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Today, the world and India need a skilled workforce. If we have to promote the development of our country then our mission has to be 'skill development' and 'Skilled India'. Millions and millions of Indian youth should acquire the skills which could contribute towards making India a modern country. I also want to create a pool of young people who are able to create jobs and the ones who are not capable of creating jobs and do not have the opportunities, they must be in a position to face their counterparts in any corner of the world while keeping their heads high by virtue of their hard work and their dexterity of hands and win the hearts of people around the world through their skills. We want to go for the capacity building of such young people. My brothers and sisters, having taken a resolve to enhance the skill development at a highly rapid pace, I want to accomplish this.
62%
of India’s population is in the working age group (15-59 years), and more than 54% of the total population is below 25 years of age.

1 Today, India is one of the youngest nations in the world with more than 62% of its population in the working age group (15-59 years), and more than 54% of its total population below 25 years of age. Its population pyramid is expected to “bulge” across the 15–59 age group over the next decade. It is further estimated that the average age of the population in India by 2020 will be 29 years as against 40 years in USA, 46 years in Europe and 47 years in Japan\(^1\). In fact, during the next 20 years the labour force in the industrialized world is expected to decline by 4%, while in India it will increase by 32%. This poses a formidable challenge and a huge opportunity. To reap this demographic dividend which is expected to last for next 25 years, India needs to equip its workforce with employable skills and knowledge so that they can contribute substantively to the economic growth of the country.

Our country presently faces a dual challenge of paucity of highly trained workforce, as well as non-employability of large sections of the conventionally educated youth, who possess little or no job skills. Ministry for Skill Development and Entrepreneurship (earlier Department of Skill Development and Entrepreneurship notified in July 2014) has been set up in November 2014 to give fresh impetus to the Skill India agenda and help create an appropriate ecosystem that facilitates imparting employable skills to its growing workforce over the next few decades. Apart from meeting its own demand, India has the potential to provide skilled workforce to fill the expected shortfall in the ageing developed world.

As India moves progressively towards becoming a global knowledge economy, it must meet the rising aspirations of its youth. This can be partially achieved through focus on advancement of skills that are relevant to the emerging economic environment. The challenge pertains not only to a huge quantitative expansion of the facilities for skill training, but also to the equally important task of raising their quality.

\(^1\) National Higher Education Mission, Ministry of Human Resource Development, 2013
Skill development, however, cannot be viewed in isolation. Skills are germane to, but not always sufficient for securing adequate economic dividends. Skills need to be an integral part of employment and economic growth strategies to spur employability and productivity. Coordination with other national macroeconomic paradigms and growth strategies is therefore critical.

It is estimated that during the five year period from 2004-05 to 2009-10, only 2.7 million net additional jobs were created in the country. For a skills strategy to be successful it should be complemented by commensurate creation of jobs in the primary, secondary and tertiary sectors which will be a key outcome of overall economic growth including entrepreneurship cutting across all sectors. The Indian capacity for harnessing entrepreneurship has not been fully realized — the MSME (micro, small and medium enterprises) sector contributes to only 17% of GDP as compared to 85% in Taiwan, 60% in China and 50% in Singapore. Given the realities of rapidly changing economic landscape in the country, entrepreneurship opportunities have emerged as an important source of meeting the aspirations of the youth. An all inclusive approach to strengthen the entrepreneurship development scenario in the country which is competent, quality conscious, market savvy, innovative and has globally competitive entrepreneurs, needs to be carefully mentored and encouraged.

Recognizing the imperative need for skill development, National Skill Development Policy was formulated in 2009. Given the vast paradigm shift in the skilling and entrepreneurship ecosystem in the country and the experience gained through implementation of various skill development programmes, there is an imminent need to revisit the existing policy. Moreover, the 2009 Policy itself provides for review every five years to align the policy framework with the emerging trends in the national and international milieu.

National Policy for Skill Development and Entrepreneurship 2015 supersedes the policy of 2009. The primary objective of this policy is to meet the challenge of skilling at scale with speed, standard (quality) and sustainability. It aims to provide an umbrella framework to all skilling activities being carried out within the country, to align them to common standards and link skilling with demand centres. In addition to laying down the objectives and expected outcomes, the policy also identifies the overall institutional framework which will act as a vehicle to reach the expected outcomes. Skills development is the shared responsibility of the key stakeholders viz. Government, the entire spectrum of corporate sector, community based organizations, those outstanding, highly qualified and dedicated individuals who have been working in the skilling and entrepreneurship space for many years, industry and trade organisations and other stakeholders. The policy links skills development to improved employability and productivity in paving the way forward for inclusive growth in the country. The skill strategy is complemented by specific efforts to promote entrepreneurship in order to create ample opportunities for the skilled workforce.

