

Re-centering the 1,000 Days Nutrition for better health

Dr. Narasimha Rao, Consultant



Sustainable Development Goals

12 of the 17 SDGs include indicators relevant for nutrition (water & sanitation, health, education, food systems and gender equality)



SDG2 End Hunger by 2025 (World Health Assembly Targets)

OUR MANDATE AND COMMITMENT TO ACHIEVE WHA TARGETS



GOAL 2

ZERO HUNGER



- 1 achieve a 40% reduction in the number of children under-5 who are stunted;
- 2 achieve a 50% reduction of anaemia in women of reproductive age;
- 3 achieve a 30% reduction in low birth weight;
- 4 ensure that there is no increase in childhood overweight;
- 5 increase the rate of exclusive breastfeeding in the first 6 months up to at least 50%;
- 6 reduce and maintain childhood wasting to less than 5%.

In 2012 the World Health Assembly (WHA) unanimously agreed to a set of –
SIX GLOBAL NUTRITION TARGETS THAT BY 2025

India being a signatory to SDG has to achieve WHA targets by 2025. This requires ownership and accountability from each state to contribute towards India achieving these targets.

SDG3 Ensure Healthy Lives and Promote Well-Being for All at All Ages



1. Infant and Maternal Mortality
2. Family Planning and Reproductive Health
3. Management of Child illnesses
4. Non Communicable Diseases
5. Access to Medicine and Vaccines

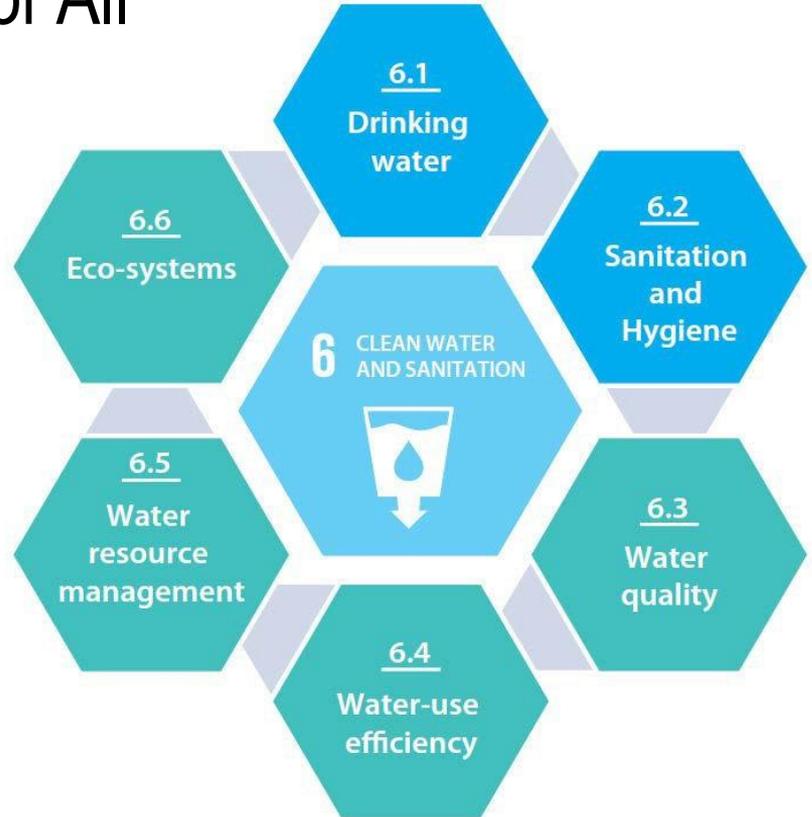
SDG 6: Water and Sanitation for All

Target 6.1:

By 2030, achieve universal and equitable access to safe and affordable drinking water for all

Target 6.2:

By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations



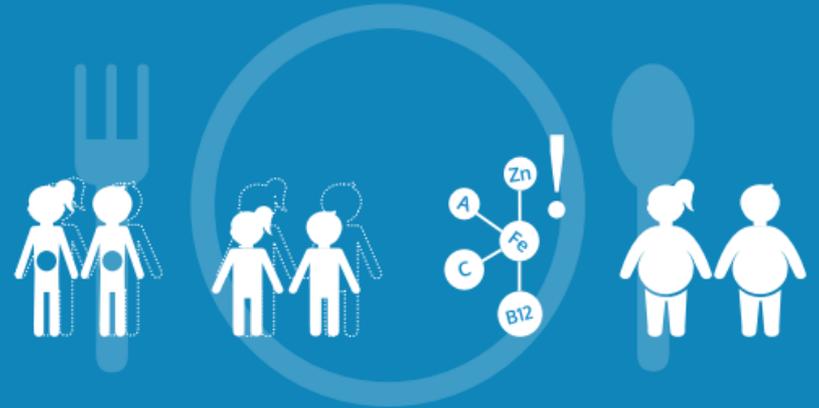
Sustainable Development Goals (SDGs)

By 2030

TARGET:

Ending all forms of malnutrition is the global goal

The double burden of malnutrition offers an important point for intervention and action



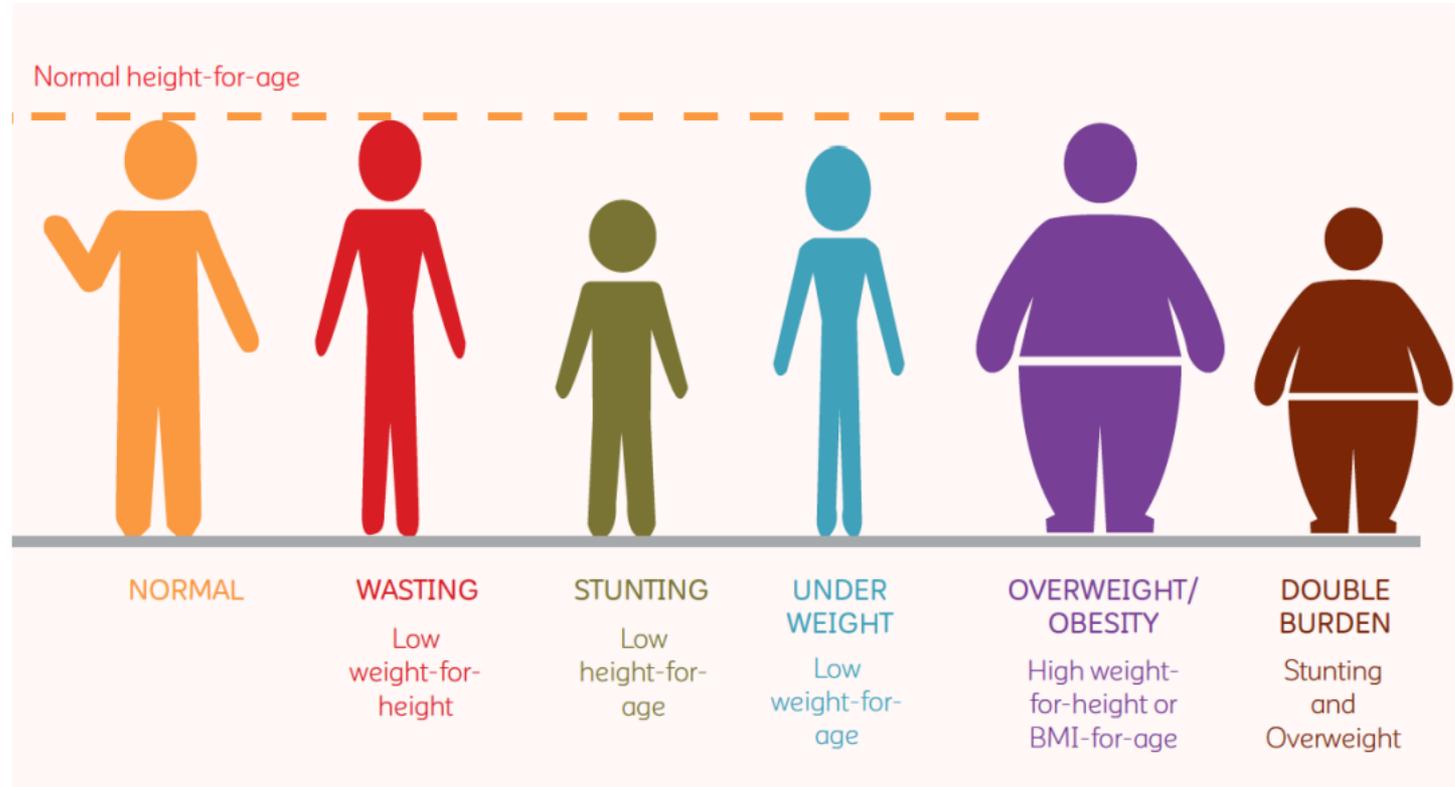
Nutrition Related SDG

(Two Core Targets)



- **2.1** By 2030, **END hunger** and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round
- **2.2** By 2030, **END all forms of malnutrition**, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons

