It also enhanced his power and prestige, in quite a surrealistic manner. “He celebrated by a feast in honour of his victory.”⁸² He asked his officials to, “let the granaries be opened, let the market be brisk, let the amins empty all the stores, let them continue this from morning till sunset, and give away to farmers all kinds of grains, let the whole land come under tillage, hands should be off from every other business.”⁸³ The all out celebrations in Prataparudra’s domain were rather short lived.

Sultan Ghiasuddin Tughlaq, just like Allauddin Khilji was a man of strong will. He could not accept defeat either. Rebel armies were severely punished. To avenge the disaster, reinforcements were sent to Devgiri where Ulugh Khan had taken refuge. He was instructed to march again into Telingana and subjugate it. The King’s faithful son, Ulugh Khan set-out, marched rapidly, reached Bedrakot, seized it along with several others en route. They were garrisoned under trustworthy officers with instructions to hold them to the last. He arrived in Podhana (Bodhan), which was at a distance of few days journey from Warangal. After siege of three or four days, the fort capitulated. The Governor and his followers saved themselves by embracing Islam.

Next and final destination of Ulugh Khan was Warangal, the Kakatiya’s capital city. He proceeded and arrived there soon.

Promptly, the siege was laid. Isami describes it and the circumstances, in which the fort was captured.

“After the retreat of Ulugh Khan from Warangal at the end of his first expedition Pratapa Rudra held a feast to celebrate his victory over the Muslims. Believing that they would not again invade his kingdom in the near future, he opened the granaries within the fort and sold all the grain stored up there; he also commanded his subjects to abandon military activities and busy themselves with their cattle and crops. When, within four months of his retreat Ulugh Khan returned with a fresh army to besiege Warangal fort, it was without a proper garrison to maintain its defence, and lacked even adequate stores and provisions to feed the garrison during the siege. Though taken by surprise, Pratapa Rudra put up a plucky fight. But the scanty stock of provisions soon ran out and since the troops inside the fort began to suffer severely from hunger, Pratapa Rudra was forced to surrender. He threw open the gates of the fort, and handed himself along with other members of his family to Ulugh Khan. The Muslims then entered the fort, plundered the houses, and demolished the public buildings.”⁸⁴

Victory was complete. The very name Warangal was altered to Sultanpur. However, it was not considered safe to keep Pratapa Rudra in the country. His presence might lead to popular revolts and other political complications. Ulugh Khan immediately sent him to Delhi with all his family members. An army contingent escorted them under Kadin Khan and Khwaja Hazi.

The very name Warangal was altered to Sultanpur

They were however, not destined to bring the fallen monarch into the metropolis. He preferred death to dishonour. On the way, while taking bath in Narmada River on its banks in Hoshangabad, he took a final dip, never to resurface again. They say that he took jal-samadhi, voluntarily. The inscriptions clearly state that, “Prataparudra reached the habitation of God on the bank of river Somodhbhava, ie., river Narmada.”⁸⁵



In 1323CE, with the defeat and death of Pratapa Rudra, Telengana passed into the hands of alien rulers. The fourteenth century

In fact, the overall polity of Peninsular India was going to take a totally new trajectory, unknown in the past

witnessed the total subjugation of both the Deccan kingdoms ie., Yadavas of Devgiri and Kakatiyas of Warangal. Arms of Delhi Sultans subsumed other southern kingdoms like Hoysalas and Pandyan too. In fact, the overall polity of Peninsular India was going to take a totally new trajectory, unknown in the past.



15.4 SUBORDINATES OF KAKATIYAS

The long political journey of Kakatiyas, spanning more than three centuries from 1001CE till 1323CE, could not have been possible without a team of dedicated chiefs. A look at these feudatory chiefs would be appropriate.

The Recherla Chiefs

They were associated with Kakatiyas from the very beginning, and deserve particular mention. “They were Reddis by caste and seem to have originated from the village of Recheruvula. We must distinguish them from the other family, bearing the same name but belonging to the Velama caste. The latter seem to have come from the family, Rechadi or Rechadla.”⁸⁶ With unfailing loyalty, the Recherla chiefs served the Kakatiyas for many generations as military commanders and feudatories.

In 1052 CE, Brahma Senapati appeared to have seized Kanchipura and secured the Goddess of victory” to his Kakatiya master, Beta I. The occasion was the invasion of Kanchi by the Chalukya king, Trilokyamalla Someswara I. Brahma Senapati’s son was Kota Senapati, whose son Kama served Prola II, as the commander of his armies. Gumda of Manthena is stated to have been beheaded by this general. His son was Kata, whose son was Rudra Senapati. “He set up an inscription to record the construction of a temple to the God Rudrashwara at Palampet and gifted villages to him. Rudra Senapati is stated to have rescued the “Goddess of Fortune” to the Kakatiyas when “she set her foot on the thorns””⁸⁷ In 1198CE, the conflict with the Deogiri rulers and death of Kakatiya monarch Mahadeva at the hands of Jaitagi, the very existence of the kingdom was endangered. Ganapathi Deva’s accession became uncertain. “But,

the statesmanship of Recherla Rudra and his followers like Malyala Chaunda Senapati, ensured safe return and accession of Ganapati Deva. The latter, in recognition of his services, conferred on him the position of Mandalika along with insignia like throne, a pair of chauries etc.”⁸⁸ During the early thirteenth century, Recherla Rudra had annexed Bhadrachalam region, also known as Visurunadu to the Kakatiya kingdom. This family continued to be in the service of the Kakatiyas, even later than Ganapati Deva’s reign, but with diminishing prominence.

“Various chiefs of Recherla family, besides their military activities strove hard to reclaim land, settle people by constructing tanks and embellish it with temples.”⁸⁹

The Viriyal Chiefs

These chiefs were also among the earliest associates of the Kakatiyas, even before the latter asserted their sovereignty. “Both Kakatiya and Viriyal families had matrimonial relations in those early days.”⁹⁰

“Viriyal Erra is known to be in the service of the Bottu Beta, of the Mudigonda Chalukya family to whom he restored Korvai region, whereas his wife Kamavasini helped the Kakatiya orphan boy, Garuda Beta (Beta-I) in acquiring the Anumkonda vishaya as fief from the Chalukyan king in 1000CE. Viriyal Erra had a son named Sura, whose son and grandson were Beta and Malla respectively. In 1124CE, Malla installed the god Malleshvara and donated the village Guduru to the deity.”⁹¹ “After 1157CE, Kakatiya Rudra attacked Kanduri Bheema. Beta’s other three sons were Sura, Malla and Komma. This Sura is stated to have built a temple for the Lord Shiva and a tank at Ayyannapura.”⁹² The other brother Malla had a son called Annaya whose daughter Mallamma was given in marriage to Malyala Chaunda, Senapati of Kondaparti. “In the year 1245CE, another member of the Viriyala family named Rudra made a gift of a lamp to god, Svayambhu deva.”⁹³ The record of service of Viriyal chiefs continued till 1273CE. Therefore, the family line of these chiefs can be traced all the way from the very beginning from the time of Beta-I in 1000 CE till Rudramba’s times. All these chiefs were designated as Samantanripa and whose loyalty to the Kakatiyas was extolled. Their

participation in all the military undertakings was unflinching and the role played by these chiefs in establishing the Kakatiyas and extending their authority, at crucial early stages was quite significant.

The Malyala Chiefs

Dannaya Mantri, lord of the town of Malyala, was the earliest member of this family of generals. Dannaya's son was Sabba-senapati whose son was Kata, a commander in the armies of Kakatiya Rudradeva. During the latter's campaign in the coastal Andhradesa, Kata took an active part and captured Dharnikota. Prola and Malyala Chaunda were the two sons of Kata. The latter was the commander-in-chief of Kakatiya's armies during early years of Ganapati Deva. The credit of subjugating the entire coastal Andhra, in particular the defeat of Prithiviswara, the Velanati chief, who was holding sway over the entire coastal region at that time goes to this famous general, Malyala Chaunda. This campaign took place sometimes between 1203 and 1206. The able commander proceeded to Dvipa, the island province of the Velanati kingdom. The island was captured, its ruler Prithiviswara driven out, the treasure of the enemy seized and presented to the king Ganapati. "He commemorated the victory by building a temple to the God Chaundesa at Kondaparthi."⁹⁴

The Natvadi Chiefs

The present day Nandigama Taluka in Krishna district was the well known Natvadi region. "These chiefs might have been stationed by the Rashtrakuta kings in this region and later shifted to Telingana."⁹⁵ "They were serving as subordinate chiefs under the western Chalukyas. In 1101, Buddha raja granted a village Indrapura to a Brahmana sabha as per Narsampet inscription of the Warangal district."⁹⁶ "They are stated as the lords of Madapallipura, a village near Madhira, which is supposed to be their original town. They were having marital relations with the Kakatiyas for more than one generation. Kakatiya Mahadeva's mother Muppamamba was the sister of Natavadi Durga. Mahadeva's two daughters Mailama and Kundama were given in marriage to the grandsons of Durga.

Both the families namely Kakatiya and Natavadi belonged to the same caste and moved together during the times of Rashtrakutas. Mailama had her fief in the Bayyaram region including Ingurti, whereas Kundama had Nandigama, Kundavaram and other places in Janagaon and Chennur talukas. Some records of Mailama are also noticed as far as in Tripurantakam temple.”⁹⁷

Both families - Kakatiyas & Natavadi - belonged to the same caste



The Cheraku Chiefs

“The family of these chiefs, like others, got their name after their home town – a small town Cheraku, consisting of twelve villages situated in the Eruva region.”⁹⁸ The region extended on both sides of river Krishna in the Nalgonda and Prakasam district. Choda chiefs controlling this region granted the leadership of Cheraku to an early member, named Kata. The family belonged to Reddi caste. Kata, the earliest Cheraku had three sons. His grandsons changed their loyalty, from Choda chiefs to the rising Kakatiyas, who made them the hereditary Mahasamantas ruling the hill tracks of present Achampet Taluka. Due to the power shift, Kakatiya Rudra was able to achieve his victory over Choda Bhima and Uday Choda. The successive generations, serving the Kakatiya kings Rudra, Mahadeva and Ganapati, continued to be showered with favours.

“In all the military undertakings of the Kakatiya kings, participation of these chiefs was always accompanied by victory. They were most trustworthy subordinates with a distinct military muscle. In 1289-90, after the accession of Prataprudra, Cheraku Rajendra, son of Veluri Bollaya granted the village Garrankapalli to certain Brahmanas, who performed the obsequies at Gaya for his deceased father in 1293.”⁹⁹ It is plausible that some chiefs of Cheraku family were entrusted with the administration of region south of Krishna River in Nandikotkuru taluka in Kurnool district. Cheraku Rajendra’s loyalty to Prataprudra remained intact.

The Kota Chiefs

The family’s name is derived from Dharanikota or Dhanyakataka near Amaravati. “These chiefs come under the class of relatives

of the Kakatiyas.”¹⁰⁰ They are said to have been the lords of the six thousand country (shat sahasravani vallabha) on the southern bank of Krishna. A member of this family, Beta was married to Ganapamba, the Kakatiya princess. In 1218CE, after losing her husband, she granted the village Mogalutla to a Brahamana, who performed Gaya sraddha for her husband. Another member, Kota III, married Bayyala Mahadevi, daughter of the Natvadi chief, Rudra. Their subsequent descendents were originally aligned to Chalukya-Chola sovereigns. Later on, they changed their allegiance to Kakatiyas. In 1185 CE, Kakatiya Rudradeva, during his campaign in Palnadu region, attacked these chiefs. The Malyala chief, Chaundasenani did the needful. After the victory, the Kota principality came under the Kakatiya sovereignty.

The Kayastha Chiefs

Of all the Kakatiya subordinates, the Kayasthas were the most accomplished, powerful and ambitious. Controlling the territories south of Krishna River in the present day Rayalseema, their alignment with the Kakatiyas was propitious for both. However, the subsequent ambition of Kayastha chiefs confronted the Kakatiya sovereign as well as all their subordinates resulted in collision and counter collision. Consequently, the Kayasthas lost their kingdom by the end of the thirteenth century.

“Kayastha chiefs as a class of warriors had migrated from Western India. Dhamsa was the early known member of the family.”¹⁰¹ The king Ganapathi deva had stationed them at Panagallu as the governors of that part of the kingdom. Horsemanship and command of the cavalry was their specialization and, therefore, the reason for their entry in Kakatiya power structure.

Five chiefs of this family had ruled some part of the Kurnool-Cuddapah region of the Kakatiya kingdom. Gangaya Sahini, the commander of the cavalry, was the earliest member to have become popular. By 1250CE, he rose to the prominence of Maha mandaleshwara, ruling a large region extending from Panagallu in modern-day Nalgonda district to Valluru in the modern-day

Cuddapah district. "At the command of Ganapathi deva, the Kayastha chief Ganagaya Sahani led an expedition into the Seuna kingdom in the west and made its king Kannara or Damodara flee from the battle that ensued. Ganapathi deva, apart from honouring him with several titles, also made him the head of the seventy-two branches of administration of the kingdom (Bahattara Niyog Adhipati)."¹⁰²

In 1254CE, the Gangaya Sahani attacked the Vidumba chief, Rayadeva. The latter was ruling Marjavadi and Pothapinadu region, i.e., the territories adjoining present-day Cuddapah and Nellore districts. During the conflict, Manuma Siddhi II, the Telugu Choda king of Nellore, sent his armies to support Kayastha chief. After victory, the Kayastha chief enlarged his kingdom including Marjavadi, Eruva and Pallinadu with their capital at Valluru in Cuddapah district.

"In 1258CE, Gangaya Sahani died. As he had no sons, his sister's eldest son, Janardhana or Janniga deva, succeeded him. He was also a warrior of great valour and participated in the war against Pandyas at Muttukuru in the Nellore region. His attack on Pallava chief from Kanchi at Somsila on the banks of Pinakini is described at length in the Mydukuru inscriptions. He was credited with the title (Ganapathi Deva Dakshina Bhuja Danda) i.e., the right hand of Ganapathi deva. He ruled upto 1268 and was succeeded by his younger brother Tripurari-I. The latter died after a short rule of three years in 1272. His younger brother, Ambadeva II came to power at this crucial juncture of Kakatiya rule."¹⁰³

"Ambadeva-II was the most illustrious and powerful chief of the family. He had an uninterrupted series of victories. Sripathi Ganapathi ruling Gurindala in Palnadu region was defeated and the title 'The Wrestler of the Thousand Kings' was appropriated. Then he killed seventy-five kings and worshipped with their 'lotus like heads the goddess of anger that came out of his eyes.'¹⁰⁴ He is said to have killed Mallideva, a Choda chief of Eruva. This was followed by his defeating the Kota chief who was ruling the eastern part of Tripurantkam and Palnadu. He is next said to have killed several enemies and wore the garland of their skulls, imitating the God Bhairava. He made the Vaidumba chiefs flee and captured several

horses from them. Further, he reinstated Manumaganda Gopala, the Choda king in Vikramsimha pura i.e., Nellore. This Choda ruler was the enemy of Manuma Siddhi-II, who was formerly helped by Ganapathi deva.

All these victories of Ambadeva-II, have a common thread. All his enemies were loyal subordinates of the Kakatiya Queen, Rudramba. To bring down the Queen's kingdom, Ambadeva was successfully demolishing each one of its supporting pillars.

To bring down the Queen's kingdom, Ambadeva was successfully demolishing each one of its supporting pillars

The structure, built on trust and loyalty, was bombarded by towering ambition, disloyalty and brute force of Ambadeva-II. In 1289CE, it eventually consumed the Queen Rudramba herself. She died in the midst of the battlefield along with her general Mallikarjuna Nayaka. We are informed that he was captured in the battlefield and instead of killing him with sword, Ambadeva took away "his seven angas". In all these expeditions, he received help from the Seunas and the Pandyas, the neighbours and sworn enemies of Kakatiyas.



In 1290CE, having achieved such a great victory over the sovereign Queen, Ambadeva proclaimed independence. Even before that event, he was exercising his independent authority from Valluripatna in the regions of Gandikota, Mulkinadu, Renadu, Pendekallu, Sakili, Eruva and Pottapi.

Prataprudra succeeded Rudramba and he was determined to wipe off the disgrace that befell the royal family. He mounted a three-pronged attack to tackle the triple challenge of Seunas, Pandyas and Ambadeva simultaneously. In 1291CE, Tripurantkam was captured by his minister Induluri Annayya.

Prataprudra, with his sustained onslaught, eradicated Kayastha power within a period of eight years and re-established his authority in the entire region. In the history of the Kakatiyas, the Kayastha chiefs thus played a prominent role, both as loyal or disloyal subordinates and formidable opponents.

