Skill Development

Theory & Policy and Practice in India

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(Views personal)

Structure of Presentation

- Public Economics view of Skill Development

- Role of Public Policy/State in Skill Development

- Evolution of Indian Skill Development Ecosystem

- Current GOI Programs in Skill Development

- Way Forward

- Q&A

Is there a Market for Skills Acquisition (in India) ?

Demand side

- India: estimated incremental skilled manpower requirement in 24 high growth sectors, until 2022 : 103 million

- Globally: net workforce shortfall is 32 – 39 million by 2020 (due to low birth rate and ageing population)

Significant demand for skilled workers in India and globally

Supply side

- 24 million youth enter the 15+ age group every year

- 47% of children drop out at secondary school level

- Hence ~10-12 million youth enter the workforce every year

- Annual training capacity : 2.5 million

Large young population; Limited training capacity

Public Economics & Skill Development- I

Basic Education not characterized by non-rivalry or excludability – Hence not a "Public Good"

Basic Education is however marked by large positive externalities – Hence a "Merit Good"

Large divergence between social and private costs/benefits– Market failure likely in the form of under-provision

Argument for "State Provision"– "State Provision" not necessarily "State Production"

Skill Development similar to Basic Education + practical/hands on training– Stronger case for state funding but private production

Public Economics & Skill Development- II

State funding with private production calls for different role of "State"– Ensuring value for public expenditure

Two more factors of Skill Development–
- Target population likely to be vulnerable
- Potential for collusive behavior

Ensuring quality of training though–
- Contracting or
- Regulation

Indian Model was a hybrid-
- NCVT without regulatory powers
- Poor contracting & enforcement capacity of Governments

Sub-optimal outcomes

Indian VET & Skill Development Landscape- I

- Formal Indian VET : **ITI system (1950s)**

- HR obverse of II five year plan industrialization & engineering PSUs

- Now **14,751** NCVT affiliated ITIs in India

- **79%** private & **21%** government

- Average government ITI
  -Large tracts of land
  -Good building
  -Poor quality labs/equipment
  -50% + teacher vacancies, balance formally qualified, well paid, low motivation

- Average private ITI not likely to be better

Indian VET & Skill Development Landscape- II

2007-17 GOI MES implemented through State Government

- About Rs. 1250 Crore spent on the scheme

- About 14,000 private sector skill development providers

- 450+ private sector assessment & certification agencies

- ~43 Lakh youth trained, assessed & certified

2007 NSDC launched

- 11,946 SMART accredited Training Centers.

- Sector Skill Councils handle assessment & certification

- More than 1.02 Cr. Candidates trained (PMKVY 2.0 & 1.0 and STAR)

- 51% Placement outcome in the placement linked skill component – PMKVY 2.0

Skill Development Programs of GOI: "Skill India Mission"

(A) Increase scale

- Numbers
- Domain
- Location

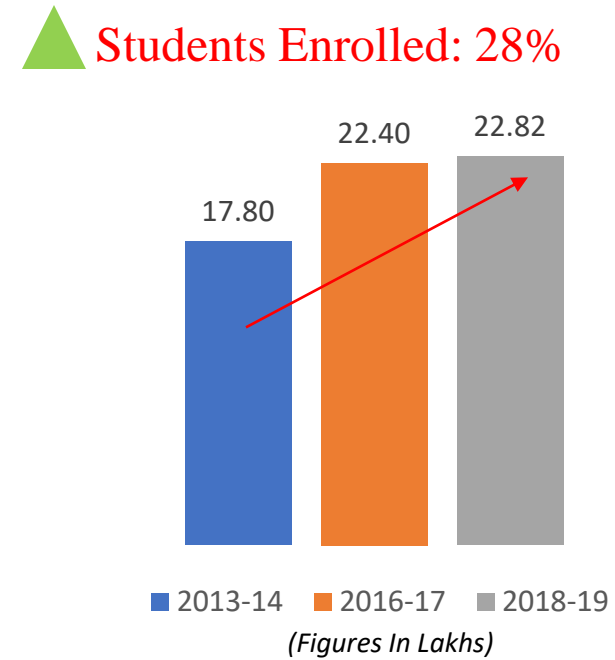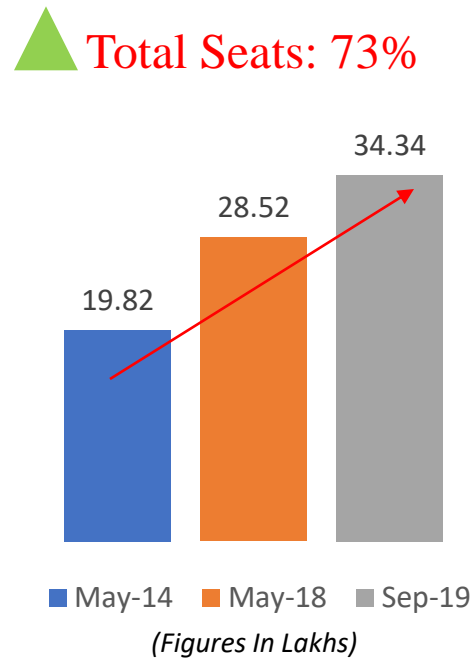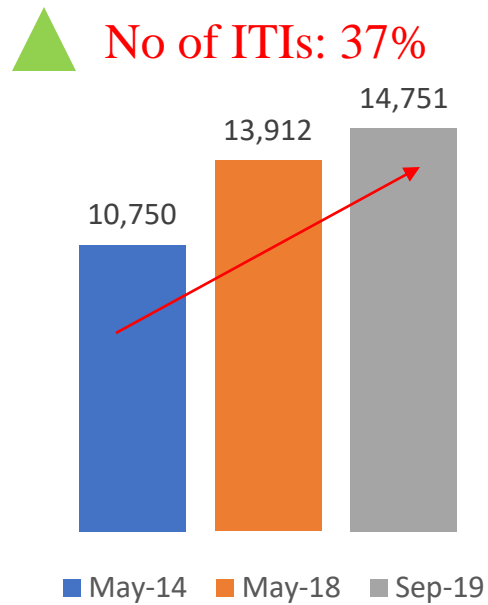**(B) Enhance quality and employability**