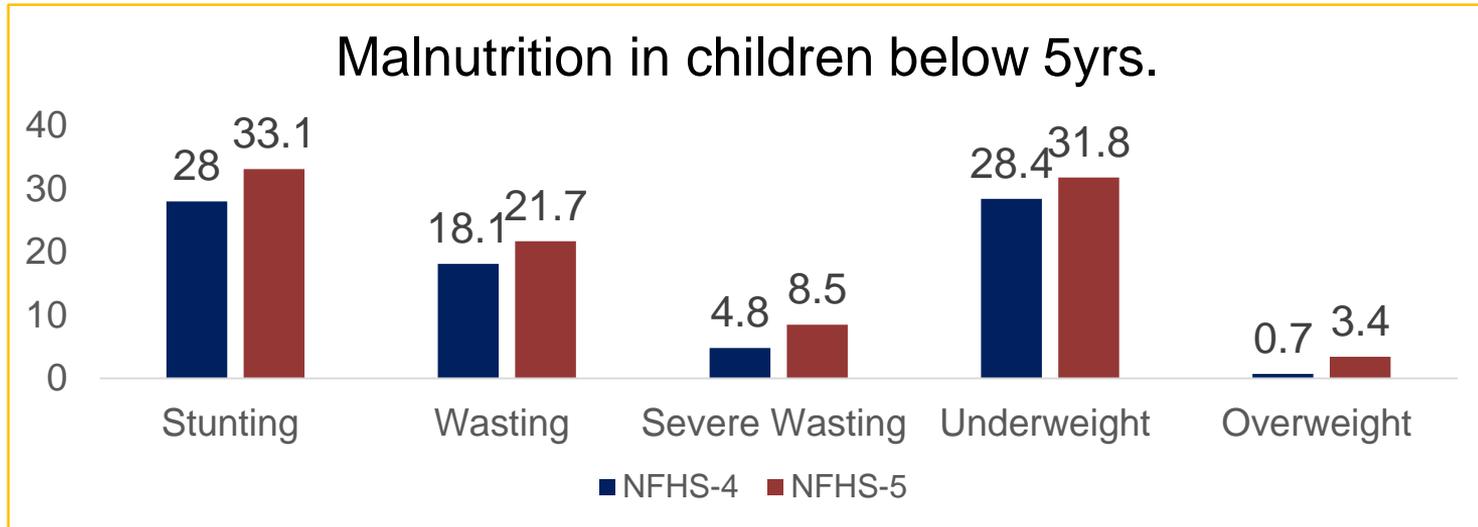
Child Malnutrition



Current Status: **Snapshot**

- **One in every 2 women is Anaemic**
- **One in every 3 children is Stunted**
- **One in every 3 children is Malnourished**
- **One in every 5 children is Wasted**

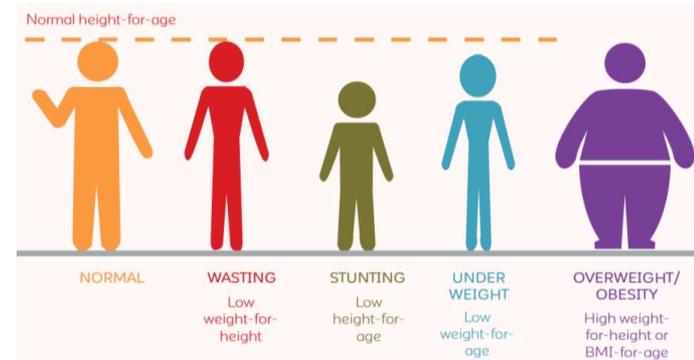
Malnutrition in children is a Major ISSUE-Increased from NFHS 4 to NFHS 5



Wasting: Low Weight for Height

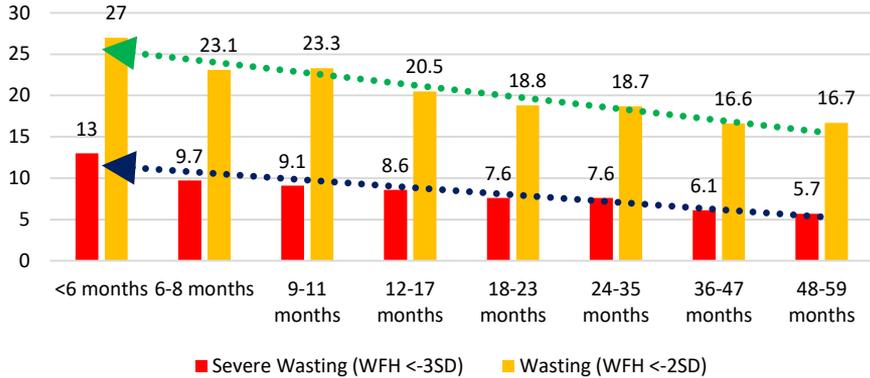
Stunting: Low Height for Age

Underweight: Low Weight for Age

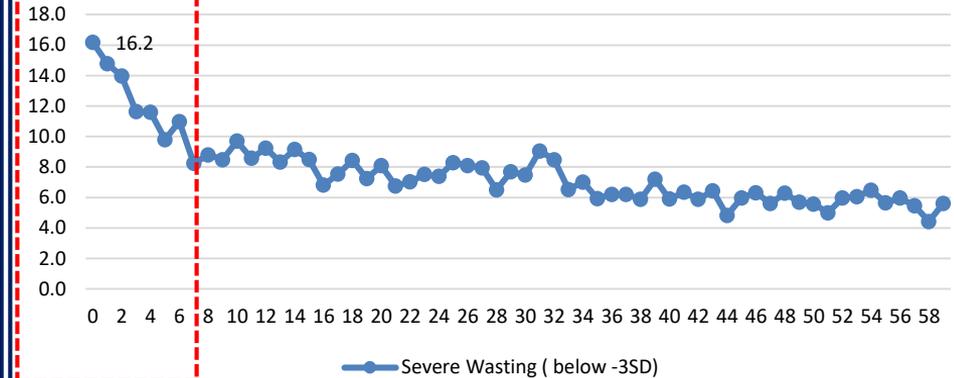


The Potential Burden

Age wise Prevalence of Wasting

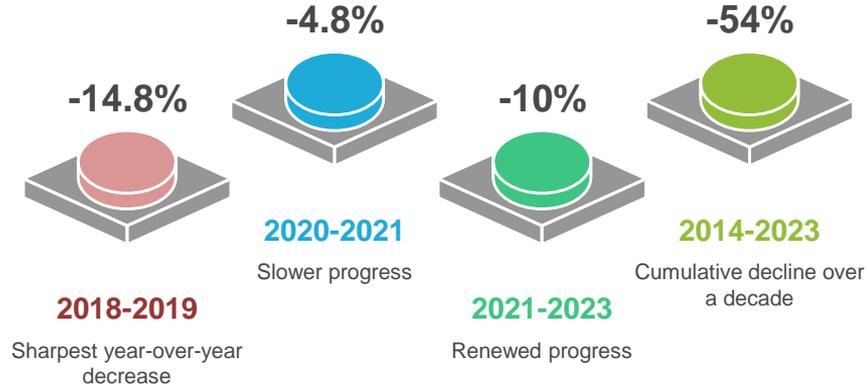
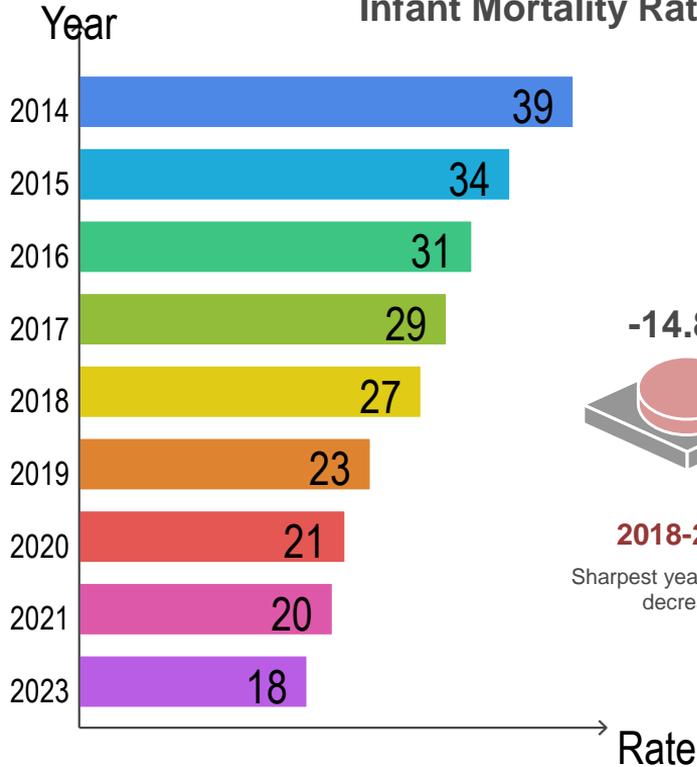


Age wise Prevalence of Severe Wasting (below -3SD)



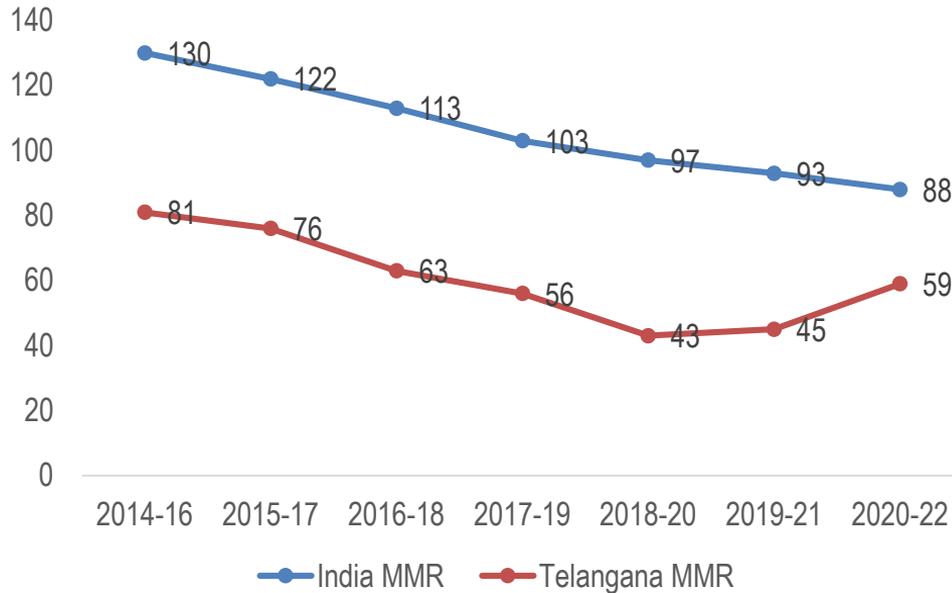
- NFHS-5 shows that wasting is highest among infants under six months, with 16.2% severely wasted at birth, exceeding prevalence in older children.
- Given the high burden and serious short- and long-term consequences, urgent action is required for prevention, early identification, and management of wasting in u6m infants.