The Induluri Chiefs

“Hailing originally from the village Induluru, the ancestors of this family are reported to be Shiva Bhaktas, Nayakas, chief accountants, Governors, scholars and administrators, the officers in charge of royal seal, scholars in Sanskrit grammar, and the like.”¹⁰⁵ Essentially, they were Brahmins performing multifarious duties as demanded by the successive Kakatiya rulers. The Queen, Rudrambadevi, impressed with the good qualities of Induluri Annaya offered her third daughter Ruyyama in marriage to this chief. He was the chief general who led the campaign against Ambadeva and seized the enemy’s seventy forts. He was one of the loyal ministers of Prataprudra and was entrusted with the defence of the stone fort of Orugallu during the Muslim invasion. The family of Induluri chiefs were ruling more or less the whole of Vengi region and they protected the Kakatiya Kingdom for a long time.

In history of Kakatiyas, Kayasthas played prominent role, as loyal or disloyal subordinates and formidable opponents



Induluris were Brahmins...



The Padma Velama Chiefs

“In the post Kakatiyan period, the Padma Velama chief’s hold over Telengana lands was sustained with Rachakonda and Devarkonda as their power bases. They could command considerable influence all the way for around a century till 1425CE, when the rising tide of Bahamanids from Bidar submerged them completely. In the subsequent periods of Vijaynagara and Gajapathi kings, they continued to play an important role. The later rajas of Venkatgiri, Pithapuram, Bobbili, Jatprole and several others in Andhradesa claim their descent from this ancient family of Padmanayakas, rooted in the Kakatiya period.”¹⁰⁶

The Chalukyas of Mudigonda

Ganapathi deva, after the subjugation of the Kolanu region, proceeded against the Chalukyas of Nidadavolu. The Mandalika Indusekhara was ruling there. In order to make him an ally, Ganapathi deva offered his daughter Rudramba in marriage to Indusekhara’s son, Virabhadra. This chief was placed in charge of Kollipaka for some time. His

other brothers and brother's son served the queen Rudramba and Prataparudra as governors of Nidadavolu's province.

15.5 THE DOWNFALL OF THE KAKATIYA EMPIRE

Victory has many suitors; defeat is an orphan. The adage fits well while narrating the victorious march of successive Kakatiya rulers. However, the defeat of Prataparudra which destroyed the Kakatiya kingdom was not at the hands of neighbouring kingdoms. It was an Islamic hurricane, directed from Delhi and driven by superior mobility, technology and ideological impulse of religious zeal. The lure of gold accumulated in temples and forts acted as an ever-present catalyst to tempt the invaders. These external factors were compounded by internal fractures among the Deccan Kingdoms.

The persistence of Islamic invasions kept buffeting the Deccan kingdoms, till the complete victory was achieved. Whether Prataparudra's kingdom was attacked five times as claimed by Muslim historians or eight times as claimed in local inscriptions is irrelevant. What is important is that attacks were mounted one after the other, till the Kakatiya Kingdom was destroyed. The entire endeavour was undertaken, 'In order that the pure tree of Islam may be planted and flourish in the soil of Tailang and the evil tree, which had struck its roots deep might be torn up by force.'¹⁰⁷ The invader along with its army travelled thousands of miles, crossed several rivers, forest and hilly regions, before mounting their assault.

What was the state of political situation in Deccan kingdoms south of Vindhyas? Each kingdom was in conflictual terms with its neighbour. They had a bitter history of almost annual warfare amongst themselves. The Kakatiyas with Yadavas; the Yadavas with the Hoysalas and the Hoysalas with the Pandyas carried on generations of warfare with a zeal worthy of a worthless cause. The mutual mistrust was so deep that instead of making an alliance against the common foe, they made things rather easy for the invader. After their defeat by the Muslims, Yadavas, in fact, helped the advancing invaders towards Telengana. Their ruler, Ramadeva personally supervised all the help and provision

of facilities to the entire army, while on march. Ramadeva was not alone in doing so. In fact, Prataparudra did exactly the same while helping the invaders to reduce the Pandyan country. Prataparudra personally fought against the Pandyas. With these cracks bordering upon each kingdom, each one of them became the cause for the ruin of others, till all of them were reduced to smithereens and swept away.

“The pugnacious activity of religions such as Vira Shaiva and Vaishnava divided the people into sect’s hostile to each other. After the decline of Jainism in the twelfth century, the social space was filled up with two contending sects, namely Vira Shaiva and Vaishnavism. They launched organized campaigns to exterminate each other. The Kakatiya rulers, particularly after Prola II were all staunch Shaivites. This might have alienated those who followed Vaishnavism, either within Kakatiya domain or even beyond its borders. The sectarian animosity amongst Hindus, weakened them socially to confront an enemy who was moving ahead under the single flag of Islam, without any distinction of caste, race or sects. The social cracks in the society rendered the job of invader that that much easier.”¹⁰⁸

The divide on caste lines at the top echelons of administration was yet another factor which weakened the Kakatiya’s resolve to win.

“During the reign of Ganapathi Deva, the governor of the different regions of the empire known as Nayakas were appointed from members of different castes. This was known as the ‘Nayankara’ system. Prataparudra re-organised this system appointing mostly Padmanayakas to these offices. He dismissed Nayakas belonging to other castes as he suspected their loyalty after the revolt of Amba Deva – the Kayasta.”¹⁰⁹ When the news reached Warangal about the impending invasion, Prataparudra got busy in collecting his forces. Reddies took advantage of the situation, concentrated at Amaravati and proclaimed independence. This was not all. Those who remained

The divide on caste lines at the top echelons of administration was yet another factor which weakened the Kakatiya’s resolve to win



in the service of Prataparudra betrayed him at the crucial moment. “When the fortune of war was hanging in the balance, they received a handsome bribe under the leadership of Babba Reddi from the invaders and deserted the Kakatiya camp.”¹¹⁰ The resulting demoralization sapped the morale and motivation of remaining troops. Though Prataparudra continued to fight, the morale amongst his forces was fading fast.

The final responsibility for the historic defeat has to be shouldered by the ruler, Prataparudra himself. His strategic failure to size up the intention of the invader and the degree of their preparedness is one aspect. But the more important aspect was his continued conflicts with his neighbouring rulers, be it Yadavas in the west or Pandyas in the south. In politics, it is said all too often, that no one is a permanent enemy nor a permanent friend. What is permanent is one's own enlightened self interest. Even in the face of sure defeat at the hands of a powerful and motivated alien invader, the neighbouring Hindu kingdoms could not come together. Each one of the kingdoms in Deccan was defeated, one after the other. None assessed the threat with a broader vision. The invaders had a far broader vision, and eventually, they succeeded in realizing it.

Yet another strategic blunder of Prataparudra relates to his becoming complacent too soon, and in the process, lowering his guard. In the last but one invasion, the Delhi army was compelled to retreat disgracefully. Prataparudra was overjoyed with his success. All the stored grains were sold away. The monarch himself spent his time in offering feasts. He ordered his men to give up war like activities and turn to agricultural pursuits. While the Kakatiya populace was in the thick of festivities and celebrations, the invader returned with fresh impetus and new troops. The ensuing war between an invader, hungry for revenge and victory and Prataparudra, satiated with festivities and celebrations but low on resources was bound to be one sided.

Three other factors, namely fiscal, technological and management of troops also need to be highlighted. The Delhi Sultanate was having access to a massive revenue inflow, from the territories spread over Indo-Gangetic plains. The Deccan Kingdoms, on the other hand, were smaller in size and with fewer resources. Moreover, the water flow in northern rivers fed from Himalayan glaciers was certain. But, the uncertain rainfall in certain unpredictable years made the revenue flow in Deccan Kingdoms rather difficult. The fiscal muscle behind northern troops was surely an important factor behind their ample size. About management of troops, the Kakatiya monarch had to mobilise the troops of his feudatories well in time.

The mobilization of such large numbers for defensive operations took time. Sometimes, they were blocked by the invading troops who were working under a single command and control. This decentralized system might have been effective to tackle Yadavas and Pandyas but proved quite inadequate against formidable surprise invasions from the Delhi Sultanate. “About technology, the invaders were equipped with arms of superior quality, such as ‘Manjank’ and other fire arms. Kakatiya forces had the ageold spears, swords and arches. The invader mostly used fast moving cavalry while Kakatiya forces used oxen, elephants and horses.”¹¹¹

The assorted lot of animals, carrying men and material quite often created confusion, especially when elephants created panic in the midst of the battlefield by crushing their own army. The sad spectacle had been repeating with deadly certainty for the previous sixteen centuries, when Alexander defeated Porus in Northwest India in BCE 323.



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16. Statecraft & Economy during Kakatiya times

This chapter deals with various aspects of the statecraft which includes polity, Governance and taxation on land and commerce. It also covers the scenario relating to tanks, crops and temples. The erstwhile centralized polity of Chalukyas was transformed into a decentralized power structure during Kakatiya times. Even after dominating the main chieftains and assuming imperial dimension, none of the chiefs were disturbed in their possession of power. The ordinary chiefs used to eulogize themselves with lengthy prasasti while referring the Kakatiya overlord with the simple attribute, Maha mandaleshwara. For administrative purposes, the kingdom was divided into Nadus (akin to districts) and Sthalas (a unit of about twenty villages). Village was the lowest unit of administration. During the closing decades of the Kakatiyan rule, a unique system known as 'Nayanakara system' of governance evolved, wherein the substance of the centralized power shifted to decentralized chiefs.

Land tax, based on the canonical principle drawn from scriptures was Shathabhaga (one sixth of the produce on land). It was similar to the one prevailing in all the neighbouring kingdoms like Deogiri and Dwarsamudra. Due to the expansion of population and economy, several other activities like industrial, commercial including professionals were brought under tax net. Property tax was based upon the size of the dwelling. There was cattle tax too.

The trading networks provided the interconnecting grid between rural surplus and urban needs. It also ignited the international trade with a vigorous import and export markets. The excise and customs duties on various commodities were quite gentle.

The rural scenario was studded with tanks, crops, temples and festivals. The tank construction was raised to a pious pedestal. That is why its construction was taken up by anyone having faith, supported by adequate resources. Its maintenance, repairs and repayment of the capital cost was taken up by the community. Innumerable tanks ensured adequate food, fodder, fibre and animal produce. The

temple, apart from being a place of worship also served as the fulcrum of socio-cultural activities.

The chapter concludes with a broad glimpse of Kakatiya times with a clear hint of its economic prosperity measuring a notch above the Indian sub continental levels.

16.1 THE GOVERNANCE

With the liquidation of the last ruler Brihadralha, in 187BCE, the Mauryan Imperium commenced its downward spiral which affected Peninsular India. The power vacuum was filled up by the Satavahanas, who in due course of time became Dakshinapath Patis (The lords of Dakshinapath). By the middle of the first millennium, the Peninsular polity was split into two dominions. Chalukyans came to dominate the north of Krishna river, while the Pallavas followed by Cholas ruled over the region south of the Krishna river. These two imperial powers kept expanding and therefore, colliding with each other. During the twelfth century, both these powers declined and, in their place, kingdoms of smaller size arose. Thereafter, for a couple of centuries, Kakatiyas from Orugallu, Yadavas from Devagiri and Hoysalas from Maa'bar came to rule the Peninsular India.

Let us concentrate upon the rulers covering the present day Telangana lands. With the rise of Western Chalukyas (950CE–1158CE), the Rashtrakutas (750CE–950CE) were eclipsed. The Chalukyan rulers were in conflict with all their neighbours, in particular the Yadavas of Deogiri and the Hoysalas of Dwarasamudra. As their hold diminished, the subordinate power centers in the peripheral zone started shifting their alliances and realigned with the 'war groups', so as to carve out their independent power. When the Chalukyan Emperor Vikramaditya VI was in trouble, Kanduri Chodas declared their independence. The Viriyala chiefs took the opportunity to support Vikramaditya-VI. Viriyala Erra, ably supported by his wife Kamavasini got 'Anumkonda Vishaya' conferred on her nephew, Beta-I.

The sustained loyalty to their political overlords commenced with Beta I and continued through with Prola-I, Beta-II and Prola-II. As their victories enlarged their area of influence, the influence

of Chalukyas declined. In 1158 CE, the Silaharas from the North and Hoysalas from the South attacked and finally extinguished the Chalukyas. The ensuing power vacuum was filled up by Rudra Deva, the son of Prola-II in 1159CE. The Imperial Kakatiyas had arrived in Telengana lands as its undisputed masters. All the other subordinate powers viz., the Recharlas, the Viriyalas, the Malayalas, the Cherukas, the Gonas and the Natawadis etc., who served under the Chalukyas began to extend their support to the new rulers. Over a century and a half, by 1310CE, the Kakatiya kingdom extended from the river Godavari in the north to the renowned town of Kanchi in the south and from the eastern coast to Panugal-Marzawadi in the west.

The imperial Kakatiya had arrived in Telengana lands as its undisputed masters



A New Polity

At first, the introduction of the polity by Kakatiyas was not exactly imperial. After dominating the main chieftains, especially Prithivisvara of Velanadu region, others quickly became their allies or relatives by marriage. None of these chiefs were disturbed in their possession or power. They enjoyed their freedom in all respects, except in military matters. The only concern of the king was to check their growth in power. Kakatiyas preference was for a decentralized type of administration with limited central enforcement. In general, the system worked well, except in the case of the Kayastha chief, Ambadeva.

“Thus, the erstwhile centralized policy of the Chalukyas and Cholas was transformed into a decentralised power structure by the Kakatiyas.”¹ In this novel type of polity, there was no pomp, no eulogy of high-sounding titles and no imposition of direct supremacy. The ordinary chiefs used to eulogize themselves with lengthy prasasti and refer to the Kakatiya overlord with the simple attribute, Maha mandaleshwara. The decentralized power structure was sustained for a century and a half from 1158CE onwards, where trust was reposed upon, and reciprocated by the subordinate chiefs. The solitary exception was Ambadeva, the ambitious General from Paknadu – Cuddapah region, whose revolt radically destabilized

An orderly succession without any conflict or bloodshed was the most important factor



the structure. In 1290, this internal revolt, reinforced by several other factors, eventually caused the collapse of the Kakatiyas in 1323.

From 1158 to 1323CE, the Kakatiya imperium sustained for 165 years. Such a long span of uninterrupted rule was due to certain unique characteristics, common to successive Kakatiya rulers. An orderly succession without any conflict or bloodshed was the most important factor. It was reinforced by successive rulers, when they expanded and consolidated the Kakatiya kingdom.

Prola-II had died in the midst of the battle field while on an expedition in Vengi. His son, Rudradeva was determined to achieve the task left unfinished by his father. Rudradeva, transformed the Kakatiya kingdom into an empire. It extended upto the sea in the east, Srisaila in the south, Kalyana (Bidar) in the west and Malayvanta mountain ranges in Karimnagar district in the north. The everexpanding territories of the empire led to shifting and expansion of the Capital. The overcrowding at Anumkonda was tackled by moving the new capital to Orugallu (Warangal), so that growing population, governmental buildings and officials could be accommodated there. Rudradeva completed the stone fort at Warangal, which had become the seat of their power. His successor, Ganapathi Deva ruled for 64 long years. The Kakatiya Empire witnessed rapid expansion during his reign. At its height, it extended upto Draksharama in Godavari district in the north to Kanchi in the south; Bellary district in the west to the sea in the east. During his long reign, he met defeat only once in Muttukuru in Nellore district, at the hands of the Pandyas.

Rudramba's period witnessed further reinforcement in all aspects of administration initiated by her father. The territory lost to Pandyas was recovered and the territories to west were added by defeating Yadavas. Kalinga's periodic advances in the east were dealt with a heavy hand. Prataprudra's reign, to begin with, witnessed consolidation of boundaries in southern and western flanks. Thereafter, buffeted by incessant Islamic assaults, he faced continuous vicissitudes and

misfortunes. With the defeat of Prataparudra, the Kakatiya Empire ceased to exist.

The Godavari – Krishna delta territories lying between the Eastern ghats and the Bay of Bengal were controlled by the Rajahmundry and Kondaveedu rulers. The inland territories, covering the present-day Telengana were controlled by Padmanayaks, before being absorbed by the rising tide of the Bahamanis.