FICCI & Nathan Associates, Nurturing Entrepreneurship in India, August 2014
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Skills and knowledge are driving forces of economic growth and social development for any country. Countries with higher levels and better standards of skills adjust more effectively to the challenges and opportunities in domestic and international job markets. The first industrial policy in the country was notified in 1956, Science and Technology policy in 1958, Housing Policy in 1988 and National Labour Policy in 1966. The first National Policy on Skill Development was notified in 2009. In the aftermath of this policy, National Skill Development Corporation (NSDC) was established in 2009 to promote private sector participation via innovative funding models. NSDC has tied up with more than 211 training providers, many of whom have started scaling up their operations, to offer short term training programmes. They also supported and incubated 37 Sector Skills Councils (SSCs) which are intended to facilitate much needed participation and ownership of industry to ensure needs based training programmes. National Skills Development Agency (NSDA) which was created in June 2013 has been working with State governments to rejuvenate and synergise skilling efforts in the States. National Skills Qualification Framework (NSQF) skilling and education outcomes with the competency based NSQF levels. These efforts build on the legacy vocational training infrastructure of Industrial Training Institutes and polytechnics which have now grown in number to approximately 12,000 and 3,200 respectively.
The country, however, has a big challenge ahead as it is estimated that only 4.69% of the total workforce in India has undergone formal skill training as compared to 68% in UK, 75% in Germany, 52% in USA, 80% in Japan and 96% in South Korea. While the debate on the exact quantum of the challenge continues, there is no disputing the fact that it is indeed a challenge of formidable proportion.

On demand side, a skill gap study has been conducted by NSDC over 2010-2014, which indicates that there is an additional net incremental requirement of 109.73 million skilled manpower by 2022 in twenty four key sectors. The sector-wise and state-wise details are at Appendix-I.

On supply side, analysis based on results of 66th and 68th round of NSSO can be seen at Appendix-II. It is observed that today the total workforce in the country is estimated at 487 million, of which approximately 57% is in the non-farm sector. If the workforce with higher education without formal skill training are excluded, the balance workforce is estimated to be 450.4 million. Of these 256.72 million non-farm workers, a maximum of 5.4% would be formally trained and skilled (3.61% is based on 2011-12 NSSO survey and includes both farm & nonfarm). Approximately 241.86 million would either be unskilled or skilled through non formal channels.

Out of these, it is estimated that approximately 170 million would be in the age group 15-45 years. This workforce will need to be mapped through recognition of existing skills and then provided with necessary skilling, reskilling and upskilling to increase productivity and provide a livelihood pathway. Similarly, in farm sector, this figure works out to be 128.25 million.

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*Extrapolated based on formal skilling data for working age population from NSSO(68th Round)2011-12

In addition, the number of people who enter the work force age group every year is estimated to be 26.14 million. Assuming an average labour participation rate of 90% (male) and 30% (female), at least 16.16 million persons will enter workforce and they all, except those opting for higher education, need to acquire skills. This will add another 104.62 million persons to be skilled in the next 7 years. Thus, it can be seen that 104.62 million fresh entrants to the workforce over next seven years (by 2022) will need to be skilled. In addition, 298.25 million of existing farm and non-farm sector workforce will need to be skilled, reskilled and upskilled. Thus, appropriate infrastructure needs to be created keeping in view sheer numbers, sectoral division and spatial disbursal not only across the country but possible requirement in other parts of the world.

One of the major challenges in the country today is public perception on skilling, which is viewed as the last option meant for those who have not been able to progress/opted out of the formal academic system. A number of factors are responsible for this state of affairs:

- Social and traditional view that sees status as being inversely proportional to the degree to which one works with one’s hands. This can also be attributed to primeval and archaic ethos which compartmentalized the skilling landscape for several hundred years. This unfortunate legacy has no moral, ethical and constitutional sanction in free India. Nonetheless, this gets at times manifested in norms, attitudes and societal behavior.

- The proclivity of large sections of industry especially in the micro, small and medium sectors to treat skilled and unskilled persons at par, thereby depriving skilling of any meaningful economic incentive.