Infant Mortality Rate Decline in Telangana (2014-2023)



Infant Mortality Rate ~ 2014-2023

Reduction in Maternal Mortality Ratio (MMR) – SRS



Trend Analysis:

- **2014–16 → 2018–20:** A **steady decline** from 81 down to 43, showing major progress in reducing maternal deaths.
- **2018–20 → 2020–22:** After reaching the lowest point (43), MMR **increased again** to 59, suggesting a reversal of the trend.

Stunting is one of the Best Global Indicators on Wellbeing in Populations



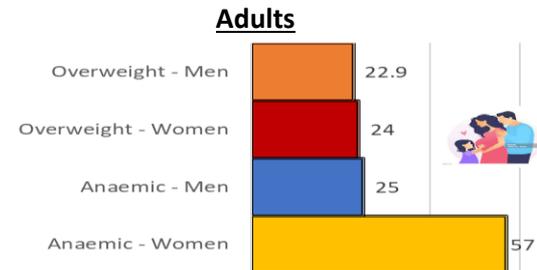
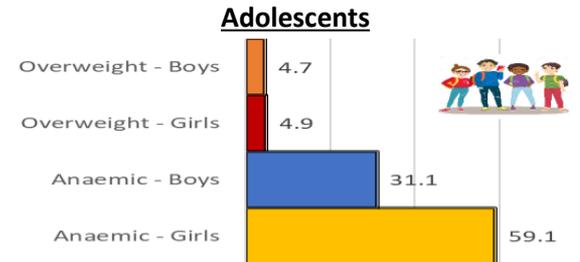
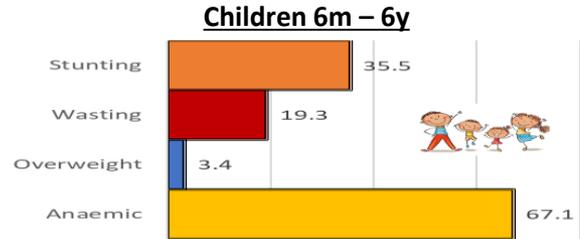
Stunting means you're too short for your age

well-nourished kids are more likely to:

- stay in school longer
- earn higher wages
- escape poverty

India's Nutritional Challenges

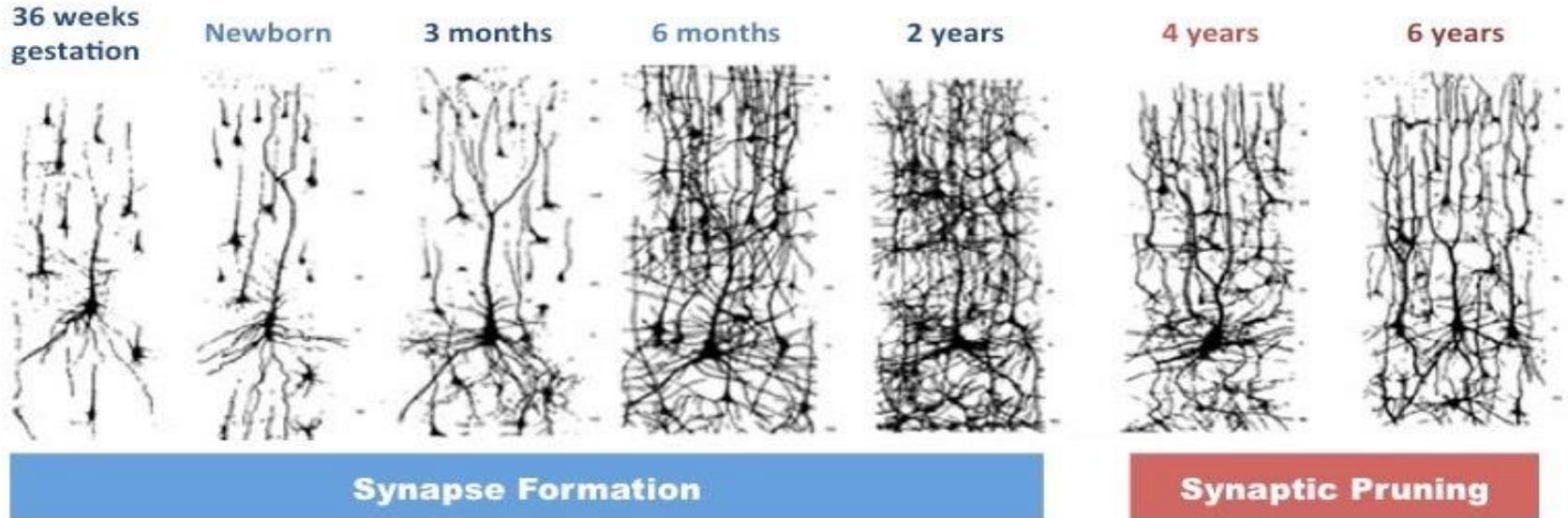
- High prevalence of anaemia (> 50% in children, adolescent girls and women)
- High rates of stunting (35.5%) (indicating chronic malnutrition) and one of the highest child wasting prevalence (19.3%) across all countries in the world
- **Overweight / obesity among children**, adolescents and adults is a rising concern, which if unaddressed can lead to a pandemic like scale for NCDs
- **Only 11.3% of children in India consume an “adequate diet”** (defined as nutritionally-adequate and safe complementary foods at six months, with consumption at least 4 – 5 food groups every day, by the child)



Data Source: National Family Health Survey, 2019-21; MOHFW, GOI and Overweight prevalence among Adolescents from CNNS, 2018, UNICEF, MOHFW, GOI

As per the NITI Aayog, in order to achieve the SDG 2 Goals for 2030, India's stunting prevalence among Children needs to be reduced to 21.03%, while anaemia among women in reproductive age-group needs to be reduced to 23.57%

Brain Development – ECE Importance



- By 2 yr. infants develop around 1000 trillion of connections
- Although connects continue to form throughout life they reach their highest density (15,000 synapses per neuron).

<https://ib.bioninja.com.au/options/option-a-neurobiology-and/a1-neural-development/synaptic-formation.html>

Programmes for addressing Malnutrition



Overview & Programs

The Women Development and Child Welfare Department is responsible to ensure the wellbeing and overall development and protection of women and children. Its key focus areas include:



Nutrition

Ensuring proper nutrition for pregnant and lactating women, as well as children aged 7 months to 6 years.



Early Childhood Education

Providing education and developmental support for children aged 3 to 6 years.



Health

Improving the health status of women and children through various preventive and promotive initiatives.



Child Care & Protection

Safeguarding children from abuse, neglect, exploitation, and ensuring their care and protection.

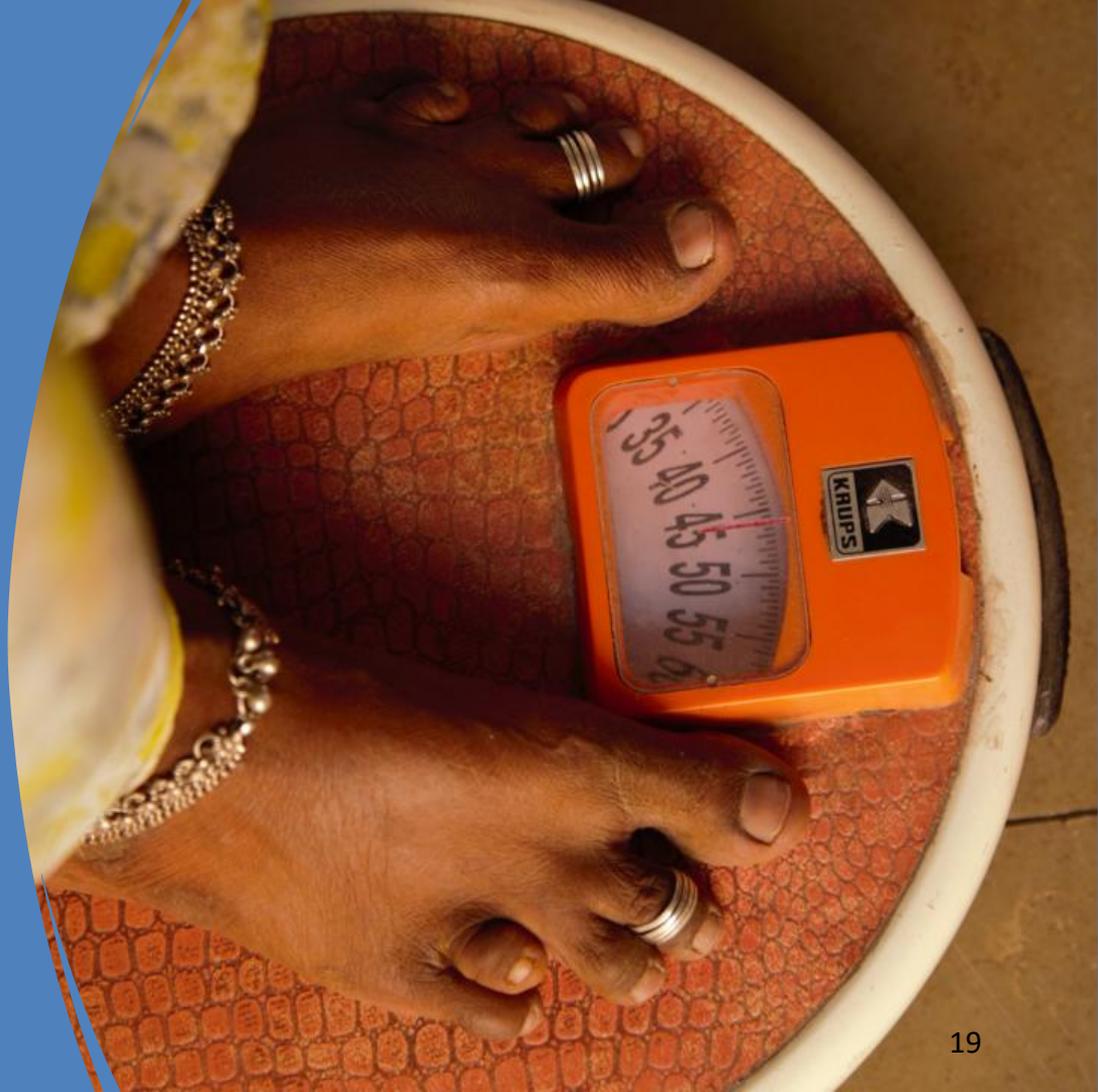


Women Empowerment and Safety

Promoting gender equality, empowering women socially and economically, and ensuring their safety and security.