Expansion by Co-option

There had been a common thread running through the personal characteristics of successive Kakatiyas rulers. Their acts of victory did not vanquish the enemy. The enemy was mostly co-opted in the expanding empire. Even, the art and architecture in his dominion were replicated, in Kakatiya's capital. "In 1172CE, Rudradeva visited the village Akunuru in Janagaon district and granted vrittis (favours) to Brahmans. He also donated ratnas (Water lifting mechanism) to certain communities and articles to the temple built in his name by the soldiers of the village."² He also exempted farmers from payment of taxes on certain grains grown in the village. He was a pious man too. 'Apart from going on pilgrimage to different religious centres, he performed Pindadana at Gaya in Bihar to his ancestors. A staunch shaivaite, he also worshipped Vasudeva and Surya.'³

Their act of victory did not vanquish the enemy



His military victories were followed up by investments in tanks, temples and the new capital city. He never demolished any tank or temple, even after subduing his several enemies. Ganapathideva, apart from a great conqueror, was also an able administrator. He always gave a patient hearing and was called, 'one who was never agitated by anyone.'⁴ His kindness towards his subjects reportedly turned their heart into a 'Krida Griha' (a play house) for them. His efficiency in matters of justice and timely adjudication is well preserved in various inscriptions. "A boundary dispute between villages of Duggirala, Brani and Morampudi was settled in an amicable manner. Two ministers were sent to the spot and in presence of all the parties, Surapraju, the watchman (Polewari)

was asked to walk on the boundary line. He faithfully traversed the ancient boundary as per his memory. Pillars were set-up at fourteen places to restore the original boundary. The dispute was settled to the satisfaction of one and all.”⁵

“Yet another inscription mentions about denial of water rights to Brahamans from Gonugu kalva by nearby cultivators. The local authorities failed to resolve it. The Brahamans moved to the court of Ganapathi Deva. He deputed his Minister who ascertained the factual position on the spot with the help of documents. After re-examining the matter, the Gonugu kalva was restored to the rightful owners. The just and fair play of the ruler was essential for maintaining social harmony and the solidarity of his empire.”⁶

“Rudramba, like her father, was a devoted Shaivaite by faith. We are informed that she made a gift of the village Mandarin in Guntur district to a Shaivaite ascetic, Vishvesvarambhu. The village was inhabited by sixty Brahaman families brought from the Tamil (Dravida) country. The village had a hospital and a school. There were a set of artisans such as goldsmith, coppersmith, blacksmith, carpenter, stone mason, maker of stone images, basket maker, potter and barber. It also informs us that Virabhadras were appointed guardians of the village to perform certain duties like cutting of testicles, heads and stomach. Most probably; they were forms of severe punishment for heinous crimes.”⁷

“Prataprudra, just after ascending the throne, reformed his overall administrative machinery. As already stated, he recruited seventy-seven Nayakas and entrusted them with the defence of the seventy-seven bastions of the Warangal fort. They were granted territories in exchange for their services and subsequently, the system became famous as Nayankara system. That continued even in the Vijayanagara kingdom. His army was composed of four arms, namely elephants, cavalry, archers and infantry. At one place, it is pointed out that the army consisted of hundred elephants, twenty thousand horses and nine lakh archers.”⁸

The impact of these conquests was large scale migration of people from one part of the country to another. Rudramba’s victory over

Deogiri at Bedarakot (Bidar) witnessed migration of Yadavas into Kakatiya's dominion. Conquest of Warangal saw an out-migration of its military leadership towards west, who subsequently laid the foundations of Vijayanagara Empire. At the same time, the rise of Bahamanis saw immigration of Muslims soldiers and their camp followers from northern India. It was followed by immigration of soldiers from distant lands like Transoxonia, Iran and Turan. With the extension of Vijayanagara Empire, large number of Telugus and Kannadigas moved into Tamil country. Most of these were soldiers and officers upholding the authority of the victorious rulers. Their migration was undoubtedly helped by grants of lands and other concessions, at the expense of the people of the conquered territory. Royal patronage of learning, art, sculpture and religion were other causes for similar movements of people.

The governance during the Kakatiya times was based on the ancient traditions. The time-honoured tenets of the Hindu Dharma laid down by the great Rishis of yore, right from Manu to Kautilya had guided the rulers and the ruled in Bharatvarsha in general. Dharmashastras in those days used to serve as the statutory texts. The king was to abide by Rajaniti, and as much as the subjects, by Dharmashastra. The king had a heavy responsibility to protect good and law-abiding subjects from the evil-doers. Whenever a conflict arose between the king's rules i.e., Rajaniti and the general law i.e., Dharmashastra, the latter was to be honoured. Kakatiya rulers subscribed to those well laid out tenets, just as their contemporaries like Yadavas, Cholas, Hoysalas and all others were following the same principles in their respective dominions.

Samayas

'The societal division, besides the four main Varnas was further categorized in their professions. The usual way of representing the people in general was by mentioning them as Ashtadasapraja i.e., the eighteen sects of people, a comprehensive term covering the whole society. The eighteen sects were the four main castes and fourteen occupations; Vyavaharikas (Officer), Parnchala (Smiths and Carpenters), Kumbhalika (Potter), Tantuvaya (Weaver), Vastra

Bhedaka (Dyers), Tila-ghataka (oil pressers), Kurantaka (Pariyas), Sauchika (tailors), Devamga (spinners), Perika (transporter of goods by pack loads), Gou-rakshakas (cow herds), Kirata (hunters), Rajaka (washerman) and Kshauraka (barbers). Almost all the occupations mentioned above exist in some form or the other in the countryside, even today. The division of society on occupational basis remained intact, so as long as the need for that particular occupation was felt.

All these eighteen categories used to organize their corporate associations to look after the well-being of their people. They were called 'Samayas'. They were internally governed by their own laws and customs called 'Samayachara'. They elected their elders by mutual acceptance and moral integrity. These elders were vested with powers to levy taxes on members, to construct a temple in their locality, to make a gift of ghee for lamps in the temple etc. Defaulters, if any faced the punishment of ex-communication from the Samaya.⁹

'The Brahmanas of a village generally formed into a body called 'Mahajanas'. Normally, they were dealing with the temple administration. The Mahajanas of two villages, namely, Vasantapuram and Vellamgodu had settled a dispute over the boundaries between the two villages. For making minor adjustments, so as to keep the natural barriers like stream or hillock as the boundary, they had asked the parties to compensate for the loss by forfeiting some land in favour of the loser.'¹⁰

Administration

'For the purpose of administration, the Kingdom was divided into several Nadus (akin to districts). Some of the well known Nadus were *Venginadu, Velanadu, Natwadi, Kona Mandala, Virusunadu, Eruvunadu, Marjavadi, Kondapalli-nadu, Sakalisima and Prolinadu. Some others were Kammanadu, Sabbinadu, Pallinadu, Pakanadu, Renadu, Mulikinadu and Kandurunadu.*

These nadus were further subdivided into 'sthalas'; the sthala being a unit of about twenty villages grouped together. The number of sthalas were obviously quite large. Some of the sthalas were *Gurindalasthala, Pingalsthala, Tangedasthala, Magatalaksthala,*

*Kailasamkotasthala, Nadendlasthala, Konduristhala, Maunanuristhala, Kacheralakotasthala and Gangapurasthala.*¹¹

Among the officers who assisted the king in administration, Mahapradhanis came first. There were only few in this category. *Pradhanis, Pruggudas, Amatyas* and *Mantris* constituted the next cadre. The administration was divided into 72 *Niyogas* or branches. Each *Niyoga* was under the supervision of a high officer called *Bhattarani yogaadhipati*. The administration of a *nadu* was entrusted to an *Amatya* or *Preggada* while the *sthala* was looked after by *sthala karnams, sthala sumkaris* and *sthala tirparis*.

‘The village was the lowest unit of administration. Officers called *Ayagaras* looked after the various aspects like collection of taxes, maintaining accounts and land tenures of various kinds. *Talari* was one of the *Ayagaras*. Similarly, *Nirukattu* or waterman who organizes distribution of water of a tank to various cultivators was also one of the villages *Ayagaras*. All these *Ayagaras* were granted some lands as *vrittis*, plus they used to collect some grains from the cultivators.

Some other officers are mentioned in various inscriptions. The post, with or without their functions are enunciated as follows:

1. *Tantrapala Prola Rautu*
2. *Sasanadhikari, Sandhivigrahi Devamamatya*
3. *Padala* - A small officer in Army
4. *Srikarna* - Accountant
5. *Tirparis* - The fixer of levy ie., government share in produce
6. *Sri Bhandau* - Chief treasurer
7. *Sarvadhikari* - The King’s agent
8. *Sumkadhikari* - Tax collectors
9. *Adapamu* - Betel bag bearer
10. *Alavathamu* - Royal fan bearer
11. *Kottaruvu* - Store keeper of the palace
12. *Angarakshaka* - Bodyguard
13. *Nagari-Srivakili* - Gate keeper
14. *Nagari-Adhikari* - Palace administrator
15. *Talari* - Village watchman
16. *Savasi* - Military officer¹²

The ranks of these functionaries depended upon the place of their service, their ranks and mostly, to the proximity of the ruler they served.

The Nayankara System

The Telangana lands, endowed as they are with hilly terrain and thick forests were also quite congenial for construction of strategic forts. The formidable backdrop of a hill range was turned into an impregnable fortress, which later developed into military camps. A fort controlled the plateau; it also stood as a defiant sentinel to any authority desirous of establishing control in the countryside. The hill forts also provided shelter and refuge during anarchy and disorder. Several forts like Panugal, Konduru, Bhuvangiri, Rajukonda, Devarkonda, Anumakonda, Amangallu, Orugallu, Perur, Nallakonda, Kandikonda, Sirikonda, Urulugonda, Arvapalli and Podichedu etc., were constructed by the subordinate authorities in their localities. Each one of these forts was a kind of military station, with enough room to store food, and other essentials in times of crisis.

“The ‘Nayankara’ system of military Administration was introduced by Rudrambadevi and further embellished by her successor, Prataparudra. According to Nitisara, the king should assign villages to the Nayakas in lieu of their salary and the maintenance of some armed forces for the king’s use. The number of elephants, horses and foot soldiers which they had to maintain was fixed according to the fiefs they held. In addition to the supply of soldiers etc, to the king, they also had to pay regular tribute. In this way, the king could ensure about the force he could gather at the times of war. It is a meaningful boast, often quoted from a verse that Prataparudra possessed nine lakhs of archers. According to Pratapacharitra, Prataparudra entrusted the defence of the majority of the seventy-seven bastions of his fort at Warangal to many nayakas of the Velama community, allotting them one-fourth of his kingdom as estates to enable them to maintain the stipulated army.”¹³

Both the statements namely the strength of the nine lakh archers as well as seventy-seven Velama Nayakas are boastful exaggerations. A total population of around 16 lakhs or so during Kakatiya times, inhabiting the present-day Telangana lands could not possibly

have contributed nine lakh archers. “Moreover, the assertion that all the seventy-seven were Velama nayaks may not be true. The reason being, that nayakas of other castes are also noticed in the inscriptions. The Lemkas, who seem to be equal to nayakas in this respect include Reddis and others also. Juttaya Lemka, Gonka Reddi, Rudraya Lemka, Somaya Lemka, Madaya Reddi, Dechaya Lemka and Pinnaya Lemka were not Velamas.”¹⁴

“Besides the forces maintained by the Nayakas, the king maintained large units of four classes of troops, viz., *ratha* (chariot) *gaja* (elephant), *turaga* (cavalry) and *padati* (foot soldiers). According to chronicles, the Kakatiya army during the reign of Prathparudra consisted of 100 elephants, 20,000 horses and 9,00,000 foot soldiers and their commanders were called *gaja-sahini*, *asva-sahini* and *senadhipati* respectively.”¹⁵ As already argued, the actual strength of army needs to be viewed with some moderation. “The kings themselves used to lead the armies in times of war. The next highest officer was *sakala-senadhipati* or commander-in-chief. Somayajula Rudradevaya was the *sakala-senadhipati* of Prataparudra during the battle with Ambadeva. Similarly, Adidamu Mallu and Somayalemka also held that post. The common bantus or soldiers were granted vrittis in lieu of their salaries, whereas the commanders were posted as governors of the nadus.”¹⁶

Prataparudra had entrusted the defence of the seventy-seven bastions of his Warangal fort, predominantly to the Padmanayaka (Velama) caste. The rise of ‘Nayankara System’ was accompanied by a gradual reduction of ‘Rachabhumi’, which were held by royal officials who acted as a check against those spread across the Kingdom as military chief. It resulted in loosening of the king’s grip. Moreover, the decrease in the number of Agraharas and Devabhagas, held by the Brahmins and temples, contributed for the loss of ritual link. The weakening of the two links, namely royal and the ritual rendered ‘war units’ detached and made them almost autonomous. It also rendered them free to shift their allegiance with the neighbouring ‘power unit’, in case of collapse of the central power.

In and around 1315CE, Alauddin found an ally in Prataprudra to wage a war in Pandyan kingdom, to restore Sundara Pandya to his ancestral throne. The subjugation of Prataprudra by Malik Kafur was followed by arrival of Kakatiya officials to the court of Sultan to pay the annual tribute into the imperial treasury. The political relations between Delhi and Warangal apparently became quite intimate. Wassaf refers to the flight of Sundar Pandya to Delhi. 'Sundara Pandi, trembling and alarmed fled from his native country and took refuge under the protection of Ala-ud-Din of Delhi'.

A large Kakatiya force under Prataprudra's famous general Muppidi

A large Kakatiya force under Prataprudra's famous general Muppidi-Nayaka was operating on behalf of Sundara Pandya in Tamil country.

Nayaka was operating on behalf of Sundara Pandya in Tamil country. In 1315CE, there is an assignment of income from lands in some villages for conducting a service named after Muppidi Nayaka, the ruler of Vikramasimha Pattana (Nellore) and one of the ministers of Kakatiya Pratap Rudradeva, in the temple of the God Vriddhagiriswara. In 1317CE, as per Sri Rangam epigraph, the Kakatiya armies came there to restore Sundara Pandya to his ancestral throne.

Therefore, it is quite reasonable to believe that the Kakatiya Monarch sent his armies to the south at the instance of Sultan Ala-ud-Din Khilji to support the contingent of Mohammadan forces, sent thither by the later to restore Sundara Pandya to his ancestral kingdom.

Howsoever reluctant an ally of Delhi Sultan, the Kakatiya's loss of will to confront the superior armies from northern geographies reflect a sapping of their morale from 1315CE onwards. The mounting demoralization was to cost them the entire kingdom by 1323CE.

From 1303 to 1323CE, the Kakatiya polity was repeatedly hammered by the military might of the rulers controlling Delhi Sultanate. The stubborn resistance in the beginning by Kakatiyas was followed by ever growing hunger for tributes by the victor. The extraction of wealth was climaxed by the surrender of Prataprudra himself. The whole city of Warangal was plundered. The treasury was bankrupted and the state economy destroyed. The accumulated wealth for



generations was carried away by Muslim generals. The polity became economically weak and politically lifeless and hence disintegrated.

The Imperium built by the Kakatiyas might have collapsed but the tanks, temples and fort complexes survived. Nayankaras chiefs, who survived became a sort of autonomous power units, free to align with any neighbouring power centre. The Padmanayakas domination was resented by other sudra feudals, who in due course of time, were pushed beyond Godavari River in to forested territories or even beyond eastern ghats in the deltaic lands. The centralizing tendency drew the surviving Padmanayakas together in establishing themselves in Amanagallu, Rachakonda and Devarkonda forts.

Summing up the rise of Padmanayakas, who were an outcome of Nayankara system, T. Dayakara Rao says,

“Owing to the arid nature of the Telangana, the rural bosses, the “local” peasant warrior groups, emerged and gradually developed into “Supra local” and “Regional powers” in time of structural anomalies and external influences. The Padmanayakas (Velamas) of Recharla gotra who were the dominant peasant warriors became “local power groups” in the early Kakatiyan times and emerged as the Nayakas and Nayankaras in the later Kakatiya times at “Supra local” level and finally developed as the “Regional Power” in the post-Kakatiyan times.”¹⁷

16.2 LAND AND TAXATION

Who owns the land? Is it the king or the individual? The question is as old as the settlement of people on land and evolution of kingdoms. The Hindu law givers like Manu, Narada and Kautilya have said that the king was the owner of the land. The immediate counter argument suggests ownership by people who use it by way of cultivation or residence. The convincing solution appears to be that while the basic proprietorship rests with the King, the individuals possess secondary ownership. It is an admitted fact that all the uncultivated waste land, forests, rivers and water bodies in a kingdom belong only to the sovereign. Kakatiya rulers were quite proactive in settling people on these vast and vacant territories.