- Voluntary Grading of ITI's & Autonomy of ITI's
- Employer connect enhancement
- Apprenticeship as essential component of Skill Development
- Statuary Regulation for Quality Assurance NCVET

(C) Make skills aspirational

- Education Pathways
- LMIS
- Participation in Global Skills Market
- Skill Wage premium

(A) Increase Scale – ITI's

Significant increase in capacity and enrolment in ITI between May 2014- Sep 2019

(A) Domain Mismatch and Location

- A total of ~26.50 Lakhs ITI seats available under 138 "trades" (Engineering trades – 75, Non-engineering (Service) trades – 58 and Divyang trades - 5)

- 20 popular trades contribute to 90% of the total seats (nearly 24 Lakhs). The trades include just a few non-engineering trades (service trades)

- The popular trade list includes Electrician, Fitter, Computer Operator and Programming Assistant, Welder, Electronics Mechanic, Mechanic Diesel, Mechanic (Motor Vehicle), Wireman, Draughtsman (Civil), Mechanic (Refrigeration and Air-Conditioning), Turner, Health Sanitary Inspector, Plumber, Machinist, Sewing Technology, Stenographer & Secretarial Assistant (Hindi), Draughtsman (Mechanical), Basic Cosmetology, Information Communication Technology System Maintenance, Dress Making
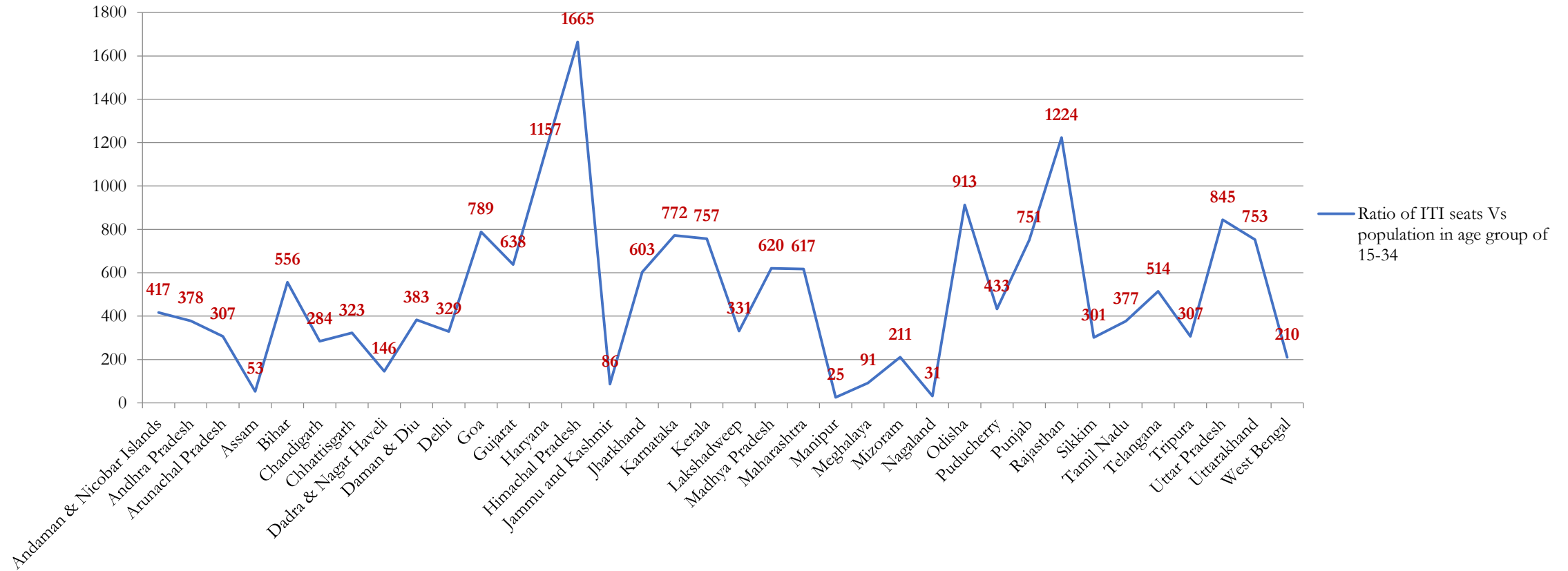
(A) Domain Mismatch and Location