'Arogya Lakshmi'

maternal nutrition program
in Telangana



Background of the program



- Poor nutritional status of a woman before and during pregnancy is a major cause of foetal stunting.
- In India, stunting affects approximately 47 million (38%) children younger than 5 years
- An estimated 5 million Indian children (19%) are born with low birth weight, approximately 4.4 million of whom are born small for gestational age.
- Increasing rates of anemia among pregnant women
- The average weight gain in pregnancy is only 7 -8 kg

1000 days | make or break time



270 days

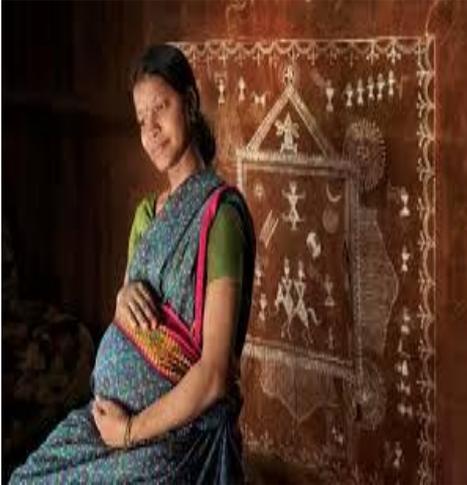
730 days

Pregnancy

0-23 months after birth

మొదటి 1000 రోజులు

తల్లి గర్భం
ధరించిన 270
రోజులు



బిడ్డ పుట్టిన మొదటి
సంవత్సరం
365 రోజులు



బిడ్డ పుట్టిన
రెండవ
సంవత్సరం
365 రోజులు





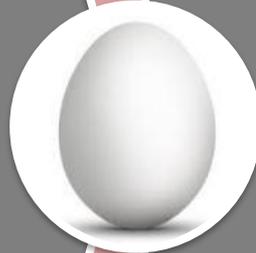
Overview- Arogya Lakshmi

- **One full meal** (Spot feeding) consists of Rice, Dal, Oil, vegetables for 25 days.
- **200ml. Milk & 1 boiled Egg** for 30 days in 149 ICDS projects
- Provision of one hot-cooked meal to Pregnant and Lactating Women and Children (3-6 years) at Anganwadi Centers
- Universalized in entire State from 1st January, 2015 with the objective of
 - Bridge the gap between the Recommended Dietary Allowance (RDA) and the Average Daily Intake (ADI) of pregnant and lactating women and children
 - Reducing malnutrition among children and women, reducing low birth weight among new born, reduction in wasting and stunting among children
 - Long term objective to reduce maternal and infant deaths

**Pregnant
Women and
Breast-
feeding
Mothers**



**One full meal
consists of Rice,
Dal, Oil,
vegetables for 25
days a month**



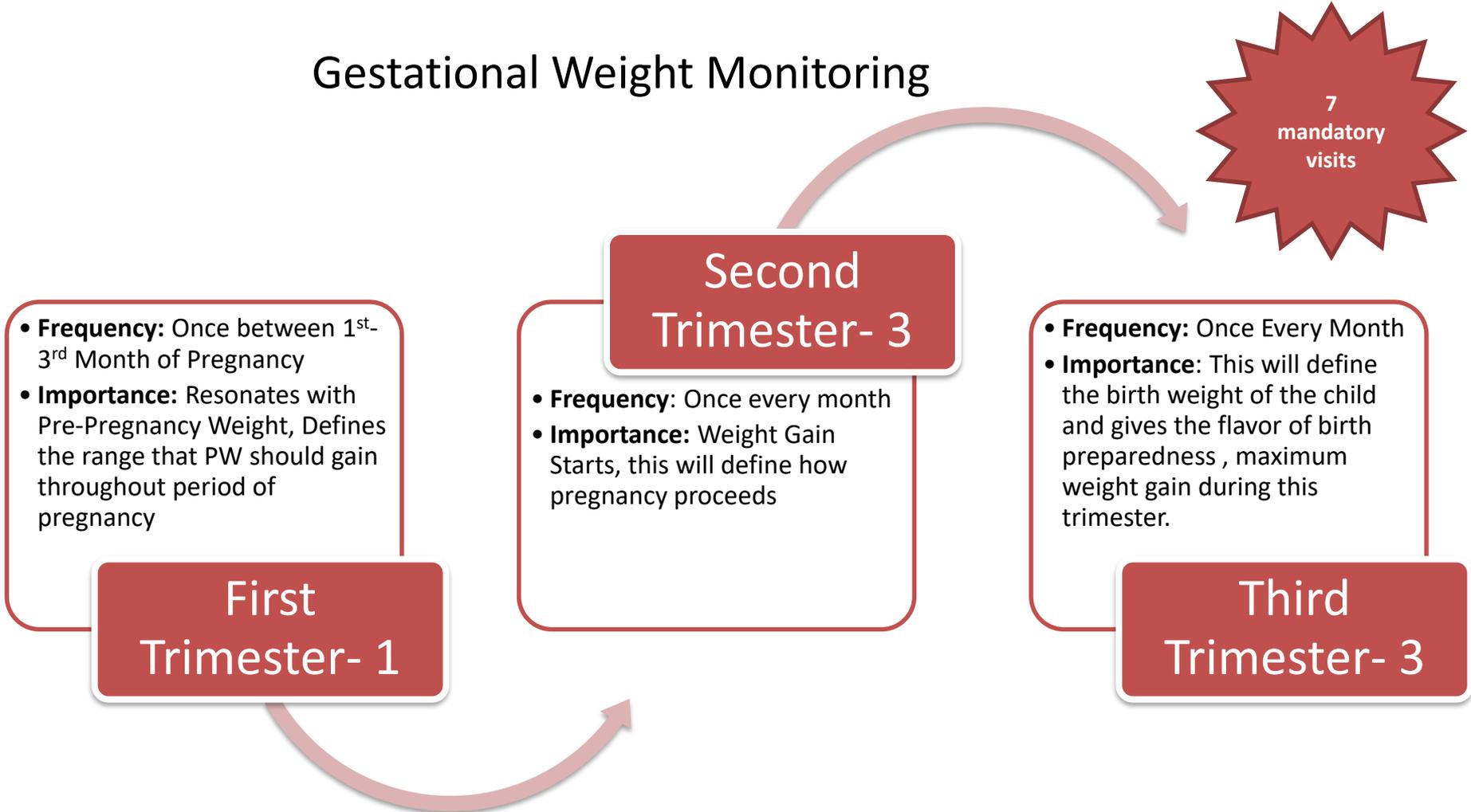
**One Boiled Egg
for 30 days a
month**



**200ml. Milk for
30 days a month**

- **47% of the RDA**
(Recommended Dietary Allowance)
- **1192 Calories**
- **37 gms Protein**
- **579 mg Calcium**

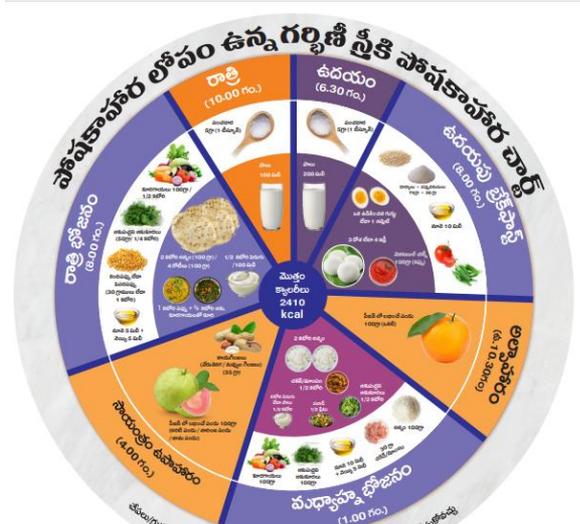
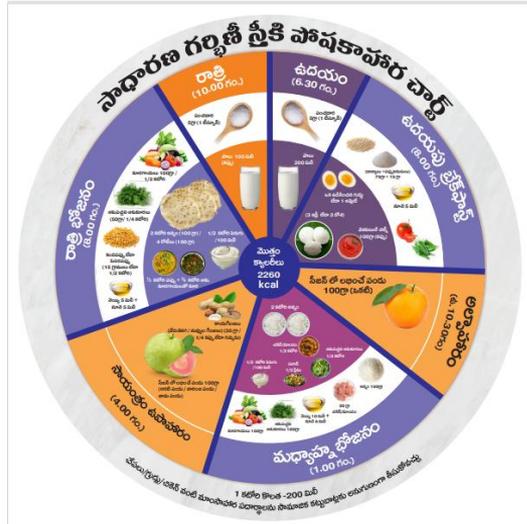
Gestational Weight Monitoring