When a village was newly constructed by clearing the forest, the kings normally extended incentives and privileges like remission of some taxes for a certain period say, for three to five years, along with construction of tanks and allotment of house sites free of cost. An epigraph at Mellacheruvu in the Nalgonda district datable to 1311 refers to remission of taxes from all kinds of government lands.¹⁸ The right of state to tax by way of grain or coin is over a particular piece of land, but not the individual farmer. The person may cultivate it or leave it fallow or even get it cultivated by someone else. The king was satisfied so long as he gets his annual revenue regularly. Therefore, a farmer could sell, donate or mortgage his land along with the same rights that he enjoyed. The state was least concerned about such kind of transfer. That is what is meant by the concept of secondary ownership of the land, which rests with the individual.

Individual ownership apart, there were Devavrittis and Agraharas. It was given to a class of people, mostly Brahamins who looked after the maintenance and functioning of temples, including performance of various rituals. Normally, they possessed more privileges than other land owners. Apart from this, there were service tenures. Those classes of people like soldiers, nayakas, ministers, generals, bodyguards and karnams (village accountants) who served the king's administration were granted Vrittis in the form of some villages or lands according to their services. However, they did not possess any permanent right over these villages. The lands which were allotted to Agraharas or Vrittis naturally belonged to the king and they were called Racha Polamu. Such lands were leased out to cultivators on almost permanent basis, the rent being mostly one sixth of the gross yield under normal circumstances. During wars or other emergencies, it may have been even more.

The king's right to impose a certain tax and his authority to ensure its collection from the people in his kingdom is a time honoured concept. Having inherited the system from the well-established Chalukyan times, the Kakatiyas introduced several new taxes, due to expansion of economy during their reign. "The taxes can be broadly categorized as follows:

1. Land Taxes
2. Industrial and Property Taxes
3. Profession Taxes
4. Commercial Taxes
5. Miscellaneous Taxes¹⁹

Land Taxes

All the lands assigned to individuals, temples, brahmanas, nobles or chiefs were invariably subjected to taxation. Only the unassigned lands in the villages called 'Rachabhumi', apart from waste lands, forests, hilly tracts, river courses and the like were not taxed. The burden of taxation upon Brahamana Agraharas and Deva Vrittis or temple lands was lighter. To encourage new settlements, certain exemptions for a certain period, say three years or more, were granted. But once the families were well settled, the normal principle of taxation was applied to them. The cultivable lands, demarcated for the purpose of taxation was called Ayakattu and the officers who used to collect the governmental share of grain were called Ayagamdru. They were the officers like today's karnams and patwaris.

"Pannu was the primary tax levied on all kinds of lands, irrespective of the crop grown in it. This tax was simply for possessing the land, because the proprietorship of all land in the kingdom rests with the king. Parngamu was another concept which involved the king's share in the gross produce of the cultivated land. The rate at which the king was entitled to have a share in the produce had been known from the time honoured scriptures, reiterated by several authors from time to time. It was to be SHASHTABHAGA (one in six parts) i.e., 16.7% of the gross produce. The system was called 'Shashtabhagen – one who has the right to one-sixth.'"²⁰

"Koluchu was yet another concept. It is the levy in kind at the rate of one tuma per each putti (one twentieth) of the gross produce. Ayagamdru would visit each piece of land at the time of harvest and assess the king's share in the gross produce. In a

Shashtabhaga - one in 6th parts ie 16.7% of the gross produce. System was called Shashtabhagen - one who has right to the 1/6th



record datable to ninth Century found at Kondaparthi, one officer Dhananjaya Phaladharu was entrusted with the task of collection of Kolchu fixed by the chief. Dharana or Nirdharana in Sanskrit means to fix or assess. Phaladhara meant an officer who assesses the produce and the king's share of it.”²¹

“Sunkamu was yet another concept. It comes into operation at the market place where the grain stocks accumulated due to Koluchu are sold to realize cash. Government in those days did not seem to have maintained public granaries for the storage of a variety of levy collections and their disposal. They were, most probably disposed off on a daily basis on the spot at the prevailing market rate. In 1224CE, the Vardhamanapura inscription of Ganapathi deva's vassal Gona Ganapayya stated that at the place where koluchu was sold, a gift of 2 manikas was made to the god. The question arises as to who paid for this and that is where the concept of Sumka comes into being. The commodity so transacted in the market would entail Sumka payment upon the cultivator as well as the purchaser. Sumka, in some ways can be compared to the present-day sales tax, but imposed equally on seller and buyer both.”²²

“Kanika and Darisanamu are other taxes mentioned in the Durgi inscriptions. The former was a kind of tribute people had to pay to the king as a mark of their submission. The Kanika was levied not only on cultivators but also men from other walks of life. Darisanamu was a payment to the king or his subordinate chief when the ryot went to see the king or chief. Even if he did not go to see the king, the payment had to be made. Obviously, the temple lands were exempted from this obligation.”²³

There were some additional taxes on lands for the extra benefits and privileges derived from public sources. Irrigation was the singular source of additional benefit. Tanks were owned by kings, their subordinates, temples as well as individuals. “If the tank or canal belonged to the king, as in the case of the Akunuru epigraph, the income goes to the king. If the water source belongs to an individual, the levy is collected by the owner, who in turn pays to the king a fixed amount for possessing the tank. Same was the case if the tank belongs

to the temple. The fact remains that the cultivator of the wet land had to pay the additional levy to the owner of the tank for using water.”²⁴

‘Vennu Pannu was a tax levied on the crops when they are ready for harvest.’ The amount was assessed on the appearance of corn (vennu). If the crop was unusually good, the cultivator was liable to a levy of additional tax, apart from what was stipulated earlier.

‘Bamtela Ayamu was a levy intended for the maintenance of bamtus or warriors.’²⁵ The general was supposed to maintain a fixed number of bamtus to serve the king in times of war. For the maintenance of such an army, he had to raise extra funds within his fief. The only source of fixed income was the tax on land. This additional tax on account of warriors occurs in the fiefs of those who maintain special battalions for the King. It can be said with certainty that in all the Nayankara villages in the kingdom, the cultivators were subjected to the additional levy of Bamtela Ayamu.

‘Ardhaya refers to the government lands leased out to cultivators, where king gets half of its produce.’²⁶ This must be distinguished from regular assigned lands on permanent basis where the cultivator has to pay one sixth of the produce. Ardhaya type of tenure was confined to only government lands. They were prime assets enjoying strategic advantages like proximity to the capital and water bodies. A certain setti i.e., a merchant is stated to have constructed a tank in Chittapur in the present-day Karimnagar district during Prataprudra’s times. He donated one-third of the produce in the irrigated land to the local god, leaving two thirds to the king, because the whole land belonged to the king. Such lands fetched considerable income to the temple, as well as to the royal exchequer.

Cattle Tax

Sheep and goats had always formed an important possession amongst all peasant classes in Telangana. The reasons are obvious. This land and its topography have provided an enabling ecosystem for these small ruminants to inhabit it since mesolithic times. The Kakatiya rulers invariably levied taxes called pullari on animals. It is a compound word consisting of pullu (grass) and ari (tax). It was the levy imposed upon animal breeders for grazing of sheep, goat,

oxen, cows, buffaloes and other domestic animals in the pasture lands and forests, the proprietorship rights of which rest with the king. The system was decentralized to subordinates who used to collect a larger amount from herders and remit a fixed amount to the king.

‘There were two more taxes called Ari and Appanamu.’²⁷ The first relates to the property tax and the second is a tribute to the king. An inscription from Tripurantkam records a private gift of 50 cows and while handing over the cattle to a cowherd, he was enjoined to supply daily one mana of ghee for maintaining one lamp in the temple and pay a certain Ari i.e., tax per annum. Here 25 cows were generally sufficient for supplying daily one measure of ghee for 365 days. The remaining 25 cows were intended to meet Ari, apart from maintaining his livelihood. In theory, even the temple sheep and cows were subjected to property tax, but in practice, they were mostly exempted from this burden.

Industrial Taxes

There were no big industries, as we presently see and understand them, in those days. However, small scale outfits in the nature of cottage industries were aplenty. Weavers, oil grinders, salt-makers, toddy tappers and potters were subjected to a series of taxes. The first two, namely weavers and oil grinders have to pay several taxes. They had to pay for setting up the industry, for running it and for selling the product in the market, to the local god and to the guild of their community and so on.

Just as Ari is a tax on property, pannu was the tax on the industry. It was levied in two ways. Firstly, one had to pay to get the license and then pay periodically towards the recurring tax. ‘The Velpuru inscription of Rudra Deva dated 1169CE, refers to the gift to the temple of Rameshwara of the Mudra Sumka and Varusarukas levied on the oil mills. Mudra Sumka is analogous to the one-time registration fee of the present days levied at the time of installation of oil mill.’²⁸ Varusa-rukas was the subsequent periodical tax on the producing industry. Sumka was perhaps the toll tax on the sale of oil. Donation to the temple was exempted from any kind of tax. Kanika

was tribute paid to the king or his representative. These four types of levies, namely Ari, Pannu, Sumka and Kanika were to be paid to the government. Besides these, he had to pay the Samaya sumka or the tax to the guild called Telikivevuru or oilmen's association. Last but not the least, the share of local god was paid without fail.

From this example of the oil mill or ganugu, we can infer that any cottage industry be it handloom, salt pans, ratnas or water pulling for supplying water to the fields from a stream or well, tapping of toddy tress, pottery etc., were subjected to a series of taxes.

House Tax

Illari consists of two words, namely Illu – House and Ari – Tax. Illari simply means house tax.²⁹ Merchants and weavers were charged more than the shepherds and other village servants. Sometimes, the assessment was made on the economic status of the owner. For instance, an inscription of Kanduri Bhima Choda at Perur records house-wise contribution by the local nakaram of merchants depending upon three classes. The above average houses were levied a tax of 2 rukas per house; average house 1½ rukas per house and below average house ¾ ruka. There are hints that at times, house taxes were exempted to those sheltering the local gods.

Profession Tax

Professions in general, included not only caste-wise livelihoods but also various cottage industries. All this was covered by various taxes during Kakatiya period. 'In 1219, Ganapathi deva and his daughter Kota Ganapamba issued a grant to certain Rudra Peddi Reddi.'³⁰ The village Mogalutla was granted to the donee with two important conditions. 1) King Ganapathi deva who was present at that time granted his share of income in the village to the donee and 2) The dues payable by the village communities Takshaka (carpenter), Ayaskara (blacksmith), Kumbhakara (potter), Suvarnakara (goldsmith), Rajaka (washerman), Hapita (barber), Chandala (Pariah), ArdhaSiri (Cultivator who shares half the produce with the owner of lands), Adi (and the like) were also granted to the donee, Rudra Peddi Reddi. That proves a point that even in the village belonging to his

own daughter, the king had his share, i.e., one sixth of pannu and other taxes on profession, which in the present case he granted to the donee. 'Elsewhere, King Prataprudra granted the entire income of the village to god Sri Ranganatha.'³¹

'The Kokkireni inscription dated 1314CE, lists house taxes in a certain order. It is maximum from Komatis, followed by Kampus, Weavers and minimum from Karnams.'³² The Akumuru epigraph of Rudradeva in 1172CE indicates the levies from professionals which the king granted to the god. It included a vast spectrum like ratna owners, garden owners, temple priests, herdsmen, potters, barbers, Jains, garland makers, Illadi, washerman and cattle-sheds outside the village. Other levies like tolls, shop taxes and water taxes are stated to have been donated to the god and Brahmins as Vrittis. To compensate for this, the king granted full remission of Tumunyaya i.e., the King's share in kind on all crops and sumka taxes in coin on all varieties in that village. That is why the rate of profession tax are different compared to those cases where people are not granted any concessions. It is quite obvious that weighted average of total tax burden, by way of grain and coin to both i.e., king and the god was kept in a certain balance. The Khandavalli inscription dated 1290CE, confirms this conclusion by stating that whatever the eighteen castes of people had to pay to the king should henceforth be paid to donee alone. For the people, there was only one agency to collect the dues i.e., either king or the god; not both.

'Even the military personnel were to pay the professional tax. The Maktal inscription during Prataprudra's time indicates that Rautu (horse troopers), tamigadu (foot soldier), omte bamtu (soldier riding on camel) and each dhora (master of a group of soldiers) had to pay a certain amount per annum.'³³

'Even the wage earners were not exempted from the profession tax. Some employees of the village Kopparam in Guntur district had reportedly made certain gifts to the god out of their wages for the merit of the king Prataprudra. Vritti pannu or the profession tax is categorically mentioned in one of the at Sarpavaram in East Godavari district of 1404CE. A time indicator or watch is said to

have been installed in a temple and the brahamin appointed for its upkeep and maintenance was given some lands as his remuneration. He was exempted from payment of Vritti pannu (Profession Tax) and the regular tax on his lands as well.”³⁴

“The Draksharama inscription of 1117CE mentions certain rates on professionals like sri mangali, garland makers, potter, vaddari, kammari, goldsmith, carpenter and washer man. The Patarlpadu inscription of 1290 CE mentions certain rates on cowherds, weavers, pregada, sri mangali, potter, warier, pattolavaru, ayagamdru and karnams. These taxes were however donated to the god.”³⁵

Commercial Taxes

Just like Pannu, Sumka is yet another general term which had a wide range of application from tolls on merchandise to tax on marriages. Normally, it implies the levy of tolls on articles of trade. The tradition was well developed during the Chalukyan times and Kakatiyas followed it by incorporating local variations. The word Adda indicated a place where business transactions were conducted or a place where things temporarily stay (Majili). “The word Adda Pattu meant a place on lease with the right of collecting tolls.”³⁶ Those authorised contractors were generally called Sumka-Manyagandru or toll farmers. They had to pay a certain proportion of their income regularly to the king or his agent, in addition to the initial cost of purchasing the license. Tolls were levied on all variety of articles. Even the articles brought to the adda but could not be sold for various reasons were also subjected to a partial taxation towards the rent of penta (market) which belonged to the government. The sellers had to pay penta sumka in all the markets where they took the articles. The tax had to be paid in every market till the articles were disposed off. The rate of levy was also varying from market to market.

Market Officers

The system of fixation of toll and its collection was handled by four functionaries. Sumka manyada (tax farmer) was the first who purchased the right to collect sumka in adda or penta. He had to pay the governmental share, then and there, to the karnam, the second

functionary. The latter was to receive the credits to the Government's account and maintain an account of these transactions. Tirpari was the third functionary who would make assessment about the commodity value and the tax to be paid thereof. Kolagadu was the fourth functionary to weigh and measure various articles. Thus, karnam and Tirpari were government officers while Sumkari and Kolagadu were private contractors. The sumkari was to purchase his right of collecting sumka. His profits depended upon the volume of goods sold in the adda in the year. He was permitted to take his prescribed share of the sumka and nothing more. "This was the general procedure in collecting the addavattu-sumka as illustrated in Tripurantkam of 1296."³⁷

Tirpari was not confined to a village. This functionary was appointed at village, taluka (sthala) and district (nadu) levels as well. "An inscription of Ganapathi deva's reign mentions certain tirpari for two districts, namely Gudrarama and Velanadu, who made a gift of angadi-sumka to the god Kundeshvara of Gudivada, the headquarters of Gudrara region."³⁸ It would appear that Tirpari was a responsible officer of the state to protect the interest of producer or owner on one hand, and ensuring fair collection without causing any loss to the state exchequer, on the other.

"The Panugallu inscription dated 1122CE set-up by Mailamba, the queen of Kanduri Tomdaya Chada, specified levies on certain articles like salt, cart load of jowar, pack load of paddy, betel leaves per head load, areca nut, pepper, ginger, turmeric, cotton, jaggery and sarees. The famous Motupalli charter of the king Ganapathi Deva records the rates of duty on some articles imported and exported from that sea port."³⁹ The rate of duty was one in thirty (or 3.3%) on all exports and imports. The rate on the sale and purchase of cart horses and other animals was 1.25%. At times, it was split into sales at 0.625% and purchase at 0.625%. A tax burden on the seller and purchaser at 0.625% appears to be modest, equitable and just.

There were some miscellaneous taxes as well. In the case of marriage of the komatis, the bridegroom's party was enjoined to pay. The

occasion of naming a child also sometimes attracted tax levy. A sheep or angadi used for conducting business was taxed. A hollow ditch used for mota or water lifting device was taxed. Plying of ferries across rivers was in vogue; so was the practice of leasing those rights for collection of taxes. Gift lands were taxed at concessional rates. Gardens and sheep were in tax net. Over and above all these known taxes, there was a provision to impose tax for unseen circumstances. Madyakam, was an arbitrary tax which could have been levied under any extraordinary circumstances. The right of the sovereign to tax its people was absolute.

The right of the sovereign to tax its people was absolute



16.3 EVOLUTION OF TRADING NETWORKS

We should look upon a city as an organism, pulsating with complex societies, where the urban nucleus along with its rural hinterland is woven into a tight political and economic web. A brief backdrop of evolving urban scenario in the subcontinent, especially in peninsular India where the present-day Telangana lands were situated would be appropriate.