- There are 58 non-engineering (service) trades

- The most prominent of the non-engineering (service) trades are Computer Operator and Programming Assistant, Health Sanitary Inspector, Sewing Technology, Stenographer & Secretarial Assistant (Hindi), Basic Cosmetology, Dress Making, Fashion Design & Technology, Stenographer & Secretarial Assistant (English)

- The above non-engineering trades contribute towards ~10% of the total seats under all trades

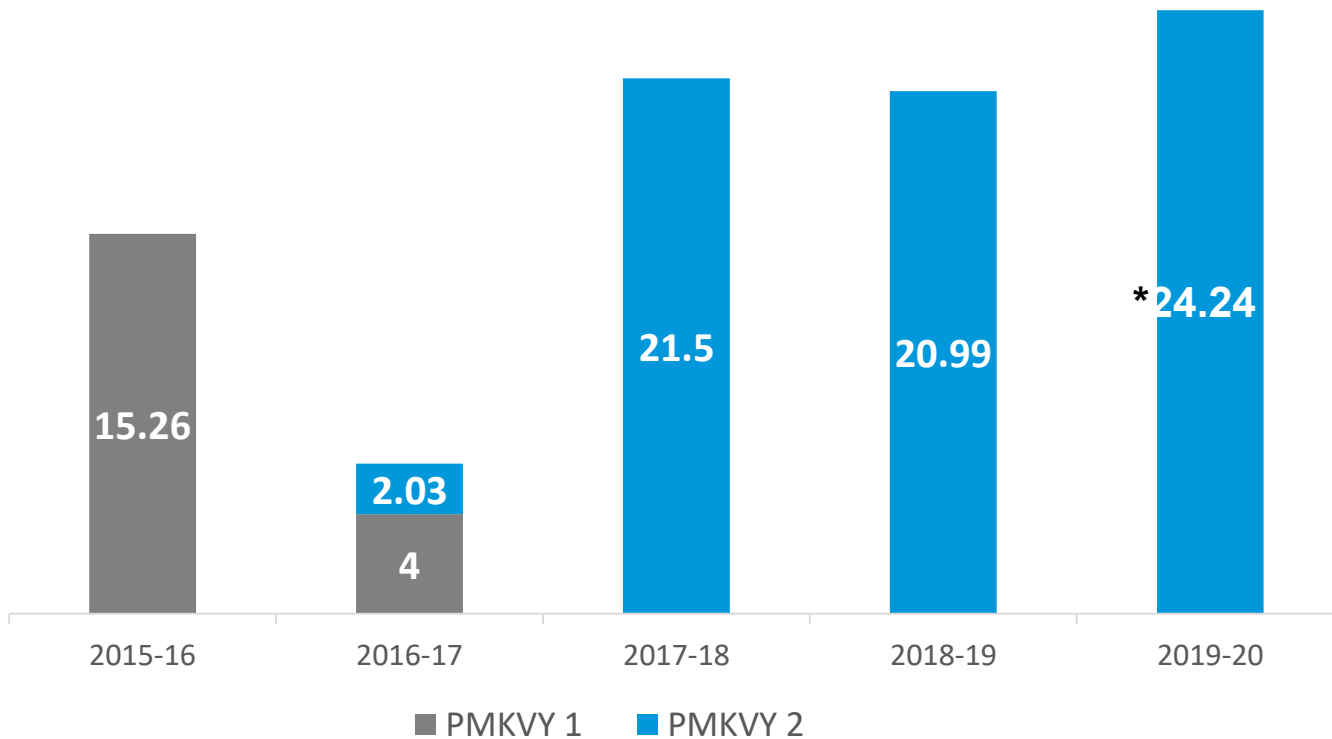# (A) Domain Mismatch and Location

No. of ITI seats / Population (age group of 15-34) in lakh
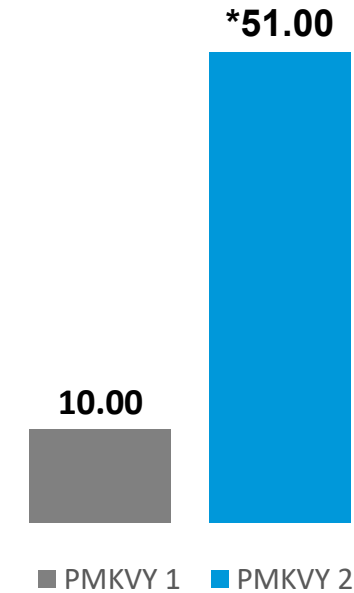
(A) Increase Scale – Short Term Training

Candidates Trained

(Figures In Lakhs)

15.26	2.03 / 4	21.5	20.99	*24.24
2015-16	2016-17	2017-18	2018-19	2019-20

■ PMKVY 1   ■ PMKVY 2

FY 2019-20 training as on 11th November`19

Placement Percentage

*51.00

10.00

■ PMKVY 1   ■ PMKVY 2

Total Placed as on November`19: 15.40 lakh, compared with candidates certified 90 days ago i.e. 30.21 lakh

Mandatory placement tracking in PMKVY 2.0 lead to significant increase in placement percentage