Diet chart based on the weight protocol (NIN guideline)



STRENGTHS



అంగన్ వాడీ కేంద్రంలో సేవలు - ఆరోగ్యలక్షి స్కం



ఒక సంవార్ష భోజనం (గుడ్లు, పాలు, అన్నం, పప్పు, పచ్చి ఆకు కూరలు ఉంటాయి)



బరువు పర్యవేక్షణ (గర్భధారణ సమయంలో బరువు పెరుగుట <1kg/నెలకు లేదా > 3kg/ నెలకు ఉన్న మహిళలకు గృహ సందర్శనలు చేయవలెను)



సూక్ష్మపోషకాలు ఇవ్వబడును (ఐరన్ ఫోలిక్ యాసిడ్, కాల్షియం)



గర్భిణీల కోసం డీవార్మింగ్



కౌన్సిలింగ్: ఇమ్యూనైజేషన్ & ANC సేవలను పొందడం కోసం, ఫీడింగ్ ప్రాక్టీస్లను అనుసరించడం కోసం కౌన్సిలింగ్ కీలకం. 24 సెషన్ క్యాలెండర్ (గర్భధారణ యొక్క 2వ నెల నుండి ప్రసవం తర్వాత 6వ నెల వరకు, ప్రతి రెండు వారాలకు)

HBNC సందర్శనల

షెడ్యూల్ Home delivery: +1 visit at birth



ASHA to check and counsel the family to ensure



Newborn receives colostrum



Newborn is kept warm



Mother receives adequate diet



Mother and newborn both receive regular health checkup



Newborn receives timely vaccination



Handwashing using soap by all care givers



Age appropriate play and communication

మొదటి ఆరునెలల్లో పిల్లల శారీరక, మానసిక మరియు



Initiate breastfeeding within 1 hour (even for C-section deliveries)



Exclusive breastfeeding for 6 months
Do not give water, even during summer



Feed on demand day and night



Ensure proper positioning and attachment

పుట్టిన వెంటనే (గంటలోపు) తల్లిపాలు పాటించాలి (సిజేరియన్ కాన్పు అయినా)

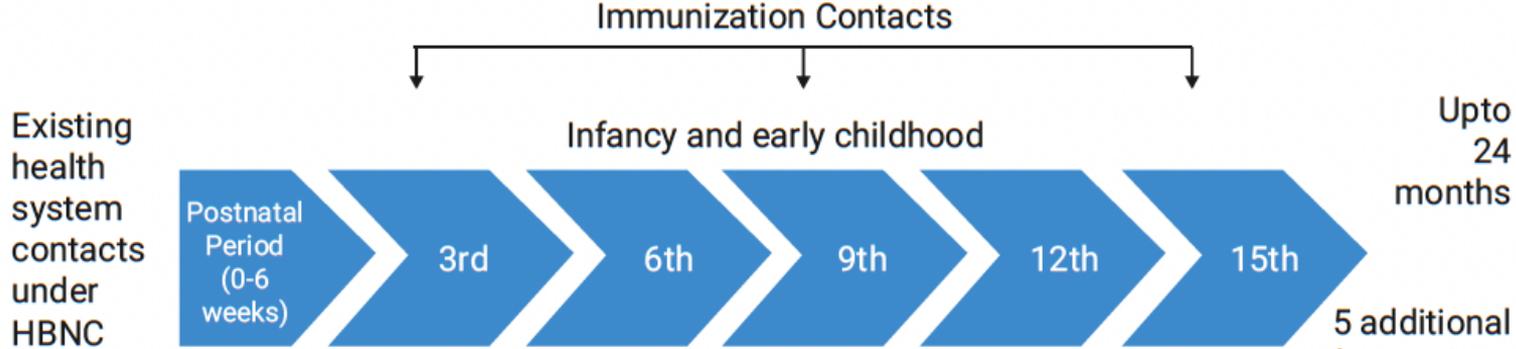
ఆరునెలల వరకూ కేవలం తల్లిపాలే పట్టాలి. (మంచి నీళ్లు కూడా)

బిడ్డ పాలకోసం అడిగినప్పుడల్లా ఇవ్వాలి (పగలు, రాత్రి కూడా)

బిడ్డకు పాలిచ్చేటప్పుడు మంచి అనుబంధం మరియు సరైన

HBYC సందర్భాల
విద్యుత్

Critical Window of Opportunity



Gap in health system contact addressed under HBYC

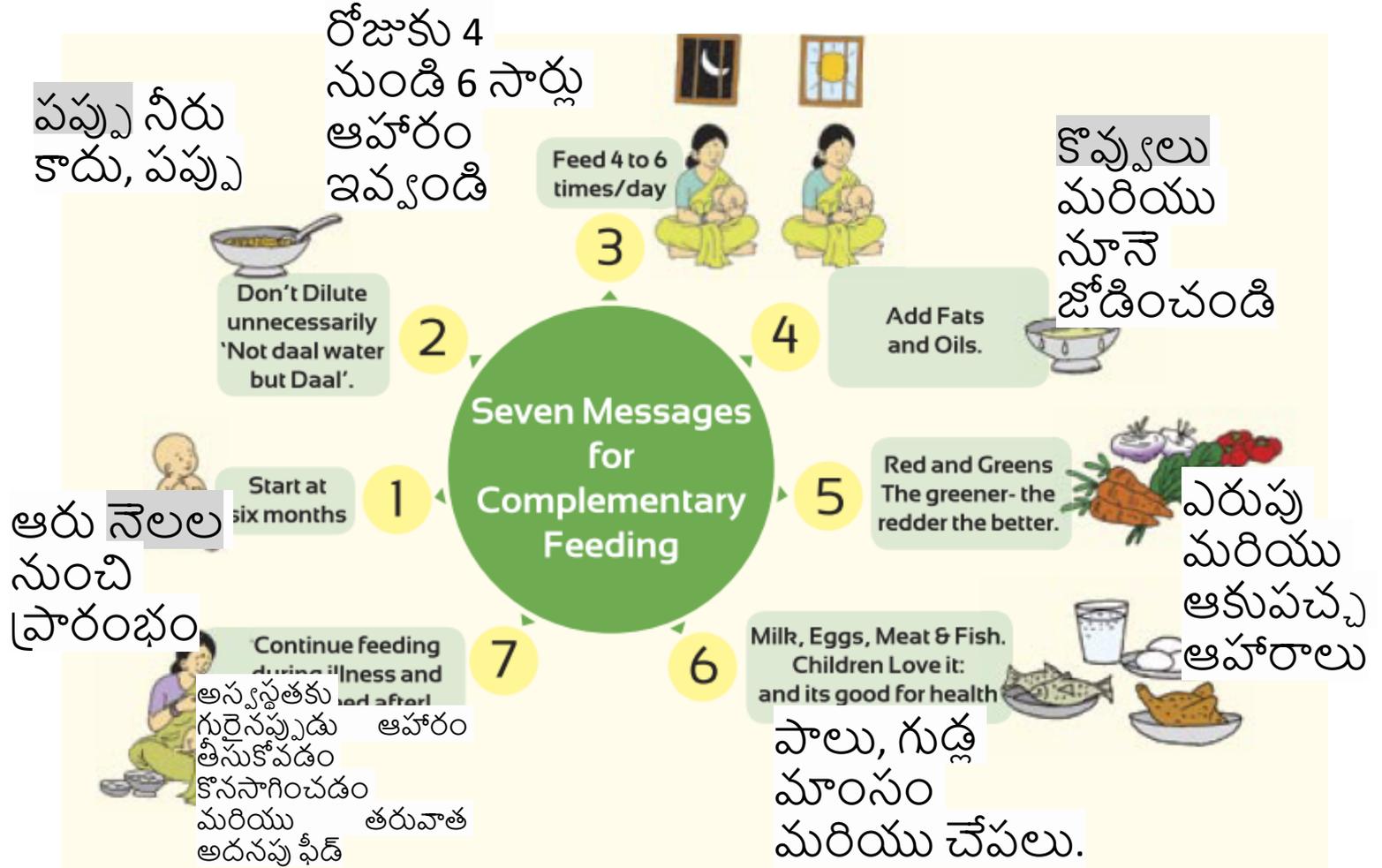
- 1st: Promote exclusive breast feeding
- 2nd: Initiate complementary feeding, introduce IFA Syrup
- 3rd: Increase frequency of CF, measles vaccine
- 4th: Increase amount of CF, give feeds adequate in quality & quantity
- 5th: Add variety of food from family pot, booster vaccination

5 additional home visits proposed at 3rd, 6th, 9th, 12th, 15th months

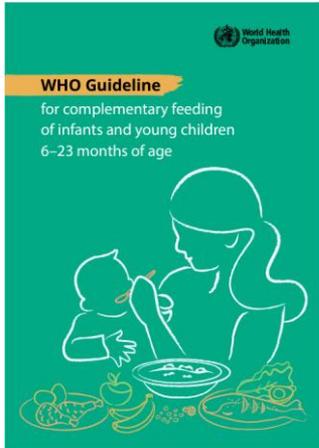
Age-appropriate interventions to be promoted during HBYC home visits

Growth monitoring and early child development at each visit

Infant Young Child feeding Practices (IYCN)



WHO Guideline for Complementary Feeding of Infants and Young Children 6–23 Months of Age