For a millennium or so after disintegration of the Indus Valley Civilization, there was a kind of moderation in the urban scenario. However, from sixth century BCE onwards, there was a long stretch of urban growth. From its epicentre in the Gangetic valley, it spread to the whole of north India first, during sixth century BCE to the third century BCE. Thereafter, from second century BCE onwards, it also covered the central India and peninsular India. Peninsular India witnessed two sets of rulers. The northern half in Deccan plateau was ruled by Satavahanas, Vakatakas, Chalukyas and Rashtrakutas. Their capital cities were Dhulikatta, Kotilingala, Paithan, Badami, Maniyakhed and Kalyan. The southern half was ruled by Pallavas, Cholas, Pandyas and Cheras, from their capital cities of Kanchipuram, Tanjavur and Madurai. The Krishna river, bisecting the peninsular land mass, broadly served as a boundary between these two sets of kingdoms. Of these two regions, it is the Deccan that first concerns us.

The forces of trade and technology are known to bring prosperity; they also catalyze urbanization. By the third century BCE, iron technology had already penetrated into peninsular India. Therefore, during Satavahana period, iron implements multiplied. This gave a fillip to agriculture. Farmers cultivated cotton and millets on high lands and transplanted rice in plain areas. The art of transplanting rice seedlings was widely practiced during the first two centuries in Godavari, Krishna, Mahanadi and Kaveri deltas. Contact with the North established during Mauryan phase helped them to learn the use of bricks and construction of ring wells.

During the first millennium, the Satavahanas made significant advancements in iron technology. Weapons and cutlery made of Indian iron and steel were exported to West Asia, where they were highly valued. It led to the development of durable and sophisticated agricultural implements in India. Hoes, sickles with curved and straight blades, and other implements were used. Some of the specimens utilised back then were much better than those used today in tribal India. The quality of these iron farming implements demonstrates that India has a high level of iron technology. Improvements in the quality and strength of iron chisels and hammers led to better stone object manufacturing, particularly grinding mills (chakki). Querns, mullers, pestles, and mortars were all made with relative simplicity back then.

Monsoon was also discovered during those times. This was an extremely profound discovery. Till then, boats were sailing to lands afar just by hugging the coast line. But monsoon winds were able to carry the same across the oceans directly. Boat sizes escalated as the journey time shrank and the countries situated afar came onto trade maps. India started trading with countries under the Roman Empire viz., Spain, Gaul, Dalmatia, Italy and Egypt. Romans and Greek merchants visited Indian ports and established themselves in small colonies. They came in quest of spices and cotton for which India had become famous in the ancient world.

Brahmins were the pioneers of progressive agriculture in the peninsular kingdoms. The Satavahanas were the first rulers to

make land grants to Brahmins. Owing to their knowledge of astrology and ability to forecast rain, they enjoyed respect among the rural people. Besides, they were the educated class of that age, and also pioneer of culture and progressive agriculture in the South. Kosambi states, "The Brahmins acted as pioneers in undeveloped localities; they first brought plough agriculture to replace slash-and-burn cultivation, or food-gathering. New crops, knowledge of distant markets, organization of village settlements and trade also came with them. As a result, Kings invited Brahmins, generally from the distant Gangetic basin, to settle in unopened localities. Almost all extant copper plates (which have been discovered all over the country by the ton) are charters which, from the fourth century onwards, record land grants to Brahmins unconnected with any temple. In addition, every village would set apart a lot or two of land plus a fixed though small share of village harvests for the priests and Brahmin. Brahmins, however, claimed and generally received exemption from all taxes; they even claimed an especially low rate of interest on loans, and other privileges."

As people settled on land, the evolution of crafts relating to agricultural activities was inevitable. To manufacture a plough, cart and a host of agricultural implements, needed smiths, carpenters and metal workers. To meet the rising social needs, weavers, jewellers and goldsmiths are needed. The proximity of the capital and a port introduced a further element of diversification, such as traders, a group of merchants, king's officers and custom agents, warehouse guards in the market and port towns. The spread of Buddhism and Jainism, coinciding with the increase in trade and commercial activity added further diversification, Jainism was more often prevalent in inland towns while Buddhism was prevalent in lower riverine areas and coastal towns. Both had their patrons who mainly came from mercantile community, apart from ruling families.

The peninsular rulers made temple construction an important activity and in due course of time, these temples controlled adjacent

lands and water resources. The seasonal regulation of cultivation process along with technology of irrigation provided a fillip to farming incomes, which in turn helped the deity and its priests and various service providers, especially its tenants cultivating the 'attached lands'. Brahamins were, needless to say, the organizers, managers and beneficiaries of these multifarious activities, around a temple complex.

“The practice of land grants to Brahmanas and temples for the upkeep of the deity started off the long process of agrarian development, followed by social and economic diversifications. Thus, the control over the temple, the most important 'super ordinate redistributive instrument' was in the hands of the 'Brahmanas'. They, through their 'Sabhas' assumed the role of economic administrators. The creation of such Brahamadiyas and temples was an act of validation by some form of divine authority for the Ksatriyas to give permanence to their power. This, in fact, led to the forging of a new instrument for the organization of sacred, economic, social and political space.”⁴⁰

Some enterprising peasants diversified into trade. Their social status did not change, but they sought validation within the existing institutional means i.e, by participating in gifts to the temple giving. In due course of time, they started managing temple finances. The deity found itself diversifying further as a 'bank' so as to provide loans with its 'righteous interest' to devotees. The merchant representatives were also accommodated in the expanding but effective space created by the temple centers. In physical terms, it was the 'Tirumadaivilagam' around the temple, where separate quarters were assigned to the merchants and craft groups. The trading activities tend to diversify due to the process of specialization. Trading in textiles, supplying ghee and oil, trading in horses or graded spices, aromatics, incense and gems evolved over centuries and spread across peninsular India reaching upto the coast.

To handle this volume of trade, there was need for an appropriate organization. “The founding of Ayyavole (Five Hundred) in the

eighth century may be attributed to a decision of 500 mahajanana of the mahagrahara of Aihole in the Bijapur district of Karnataka to provide an institutional basis for commerce in this region.”⁴¹ It was the largest organization of itinerant merchants of a supra-regional character. It must be differentiated with Manigramam, which as a merchant organization operated within specified regions. The interaction between ‘Manigramam’ and Ayyavole (Five hundred) strengthened both. In due course, many of the military groups joined the organization as protectors of merchandize with a stake and share in its profit. By its very nature and functional necessities, this Five Hundred were not confined to a single caste but were composed of representatives of all the four castes.

“This merchant organization played a dominant role in relation to craft groups. The organization gave advances. The craftsmen produced and merchant’s network sold it to markets, near and far. The association of craft groups with the Five Hundred provided certain legitimacy to the Ayyavoletrade in various articles. This was particularly important in the case of weavers, with whom close contacts were established, for the textile trade was handled particularly in peninsular India and overseas by the five hundred. Their presence in Siam, Sumatra and Burma is attested by the inscriptions in Takua Pa, Laboe Tima and several other places in those countries.”⁴²

A profuse agricultural prosperity, with rice and cotton aplenty, drawing their extension management practices from temple centric men of learnings was a rule, without exception in all peninsular kingdoms, irrespective of dynasties. The uniform Shashta Bhaga (one sixth) share of produce as the king’s share sat comfortably on peasant’s shoulders. The balance 5/6th share, after meeting their family needs found its way through the networks of ‘manigramam’ and Aihole Five Hundred to the markets situated near and far. The virtuous cycle of prosperity kept the king, the deity, its managers, traders and the bulk of peasantry, including military groups in a state of social equilibrium, with a rising and shared prosperity.

**Uniform
Shashtabhaga
(one-sixth)
share produce
as the King’s
share sat
comfortably
on the
peasant’s
shoulders**



Trade Scenario During Kakatiya times

During the first millennium, several kinds of merchant guilds, in particular the famous Ayyavati-500 guild had been in place to take care of trading needs of those times. However, during the Kakatiya period, the traders neither seem to have got any connection with the Ayyavati-500, nor had their religious learnings to Jainism, as they are supposed to have. "An inscription at Tripurantakam of 1214 CE, mentions merchant guilds consisting of members of not only Setti but other classes like Reddis, Nayudus, Boyas and Dasaris."⁴³ Therefore, the advent of Kakatiyas in Telengana brought about a multi-caste sectarian set-up of the merchant guilds. These trading organisations were mainly called Nakarama, Swadesi, Pardesi and Ubhaya Nanadesi-Pekkamdru. These merchants were dealing in wheat, paddy, green gram, jowar and other grains, salt, oil and ghee, pepper, mustard, honey, metals like zinc, tin, copper and camphor, musk, silk, precious stones, pearls, beads, turmeric, onions, ginger, roots, yarn and so on. These guilds had got the license to operate their business in specific territories. Almost all the merchant guilds in the kingdom, besides their respective regions of business, used to maintain regular contacts with the bigger traders in metropolitan areas.

"Several craftsmen and manufacturers like weavers, oil pressers, smiths, potters, jewelers, basket weavers, mat makers and the like also formed into guilds and took their goods in a fair near to their own village. They were not like regular traders of multiple commodities. Yet, they had a place in the adda or market. Their role as producers in the commercial set-up of the country was by no means insignificant."⁴⁴

"Trade in medieval India was dominated by the Vaisya community and in Telengana, this community was called Komati. Some scholars hold a view that the term is derived from the Jain God, Gomateshwara."⁴⁵ But, as most of the Komatis in Telangana did not belong to Jain faith, this view is not tenable. The Komatis are otherwise called Setti (Shreshthis), Chettis etc., and they squarely fall within the Hindu fold. Several authors have attested to the importance of Komatis during the twelfth century. One opinion

holds that Komati was the life of a town, like the trunk to an elephant and water to the paddy crop. It is understandable for the simple reason that wherever there is surplus agricultural produce, it has to be collected, stored, transported and distributed to the nearby towns. Similarly, the ordinary needs of the households like oil, ghee, clothing, utensils, cosmetics and other sundry items had to be procured from towns to be distributed to the villages. The trading network provided two-way circuit among the countless producers and consumers.

“Even the kings and subordinates maintained state Settis. In 1268, Daram Govindu Setti is mentioned during Rudramma’s times; Surapa Setti of Kulottunga Gonka raja and another Setti of the same king is named Raddi Namakara, son of Ayyappa Reddi.”⁴⁶ It must thus be noted that even Reddis were appointed as Settis of the king. In every town and business center, it would appear, the king used to appoint these royal Settis to dispose-off the grains collected as state’s share from the cultivators. Establishing equivalence between a commodity and its prevailing market value has always been the skill of this community.

“The villages were self-sufficient to the extent of food and clothing. However, several other items like salt, minerals and forest produce must necessarily reach every village. Among the aromatics, pepper, ginger (green and dried) and cloves were to be imported from other parts. Then, among the animals, horse, camel, cow, oxen, sheep and buffalo were traded during fairs and pentas, especially organized for animals, as now-a-days. The Velpura inscription of Dochana Peggada Ganapayya of 1247 mentions horse, ox, sheep, cart, ropes as saleable items.”⁴⁷

Orugallu, the capital town undoubtedly, was at the apex of trade pyramid. The market at this place was called ‘Mathiya’. It changed to ‘Mattewada’ with the passage of time. It was the center of all business activities then, just as it is today. Pangallu near Nalgonda, Jadcherla in Mahboobnagar, Alampur on the banks of Tungabhadra, Manthena in Karimnagar, Peruru in Nalgonda, Durgi in Guntur, Gantasala in

Orugallu, the capital town undoubtedly, was at the apex of trade pyramid



Krishna, Tripurantakam in Prakasham and Dornal in Kurnool districts, among others were the important trade centers during the Kakatiya period.

The Kakatiya inscriptions give us some interesting insight about the king's responsibility in maintaining proper conduct of trade in the kingdom. "It is disastrous, it says, to the people if the king appropriates the merchandise, enhances the Sumka (tax) and refuses permission to Pardesi merchants (outsiders) to carry on trade, keeps himself unconcerned when the merchants enhance the prices as they like and when the weights and measures do not remain standard, allows theft and adulteration and the use of false balances even at the cost of his income."⁴⁸ The author continues that when a merchant assures monopoly of a commodity and tries to enhance its price abnormally, the king must confiscate the commodity, paying the dealer its lowest cost price. That is how a king had to deal with the evil trade practices. The ethical trade practices mandated around a millennium ago bear an uncanny resemblance with today's scenario.

The fourteenth century, with the penetration of Islamic armies into the peninsular India presented new challenges to the rulers as well as temples. The accumulated wealth in temples and forts, especially gold and jewels was plundered and carted away. The residual authority of the ruler was demolished. The capital city lost its authority and luster. In its wake new fortified urban centers, fully protected by forts and their garrison rose. The existing political and economic structures were shattered. They were replaced with an alien polity and a changed economy and new capital cities.

16.4 TANKS

The present-day Telangana land in the year 2014, sheltering a population of some 351 lakhs, most probably had around 16 lakh population, a millennium ago. Certain features regarding its population density, being sparser than river valley plains or coastal deltaic spreads were equally true then, as they are today. The main reason has always been the underlying geography. The rocky nature of soil deposits on an undulating plateau, scrubby hills, wooded forests

and limited rainfall, restricted to a couple of months followed by a long dry spell could not have been the first choice of early settlers. Whatever population was subsisting on these lands must have struggled hard against the elements for millennia to ensure its own survival.

The lack of perennial river systems in the peninsular India was compensated by developing 'water storage technology'. Since the turn of the millennium, successive dynasties like Sathavahana, Chalukyas and Rashtrakutas had perfected the technique of check dam constructions across streams and tank construction technology in general. By the time the Kakatiyas arrived on the scene, all these water harvesting structures were well known to the rulers and people alike. Dams were erected across streams and channels taken off from them. In undulating plateau geography of Telangana lands, a chain of tanks (golusu cheruvulu) was constructed along a formidable stream, so that the surplus of a tank in upper reaches flows down to fill up the successor tank downstream. This cascading flow was completely captured through a chain of tanks, even at the height of copious rains during a vigorous monsoon. Most often, the size of a large tank was so large as to accommodate the highest rainfall once in a while, without ever getting breached. A proper management system for maintaining these tanks was always in place.

"Construction of tanks and settling people was embedded in the policy of Kakatiya rulers. Innumerable inscriptions mention about Ganapathi Deva's instructions to his chiefs to carry out his wishes by constructing a tank and settling people around it. All the chiefs took pride in carrying out the ruler's wishes. The spree of constructing irrigation projects continued apace due to active interest taken by the wives of ministers and high-ranking officials. Kuppembika, the wife of Malayala Chamunda excavated several tanks, namely Basasamudram, Kuppu samudram and Ganap samudram and donated her lands behind the tanks.⁴⁹

"In due course of time, the Kakatiya kingdom came to be dotted with countless tanks with settled agriculture and expanding prosperity. The Ramappa and Pakhal lakes are just two examples, which survive

even today, after seven long centuries. Ramappa lake, ‘stands like an ocean that has come thither from fear of submarine fire and looks like a mirror for that city. All the clouds certainly take up its water, not that of the ocean, for they everywhere carry sweet water.’ About Pakhal lake, “Because of its depth, Sesha in its waters relieves himself of drought by means of the throat position of its coolness; by reason of its breath, the damsels of the region of space together perform in it adequate sports; because of its height, its waves spring over the river in the park of the celestial city; into it the orbs of the sun and moon sink by way of substitution, because they imagine it to be an ocean.”⁵⁰

In Telengana, therefore, unlike the rulers located in river valleys or deltaic areas, the kings and their dependents had a tough task of clearing jungles, harnessing streams and managing cultivation. In times of erratic rainfall or spread of epidemic, the challenge must have worsened due to loss of crops and perishing of small animals and human beings. The arrival of Kakatiyas, being the native rulers, was accompanied with strenuous efforts to harness land and water for cultivation. A large number of villages were founded by them or their subordinates. Most of the habitations in the forest tracts of Manthana, Kaleshwaram, Chennur, Narsampeta, Achampet, Khammametu and Kothagudem were all founded during those times. All these habitations were embellished by construction of a tank. The donors, quite often due to their religious zeal, not only funded the entire projects but distributed the consequent benefit in a ratio 1:2 between the temple and the king. The people’s faith in the authorities, both priestly and temporal remained intact.

