

Skill Development Priority Index

Data driven approach to investing in skills

September 2021

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Sector Context in India







28 States & 8 Union Territories 730+ Districts*

*(Grouped into Clusters by National Statistical Office, for surveys and analysis)

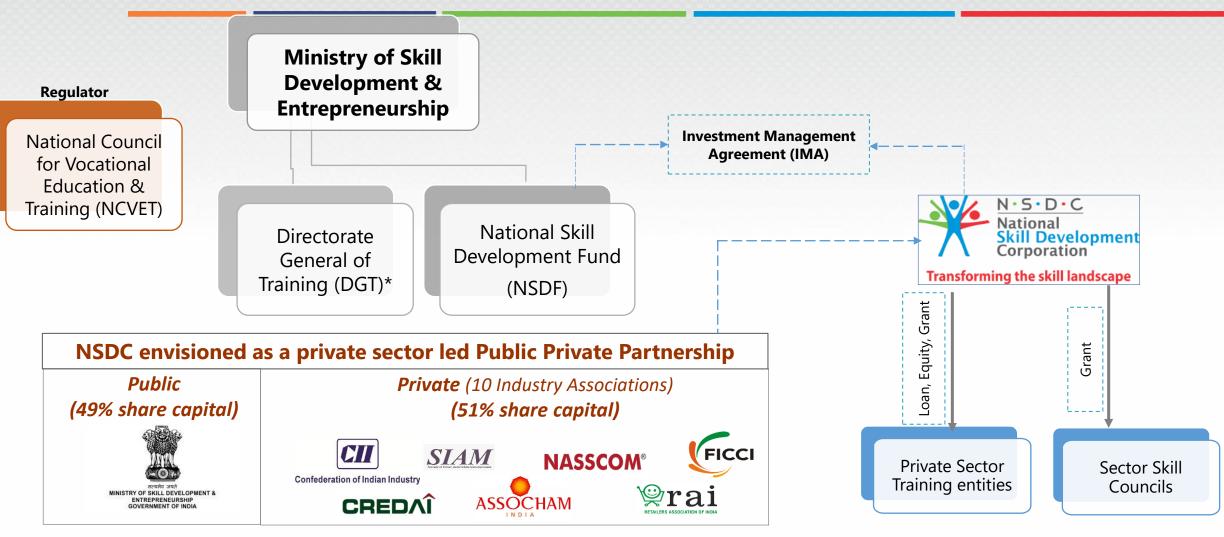


- Ministry of Skill Development
 & Entrepreneurship is nodal
 agency for skill development
 policies at national level.
- State governments play important role in program implementation through State Skill Devt Missions.
- Skilling programs are funded by various central/ state govt. departments, private sector entities and philanthropic organisations.
- India's skill market size estimated at \$3 bln

NSDC's Institutional Context







Other Stakeholders: Various central Ministries; State departments; Govt institutes; Schools and Higher education institutions; Corporates; Industry bodies; Development & philanthropic agencies

NSDC's Role in the skills ecosystem





Development Financing



Government Schemes



Industry Partnerships & CSR led Skilling



Sector Skill Councils
Coordination



International collaborations



Apprenticeship



Digital skilling & Innovations (eSkill India.org)



Learning Standards & Resources

(Qualifications, Curricula)



Market Analytics



Knowledge and Advisory Services



Communications & Outreach



Technology enablers (SMART, SIP)



Monitoring, Quality Assurance, Capacity Building

Training Models & Achievements





Fee Based Model

Candidate/ industry willingness to pay (typically for aspirational/ high demand job roles)

NSDC as a catalyst

16.6 Mn

Grant Based Model

Govt. funded programs for job roles with low willingness/ ability to pay. **National Flagship program PMKVY***.