(B) Enhance Quality and Employability- Employer Connect

- Establishment of Institute Management Committees (IMCs) in 1,227 ITIs
- German model of dual training with industry introduced on a pilot basis
- 80 short term training courses linked to apprenticeship (pilot launched)
- 37 corporates contributed over Rs. 100 Cr in CSR to NSDF (2016-17)
- 38 sector wise SSCs created which create important linkage between employer demands and skills supplied

Course standardization

- **1,911 QPs** and **5,000+** NOS developed and validated by 2000+ companies
- All central government scheme NSQF aligned
- SSDMs and States adopting NSQF
- 11 state core committees for NSQF alignment

Course modernization

- **63 course curricula upgraded** with industry consultations
- **35 new trades introduced such as** renewables, mechatronics, Instrumentation
- **6 advance diploma courses** on IT & networking, Automotive, manufacturing, welding, industrial electronics, construction technology
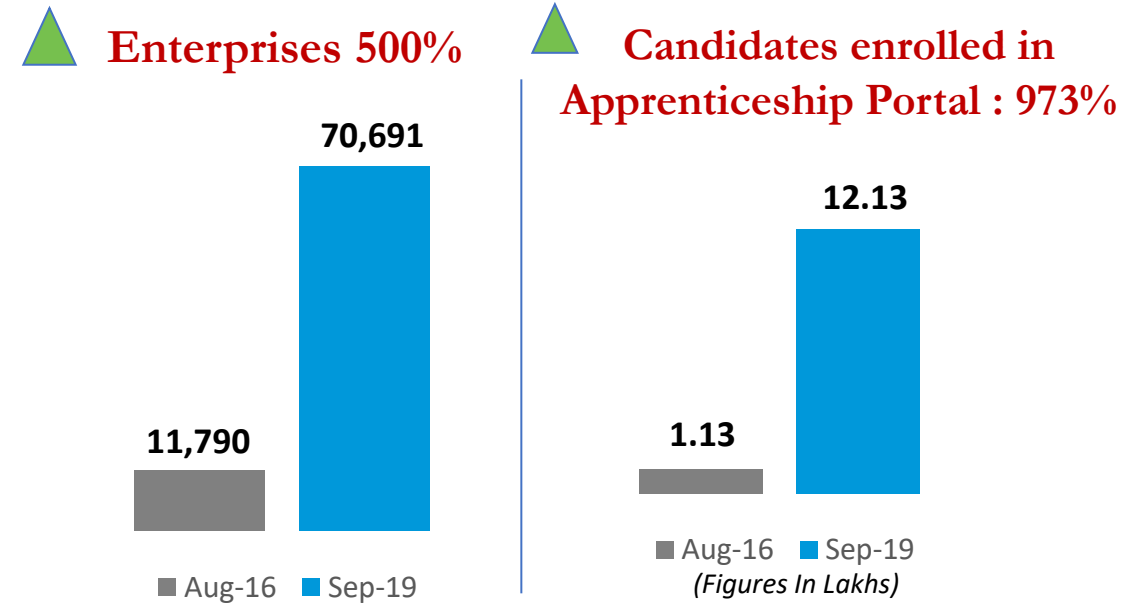
(B) Enhance Quality & Employability – Apprenticeships