- 1 **Continued breastfeeding:** Breastfeeding should continue up to 2 years or beyond (strong, very low certainty evidence).
- 2 a) **Milks 6–11 months:** for infants 6–11 months of age who are fed milks other than breast milk, either milk formula or animal milk can be fed (conditional, low certainty evidence).
b) **Milks 12–23 months: for young children** 12–23 months of age who are fed milks other than breast milk, animal milk should be fed. Follow-up formulas are not recommended (conditional, low certainty evidence)
- 3 **Age of introduction of complementary foods:** Infants should be introduced to complementary foods at 6 months (180 days) while continuing to breastfeed (strong, low certainty evidence).
- 4 **Dietary diversity:** Infants and young children 6–23 months of age should consume a diverse diet. a. Animal source foods, including meat, fish, or eggs, should be consumed daily (strong, low certainty evidence). b. Fruits and vegetables should be consumed daily (strong, low certainty evidence). c. Pulses, nuts and seeds should be consumed frequently, particularly when meat, fish, or eggs and vegetables are limited in the diet (conditional, very low certainty evidence).
- 5 **Unhealthy foods and beverages:**
a. Foods high in sugar, salt and trans fats should not be consumed (strong, low certainty evidence). b. Sugar-sweetened beverages should not be consumed (strong, low certainty evidence). c. Non-sugar sweeteners should not be consumed (strong, very low certainty evidence). d. Consumption of 100% fruit juice should be limited (conditional, low certainty evidence).
- 6 **Nutrient supplements and fortified food products**
In some contexts where nutrient requirements cannot be met with unfortified foods alone, children 6–23 months of age may benefit from nutrient supplements or fortified food products.
- 7 **Responsive feeding**
Children 6–23 months of age should be responsively fed, defined as “feeding practices that encourage the child to eat autonomously and in response to physiological and developmental needs, which may encourage self-regulation in eating and support cognitive, emotional and social development” (13) (strong, low certainty evidence).



6 months



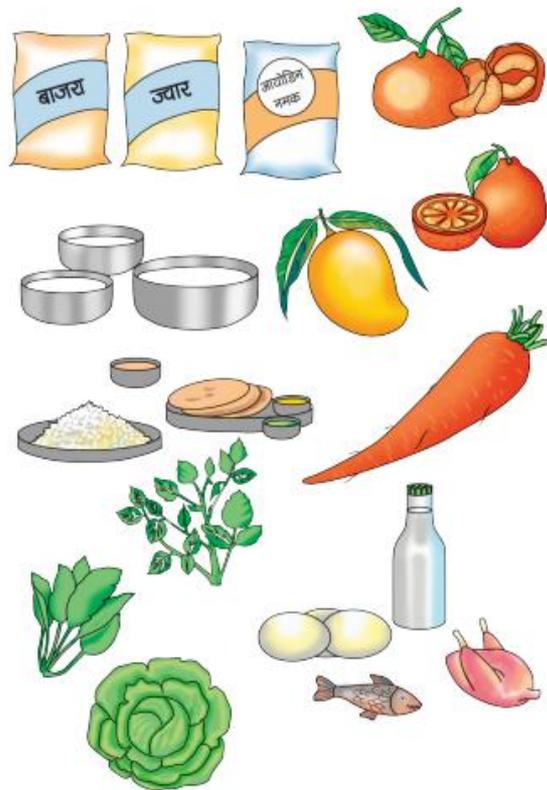
7-8 months



9-11 months



12-24 months



Addressing Malnutrition is a collective responsibility



GOVERNMENT OF TELANGANA

Dr. Christina Z. Chongthu, IAS
Secretary
Health, Medical & Family Welfare

Smt. Vakati Karuna, IAS
Secretary,
Women and Child Development

Dear All,

Sub: WDCW and Health & Family Welfare - Joint protocol for management of SAM, MAM, and Underweight Children birth to 5 years under ICDS and Health care service delivery -- Reg

- Ref:
1. Protocol for management of malnutrition in children, guidelines issued by MoWCD, GoI, 2023
 2. G.O.Ms.No.23, Dated 29.08.2022, Guidelines for Supplementary Nutrition Programme (SNP) under Integrated Child Development Service (ICDS) Scheme - "Supervised Supplementary Feeding Program" (SSFP) for Children upto 5 years categorized as Severe Acute Malnutrition (SAM) and Moderate Acute Malnutrition (MAM)
 3. Convergence meeting held on 29.04.2024 Health Family Welfare and Women Development Child Welfare Departments

Significant Percentage of children in the Telangana state suffer from malnutrition thereby impeding their normal growth. With an objective to remove/minimize malnutrition Government has initiated several supplementary nutrition programs for children.

For reducing childhood malnutrition on faster pace and ensure every child attain age specific development potential during the first 5 years of the life the WCD department along with the Health Department have derived a joint and comprehensive mechanism in the form of the SSFP (Supervised Supplementary Feeding Program). As a part of the program Anganwadi wise line listing of SAM and MAM children is done and these children are put on a special diet (BALAMRUTHAM+) after the appetite test and medical assessments are completed. Results of the program have been encouraging.

Further, the Department of Women Development and Child Welfare and Department of Health and Family Welfare, have reviewed the existing guidelines and protocols for management of malnourished children and revised the Joint Directive Order (DO) on SSFP to ensure services reach every nutritionally at-risk child i.e., Severely Acute Malnourished (SAM), Moderately Acute Malnourished (MAM) and Underweight (Low weight for age) children from 0-59 months.

The simplified framework for the management of acute malnutrition, underweight and growth faltering among children from birth to 5 years along with the comprehensive guidance, roles and responsibilities of functionaries is enclosed at [Annexure A](#). Hence, all the existing protocols for the management of malnourished children are subsumed into the revised guidelines, and this joint guideline will be treated as updated.

Joint Directives and Guidelines (Health, Nutrition and WASH)

for Supervised Supplementary Feeding Program (SSFP) under Integrated Child Development Service (ICDS) Scheme for Children birth to 5 years categorized as Severe Acute Malnutrition (SAM) and Moderate Acute Malnutrition (MAM) & Underweight (SUW, MUW)

DS and Health Supervisors to ensure AWTs and ASHA coordinate and concile the line listing of children for growth monitoring and medical screening, ferrals, and follow-up during the program and after discharge.

SHA facilitators and Health and ICDS Supervisors to coordinate and ensure SHAs take up HBNC and HBYC visits along with AWTs.

ie specific outcomes of the SSFP include ensuring:

- a. Line listing of identified Underweight / MAM / SAM children under 5 years.
- b. Medical Assessment for all SAM, MAM and underweight children and Appetite test for SAM children for enrollment into SSFP or referral to NRC.
- c. Timely Follow-Up during the SSFP ensuring provision of all services and post-discharge from SSFP for six months.
- d. Accurate entries in the NHTS application for tracking children.

I are requested to follow the Nutrition Champion Resource Kit shared during the ste level training organized by Department of Women Development and Child efare in June-July 2024.

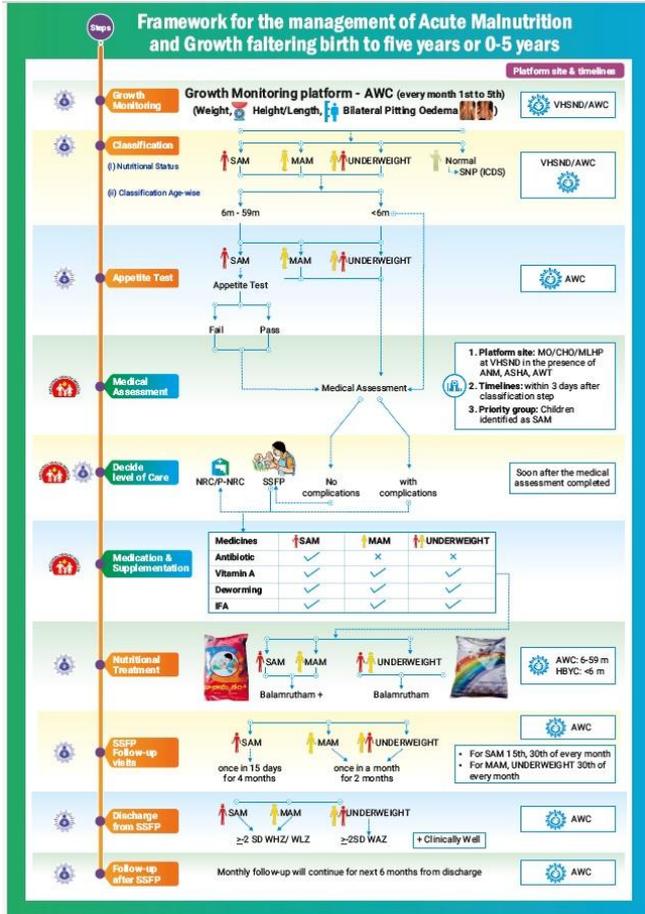
level, District level and PHC-level reviews on the progress will be taken up on a using the data from the Nutrition and Health Tracking System (NHTS)


Secretary to Government
Medical and Family Welfare Dept


Secretary to Government
Women Children Differently Abled and
Senior Citizens Welfare Dept

Have been jointly issued by
**SECRETARY HEALTH and
SECRETARY WCD**

Supervised Supplementary Feeding Programme - SSFP



The simplified framework for the management of acute malnutrition, underweight and growth faltering among children from birth to 5 years along with the comprehensive guidance, roles and responsibilities of functionaries

10 steps of SSFP

1. Growth assessment
2. Classification of Nutritional Status
3. Appetite Test
4. Medical Assessment
5. Decide the Level of care (Either NRC or SSFP)
6. Medication & Supplementation Medicines
7. Nutritional Treatment
8. Follow-up visits while in SSFP
9. Discharge criteria for SSFP
10. Follow up after discharge from the SSFP program

POSHAN Abhiyaan

Strives to reduce the level of **stunting, wasting, underweight, anaemia, and low birth weight babies** through mission mode by setting fixed targets. It is done through