NSDC as an implementer

14.3 Mn

Apprenticeship Model

Willingness to learn and earn. Cost born jointly by Govt & Employer

NSDC as an implementer

0.34 Mn

Over 30 mn learners supported through NSDC skill ecosystem

Incubated **37** Sector Skill Councils

Eco-system of **650+** training partners

Presence in **620**+ (86%) districts

Committed **over \$280+ mn** financing

(Loans & Equity)



*Pradhan Mantri Kaushal Vikas Yojna



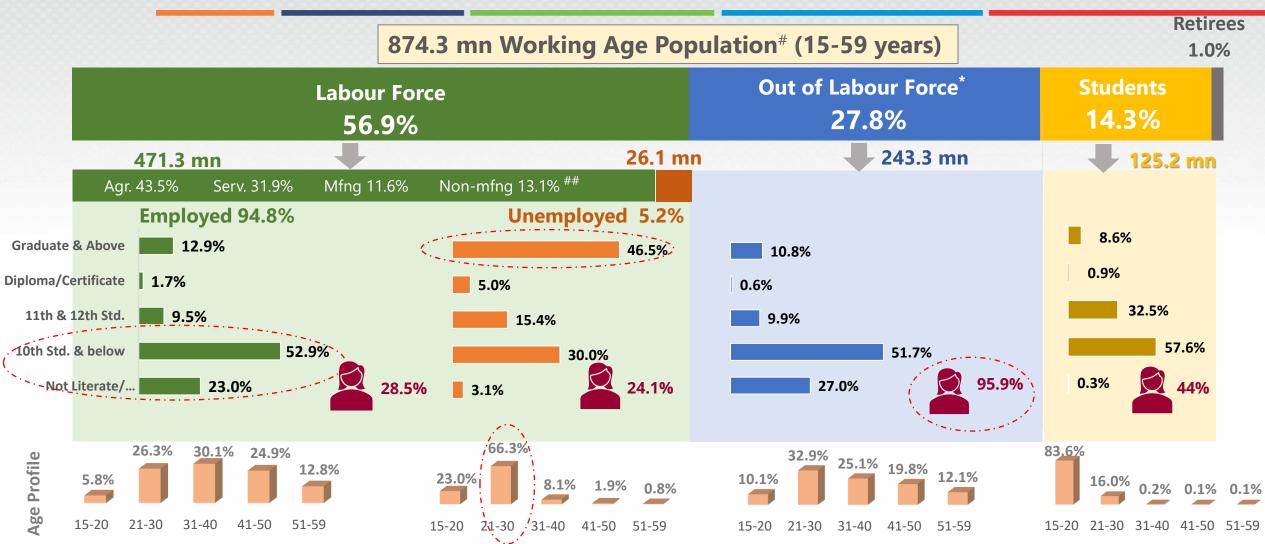


Introduction to Skill Development Priority Index

Overview of working age population in India







Note: Weights of PLFS 2019-20 were multiplied by 1.22 to get projected population for 2019. ## Non-manufacturing includes Construction, Mining & quarrying, Electricity, etc.

^{*}Defined as per Usual Principal Activity status under PLFS 2019-20 survey. Excludes persons – a) in the labour force (employed/unemployed), b) who reported their status as 'attended educational institution' (categorized as 'Students'), and c) rentiers, pensioners, remittance recipients (categorized as 'Retirees')

Need for SDPI





- Multiple drivers for skill development programs. Limited resources available.
- Government programs getting increasingly decentralised.
 - Growing role of states in successive PMKVY programs. District level approach envisaged under PMKVY 3.0. Formation of District Skill Committees being supported under World Bank's SANKALP project
- Rise in philanthropic funding for skill development.
 - CSR funding has doubled from \$1.3 bln to \$2.8 bln (2015-20), of which share of Education & Skilling has risen from 31% to 40%.

SDPI Overview





Objective

To identify priority states, clusters and districts with respect to the need for skill development interventions. Enable more optimal allocation of resources for skill development.

Approach

- Based on four indices (i) **Population Index** (ii) **Industry Index** (iii) **Labour Supply Index** (iv) **School & Vocational Education Index**.
- The four indices are aggregated using geometric mean, to calculate **Overall Priority Index** for a state/ cluster.
- Each of the four indices is calculated using 2-3 sub-indicators which are scaled to a value of 0 to 100.
- All index calculations are at **state and cluster levels**. Clusters correspond to the 88 National Sample Survey (NSS) regions as defined by National Statistical Office, Ministry of Statistics and Program Implementation (MoSPI). Index can also be calculated at district level.