Comprehensive reforms of Apprentices Act, 1961 (Amended in 2014) / Apprenticeship Rule 1992 (Amended in 2019)
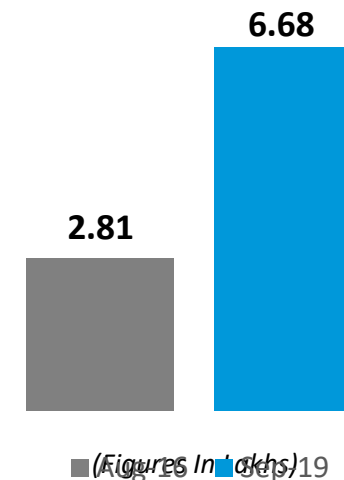
- Upper limit for apprenticeship increased to 15%
- Introduction of Optional trade pathway
- Scope of apprenticeship extended to service sector
- Penalties for employers rationalized
- TPA & self regulation by employer bodies

National Apprenticeship Promotion Scheme (NAPS) launched for catalyzing apprenticeship

- Incentivizing employers to onboard apprentices: 25% Government funding
- Online and transparent system of operations
- Integration with other skill development programs
- Better communication and outreach Strategy

▲ **Enterprises 500%**

70,691

11,790

■ Aug-16 ■ Sep-19

▲ **Candidates enrolled in Apprenticeship Portal : 973%**

12.13

1.13

■ Aug-16 ■ Sep-19
(Figures In Lakhs)

▲ **Apprentices 137%**

6.68

2.81

(Figures In Lakhs)
■ Aug-16 ■ Sep-19

(B) Enhance quality & employability- Affiliation & Accreditation

New affiliation, accreditation norms and process for ITIs implemented w.e.f August 2018

- DGT formulated and introduced new affiliation norms for all existing and new ITIs.
- Intent to curb mushrooming substandard institutes across India to improve overall quality.
- Civil/Infra norms also revised for better standards

New Affiliation Procedure:

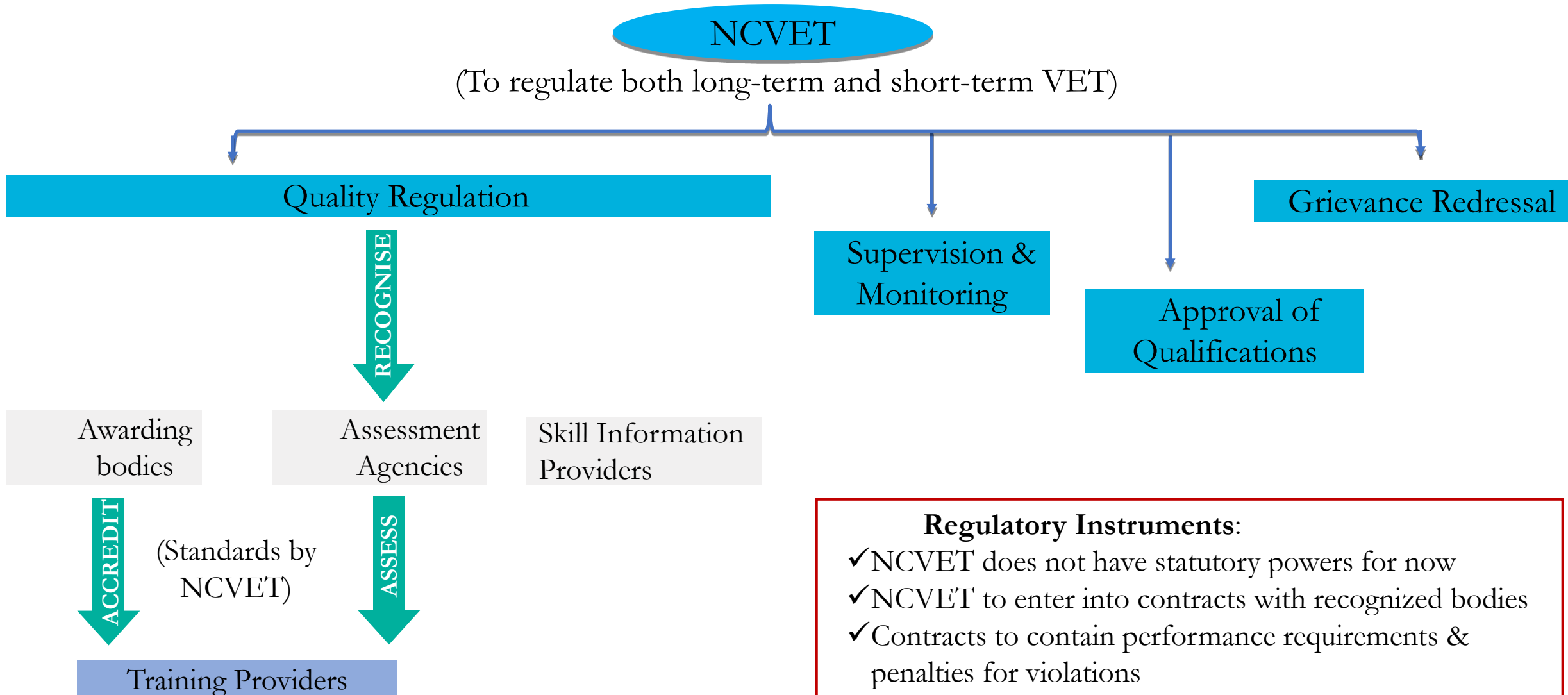| STAGE I	STAGE II	STAGE III
Desktop Assessment- Online assessment and NOC from State Government	Verification of Civil Infrastructure through State Government	Expert Committee verification or final inspection through active participation of State Government