To settle a village and to construct a tank was a pious act; and added to one’s good deeds. All the rulers and their sub-ordinates, therefore, were busy in earning these spiritual credits for their present life and even beyond. Rudradeva created Rudravaram village; Mahadeva established Mahadevapuram village and Ganapathi deva established Gnanapuram village. Even royal queens did their bit. Bayyaram village has the imprint of Bayyaldevi and Muppavaram

village carries the name of Muppamamba, the sister of Ganapathi deva. Kundamamba gave Kandasamudra tank to the village of Kundavaram in Chinnur taluka. In 1144, an inscription in Parendu in Nalgonda district records the creation of an Agrahara in the same name. "Shares in the lands were assigned to several Brahamanas, Setti, Boya and some temples, with a specific condition that the donees should neither leave the place nor sell away their shares. They were expected to remain there so as to ensure that the village prospers. The lands in the village were exempted from payment of all kinds of taxes, obviously to promote the new settlement."⁵¹

Tank, a spritual virtue

Sapta-Santanas or seven deeds of everlasting virtues, being mentioned in Hindu ethics comprise of producing a son, building a temple, laying a garden, constructing a tank, establishing an Agrahara, undertaking a literary work and accumulating a treasure. Divine benefits attached to the construction of a tank have been mentioned as an incentive in countless inscriptions in Kakatiya times. The tank construction was invariably preceded by installation of Varuna, the God of waters, in order to ensure good supply of water by his grace.

The Kakatiya capital cities of Anumkonda and Orugallu are not served by a perennial river or a natural water body in their proximity. This is in sharp contrast to similar capitals in the contemporary kingdoms like Chalukyas, Deogiri, Hoysalas, Cholas and Pandyas which had rivers like Krishna, Godavari, Kaveri and Vaigai serving the capital needs. Therefore, constructing tanks, reclaiming forest lands and settling people on irrigated agriculture was the essential task of Kakatiya's socio-economic policy. It was also a geographic imperative in plateau lands with a few monsoon months, followed by dry spells. Driven by this logic, all the Kakatiya rulers constructed several tanks; their example was followed by the royal personages, including royal women and others. The table given below is quite eloquent.⁵²

Patrons	Tanks	Canal	Well	Ponds	Total
Kings	64	11	01	01	77
Royal Officials	48	12	01	14	75
Royal Women	09	01	01	06	17
Others	06	03	--	02	11
Total	127	27	03	23	180

(Source: Rao Dayakara, 2016, p 33)

In fact, the Samanthas increased the area under irrigation and cultivation in their own jurisdiction. After meeting their expenses, the surplus went to the central authorities by way of taxes, along with military assistance. It also enhanced the political status of the subordinate powers of Kakatiyas such as Viriyala, Kanduri Choda, Cheraku, Natvadi, Malyala and Recherla families. Among them, Recherla fared well in the polity as well in the economy, since they were supporting Kakatiyas during their troubles with the Yadavas. 'Almost 30% of total irrigation facilities were developed by Recherla chiefs and Kanduri chodas developed 35%.⁵³

Feudatory Chiefs	Tanks	Canals	Wells	Ponds	Total
Recherla	15	05	--	01	21
Malyalas	05	04	--	01	10
Viriyalas	05	--	--	04	09
Cherakus	04	04	--	03	11
Kanduri Chodas	20	04	--	--	24
Total	49	17	--	09	75

(Source: Rao Dayakara, 2016, p 34)

The Recherla chiefs were not only enhancing the agricultural production and also stabilizing Kakatiya rule. In the future, this investment would help them to consolidate their grip over power, even after the fall of Kakatiyas.

‘In the Kakatiya administration, there seems to have been no centralized department to look after either the construction or maintenance of tanks. The Kakatiya kings themselves constructed big tanks. Prola I constructed Kesari Samudra near the village Kesamudram in modern day Mahboobabad Taluka of Warangal district. His son Beta II began the construction of two tanks. Rudradeva caused a big tank to be constructed in the town of Udaychanda, while his minister Gangadhara is known to have constructed a big tank in Hanumkonda. In due course of time, their ministers, subordinates and rich families constructed many tanks across Telangana. Pakala tank, Ramappa lake, Ghanpur tank, Laknavaram tank and so many others have withstood for centuries and continue to irrigate vast extents of land even today.’⁵⁴ ‘In short, there could not have been a village without a tank in those distant times. The same reality is discernable in all the districts of Telingana even today.’⁵⁵

**There
couldn't
have been
a village
without a
tank in those
distant times**



Besides tanks, subsoil water along the sandy banks of rivers and streams formed another source of irrigation. ‘Drawing water by means of mota was in vogue in those days. They were called ratanas. Bullocks were generally used to lift the water from deep wells. An inscription records the gift of a ratana with necessary wood and bullocks. But when water is not very deep, men also used to lift it from canals and wells. Reference to ratanas, that is lifting water by pulley device is very common in the inscription. It seems that these ratanas were let out for rent by the owners of the wells to the neighbouring landowners who did not possess wells.’⁵⁶ Quite often, the money or grain collected was gifted to a certain deity. Similarly, small ponds or kuntas were granted as gifts to the Gods. It would appear that innumerable water bodies, apart from enriching human beings were ensuring prosperity of divine beings as well.

This organic linkage between a tank and the temple gave rise to a unique system of maintenance of water bodies. ‘A record in the Amarabad village datable to thirteenth century BCE. states that a tank belonging to the temple of Swayambhudeva was repaired by a

certain Malliseti. Thereby he irrigated new land and paid 30 madas towards the cost of the land, 25 madas for acquiring niri-mudi, the right of using water from the tank and 10 visas as recurring annual water cess, all the three items being paid to the temple treasury.⁵⁷ It is interesting to note here that a private individual on his own accord raised the tank bund and got the land irrigated, paying the amount to the temple under the above heads. The individual as well as the owner of the tank, i.e., temple is benefitted. This is a fitting example to illustrate as to how tanks, organically attached to the temples were maintained in those days.

“The regular maintenance and upkeep of these irrigation sources was organized with sufficient care. Annual repair to the bunds, removal of silt deposits on the bed and repairs to canals and sluices were looked after by a dedicated body of persons. Those persons were granted an income levied on the cultivators, generally at the rate of one Kuncha for each putti (5% of 20 kuncha is 1 putti) of the gross yield of grain. It was known as Putti-Kuncha or Cheruvu-Kuncha. There was another kind of remuneration called Dasabandha (one-tenth). These charges, it would appear, were in the range of 5% or 10% as a water cess collected and paid locally to those who maintained the irrigation works.”⁵⁸

All the arable land in the kingdom broadly fell in two categories. The lands irrigated by rivers, rivulets, canals, tanks and springs were called

Paddy & millets, grown on wet and dry lands were the staple crops in all parts of the kingdom, as it is today



Nadi – Matrikas. The other rain-fed lands by nature were called Deva – Matrikas. A look at the variety of crops grown during those times would be appropriate.

‘Paddy and millets, grown on wet and dry lands were the staple crops in all parts of the kingdom, as it is today. The harnessing of water on all kinds of streams, small or big, seasonal or perennial for lands lying along their courses was not insignificant. Every village was self sufficient with regards to its food, fodder and water needs. Abundance of rice is attested by innumerable inscriptions.⁵⁹ All kinds of millets along with wheat, green gram, horse gram and black gram were grown

in the fields. Sesame was the main oilseed while mustard, areca nut, coconut, betel leaves and sugarcane were the important commercial crops of that period. Handloom industry needed cotton which had been produced in vast areas since the times immemorial. Vegetables, roots, turmeric, jiggery, indigo, onions and ginger were also grown by the farmers.

The cycle of seasons and rainfall pattern in the geography of Telangana had remained, by and large, consistent over centuries. Therefore, the cropping cycle from sowing to harvesting had remained stable. This also explains the seasonal regularity of various agricultural festivals observed by peasantry in Telingana countryside. Decoration of bullocks and carts and worshipping seed pots along with deity before sowing is still a common sight. A temple on a tank bund is revered as 'Katta Maisamma' by all, with a prayer to Gods to ensure safety of the tank and its filling up during the monsoon season.

The surplus produce from irrigated and settled lands was bound to initiate trade with the outside world. That is where the acumen of the ruler was reflected. After the fall of Chalukya Chola monarchy in coastal regions, the foreign trade deteriorated considerably. Traders were insecure as the king used to take away by force the whole cargo of shipwrecked merchants. But, once his authority in coastal areas was established, Ganapathi Deva brought the situation under control. A charter of security (Abhayasasana) was issued and Motupalli inscription states that he gave protection to all merchants who wished to trade in this part and made them free from oppressive taxation. Moreover, the duties on all exports and imports were not to exceed 1/30th of their value. This edict was renewed a century later by Annupota Reddy (1378) and corresponded to the general practice that prevailed in all the ports, controlled by enlightened and progressive rulers of peninsular India. Duties were fixed for various articles and a state representative was stationed there to ensure fair treatment to all traders. The articles traded were gold, elephants, horses, gems, sandal, camphor, pearls, ivory, silk thread, cereals and spices etc.

The development of a guild structure, which connected traders dealing in a single commodity, aided the trade-driven prosperity. Because these networks generally transcended political upheavals, they were largely unaffected by the wars and revolutions that raged all around them. The 'Manigramam' and the 'Nanadesis' were two of the most well-known guilds from the beginning. The Kakatiyas' chronicles mention merchants from their native nation (Swadesabeharulu), merchants from another country (Paradesabeharulu), and merchants from several countries (Nanadesis). The first were the local merchants, who were organised into nagarams, or local guilds. The second group was similar to the first, only they came from a different country; perhaps they were combining business and pleasure while visiting their neighbours, or perhaps they were gaining religious virtue by participating in yatras and festivals at well-known shrines. Last but not least, there were the great guilds, which featured merchants from all over the world and had formed branches in each.

The Nanadesis certainly brought traders from outside, but they also opened a window for any local enterprising trader to look out for opportunities. They played a very important role in encouraging foreign trade from these lands with countries situated afar. The term 'Manigramam' is a corruption of 'Vanik – gramam', 'an association of merchants'. The traders paid the 'Sumka' regularly, and filled the royal treasury with gold and jewels, and replenished the king's armoury, besides bestowing gifts on pundits and sages "versed in the four samayas and six darsanas". These activities involving continuous meetings and intermingling of people of diverse social background created a liberal and cosmopolitan atmosphere, as opposed to an insular and provincial attitude to life, so common in a peasant society. There were guilds amongst those dealing with Panch-lohalu (five metals), perfumes, money exchangers, areca nut dealers and santa guilds (The weekly fair is called santa). Incidentally, the weekly market i.e., santa is mentioned during Satavahana times as well.

Internal trade was equally brisk in those times. Both, native and foreign traders were participating in internal trade. Bandi (a cart

load) was the unit of measurement and the basis of calculating the dues for bulk commodities like grains, fruits, oil and ghee. Peruka was the unit for salt and unhusked grains. Tula (weight) was the unit in case of sandal and metals, pada in case of javadi and maddur, kodi in case of ivory and silks; malga in the case of yarn and cotton piece. The overall prosperity was so much that, “Ganapathi Deva’s representative Pochana Peggada Ganpayya remitted custom duties payable to three hundred bullocks used in importing goods in the town of Tripurantakam.”

The extension of agriculture was encouraged at all times by granting special facilities and tax concessions for specified periods to people who reclaimed land and brought it under cultivation for the first time. Closely allied to agriculture was cattlerearing and dairy farming. The eco system in Telangana was quite suitable for rearing sheep and goat. Then, dairy farming had been yet another activity prevalent all over. Ghee was not only an important item of food amongst well to do sections in the society, but was used in considerable quantities for lighting lamps in the large temples.

“During Prataparudra’s time, agriculture development was amongst his priorities. He, while on a military campaign against Kayastha Chief Ambadeva, directed one of his officers Irupaketi Nayaka to clear the jungles. He accomplished the task and founded a village named ‘Dupaddi.’”⁶⁰ Similarly, the dense forests covering west of Srisaila mountains were cleared by the order of the king and new population was rehabilitated there. This developed the material resources of the people and also enabled the ruler to expand his revenues. To facilitate the settlement of new arrivals, they were exempted from the payment of revenue for the first three years. New inhabitants arrived, cultivated lands which attracted more people. Increase in population, agricultural expansion and enrichment of state revenues got linked up in a virtuous cycle.

Besides agriculture, industries were also in a healthy condition. “Spinning and weaving formed a major industry, which enjoyed good reputation in the world market. Marco Polo informs us about the muslin manufactured by the local people, that “you must know

that in this kingdom best and most beautiful and finest buckram, in the world is made and most costly too. For I assure you that they were like tissues of spiders' web. Indeed, they are so beautiful that the greatest king and queens might wear them as something truly royal. The people have also the largest sheep in the world, and great abundance of all the necessities of life.”

If Agriculture & Industry were powering the economy within the Kakatita lands, an acceleration was provided by foreign trade of tax by weavers. The Mellacheruvu inscription in Huzurnagar taluk in Nalgonda district dated 1312CE informs us those weavers were paying 16 sinnas per year as professional tax”⁶¹

If agriculture and industry were powering the economy within the Kakatiya territories, an acceleration was provided by trade including foreign trade. An inscription from Tripurantakam dated 1292CE says that various kinds of grain were generally sold in that market. Marco Polo, a Venetian traveller, who visited Motupalli in 1293CE, informs us that the Kakatiya Empire had trade relation with the great Khan. He says, “do not suppose that the good diamonds are brought to our Christian countries, they are all taken to the great Khan and to the kings and barons of these kingdoms. It is they who possess great treasures and purchase almost all valuable stones.”⁶² After praising the virtuous queen, his observations regarding diamond industry are quite appropriate.



“It is in this kingdom that diamonds are got; and I will tell you how. There are certain lofty mountains in those parts; and when the winter rains fall, which are very heavy, the waters come roaring down the mountains in great torrents. When the rains are over, and the waters from the mountains have ceased to flow, they search the beds of the torrents and find plenty of diamonds. In summer also there are plenty to be found in the mountains, but the heat of the sun is so great that it is scarcely possible to go thither, nor is there then a drop of water to be found. Moreover, in those

mountains great serpents are rife to a marvellous degree, besides other vermin, and this owing to the great heat. The serpents are also the most venomous in existence, in so much that any one going to that region runs fearful peril; for many have been destroyed by these evil reptiles.

Now among these mountains there are certain great and deep valleys, to the bottom of which there is no access. Wherefore the men who go in search of the diamonds take with them pieces of flesh, as lean as they can get, and these they cast into the bottom of a valley. Now there are numbers of white eagles that haunt those mountains and feed upon the serpents. When the eagles see the meat thrown down, they pounce upon it and carry it up to some rocky hill-top where they begin to rend it. But there are men on the watch, and as soon as they see that the eagles have settled, they raise a loud shouting to drive them away. And when the eagles are thus frightened away the men recover the pieces of meat, and find them full of diamonds which have stuck to the meat down in the bottom. For the abundance of diamonds down there in the depths of the valleys is astonishing, but nobody can get down; and if one could, it would be only to be incontinently devoured by the serpents which are so rife there.

There is also another way of getting the diamonds. The people go to the nests of those white eagles, of which there are many, and in their droppings, they find plenty of diamonds which the birds have swallowed in devouring the meat that was cast into the valleys. And, when the eagles themselves are taken, diamonds are found in their stomachs.

So now I have told you three different ways in which these stones are found. No other country but this kingdom of Mutfli produces them, but there they are found both abundantly and of large size. Those that are brought to our part of the world are only the refuse of the finer and larger stones. For the flower of the diamonds and other large gems, as well as the largest pearls, are all carried to the Great Khan and other Kings and Princes of those regions; in truth they possess all the great treasures of the world.”

It would appear that diamonds produced by nature in Telangana were being collected by its people and traded globally - some eight centuries ago.

16.5 TEMPLES

If village had been the microcosm of Indian society, the caste system had been its basic structure. It would be appropriate to have a brief look at this social reality during the Kakatiya times.



Kakatiya Pillar, Ramappa Temple, Warangal – The finely sculpted and highly decorated pillar in black granitic stone is one of the four pillars that support the main mandapa of the temple. 1213 CE, Recherla Rudrudu, Kakatiya period

The institution of caste, with all of its social and economic implications, was nearly universally accepted, and the ruler's principal responsibility was to maintain the social order based on it. This explains the prevalence of social classification in food and marriage at the same time. It also discusses how many groups came together and worked in things of common concern, such as the management of a temple and its adjuncts, the regulation of land and irrigation rights in the village, and the administration of local affairs, including annual fairs and festivals. Rather than individual or collective rights, the focus was placed throughout on the execution of tasks associated with one's position in the socio-economic system. The prevalent mood was one of social peace and satisfaction with the status quo. There were arguments and disagreements, but they were rarely hostile. Social violence was a relatively unknown concept.