Data Sources

- 1. Periodic Labour Force Survey (PLFS) 2018-19, MoSPI, Government of India (Gol)
- 2. Reserve Bank of India data (2019-20 Q4) on Bank Credit of Scheduled Commercial Banks
- 3. State Gross Domestic Product (GDP) 2018-19 (at constant 2011 prices, updated on Feb 1st, 2021), MoSPI, Gol
- 4. Census 2011, Ministry of Home Affairs, Gol
- 5. CapEx Database (2017-19), Centre for Monitoring Indian Economy (CMIE)
- 6. Unified District Information System for Education (UDISE) 2018-19, Department of School Education & Literacy, Ministry of Education, Gol
- 7. National Council for Vocational Training (NCVT) (MIS downloaded in June 2020), Ministry of Skill Development and Entrepreneurship, Gol
- 8. NSDC data on Accredited Training Centres from the Skill India Portal (SIP) (May 2020)

Composition of SDPI





State Priority Index (or Cluster Priority Index)

- Geometric Mean of the following 4 indices

Population Index

- No. of persons aged 21-30 years
- No. of migrant persons

Industry Index

- GDP at state-level (Bank loans at cluster level)
- Total value of investments

Labour Supply Index

- No. of unemployed persons
- No. of employed persons in lowest 10 percentile income slab
- No. of working age persons not in labour force

School and Vocational Education Index

- TVET institutes per 1,000 population aged 21-30 years
- Gap in Net Enrolment Ratio at higher secondary school level
- Industrial Training Institute (ITI) seat utilization (%)

Each of the 4 Indices is the Geometric Mean of the subindices (0-100 value) under it Conversion of data to a scale of 0 - 100:

$$Sub - Index = \left(\frac{Value - Minimum}{Maximum - Minimum}\right) * 100$$

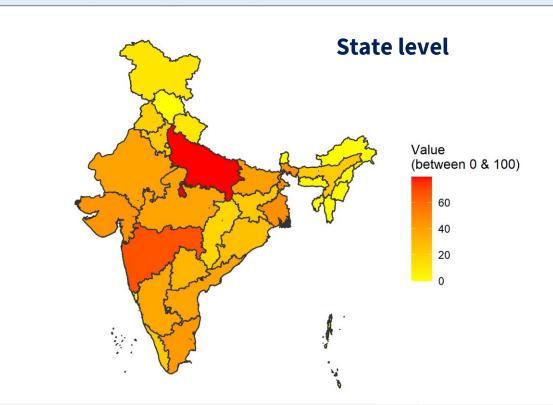
Maximum and minimum values correspond to observed maximum and minimum values across states (or clusters)



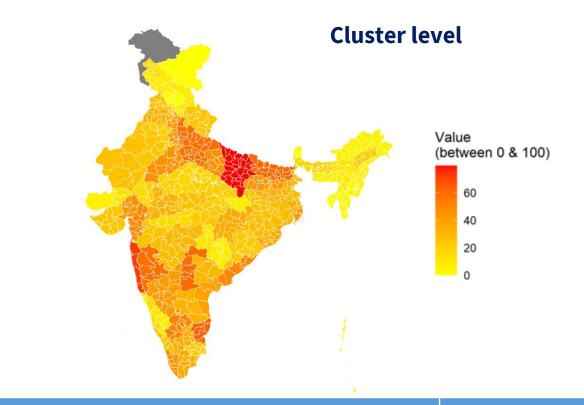


SDPI – Results & Insights

Skill Development Priority Index



| Top 5 States | Index |
|---------------|-------|
| Uttar Pradesh | 79.60 |
| Maharashtra | 67.13 |
| West Bengal | 46.60 |
| Gujarat | 44.55 |
| Tamil Nadu | 42.21 |



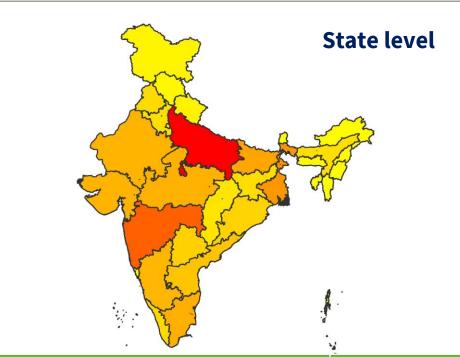
| Top 5 Clusters (NSS) | Index |
|----------------------------------|-------|
| Eastern - Uttar Pradesh | 58.57 |
| Coastal - Maharashtra | 52.98 |
| Coastal Northern - Tamil Nadu | 46.23 |
| Northern – Bihar | 44.77 |
| Inland North Western - Telangana | 43.50 |