- Most of the vocational training programmes are not aligned to the requirements of the industry. As a result of the above, a piquant situation exists in the country wherein unemployment continues to coexist with lack of requisite number of skilled people at functional level to build roads and bridges, lay pipelines, work in factories, engage in offshore drilling, build ships etc.

Skill development programmes of the Central Government over the years have been spread across more than 20 Ministries/Departments without any robust coordination and monitoring mechanism to ensure convergence. The scenario is no different in most of the states except the few states which have moved towards functional convergence by creating State Missions. This legacy has resulted in multiplicity of norms, procedures, curricula, certifications etc. Further, many of these skill development initiatives often remain unaligned to demand, thus defeating its entire objective.
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Different states in India face varied challenges in relation to demographics and skill development. There needs to be a shared sense of urgency to address the challenges of the changing demography. While State Skill Development Missions (SSDMs) have been launched in almost all States, there is an imminent need for capacity building and empowerment of SSDMs in many States in order to upscale quality skill development.

The various grant based, “free” training programmes available today, though necessary, have their own limitations especially on quality and employability. Students undergoing training for “free” attach little value to training whereas training providers focus on increasing their numbers rather than quality of training. While financial support is required for certain industry sectors or segments of unorganised sector, it is critical to exercise utmost discretion and link employability with all such efforts.

There is multiplicity in assessment and certification systems existing in the country which leads to inconsistent outcomes and causes confusion to the employers. Further, despite concrete timelines mentioned in the NSQF notification, the process of alignment of courses/qualifications with NSQF has been rather tardy.

The availability of good quality trainers is a major area of concern. There is a lack of focus on development of trainer training programmes and career progression pathways for trainers have also not been defined.

Efforts in the skill landscape have been largely devoid of industry/employer linkages until the last few years. This has created gaps in terms of sectoral need and availability, competency required by employer and those possessed by a trainee etc. Placement of trainees has consequently suffered. While industry has started defining their skills requirements, and training methodology, commitments in terms of increased remuneration to skilled workers also need to be made by them. This is necessary to create economic incentive for skilling, and for industry to realize the productivity gains linked with skilled manpower.
One of the biggest challenges of skill development in our country is that 93% of the workforce is in informal/unorganised sector. Consequently it is difficult to map existing skills in the unorganised sector and gauge the skillling requirement in the sector. On the other hand, the rate of job growth in informal sector is estimated to be twice that in formal sector.

Women constitute almost half of the demographic dividend. The key challenge here is to increase their participation in the country’s labour force, which is directly linked to economic growth of the country. Census data has revealed that there has been a continuing fall in labour force participation rate of women from 33.3% to 26.5% in rural areas, and from 17.8% to 15.5% in urban areas between 2004 and 2011. Mainstreaming gender roles by skilling women in non-traditional roles and increasing gender sensitivity in the workplace will have a catalytic effect on productivity and be a smart economic decision.

Job creation for skilled youth is also a major challenge before the nation. Entrepreneurship based on innovation has immense growth potential. However, the number of local entrepreneurs emerging every year in India is very low. The Global Innovation Index 2014 ranks India 76 out of 143 countries. Accelerating entrepreneurship especially that based on innovation is crucial for large-scale employment generation in India.

The growth and prosperity of all economies remains highly dependent on entrepreneurial activity. Entrepreneurs are the essence of economic growth — they provide a source of income and employment for themselves, create employment for others, produce new and innovative products or services, and drive greater upstream and downstream value-chain activities. Supportive environments are increasingly essential to successful entrepreneurship and these are evolving across the world. The ideal entrepreneurial environment has five pillars: Access to funding, Entrepreneurial culture, Supportive regulatory and tax regimes, Educational systems that support entrepreneurial mindsets; and a coordinated approach that links the public, private and voluntary sectors.