The cultural effervescence throughout the Kakatiya period was rather amazing, given this robust social edifice. The emperors encouraged the construction of the temple on a long-term basis. The temple served as more than just a place of worship. It occupied a significant portion of the people's cultural and economic lives. Its construction and upkeep provided work for a number of architects and craftsmen who competed with one another in their ambitious planning and deft execution. The creation of stone and metal idols allowed the best sculptors in the kingdom and abroad to shine. A large number of priests, choristers, musicians, drum beaters, dancing girls, florists, cooks, minor shopkeepers, and other types of servants were employed on a daily basis by the temple's daily routine. Fairs, learning contests, wrestling matches, and other forms of popular entertainment were all part of the quarterly festivities. In temple precincts, schools and hospitals with dispensaries were common. It was also frequently used as a town hall, where people gathered to discuss local issues or listen to the reading of sacred literature. Each temple's endowments in land and money, provided by successive generations of pious kings, tended to make it both a generous landlord and a fair banker, whose assistance was always available to anybody who needed it. The practise of adorning the deity and

The temples gathered the greatest in the arts of civilised existence and governed them with the humanness born of the spirits of 'Dharma'



other figures, particularly during processions, greatly aided the jeweller's craft. In other words, a temple was a social centre around which a diverse economy with its accompanying employment and stable incomes revolved. It is hardly an exaggeration to state that the temple gathered all that was greatest in the arts of civilised existence and governed them with the humanness born of the spirit of "Dharma." The temples of India had few international counterparts as a source of social well-being in the past.

During Rudradeva's reign, the magnificent Thousand Pillar Temple in Anumkonda, a fine example of Chalukyan architecture, was built. The temple at Vardhamanapura, which he saw during his military exploits, appears to have inspired it. He won the war, preserved the temple, and returned to his realm to repeat the process. This temple in Vardhamanapura, which he saw, was devoted to Shiva, Vishnu, and Surya, the three Gods. The Thousand Pillar Temple is no exception. A magnificently carved stone bull (Nandi) situated on the platform is one of the temple's most notable features. Other chiefs and officials followed his lead and erected temples and provided them with gifts. The mantri Gangadhara is also worthy of attention. He aided Rudra in both his wars and his religious activities. Prola-II thought of him as a valiant warrior with a good moral character. "In the capital and other areas, he built temples for the God Prasanna Kesava and bestowed them with Vrittis (land tenures)." ⁶³ "Several temples sprang up throughout the Kingdom during Ganapathi Deva's reign. Palampet and Ramappa temples, on the other hand, are one-of-a-kind examples from that era. Recherla Rudra, Ganapathi Deva's commander-in-chief, finished them in 1213. The exquisitely sculpted dancing damsel in distress has been dubbed as "poetry in stone." What we are trying to communicate in the west now, was likely expressed in India 800 years ago according to G.Yajdani." ⁶⁴

"Like his forefathers, Prataparudra built a number of temples. Nagesvara temple in Pedakallupalli, Krishna district, is one among

them. Bhimnath temple in Pinnali, Gopinatha temple in Motupalli, and Gautmeswar temple in Manthena on the banks of the Godavari are all located in Guntur district. This Gautameswara temple is particularly noteworthy. It's made of red sandstone with a thousand pillared kind.”⁶⁵

The various economic functions of the temple made it a citadel of economic power enjoying a status co-equal to that of the state. Temples directed agricultural development, through the endowments it received. Endowments were made in order to provide income for temple maintenance, for festivals honoring the deities and for food offerings to the deities. The endowments involved made provisions for a perpetual service for the merit of the donor or someone designated by the donor. Of the land endowments, which the temple received, it did not have ownership rights but had a major share in the income. The money investments received by the temple were frequently loaned to the village assemblies and commercial firms for a perpetual interest and these added to the income of the temples.⁶⁶ Temple became the citadel of the socio-economic activities of the people. It was the nucleus around which village, towns and commerce flourished. The temple was closely associated with the territorial and communal bodies in the administration of local areas. It was both a landlord and an employer. Its treasury was a bank, which received deposits and lent money. Thus, there was a total institutionalization of the temple. These temples flourished because the ruling warrior groups,⁶⁷ provided them with support and protection. A vast range of officials and warlords came to exercise a lot of control over the temple functioning. Besides these functionaries there was also a substantial participation by pilgrims. In certain ways, these temples also served as educational centres. The endowments made it possible to recite and explain the epics and puranas. A popular and educated expositor, usually a Brahmin, rarely stuck to the terms of his book. He delighted his audience by covering a wide range of themes, including witty observations on current events. Another part of education was the singing of devotional songs in temples by choirs that

were routinely maintained for that purpose in schools mainly associated with the mathas.

The construction of Warangal Fort was another feather in the ruler's cap. The double walled solid granite fort has all the appurtenances of a state in full bloom. The imposing gates, towering bastions, wide treads to enable garrison to rush in large numbers to counter a sudden enemy's attack and several temples inside the fort provide rich proof of a golden era in Telangana lands, some eight centuries ago.

All Kakatiya rulers, paid considerable attention to learning also. The rulers and their ministers were not only scholars but they encouraged men of learning as well. During Rudradeva's times, we are informed that, "In the houses of excellent Brahmins, clever parrots join the students, though prevented, and study the vedas, which contain all vedangas, all appropriate subjects, beautiful histories and well studied in Pada order." Rudradeva himself was a great scholar. He was having several recreations, bestowed great Brahamanas, destroyed the cities of enemies, moved with the poets and was resorted to with love by all learned men. In one place, he is called 'Vidyavibhushana.'⁶⁸ An all-round visionary like Ganapathi Deva could not have remained aloof from the pursuit of knowledge. He made lavish endowments to Brahmans and founded several Agraharas. These Agraharas were important centers of higher learnings. Once, on the auspicious occasion of solar eclipse, he donated a village named, Kolavennu situated on the banks of river Krishna to 130 Brahamanas. The record states, "Ganapathi, having named after his father a big Agraharam of great renown on the banks of the river Krishna, gave with pleasure the Agraharam to the best of Brahamanas who were well versed in the Vedas and all the branches of knowledge and who had specialized in that branch, namely Sukla, Yajurveda, which has been reputed to be the first among all the branches of the Veda and which had the honour of having Yagnavalkya as their progenitor."

The ruler also patronized a number of poets and scholars who were renowned for their knowledge. Iswarsuri was well versed

in Yajurveda and had mastery over Panini's grammar. Racin was another poet who composed highly artistic poetry. Jayapa Nayaka, the son of Divi ruler after Ganapathi Deva's victory was appointed as Gajasenapathi. He wrote a book 'Nritya Ratnavali' which throws light on the pattern of native dances.⁶⁹

Rudramba's achievement was most notable in the social arena. She herself belonged to Chaturtha Vamsha, but married one of her daughters Ruyyamma to a Brahmin minister of Induluri family. That is perhaps understandable as there must have been many willing suitors from other castes to marry queen's daughter even if born in a different caste. But, what Rudramba achieved as a woman ruler in those distant times is unparalleled. As a queen who died while defending her empire in the midst of battlefield, she is remembered by posterity, even today. Born in around 1210CE, participating in administration from 1240CE onwards, ascending the throne as the queen in 1262CE and finally dying as a fighter in 1289CE was her total life span. But her legacy has transcended her times and continues to live on, even today.

Prataparudra took equal interest in the promotion of education and encouraged learned personalities. "He himself was a great scholar. He wrote, "two famous books namely the Yayati-charitra and the Usharagodana in Sanskrit and a commentary on Amarasulra. He has been characterised as Vidyasati vidite-vinava-virarudra abhidhanah, a learned sovereign of lofty character, and his capital Warangal has been described thus:

*"Vidyaviara padaviti cha labdhavarnah
Sri Kakatinarendra nagarimnisam stuvanti."*

He patronised several famous scholars and poets such as Vidyanathi, Rudrabhatta, Tripurantaka, Sivadevaiah. Vidyanatha wrote several volumes of books, in which the Prataparudra Yesobhusanar or the Prataparudriya is of much historical value and deserves special notice. Though it is a work on Alankara Sastra(Poetics), all the illustrative verses are eulogies of his patron. Naturally it gives us some pieces of information of historical value."⁷⁰

Narsimha was another court poet of Prataparudra. He was son of Visesvara Pardita, the Rajaguru of Rudrambadevi. His greatness is inscribed on the damaged gate in the Warangal fort in which he is compared with the God Narsimha -

“The God Narsimha came out of the pillar of the assembly hall with an ugly face having the well-known forms and killed Hirankasipa whereas the poet Narasimha, without (facing) any suppression in the assembly (of scholars), not being deprived of gold (hiranya) and clothing (Kasapu) and not being defaced (due to shyness). He wrote several books such as the Rikchchaya, some treatise on Sastra, the Kakarira Charitra in eight sargas. His other works were the rupakas (plays) and a prose work (Gadya Kavya) the malayavali. Another poem composed by him is lying on a boulder in Urusugutta in Warangal taluk. The title is not mentioned, but the editor has called it as ‘Sidahodvaha’. Though it is in Sanskrit, its script is Telugu, only the first line is in nagari character. It starts with a mischievous Yaksba seeing a Siddha couple sporting on the sands of the Ganges, causes them to be separated from each other with the objective of enjoying fun out of their state of sorrow (virah) on separation. The Siddha surprisingly found his wife absent from his bed. He started to search for her with heavy heart and he began to narrate in soliloquy the story of their love from beginning to the first union.”⁷¹

A look at the evolution of Telugu literature through the vicissitudes of these centuries would be appropriate. The beginnings of the Telugu literature, in fact goes back to eleventh century when Nannaya Battu, the court poet of Eastern Chalukyas began to translate the famous

A national epic, Mahabharata - for Telugu speaking people had been created

epic Mahabharata from Sanskrit into Telugu. He could translate only a part of the epic in his life time. After a long wait of around two centuries, arrived Tikkanna who completed the translation of the epic in his life time. A national epic, Mahabharata, for Telugu speaking people had been created and therefore, Tikkanna Somayajulu is reckoned as one of the greatest poets of Telugu. He laid down his pen by around 1290CE. After Mahabharata, it was naturally the turn of Ramayana, the



most popular epic amongst the masses to be translated. During the thirteenth century at the height of Kakatiyas, many poets attempted it successfully. Gona Buddha Reddy, a tributary of Kakatiyas was the first to translate Ramayana into Telugu in 1250CE. The work is known as 'Ranganatha Ramayana'. Quite close on the heels of this work, came another translation of Ramayana known as 'Bhaskara Ramayana' which is attributed to Mantri Bhaskara. The classical period or the age of Puranas was at its height.

At this juncture, there arose in Tilangana a rhetoric Shaivite poet, Palakurthi Somanatha. The Shaivism, which emanated from its home in the Kannada country was spreading its vigour into Telugu land. King Prataprudra, the last Kakatiya monarch himself was a Shaivite, like most of the poets and rulers during the Kakatiya period. But Palakurthi Somanatha was radically different. He revolted against the existing order as defined by the Vedas, the Brahmana, the caste system and the time honoured models of Sanskrit language. He chose the lives of Saivite and dealt with the known persons to describe the contemporary life. He was indeed a pioneer for realistic poetry. He was followed by Ranganatha, Bhaskara, Yerrana and Nachanna who were the highlights of the fourteenth century. During the times of Prataprudra-II a Vaishnava devotee, Krishnamachari, inspired by Kannada devotional compositions, introduced Telugu lyrics. These kinds of devotional lyrics were to be perfected latter by the famous Tallapaka poets. Similarly, Srinatha, Bammaera Potharaju and a galaxy of others illuminated the fifteenth century.⁷²

**But
Palakurthi
Somanatha
was
radically
different**



16.6 THE POET'S VISION

Poets are the authentic witnesses of their times. Their work provides a glimpse through the vicissitudes of history. In 1162-63CE, during the reign of Rudradeva, the Thousand Pillar Temple complex was built. Apart from several important features, a remarkable balustrade sculpture from a ruined mandapa symbolizes the great queen

Rudramba devi, shown on lion trampling elephant like enemies (daya-gajakesari). The epigraph gives a graphic description of Hanumkonda, its learned scholars and damsels of this beautiful city. A translation from Sanskrit stanzas is as follows:

- A capital city named Anumakonda which was like the capital of the goddess of fortune raised to a great state by the rise of the excellent and full grace (lila) of God Siva who was there: which was full of delight (Rati) like the city of Cupid: and it is like Mahendri in being possessed of temples Jishnu and Vishnu (as image in its temples) and (which was) beautiful with the charm of plantain trees (with the amorous play of Rambha):”

- “Where, the women were indeed the metropolis of Cupid, having eyes like the petals of the blue lilies and slim bodies; ornaments to the women of the three worlds and had bodies weighed down by the weight of big and high breasts:”

- “(Where) in the houses of the excellent brahmins clever parrots join the students, though prevented and study the Vedas (which contain) all the Vedangas all appropriate subjects, beautiful histories and (which are) in well studies pada and krama methods:”

- “(and where) in the house of courtesans the loud and sweet sound of young parrots make all the quarters resound - (parrots) imitating the sounds of amorous sports in sexual enjoyment, which are during day-time like full moon of the tremulous ocean of the excitement of love.”⁷³

(http://asihyd.ap.nic.in/Warangal_monuments.html).

Yet another inscription belongs to the period of Prataprudra. It consists of thirty-six stanzas. It describes the socio-pastoral and agricultural scenario in lyrical details. The translation from Sanskrit to English is as follows:

- *“There is the great Andhradesa full of rice (fields) of golden hue, resembling the dales of the golden mountain (ie. Meru) with gems.*

- *There, the rice-fields, containing waving waters inside, resemble the shores of the sea with dark-tinged verdant.*

- The parrots (that come to eat the grains) fly away being frightened by the sounds produced from the bangles due to the clapping of the hands by the women-guards of the rice-fields and also being overcome by their utterances.
- In the groves of trees like rasala (the mango), sala, himtala (the marshy date), tala (the palmyra) and ketaka {*Pandanus odoratis simus*}, youthful couples are engaged in amorous activities.
- There, the bees, being blind-folded due to (intoxication) of the strong smell emanating from the honey of mango trees, could not see even their consorts.
- The bees, there, are not only attracted by the smell of the creepers of the Santana Forest but also by the odourless Karnikara trees (due to their attractive colours).
- Some of the peasant youths of the place, having been attracted by the bewitching glances of the peasant maidens, forget (their work of) ploughing.
- The gaits of the peasant maidens of the place seem to serve as lessons to the swans while their glances serve as models for the female deer.
- The entire country (seems to be) covered by a blue raiment because of the spreading of the sheen of the crops in the fields.
- The sound produced by the group of conch-shell bangles (seen) in the hands of the damsels of the country has outstripped (that of) the innumerable swans.
- The multitudinous heaps of paddy seen in the courtyard of the houses, there, look like the clouds in the sky, possessing lightning.
- Where the fallow land protected by thrones (i.e., full of thorns) and containing un-demarcated with interspaces with cattle beside them, become bashful (i.e., become objects of pity).
- There the parrots, thinking that they belong to their own group, resort always to the groves of plantain trees with attractive green leaves.
- The honey that flows always from the innumerable mango trees, there, seems to suggest that it is intended for the peacocks to dance without pain.
- The golden-hued pollen of the mango trees, there, resemble the dusts of the sun produced by chiselling.
- The hair of the peasant woman in the act of being dressed by their dart-like hands give the appearance of the spread-out plumes of the peacock.

- The countless big cities of the country outshine the numerous divine cities: because, instead of the Nandana (the pleasure garden of Indra) and the Chaitraratha (the sporting park of Kubera), its entire forests constitute the Nandana and the whole (of the wooded land) constitute the Chaitraratha here.

- The male elephants of the country, with their half-closed eyes caused by their being with their mates look like the couples of elephant-headed (gods) possessing also elephant's body.

- The heavy chariots covered with numerous blue clothes and resounding with the (jingling sounds) of the small bells (attached to them), resemble the clouds with groups of shining lightning's (accompanied by thunder).

- In the country are hundreds of tanks and thousands of rivulets; and they indeed appear to be the ocean and his consorts respectively.

- The young cows of the country resemble the rays of the sun; the former by giving milk become the removers of suffering (of the people) of the three worlds, while the latter (by causing the rains) become the purifier of the three worlds.

- Here is the great city called Ekasila which by its splendour seems to spread over the entire region up to the shores of the ocean.

- The melodious speech, the deep sound of the small bells of the waist-band, and the anklets, of the tender-limbed damsels of the place are responsible for the sleeplessness of the goddess of Prosperity.