Index Results (1/4)

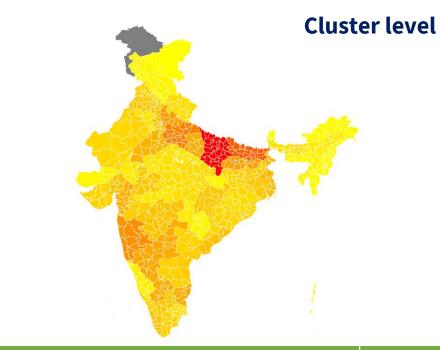




Population Index



| Top 5 States | Population Index |
|---------------|------------------|
| Uttar Pradesh | 99.19 |
| Maharashtra | 78.53 |
| West Bengal | 54.86 |
| Bihar | 47.41 |
| Tamil Nadu | 42.38 |

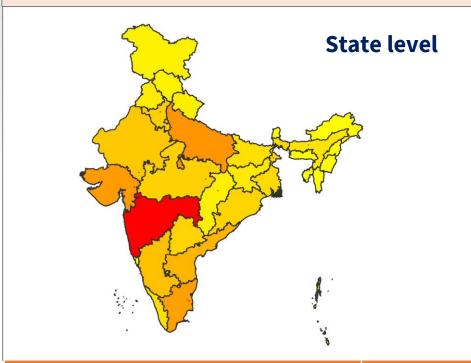


| Top 5 Clusters (NSS) | Population Index |
|------------------------------------|------------------|
| Eastern - Uttar Pradesh | 100.00 |
| Northern – Bihar | 80.18 |
| Southern Upper Ganga Plains – U.P. | 65.71 |
| Inland Western – Maharashtra | 58.60 |
| Coastal – Maharashtra | 56.55 |

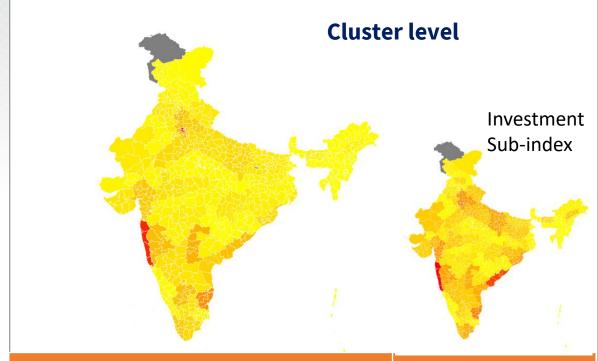




Industry Index



| Top 5 States | Industry Index |
|----------------|----------------|
| Maharashtra | 100.00 |
| Uttar Pradesh | 55.69 |
| Gujarat | 52.97 |
| Tamil Nadu | 50.23 |
| Andhra Pradesh | 39.66 |



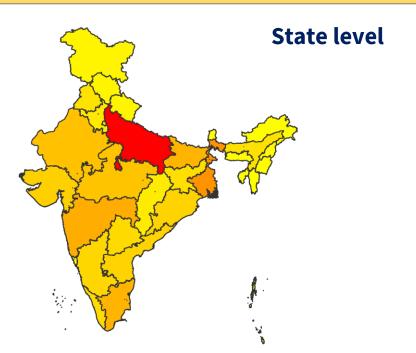
| Top 5 Clusters (NSS) | Industry Index |
|----------------------------------|----------------|
| Delhi – NCT Of Delhi | 91.99 |
| Coastal – Maharashtra | 87.92 |
| Coastal Northern – Tamil Nadu | 52.11 |
| Inland North Western – Telangana | 37.45 |
| Inland Western – Maharashtra | 31.63 |

Index Results (3/4)

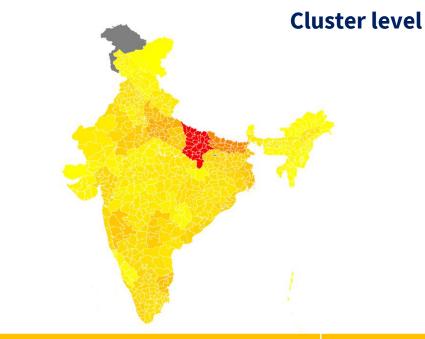




Labour Supply Index



| Top 5 States | Labour Supply Index |
|---------------|---------------------|
| Uttar Pradesh | 98.95 |
| West Bengal | 56.78 |
| Maharashtra | 43.54 |
| Tamil Nadu | 40.00 |
| Bihar | 39.78 |