The face of entrepreneurship is also changing — across the world, entrepreneurs are increasingly young and/or female due to increasing unemployment. The International Labour Organization (ILO) reports that globally, almost 13% of young people (close to 75 million people) are unemployed. This phenomena is particularly evident in regions where wage employment is difficult to obtain. Access to funding remains the primary obstacle for entrepreneurs from all markets. The public and private sector each have an important role to play in creating entrepreneurial ecosystems that, in addition to funding, are essential to promoting entrepreneurial success.
In India, only 0.09 companies were registered for every 1,000 working age person—among the lowest rates of G20 countries in 2011.11 Further, highlighting the diversity of the country, three kinds of entrepreneurial activities exist- Factor driven entrepreneurship, Efficiency driven entrepreneurship and Innovation driven entrepreneurship. GEM Report (2013) indicates that India primarily being a factor-driven economy has the highest proportion of necessity-driven TEA (38.8%) and improvement driven TEA (35.9%). Necessity-driven entrepreneurship, particularly in less developed regions or those experiencing declines in employment, can help an economy benefit from self-employment initiatives. More developed economies, on the other hand, generate entrepreneurial opportunities as a result of their wealth and innovation capacity, yet they also offer more wage employment options to attract those that might otherwise become independent entrepreneurs. If these opportunities for entrepreneurship and innovation are to be captured, it is essential to create an enabling eco-system for entrepreneurship to thrive and instill a mind-set and culture of opportunity& innovation based motives and entrepreneurial incentives.

National Skill Development and Entrepreneurship Policy 2015 attempts to address these concerns. It tries to bring the world of education and training closer to the world of work so as to enable them together build a Strong India.

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12 Global Entrepreneurship Monitor 2013 Global report, Global entrepreneurship research association (GERA), 2013
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Aims and Objectives of the Policy

Vision “To create an ecosystem of empowerment by Skilling on a large Scale at Speed with high Standards and to promote a culture of innovation based entrepreneurship which can generate wealth and employment so as to ensure Sustainable livelihoods for all citizens in the country.”

Mission The mission is to-
Create a demand for skilling across the country;
Correct and align skilling with required competencies;
Connect the supply of skilled human resources with sectoral demands;
Certify and assess in alignment with global and national standards; and
Catalyse an ecosystem wherein productive and innovative entrepreneurship germinates, sustains and grows leading to creation of a more dynamic entrepreneurial economy and more formal wage employment.

Objectives

3.3.1 The core objective of the Policy is to empower the individual, by enabling her/him to realize their full potential through a process of lifelong learning where competencies are accumulated via instruments such as credible certifications, credit accumulation and transfer, etc. As individuals grow, the society and nation also benefit from their productivity and growth. This will involve:
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- Make quality vocational training aspirational for both youth and employers whereby youth sees it as a matter of choice and employer acknowledges the productivity linked to skilled workforce by paying the requisite premium.
- Ensure both vertical and horizontal pathways to skilled workforce for further growth by providing seamless integration of skill training with formal education.
- Focus on an outcome-based approach towards quality skilling that on one hand results in increased employability and better livelihoods for individuals, and on the other hand translates into improved productivity across primary, secondary and tertiary sectors.
- Increase the capacity and quality of training infrastructure and trainers to ensure equitable and easy access to every citizen.
- Address human resource needs by aligning supply of skilled workers with sectoral requirements of industry and the country’s strategic priorities including flagship programmes like Make in India.
- Establish an IT based information system for aggregating demand and supply of skilled workforce which can help in matching and connecting supply with demand.
- Promote national standards in the skilling space through active involvement of employers in setting occupational standards, helping develop curriculum, providing apprenticeship opportunities, participating in assessments, and providing gainful employment to skilled workforce with adequate compensation.
viii. Operationalize a well-defined quality assurance framework aligned with global standards to facilitate mobility of labour.
ix. Leverage modern technology to ensure scale, access and outreach, in addition to ease of delivering content and monitoring results.
x. Recognise the value of on-the-job training, by making apprenticeships in actual work environments an integral part of all skill development efforts.
xi. Ensure that the skilling needs of the socially and geographically disadvantaged and marginalized groups (like the SCs, STs, OBCs, minorities, differently abled persons etc.) are appropriately taken care of.
xii. Promote increased participation of women in the workforce through appropriate skilling and gender mainstreaming of training.
xiii. Promote commitment and ownership of all stakeholders towards skill development and create an effective coordination mechanism.