(B) Enhance quality & employability - Grading

Voluntary Grading of ITIs

- First phase of grading process started in November 2017 and the process completed in June 2018

- In Total 4811 ITIs including 2940 Pvt. it is have been graded and final grades were published on DGT/NCVT MIS website in June 2018.

- Twenty top graded ITIs were honored by Hon`ble Minister at New Delhi

- The second phase of grading process launched in January 2019 with compulsory grading all the remaining ITIs in the country.

Autonomy of ITIs- Autonomy linked with national grading

(B) Enhance quality & employability- Regulation for Quality Assurance

NCVET

(To regulate both long-term and short-term VET)

Quality Regulation

RECOGNISE

Awarding bodies

Assessment Agencies

Skill Information Providers

ACCREDIT

(Standards by NCVET)

ASSESS

Training Providers

Supervision & Monitoring

Approval of Qualifications

Grievance Redressal

Regulatory Instruments:
✓NCVET does not have statutory powers for now
✓NCVET to enter into contracts with recognized bodies
✓Contracts to contain performance requirements & penalties for violations
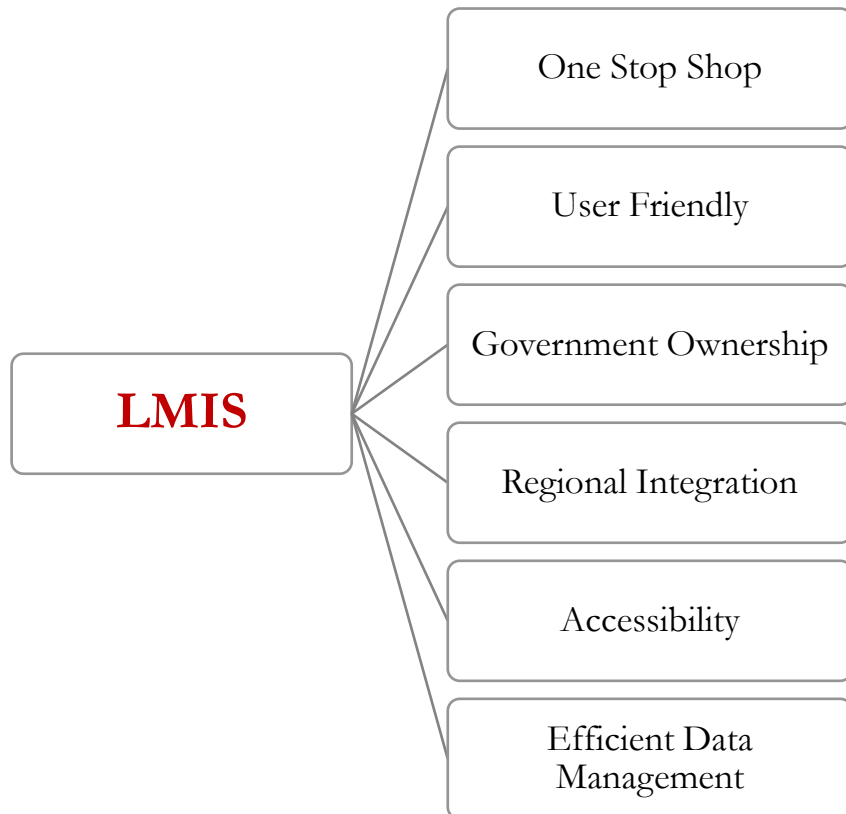
(C) Skills as Aspirational- Skill Wage Premium

Three economist`s won the Nobel Prize for economics in 2001 for their work on information flows and market development.