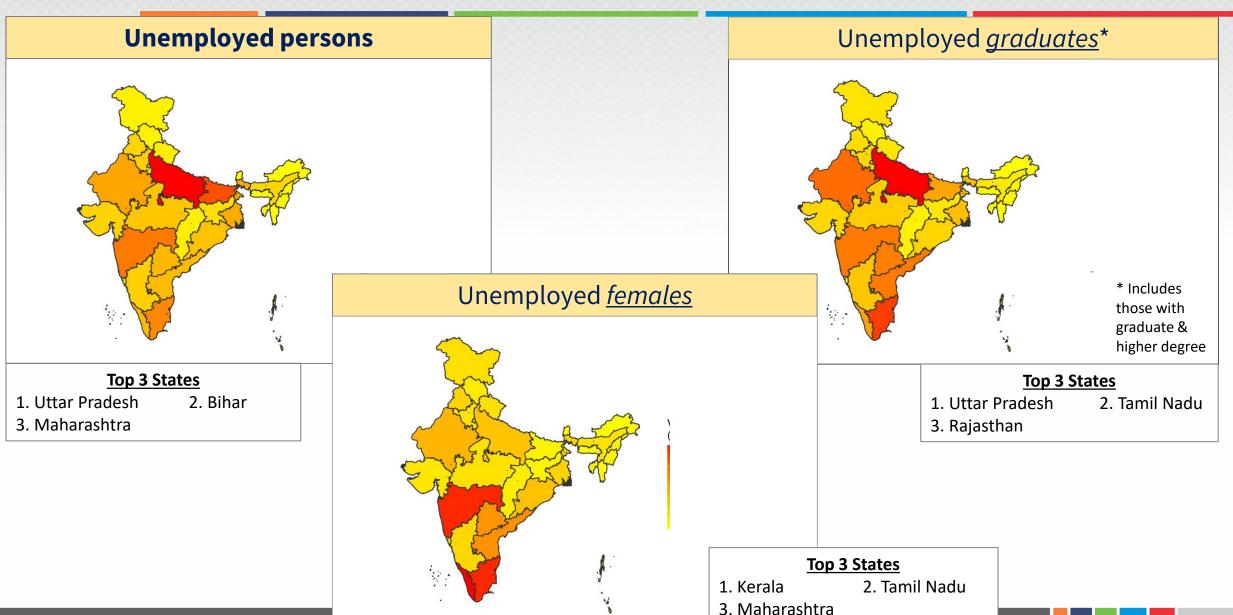


| Top 5 Clusters (NSS) | Labour Supply Index |
|------------------------------------|---------------------|
| Eastern – Uttar Pradesh | 89.26 |
| Northern – Bihar | 55.92 |
| Southern Upper Ganga Plains – U.P. | 38.63 |
| Northern Upper Ganga Plains – U.P. | 30.64 |
| Southern Plains – West Bengal | 30.34 |

Additional insights on Unemployed Segment

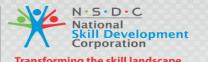




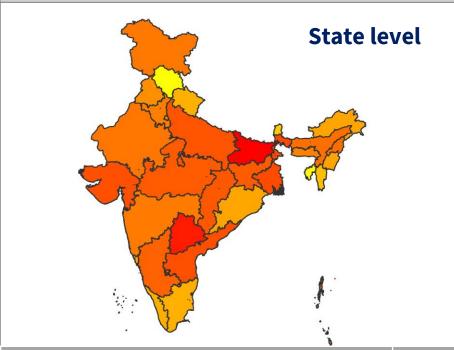


Index Results (4/4)

