SKILL INDIA: CHALLENGES, ACHIEVEMENTS AND THE WAY FORWARD

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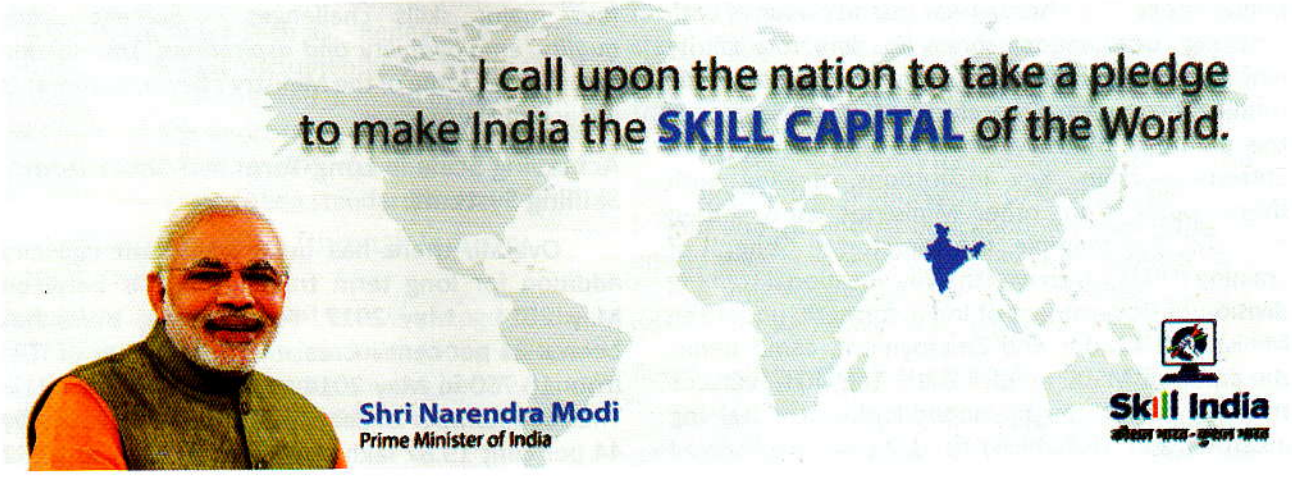
New disruptive technologies are creating new forms of work and new forms of flexible employment. A key topic of debate in academic, industry and policy circles pertains to how automation and industrial transformation will impact work and skills in India. What kinds of skills will be needed for workplaces of the future? How can we make our youth resilient and adaptable to these changes? How can we make lifelong learning, upskilling and reskilling a key component of our skills ecosystem? The Ministry is engaging with a number of experts to create a solid evidence base to find answers to these questions.

Skills are a key driver of the modern economy. Vocational education and training is aimed at enhancing the employability of an individual, by facilitating the individual's transition into the labour market. Changing skill requirements, new technologies and new kinds of jobs have placed greater emphasis on skills training – which is increasingly becoming a process of lifelong learning.

A combination of factors has made skill development an important policy priority for India. It starts with demographics. India is at the cusp of reaping its demographic dividend. Its population pyramid is expected to "bulge" in the 15-59 age group over the next decade. By 2020, the average age of the Indian population will be 29 years, as against 40 years is USA, 46 years in Europe and 47 years in Japan. There is a narrow window to harness the potential of India's young population. However, India's training capacity is limited. Though, there is no unanimity on the exact numbers, it is estimated that about 50 lakh young people enter the workforce every year. Yet, the current capacity of India's Industrial Training Institutes (ITIs), which still form the backbone of India's vocational training ecosystem, is only 25 lakhs per annum. Therefore, enhancing capacity and scale of skill training programmes, is an urgent policy priority for India.

On the demand side, skill gap studies commissioned by the National Skill Development Corporation suggest that 10.9 crore incremental human resources, will be required across 24 high growth sectors by 2022. Therefore, while there is a demand for skilled workers in industry, it is vital that training must be of high quality and relevant to industry requirements.

Closely linked to the issue of training quality is the issue of employability. One way to ensure employability of trained workers is by forging links with industry or through large scale apprenticeship programmes. However, the fact that in India, over 90% of the workforce is engaged in the unorganized sector, means that formal sector wage employment opportunities are limited, and placements are difficult to track. Hence, India's skills training programmes must not only equip youth with marketable skills to make them employable. It must also train youth to be self-employed or take up entrepreneurship.



While skills training is being actively promoted by the government and its partners in the private sector and industry, it is not an aspirational career choice amongst youth. It is perceived as a fall back option, rather than a mainstream career choice. Formal education still remains the top choice for young people. This bias is also seen amongst employers who pay higher salaries to entry level engineers, compared to experienced workers who have undergone vocational training, Therefore, along with issues relating to capacity, quality and employability – attitudinal factors about how skills training is perceived by both potential trainees and employers need to be addressed.