- George Akerlof wrote "The Market for Lemons" in QJE 1970 identifying severe problems that afflict markets characterized by "asymmetric information"

- Michael Spence wrote "Job Market Signaling" in QJE 1973 showing how productive workers "signal" their productivity by getting formal education

- Joseph E. Stiglitz wrote "The Theory of Screening, Education, and the Distribution of Income" in the Yale Economics Journal, showing how economic agents use "screening" as a technique to extract information from another agent
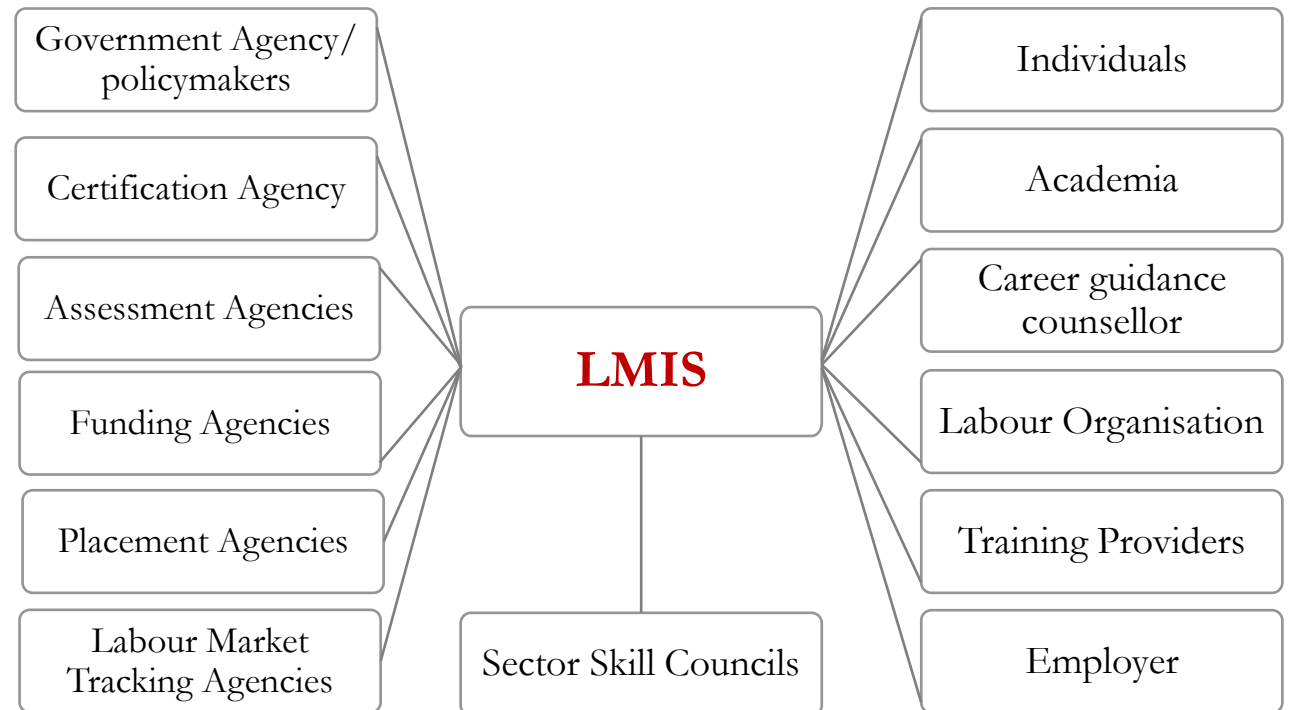
(C) Skills as Aspirational- LMIS