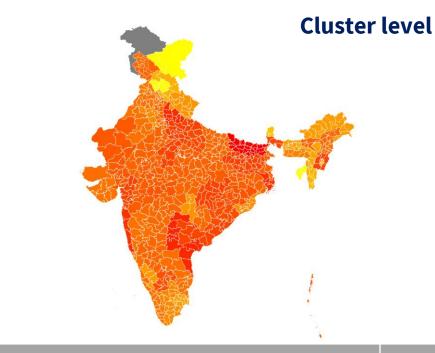




School & Vocational Education Index



| Top 5 States | TVET Index |
|----------------|------------|
| Bihar | 87.52 |
| Telangana | 85.41 |
| West Bengal | 75.92 |
| Andhra Pradesh | 74.77 |
| Gujarat | 74.42 |



| Top 5 Clusters (NSS) | TVET Index |
|------------------------------------|------------|
| Northern – Bihar | 93.08 |
| Inland North Western – Telangana | 89.27 |
| Coastal Southern – Andhra Pradesh | 88.90 |
| Northern Upper Ganga Plains – U.P. | 88.81 |
| Central Plains – West Bengal | 87.56 |





SDPI - Use and Way Forward

Use of SDPI indicators to allocate training targets under PMKVY 3.0

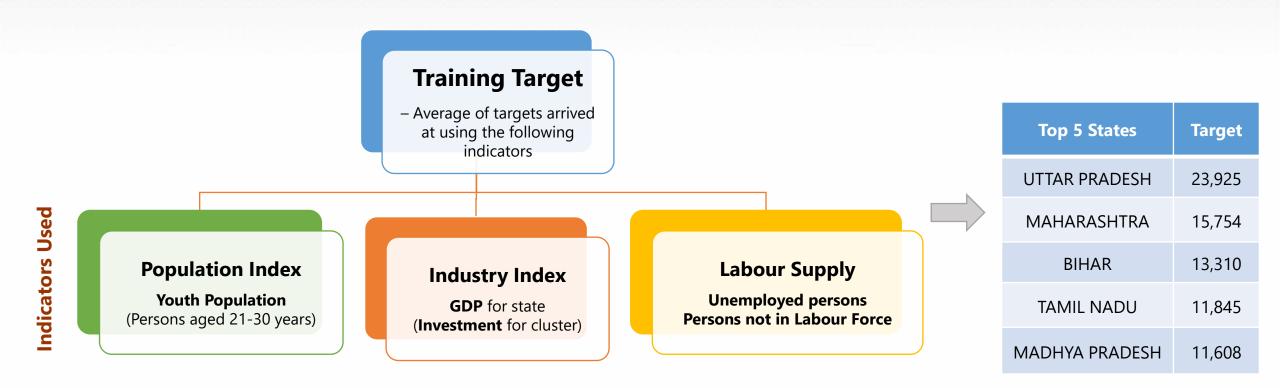




PMKVY 1.0 (2015-16) & PMKVY 2.0 (2016-20) Targets allocated to TPs

PMKVY 3.0 (2020-21)
Targets distributed to District level & then allocated to TPs

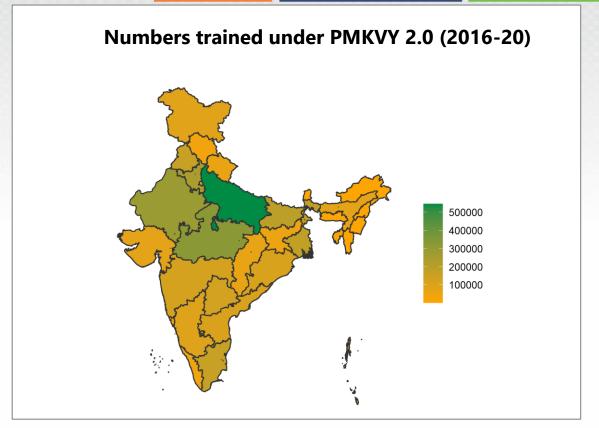
Total targets at all-India level were disaggregated to state, cluster and district-level using select SDPI indicators.