- The assemblage of numerous damsels with moonlike faces, on the top-most floor of the houses of the city, makes it difficult to know about the existence of the real moon in the sky.

- The heaps of camphor seen in the shops of the bazaar look like a collection of moon-beams.

The houses of the city with never-diminishing (heaps of) sapphire and moon-stones appear to show simultaneously the darkness and moonlight together.

- In this city, the beloved, by their bewitching glances, cause affliction to their lovers; (similarly) the lovers, by their beautiful sights, cause affliction to their beloved.

- Whom do not the glances of the women of the place, (like those of the gopis on the bank of the Yamuna), which excel (in beauty) the collection of crawling waves of the daughter of Kalinda (i.e., the Yamuna) attract (or make into a Krishna)?

- The glances of the women with curved eyes, made tremulous by

the power of liquor, look like the rows of swords held in the hands of Rati-natha (i.e., Cupid).

- The lips of the women of the city have rendered everything else inferior to them; and their side-looks (appear to) suggest that they have blessed the groups of lotuses (i.e., excelled them in beauty).

- By the gestures of their hands (adorned) with bangles, the women of the city frighten the swans in the sporting ponds for having stolen their gaits.

- The damsels of the city, the rays of whose ear-rings become merged into the spaces of the quarters, listen to music appreciatively.

- The bees that are attracted by the drip lets of honey in the water-lilies serving as ear-rings of the ladies of the city, are frightened away by the sounds of the bangles in their hands (produced by the gesture of waving).

- Do not the lotus-eyed damsels of the city by their (enchanted) smiles resembling the moon marked by the (dark) sheen of their glances mock at the daughter of their lords?

- By the rays of their moon-like faces, the pupil of their eyes serving as the dark patch of the moon, the women of the city seem to feed the birds which feed upon the moonlight (i.e., Chakorras).

- The women, with their faces resembling the full moon and their forehead resembling the half-moon, demonstrate that all the arts are acquired by themselves (i.e., by looking at their faces it is easy to know that they are kalaratis).⁷⁴

Kakatiya times were perhaps closest to the 'Golden Age' for the land and people of Telangana



The poets' imagination is too vivid to need any explanation. The overall political ambience witnessed just five sovereigns ruling the imperium spread over one hundred and sixty-five years. Political succession was orderly without any bloodshed. Kakatiya times were perhaps closest to the 'Golden Age' for the land and people of Telangana.

16.7 A GLIMPSE OF THE KAKATIYA TIMES

During the second half of the first millennium, the present-day Telangana lands came under the sway of Chalukyas and Rashtrakutas. They belonged to Kanarese stock and ruled from Vatapi, Manyakhet and Kalyana, all lying outside Telangana. But the beginning of the second millennium witnessed the rise of Kakatiyas who controlled

areas including the present-day Telangana from its midst. Ruling from Anumkonda and then Warangal as their capital, the Kakatiyas were the first native rulers to have brought such immense glory to the lands. No wonder, their reign is reckoned as the golden age in the millennial history of Telangana.

What were the essential ingredients which distinguished Kakatiyas from others? Well, eternal loyalty to the throne was one such virtue. Prola-II, as a feudatory remained loyal to his chief at Kalyani. While others revolted, he remained steadfast. This loyalty laid the foundation of future dynasty. The virtue percolated amongst army generals. When Ganapathi Deva was captured by the Yadavas of Devgiri, many feudatories declared their independence. But, the loyal general, Recherla Rudra, put down the revolts, protected the Kingdom and handed it over intact to Ganapathi Deva after negotiating his release. Loyalty to Kingdom begot loyalty amongst subordinates who ensured its sustained glory. Such vibrant description of land, flora, fauna, people and cities are hard to find in post Kakatiyan times. If poets are to be trusted, as territories expanded, the loyal chiefs, irrespective of their social background were allowed to govern without undue interference from the centre. This was the basis of Nayankara system of administration which evolved during Kakatiya's rule. Loyalty to the throne was its essence. Parricide, fratricide or murderous intrigues to capture throne were unknown.

**Victory
marches
were
followed
by acts of
nobility**



Nobility was another virtue. It was perhaps embedded in their sovereign genes. Victory marches were followed by acts of nobility. Places of worship were neither destroyed nor desecrated. Rudradeva defeated Uday Choda. The latter became a vassal and married his daughter to the victorious King, who in turn celebrated by constructing a big irrigation tank, Rudrasamudram at Panagallu. Rudramba annexed Bidar and celebrated by constructing a temple in Warangal fort. Prataprudra after establishing his authority in Nellore and Cuddapah prayed at Srisailam and Tripurantakam. As areas were thickly forested, he undertook land reclamation and settlement of new villages. These acts of nobility, therefore,

ran through the genes of Kakatiyas. That is what has made them immortal.

Tank construction was yet another feature of the dynasty. Rulers made it a point to construct at least one tank in every village. Huge tanks were constructed as well. Pakhala, Ramappa, Bayyaram, Kesamudram, Ghanapuram, Laknavaram and Kundavaram were constructed then. They have survived and serve the society even today. As well laid network of canals carried waters to parched fields, crops flourished, countryside flowered as the empire became food secure. Famines were unknown during those times.

Temple construction along with tanks was yet another feature. In fact, the two are organically related. Tanks ensured prosperity. And a part of the surplus wealth filled temple Hundis. Kakatiya domains had innumerable tanks. It had innumerable temples too. The famous and well-known temples like Thousand Pillar Temple, Swayambhu temple, Pillalamarri and Ramappa temples were constructed then. They have survived and attract devotees and tourists, even today.

Kakatiya domains had innumerable tanks and innumerable temples too



Trade and commerce was also encouraged by rulers. Commercial complexes known as penta were built near big villages where weekly fairs were held. In course of time, they became petas or commercial street. Godowns and shops, built by rulers were given to merchants on hire. Roads were laid and goods were carried on highways by bullocks, horses and donkeys. Robberies were unheard of. The word 'pirates' or 'pindari' was yet to be reckoned by rulers. Societal peace ensured safe movements of goods, men and women across the empire.

Kakatiya rulers did not forget maritime trade. The vast eastern sea board gave them enough space to trade with Burma, China, Srilanka and Indonesia. Merchants from Rome and other cities of Italy visited famous ports like Motupalli, Machilipatnam and Krishnapatnam. Textiles, diamonds, spices and carpets were exported while horses, silk and glass were imported. 'Abhaysasanam' proclaimed by Ganapathi Deva guaranteed hassle free transaction, a sort of "green channel", to foreign merchants at Motupalli. As

trade boomed, prosperity followed and the empire came to be dotted with several towns and cities. Alampur and Vemulwada developed as temple towns. Kollipaka, Potlacheruvu, Polavasa, Sanigram, Naganur, Pillalmarri, Kondaparthi and Palampet developed as administrative and commercial centers. The capital city of Anumkonda and then Warangal came to be known as Mahanagara, the biggest city of the empire.

A healthy respect for women was the most important social feature of those times. But, Kakatiyas had inherited it from their predecessors. Chalukyas were notably liberal in their treatment of women. They appointed royal ladies as provincial governors and district administrators. Queens and wives of high officials were allowed to wield power, openly and directly. Satavahanas were no different. They too, accorded high status to women. Royal ladies like Naganika and Balasri played a dominant role in state affairs. Satavahana Kings took pride in associating their names with their mothers like Gautamiputra and Vashisthiputra. Royal ladies during Satavahana times patronized Buddhism and made liberal grants to Chaityas and Viharas for Buddhist monks and mendicants. It all

Those women were fashion conscious too



happened even when rulers were champions of Hinduism. Freedom of faith amongst royal ladies, even while at variance with their husbands was a unique feature of those times in Deccan lands.

Those women were fashion conscious too. They loved ornaments and bedecked themselves with a variety of jewels like earrings, necklaces, bangles, bracelets and anklets. They partook intoxicants and participated in entertainments like Madanotsava, Ghatam Bandhana, Kaumadi Yagam, where both sexes mingled freely. Society was open, not permissive. It had a rather healthy attitude toward religion, morals, sex and its women.

An overall healthy attitude towards women prevailed during the first millennium in peninsular India. It continued during Kakatiya times as well. Perhaps, a settled nature of economy with faith-based society without conflict had something to do with this. Tank was the pivot of rural economy, just as temple was the pivot of society. Neither Buddhism nor Hinduism encouraged loot of temple or

chaitya wealth or its desecration. As long as tanks and temples remained safe and secure, the economic and social equilibrium remained stable. And, a healthy respect for women was a natural corollary of such a stable society.

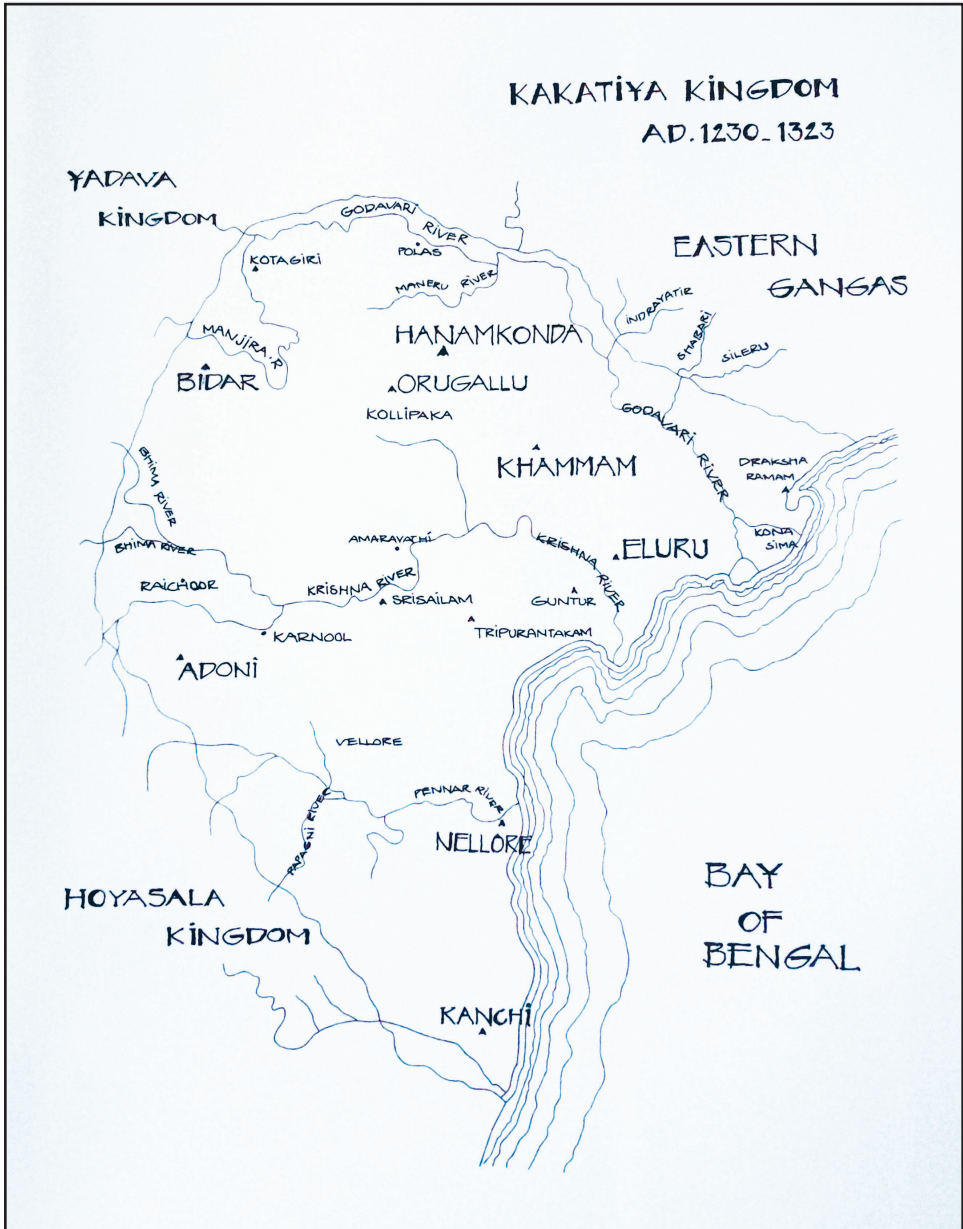
The scenario in towns and capital city, of course was quite different. Trade and commerce brought prosperity to its inhabitants. But, faith in the gods remained intact in spite of power, pelf and riches. In fact, it got intensified. Kings prayed for prosperity of their kingdom as well as for their own victory. Big temples, therefore, were constructed. Nobility and chieftains followed. Temples multiplied. Then, the royal ladies prayed not only for themselves and their husbands but also continued to pray for their victory till the King would return from a military expedition. All in all, the entire society, be it Kings, royal ladies, nobility, chieftains, traders, peasants or commoners kept their faith intact around temples. As both, men and women visited temples, society developed a mutual and healthy respect. The thread of tank construction, temple worship and a healthy respect for women runs through all the peninsular Kingdoms, be it Satavahanas, Chalukyas, Rashtrakutas, Cholas, Pallavas, Pandyas, Cheras, Hoysalas and Yadavas. There was no reason for Kakatiyas to be an exception to this golden rule.

Role of women did not remain confined to social sphere. It got embellished and reached the pinnacle of kingdom's glory. Rudramba Devi assisted her father Ganapathi Deva in state matters for several decades. Enthroned thereafter, she ruled as Queen for twenty-seven long years. Attired in male dress, presiding over durbar, giving interviews to foreigners, holding consultations with her ministers, generals and other high dignitaries of state so as to promote the best interests of the people was one aspect of her personality. But, when required, taking to field in person, astride on a horse and leading her troops against enemies was another equally gripping aspect. A valiant and courageous fighter, she eventually died amidst the battle field. Her sacrifice is embossed in the minds and hearts of ever loyal posterity. Rudramba's memory fills their bosom with dignity, pride and self respect, even today.

**Memory of
Rudramba
fills their
bosom with
dignity, self
respect,
even today**



Kakatiya Kingdom 1230-1323 CE



Economic Trends

What about the estimates of GDP, population and per capita income during those times relating to the present-day Telangana State as it stands carved out as the 29th state of the Indian Union from 2nd June 2014 onwards? It must be stated categorically that there was no separate Telangana polity known by this nomenclature way back in 1000CE. During the first millennium, the present-day Telangana lands were ruled by the dynasties of Satavahanas, Badami Chalukyas, Rashtrakutas and Kalyan Chalukyas. A few peripheral areas were ruled by Vakatakas, Vishnukundis, Ikshvakus and others. Its plateau geography would not have been the first choice of human settlements and the population density must have been quite sparse. Presuming the population ratios to have remained the same over time, we can derive comparative population of India and the present-day Telangana lands and its people during those times, as follows:

Population in Lakhs

Year	1000 CE	1300 CE	1500 CE
India	750	960	1100
Telangana	18.75	24.00	27.50

The arrival of Kakatiyas and their rule lasting till 1323CE gave a certain shape to the Telangana polity because its present-day territories were substantially included in the then Kakatiya dominion. More than three centuries span (1000CE–1323CE) witnessed a certain divide in the Indian sub continental polity. The areas north of Vindhyan mountains were controlled by the Islamic polity while the areas south of Vindhyan were under the control of Chalukyas, Seunas, Kakatiyas, Gangas, Hoysalas, Pandyas and Cholas. The overall socio economic and cultural landscape in all these kingdoms were almost similar. The tank was the economic fulcrum of a village, while a nearby temple was its social fulcrum.

Corresponding figures for Telangana land & its people must have been a notch ahead of 510 dollars in 1300CE.



An international trade in spices, cotton textiles, diamonds, steel and horses were yet another feature of peninsular kingdoms. Mutual conflicts amongst neighbouring kingdoms were no doubt there, but none attempted to subsume thy neighbour's kingdom. As political boundaries, by and large remained intact for more than a couple of centuries, it is quite reasonable to conclude that the economic prosperity of these peninsular kingdoms must have been a notch ahead of their north Indian counterparts by around 1300CE.

The Per capita income figures for India are estimated as 450 dollars in 1000CE, 510 dollars in 1300CE and 550 dollars in 1500CE. The corresponding figures for Telangana land & its people must have been a notch ahead of 510 dollars in 1300CE.



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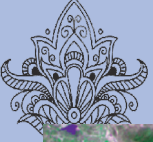
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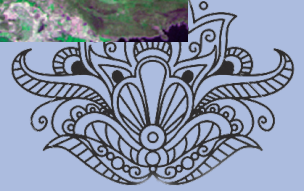
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Natural Colour Composite Image of Ramappa Lake and its environs
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