A Labour Market Information System **(LMIS)** is a labour market policy instrument to improve information flow in labour market. **LMI** refers to all data, quantitative and qualitative which can describe the labour market.
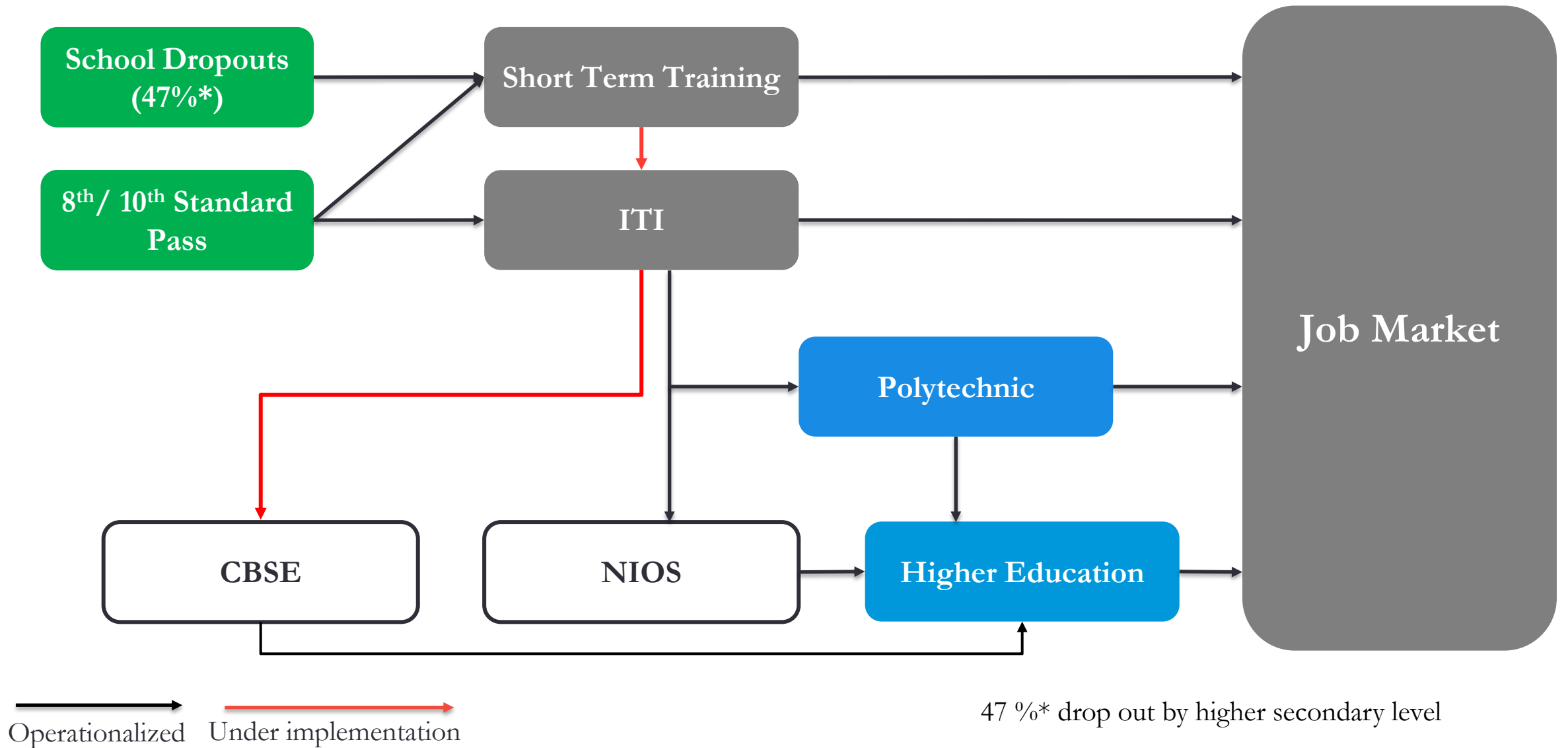
LMIS Characteristics

LMIS

- One Stop Shop
- User Friendly
- Government Ownership
- Regional Integration
- Accessibility
- Efficient Data Management

LMIS Key Stakeholders

- Government Agency/ policymakers
- Certification Agency
- Assessment Agencies
- Funding Agencies
- Placement Agencies
- Labour Market Tracking Agencies
- Sector Skill Councils

LMIS

- Individuals
- Academia
- Career guidance counsellor
- Labour Organisation
- Training Providers
- Employer

(C) Skills as Aspirational : Education Pathways

School Dropouts (47%*)

8th / 10th Standard Pass

Short Term Training

ITI

Polytechnic

CBSE

NIOS

Higher Education

Job Market

→ Operationalized   → Under implementation

47 %* drop out by higher secondary level

(C) Skills as Aspirational : Participation in Global Skills Market

Unlocking the Demographic Dividend: By 2022 countries like USA, UK and **China will fall short of skilled labour by 1 Mn, 2Mn, and 10 Mn** respectively while India will have **surplus of ~ 47 Mn** in the age group of 19-59 Years

Government`s Initiatives for International Skilling:

International Benchmarking	Global mobility G2G/B2B	Training Infrastructure	Research and other
• **UAE:** 15 Indian QPs mapped to 13 UAE Qualifications • **UK:** 82 QPs mapped to UK standards • **Australia:** 25 QPs mapped across 2 sectors	• **TITP Japan:** 17 Candidates placed • **IISC Pilot:** 63 candidates placed • **Sweden:** B2B signed to send Skilled India IT & Telecom Professionals • **UAE:** Blue Collar, DTIs	• **Singapore Enterprise** • **Japan:** JIMS • **Germany:** Dual TVET • **France:** Fondation De France, Schneider Electric • **IISC+PDOT**	• **Global Skill Gap Study** • **PIOCCI** • **USISPF**

Challenges:

• Work Visa Challenges • Govt. imposed restrictions on immigration • Social Security	• High Costs of Living in some countries • Acceptance of skill certification • Pre departure and post arrival support and training

Vision 2020

- Five design principles

  - Learner centric and inclusive

  - Employer connect

  - States as equal partners

  - Listen learn and respond

  - Technology to drive change

- Three strategic priorities

  - Improve linkages between education and skilling pathways

  - Catalyse demand for formal skills especially from small and informal enterprises

  - An enabling & inclusive skills & entrepreneurship ecosystem

Q&A

Thanks
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