- Mapping various schemes contributing to address malnutrition for convergence
- Strengthening growth monitoring for appropriating corrective actions
- Implementing Real-time monitoring with Information Technology tools (Poshan Tracker) and to eliminate physical registers
- Implementing a package of interventions under “first 1000 days of life”

POSHAN Abhiyaan

Common Core

- Maternal Nutrition
- Infant & Young Child Feeding Norms
- Treatment Protocols for SAM, MAM
- Wellness through AYUSH

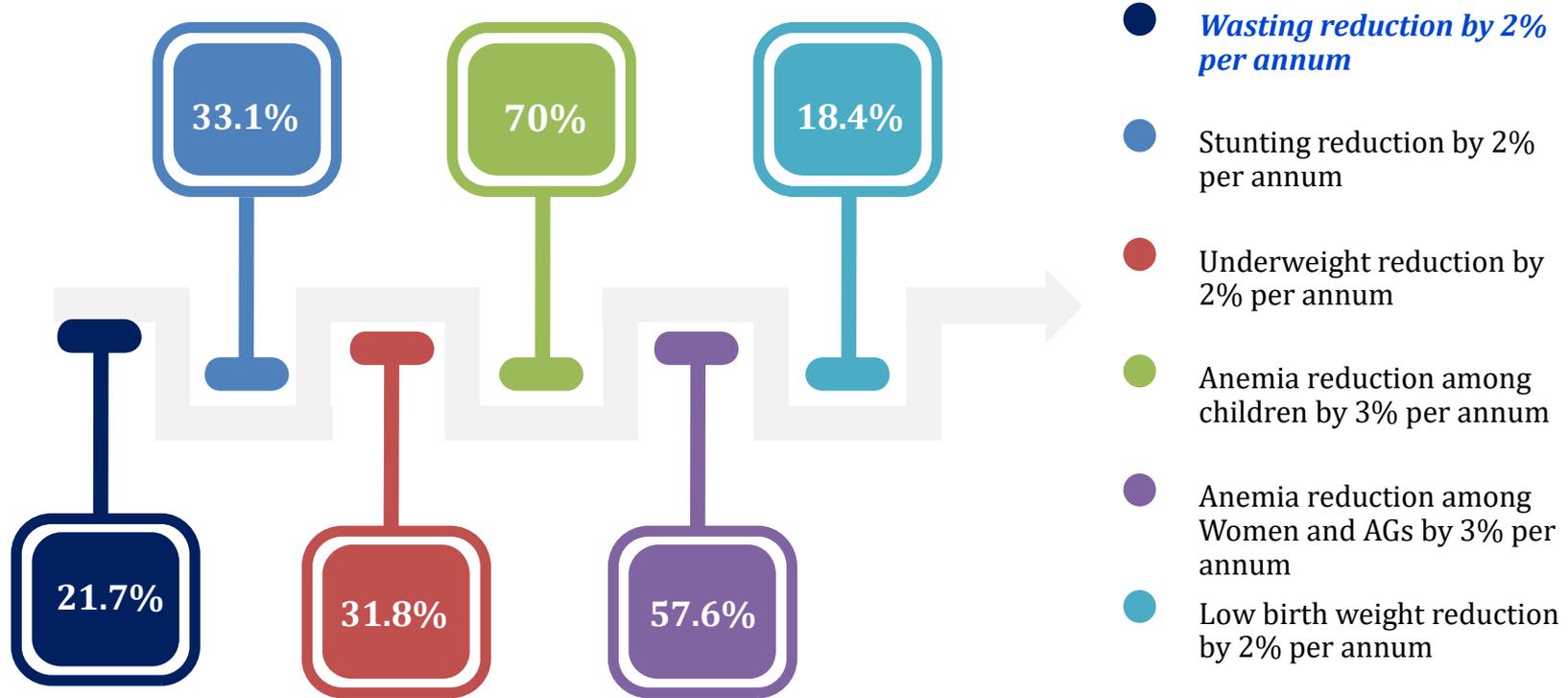
Three Pillars

- 1. Governance:** *Poshan Tracker, National Nutrition Index, Integration with RCH Portal of Health, Supply-chain + Testing with District Collector as Nodal Point*
- 2. Convergence:** *Jan Andolan, Innovation, Grievance Redressal & Incentive*
- 3. Capacity Building:** *Domain-Specific Skill Training for AWTs, Location-Specific Nutrition Education, and Capacity Building on THR Quality*

Components of POSHAN Abhiyaan



POSHAN Abhiyaan Targets



Baseline Data Source: NFHS -5 (2020) and



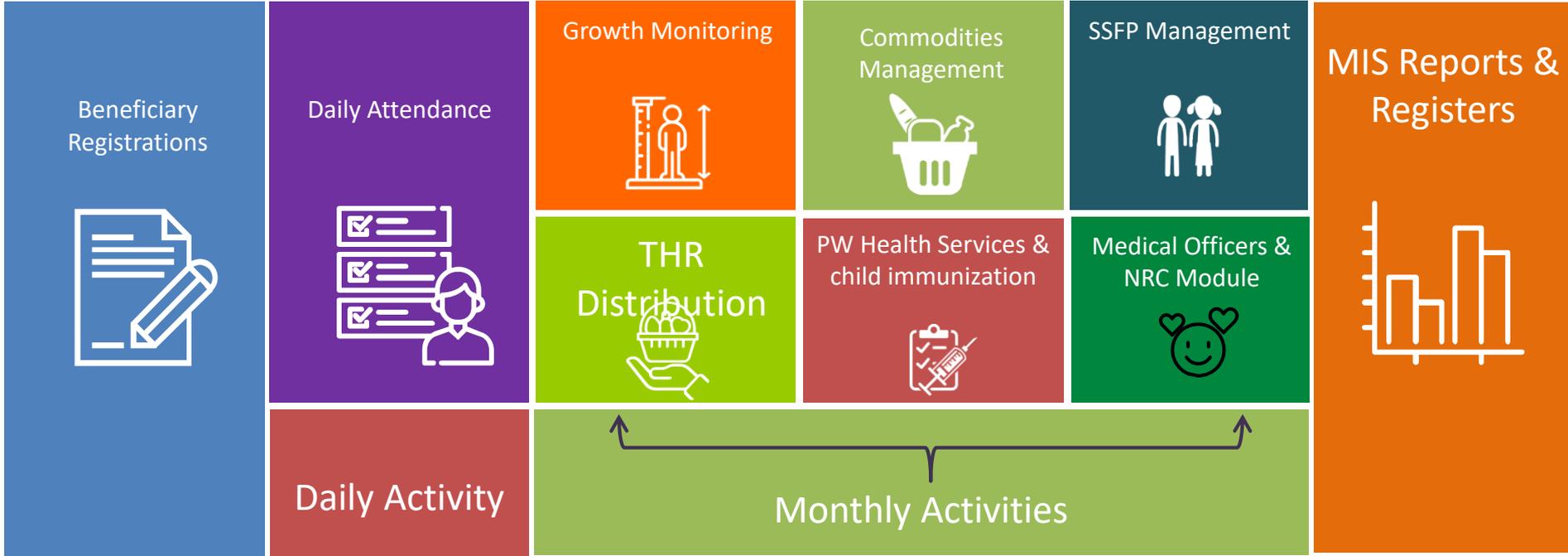
NHTS - MOBILE APP

SSFP (C-SAM) Module



Version: 2.2.5

Major features of the application



Nutrition and Health Tracking System

NHTS (Nutrition and Health Tracking System)

To strengthen the MIS & Monitoring system the WD&CW Department has put in place certain innovative & integrated IT solutions called Nutrition & Health Tracking System (NHTS – Mobile APP) for better monitoring of the Arogya Lakshmi Scheme being implemented by the department and to bring in transparency and accountability in service delivery.

The major objectives of NHTS are

- Monitoring **Daily Attendance** of Beneficiaries, AWTs & AWHs
- Tracking the actual **utilization of commodities** at AWC Level based on daily attendance submitted by AWTs
- Regular **Monitoring of Children Growth and their Nutritional Status**
- Tracking the **Services provided to Pregnant & Lactating Women**
- Beneficiary wise tracking of **THR Distribution**
- Implementation of **Supervised Supplementary Feeding Program (SSFP)** to tackle the high prevalence of wasting (SAM & MAM) in children 0-59 months jointly with Department of Health & Family Welfare
- Digitization and **automation of manual registers**

Special Features of NHTS Application - Growth Trajectory

← Child Growth Report

BIKKI PRANEETHA, BIKKI BABU, 4648821

UW Wasting Stunting

Month	H	W	Date	Wasting	Stunting
January	H: 0.0	W: 0.0	null		
February	H: 78.0	W: 9.2	5/2/2022	Yellow	Green
March	H: 78.0	W: 9.2	20/3/2022	Yellow	Green
April	H: 82.0	W: 9.2	12/4/2022	Yellow	Green
May	H: 84.0	W: 9.5	9/5/2022	Yellow	Green
June	H: 94.0	W: 10.0	7/6/2022	Yellow	Red
July	H: 95.0	W: 10.2	7/7/2022	Yellow	Red
August	H: 95.0	W: 10.5	5/8/2022	Yellow	Red
September	H: 0.0	W: 0.0	null		
October	H: 0.0	W: 0.0	null		
November	H: 0.0	W: 0.0	null		
December	H: 0.0	W: 0.0	null		

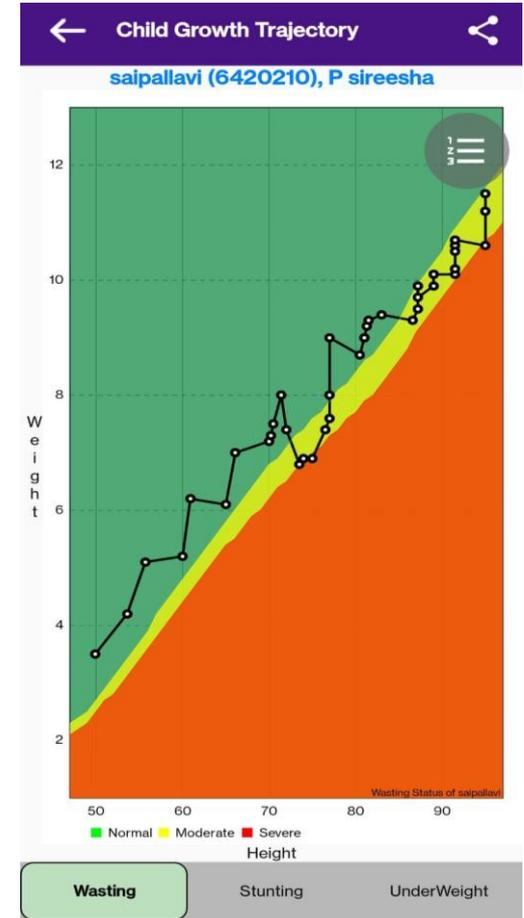
← Child list for Growth Report

Search by Child/Mother name

to the child's completed months ...