The complexity of these challenges, combined with several market failures which characterize India's vocational training ecosystem (such as information asymmetry; low skills equilibrium, low private sector investment in skills training and moral hazard), make a strong case for state intervention in this sector. However, the state skill training ecosystem was also highly fragmented. For example, in early 2014, over 20 central ministries operated a range of skill training programmes, with differing norms, standards and certification systems. There was an urgent need for policy coherence and robust programme implementation plan, to overcome these skills challenges.

With a view to resolve these diverse challenges, India's first Ministry for Skill Development and Entrepreneurship (MSDE), was established in November 2014. Importantly, the Ministry was given the responsibility for both skill training and entrepreneurship (which for the first time were portrayed as complementary activities). As a result, the Ministry mandate was to equip India's youth with the skills needed to access to multiple livelihood pathways from wage employment to self-employment. The Ministry was tasked primarily with ensuring coordination, coherence and role clarity within India's complex vocational training and skill training ecosystem. Therefore, MSDE emerged as the umbrella Ministry for Skill Development and Entrepreneurship. Key institutions, dealing with these topics, from other Ministries were shifted to MSDE. For example, the Directorate General of Training (DGT) which was the key vocational training division of Government of India, formerly under the Ministry of Labour and Employment, came under the ambit of MSDE in April 2015. The DGT oversees trainings done through a network of central training institutes and ITIs (which offer 1-2 year long training courses). Other agencies such as the National Skill Development Corporation (which was created as a public private partnership to catalyse private sector involvement in the field of skills training), also became a key implementation arm of the Ministry. NSDC has played an important role in funding private training providers to provide short term skill training courses. NSDC also supports the Ministry in implementing and monitoring the Ministry's flagship skills training programme (Pradhan Mantri Kaushal Vikas Yojana or PMKVY). Similarly, the National Skill Development Agency (which regulates training standards and works on quality assurance), also came under the Ministry.

Over the last two and a half years, MSDE has taken important steps forward to build a robust skills training ecosystem through a focused set of policy interventions.

Key policy instruments include:

- The National Policy for Skill Development and Entrepreneurship 2015, which outlines the overarching vision for Skill India.
- The National Skill Development Mission 2015, which lays down a framework for implementation of the Skill India programme.
- Common Norms, for skill training programmes.
- The Apprentices Act 1961, has been modified with a view to encourage industry to take on apprentices.

How did these policy interventions address the skills challenges outlined above? What has been achieved so far?

Addressing Skills Challenges:

MSDE's policy interventions have translated into concrete programmes of action which address four major skills challenges – namely: *scale, quality, employability and aspirations.* This section summarises some of the Ministry's key achievements in each of these areas.

Achieving Scale in Long-Term and Short Term Skilling Systems:

Overall, there has been significant capacity addition for long term trainings in ITIs between May 2014 - May 2017. For example, there has been a 24 per cent increase in the number of ITIs, from 10,750 in May 2014 to 13,353 in May 2017. The total number of seats in ITIs have increased by 44 per cent 19.82 lakh seats in May 2014 to 28.52

lakhs seats in May 2017. There has also been a 26 per cent increase in enrolments of students in ITIs, from 17.80 lakh in 2013-2014 to 22.4 lakh in 2016-2017.

Short-term fee based trainings through NSDC, have also scaled up. The number of training centres has increased by 85.9 per cent between May 2014 and May 2017. There has been a substantial (71 per cent) increase in the total number of candidates trained from 2013-2014 to 2016-2017. There has also been an improvement in placement rate, by 65 per cent for fee based courses and 12 per cent for PMKVY courses during the same period.

Enhancing Quality:

Several interventions have been introduced in both short term and long-term skills training systems to enhance the quality of training. This includes:

- **Grading:** A robust grading system (based on 43 grading parameters) has been introduced in ITIs, to differentiate between performing and non-performing ITIs. Grading parameters include a focus on training outcomes, quality of infrastructure, industry connect etc. A grading system has also been introduced for the first time, in the short-term skill training ecosystem. This will take place through the newly established Skill Management and Accreditation of Training Centres (SMART) Portal.
- **Strengthening of Accreditation and Affiliation norms:** Comprehensive ITI accreditation and affiliation norms have been created and released, for the first time.
- **Extensive Curriculum Reforms have been undertaken:** 63 curricula have been upgraded through active consultations with industry. 35 new Trades have been introduced, with a focus on emerging fields such as: Renewable Energy, Mechatronics, and Instrumentation, where there is likely to be an increased demand in the future. Similarly, in the short-term training ecosystem, model curriculum for 405 courses and content for 252 courses has been standardised.

Improving Employability (through Industry Connect):

Industry connect is vital at every stage of the skill training cycle, to ensure that young people who enroll in skill training programmes become and remain employable. Some of MSDE's initiatives in this area include:

- **Apprenticeship Reforms:** At the statutory level, comprehensive reforms have been introduced under Apprentices Act, 1961 (effective from 22nd December, 2014). Key reforms include:
  - Increasing the upper limit for apprenticeship to 10 per cent.
  - Introduction of optional trade pathway.
  - Extending the scope of apprenticeships to the service sector.
  - Rationalization of penalties for employers.
- **Launch of National Apprenticeship Promotion Scheme (NAPS):** This new scheme aims to catalyze apprenticeship. Key features of the scheme include:
  - Incentivizing employers to onboard apprentices;
  - Online and transparent system of operations;
  - Integration with other skill development programs;
  - Better communication and outreach strategy.