Shift in training distribution







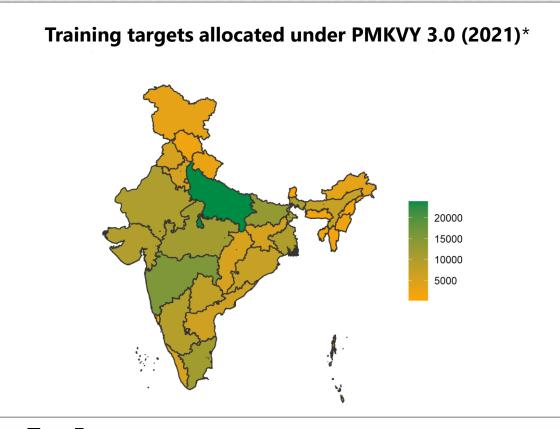


- 1. Uttar Pradesh (16%)
- 3. Rajasthan (8%)
- 5. Bihar (6%)

- 2. Madhya Pradesh (9%)
- 4. Haryana (7%)



- 8. Tamil Nadu (5%)
- 9. Maharashtra (4%)
- 17. <u>Gujarat</u> (2%)



Top 5 states -

- 1. Uttar Pradesh (12%)
- 3. Bihar (7%)
- 5. Madhya Pradesh (6%)
- 2. **Maharashtra** (8%)
- 4. <u>Tamil Nadu</u> (6%)
- 6. Rajasthan (5%)
- 8. **Gujarat** (5%)

- 7. <u>West Bengal</u> (5%)
- 14. Haryana (3%)

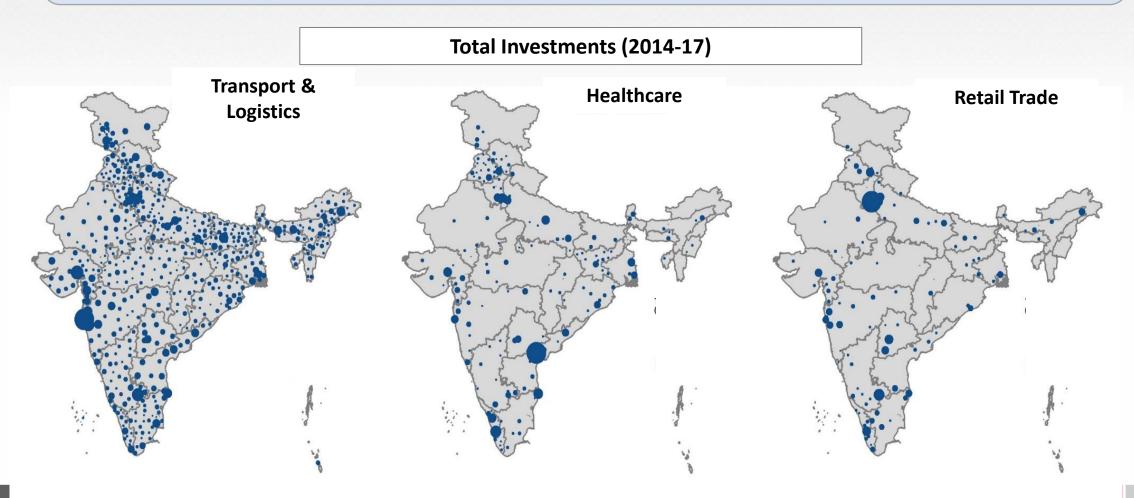
Sectoral focus can also be integrated





Higher score may be given to proposals for training in sectors/ job roles having greater potential for employment in the district

(Piloted in PMKVY 2.0, based on estimated labour demand using CMIE's investment data and RBI's credit data).



Way Forward





- Scope for use of SDPI in future central and state government programs to guide resource allocation and identify focus regions for new initiatives.
- Can help inform allocation of CSR / philanthropic funds for skilling interventions in different regions
- Modular index structure enables use of select indices/ sub-indices for targeted interventions e.g.
 - Skilling for graduate unemployed youth
 - RPL / upskilling interventions targeted at migrant workers
 - Upskilling / reskilling of employed persons earning low levels of income/ facing job losses
 - Skilling priority from a gender lens
 - Sector-specific interventions (using priority index along with information on sectoral investments)
- Index will be periodically revised for data updates





Thank You

Detailed report accessible at -

https://skillsip.nsdcindia.org/knowledge-products/skill-development-priority-index

SDPI Dashboards accessible at -

https://public.tableau.com/app/profile/nsdc.india/viz/NSDCDashboardSkillDevelopmentPriorityIndex/Introduction

State & District Indicators Dashboard accessible at - https://skillsip.nsdcindia.org/plfs-dashboard

Contact – SkillsIP@nsdcindia.org