September 2023

<p>SARA HASHEEMA</p> <p>Mother Name : MERAZ UNNISHA</p> <p>ID:5370218 Gender: Female</p> <p>Date of Birth : 25/09/2018 Age(M) : 59</p> <p>Graph</p>
<p>ZAYEEM KHAN</p> <p>Mother Name : MEHARAZUNNISHA</p> <p>ID:5547674 Gender: Male</p> <p>Date of Birth : 24/08/2020 Age(M) : 36</p> <p>Graph</p>
<p>REHAN PASHA</p> <p>Mother Name : IFATH SULTHANA</p> <p>ID:5353443 Gender: Male</p> <p>Date of Birth : 25/10/2018 Age(M) : 58</p> <p>Graph</p>
<p>Farhan Phasha</p> <p>Mother Name : NOORNNISA BEGUM</p> <p>ID:5476305 Gender: Male</p> <p>Date of Birth : 06/01/2021 Age(M) : 31</p> <p>Graph</p>
<p>Zulekha Sulthana</p> <p>Mother Name : Syed Sana</p> <p>ID:6668650 Gender: Female</p> <p>Date of Birth : 19/07/2022 Age(M) : 13</p> <p>Graph</p>

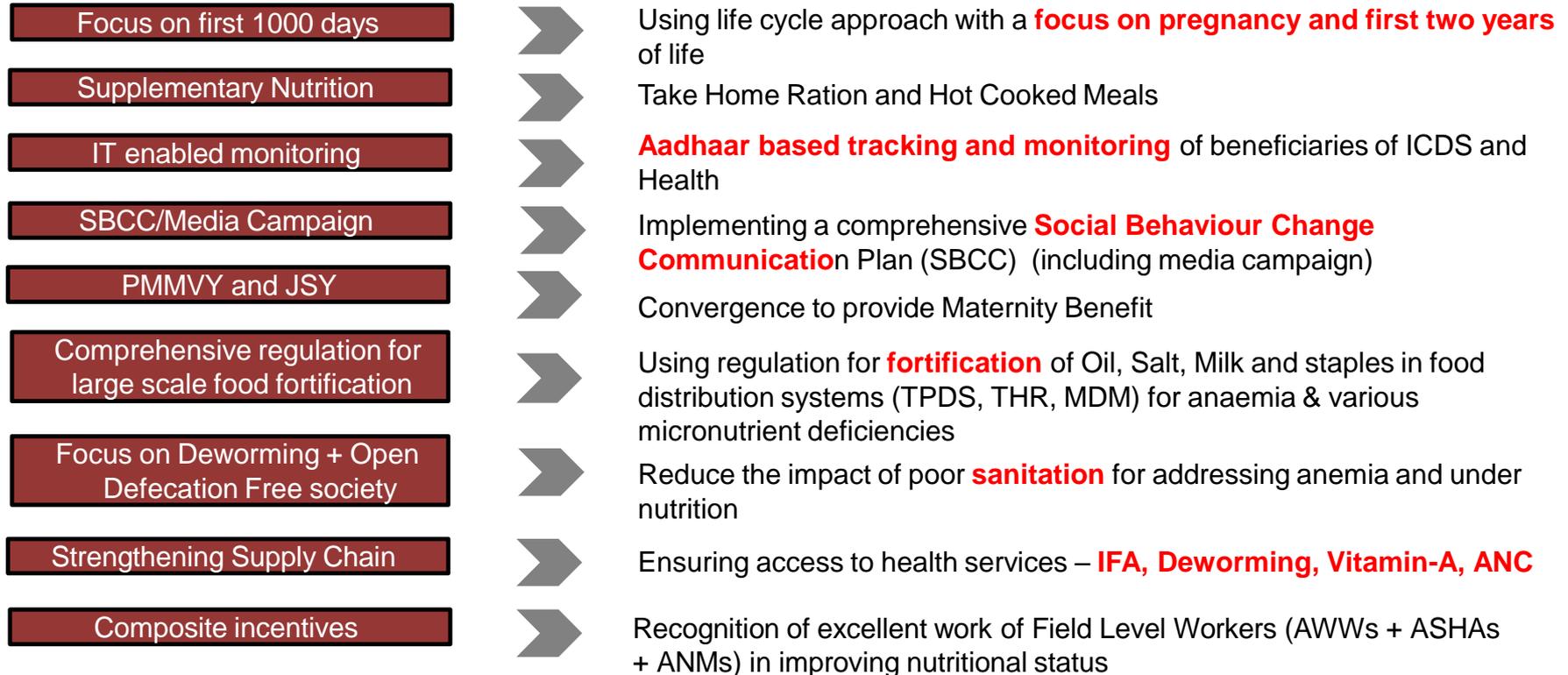


Best Practices in THR Implementation ~ TELANGANA

- An online web application called Online Food Consolidation Report (FCR) has been developed for tracking the supply of commodities and is in use since 2017.
- AADHAAR linked application with biometric authentication was introduced to curb diversions and irregularities in commodity supply.
- Eggs, milk, red gram, Balamrutham, murukulu (snack food), and oil are being supplied to AWCs through Telangana State – Commodities Supply Tracking System (TS CSTS) App.
- Rice is supplied to Anganwadi centres through an electronic indenting and supply management system e-PoS, in coordination with the Civil Supplies Dept. of Govt. of Telangana.



KEY FOCUS AREAS: MISSION MODE TO ADDRESS UNDERNUTRITION



#StopChildMalnutrition

- Govt can provide policies, funding, implement programs e.g. vitamins, CMAM, iron/folate, food provision
- Private sector can ensure good and affordable food products and marketing

But much has to do with behavior – the **BIG 7**:

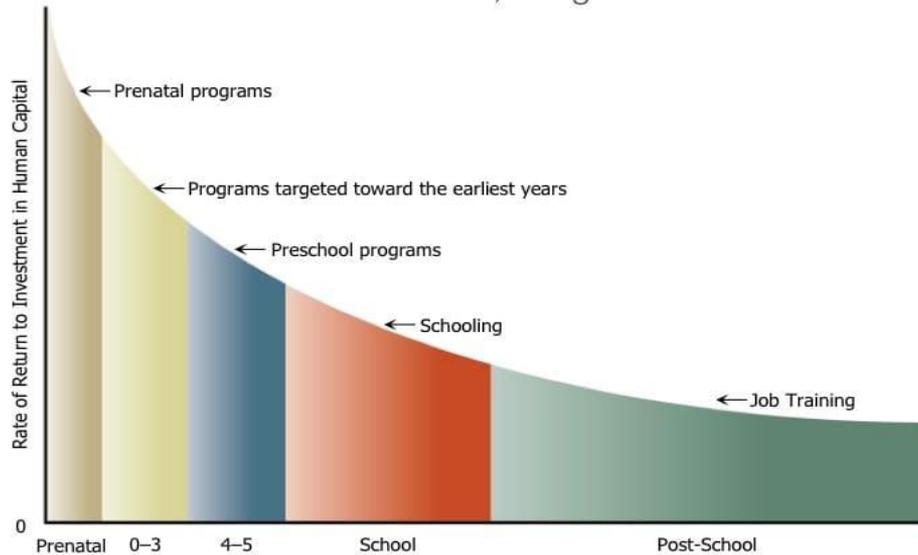
1. **Exclusive Breastfeeding - No drinking water is need during first 6 months**
2. **Dietary Diversity - Prepare nutrient rich foods from 6 months**
3. **Meal Frequency - 3-4 meals and 1-2 snacks**
4. **Hygiene - Wash hands and utensils**
5. **Micronutrient (IFA, Calcium & Vitamin A) Supplementation with Deworming for Women & Children.**
6. **Routine Weight Gain Monitoring for Women & Children**
7. **Behavior Change Practices focused on Feeding & Hygiene Practices.**



Rate of Return to Investment in Human Capital

EARLY CHILDHOOD DEVELOPMENT IS A SMART INVESTMENT

The earlier the investment, the greater the return



Source: James Heckman, Nobel Laureate in Economics



Photo from the Nobel Foundation archive.

James J. Heckman



Photo from the Nobel Foundation archive.

Daniel L. McFadden

In the field of 'Economic Sciences', in Memory of Alfred Nobel 2000 was divided equally between James J. Heckman "for his development of theory and methods for analyzing selective samples" and Daniel L. McFadden "for his development of theory and methods for analyzing discrete choice."

<https://www.nobelprize.org/prizes/economic-sciences/2000/summary/>

**A strong beginning greatly increases
the chances of a good ending**



*THANK
YOU!*