NAPS has catalyzed interest of both industry and trainees towards apprenticeship promotion.

Making Skills Training Aspirational Among Youth:

The Ministry is also working towards making skills training an aspirational career choice among young people, through two strategies. The first strategy focuses on addressing the cultural mindset, which makes skills training a default option, rather than an active choice amongst youth. This includes skills competitions, job melas, mobilization camps, awards etc. New training initiatives are also now aligned closely with the aspirations of youth. For example, the Ministry's India International Skills Centre programme, seeks to provides skills training at global standards to youth who aspire to work overseas. The Pradhan Mantri Kaushal Kendra (PMKK) initiative aims to create model, aspirational, state of the art skill training centres in every district of the country, opening up access to high quality training facilities to youth across the country.

The second strategy focuses on creating vertical and horizontal progression pathways, between formal and vocational education streams (through equivalence frameworks). This will connect the formal and vocational education streams, creating new career pathways for young people.

Formalising Entrepreneurship:

India's entrepreneurial spirit is well known and takes two key forms. First, there is a strand of

entrepreneurship, which is borne out of necessity and takes the form of frugal innovation. Often this kind of entrepreneurship is seen in the informal sector, which still comprises of 93 per cent of the economy. The second is entrepreneurship which emerges in high technology start-ups which draws on technological innovation to find solutions to key challenges. These start-ups are formally registered enterprises and are increasingly growing in clusters in Bangalore and Hyderabad.

It is absolutely vital that India moves from frugal innovation and 'jugaad' models of entrepreneurship to entrepreneurship forms which are formalised. The recent spate of regulatory reforms including: Aadhaar, demonetisation and the implementation of the Goods and Service Tax (GST) are attempts to transition India's economy from the informal to the formal sector, so that India's entrepreneurs, both large and small, can contribute to India's growth trajectory. Formalising entrepreneurship by providing active support to budding entrepreneurs in the informal sector and facilitating their transition to the organized sector, is a key focus area of MSDE's work in the area of entrepreneurship.

MSDE's entrepreneurship development programme, Pradhan Mantri Yuva Yojana, seeks to provide budding entrepreneurs, particularly those working in the informal sector, with entrepreneurship education and training, through a combination of factors including: easy access to credit, incubation support and mentorship to enable them to become a part of the formal economy. We aim to reach over 7 lakh students in 5 years through 3050 institutes of learning - including, schools, colleges, training institutes, through Massive Open Online Courses (MOOCs). This scheme will also provide financial and handholding support to empanelled institutes.

Way Forward: Preparing for Workplaces of the Future Industry demand is dynamic. Therefore, MSDE's focus is to ensure that young people are not only equipped with the skills for today's jobs, but also for jobs of the future. Industry – particularly the manufacturing sector is on the cusp of transformation, leading to a new industrial paradigm, known as industry 4.0. Industry 4.0 in our understanding is the intersection and application of the Internet of Things (IoT) to the secondary sector, i.e., manufacturing. Certain sectors in manufacturing (particularly the automotive sector) have traditionally been on the cutting edge of modernization, through process automation, use of methodologies like Six Sigma and efficiencies driven by supply chain management. Other sectors like textile manufacturing, SMEs, and new and emerging sectors like electronics, aviation, etc. are ripe for adoption of such technologies. New disruptive technologies are creating new forms of work and new forms of flexible employment. A key topic of debate in academic, industry and policy circles pertains to how automation and industrial transformation will impact work and skills in India. What kinds of skills will be needed for workplaces of the future? How can we make our youth resilient and adaptable to these changes? How can we make lifelong learning, upskilling and reskilling a key component of our skills ecosystem? The Ministry is engaging with a number of experts to create a solid evidence base to find answers to these questions.

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Indian Skill Development Service

The Ministry of Skill Development and Entrepreneurship (MSDE) has set up Indian Skill Development Services (ISDS). The notification in this regard has been issued on 4th January 2017. This service has been created for the Training Directorate of the Ministry of Skill Development and Entrepreneurship. With notification of this service the skill ecosystem is expected to get strengthened and modernised in line with the current scientific and industrial development in the country. The Indian Skill Development Service (ISDS) will have 263 all India posts. The cadre shall comprise of 3 posts at Senior Administrative Grade, 28 posts at Junior Administrative Grade, 120 posts at Senior Time Scale and 112 posts at Junior Time Scale. The Academy for training of the cadre will be National Institute of Skill Development

ISDS will be a Group 'A' service where induction will take place through Indian Engineering Service Examination conducted by UPSC. It is an attempt to attract young and talented administrators for Skill Development. The knowledge acquired by the engineers recruited will give new impetus to the initiative of the government to the skill development and also efficient and effective implementation of the schemes. Skill India Mission is expected to supply huge human resource not only in India, but also internationally. This is a step forward to meet the target of skilling 500 million people by 2022.