3.3.2 The core objective of the entrepreneurship framework is to coordinate and strengthen factors essential for growth of entrepreneurship across the country. This would include:

i. Promote entrepreneurship culture and make it aspirational
ii. Encourage entrepreneurship as a viable career option through advocacy.
iii. Enhance support for potential entrepreneurs through mentorship and networks.
iv. Integrate entrepreneurship education in the formal education system
v. Foster innovation-driven and social entrepreneurship to address the needs of the population at the ‘bottom of the pyramid’.
vi. Ensure ease of doing business by reducing entry and exit barriers
vii. Facilitate access to finance through credit and market linkages
viii. Promote entrepreneurship amongst women
ix. Broaden the base of entrepreneurial supply by meeting specific needs of both socially and geographically disadvantaged sections of the society including SCs, STs, OBCs, minorities, differently-abled persons
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Aims and Objectives of the Policy

3.3.2

National Policy for Skill Development and Entrepreneurship 2015  |  13
The policy framework has been developed to accomplish the vision of Skill India by adhering to the objectives mentioned in Chapter 3. The framework outlines eleven major paradigms and enablers to achieve these objectives of skilling India:

- Aspiration and Advocacy
- Capacity
- Quality
- Synergy
- Mobilization and Engagement
- Global Partnerships
- Outreach
- ICT Enablement
- Trainers and Assessors
- Inclusivity
- Promotion of skilling among women
Policy Framework for Skill Development

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National Policy for Skill Development and Entrepreneurship 2015  |  15

25% schools will integrate skilling with formal education from class 9 onwards, over the next 5 years, to make skill development aspirational

4.1 Aspiration and Advocacy

4.1.1 The need of the hour is to make skill development aspirational for boys and girls in our country. For skill training to be looked at as a matter of choice, it must

- provide vertical growth pathways on the lines of the general education system, so that skill education and training is also seen as a valid route to earn degrees and diplomas, and consequently to positions of authority linked to such qualifications; and
- be associated with growth and sustainable livelihood pathways; and
- have a causal relationship with increased income for skilled workforce.

4.1.2 A National Campaign will be launched within three months to create awareness and a positive pro-skilling environment. Communication packages and kits will be standardized to ensure quality, and made available in all local languages with focussed promotion through skill ambassadors including eminent personalities. State wise camps will be organised for skills awareness and mobilization. Social media will be effectively used to amplify the campaign and build publicity. A TV channel and a national community radio frequency dedicated to skilling will be promoted to enable communication and dissemination of information and opportunities relating to skills on a regular basis. The Skill India logo will also be used to promote the value of a skilled workforce and create momentum for skilling amongst the youth.

4.1.3 National Skills Universities and institutes will be promoted in partnership with States as centres of excellence for skill development and training of trainers, either as de-novo institutions or as a part of existing university landscape. It is desired that these institutions become as aspirational for candidates as other premier institutes around the country. These institutions, apart from skilling candidates through affiliates and training the trainers, will also conduct extensive research to enhance the quality and delivery of skill training by keeping abreast with latest developments in the skills space.

4.1.4 Skilling will be integrated with formal education by introducing vocational training classes linked to the local economy from class nine onwards in at least 25% of the schools, over the next five years. Seamless integration of vocational training in formal education is expected to ignite student interest. All NSQF compliant assessment and certification bodies will be competent to provide support to the School Boards for assessment and certification of the skilling component of vocational education and training, wherever required.

4.1.5 Skilling will be increasingly integrated with higher education with polytechnics offering NSQF aligned vocational courses and Bachelor of Vocational Studies degrees. These courses will be aligned to a credit framework which can provide horizontal and vertical mobility. Further, at least 25% of all existing institutions of higher education would offer add-on career oriented courses with specialized skills at an appropriate NSQF level within the next five years.
4.1.6 The ITI qualifications will be linked to formal educational qualification at appropriate level through suitable language/bridge courses as necessary in consultation with State/ Central boards of education. The existing ITIs and Polytechnics will be modernized with courses and curriculum that are aligned to the emerging competency based demand in the market. Technology would be leveraged for designing curricula and developing pedagogical techniques. ITIs interface with industry will be promoted to enhance apprenticeship opportunities, improve relevance of training and increase employability of trainees. Industry is expected to take a lead role in running ITIs through Institute Management Committees (IMCs) which will be given autonomy to implement decisions in the interest of better training outcomes. Performance rating of ITIs will also be promoted based on outcome linked parameters and trainee/employer feedback.

4.1.7 Government will promote use of certified, skilled manpower for its work and projects through enabling provisions in their contracts. Industry will also be encouraged to follow suit and pay skill premium to skilled and semi skilled workers. The companies will also be asked to indicate the percentage of certified, skilled workforce in their units as a part of their annual report.

4.1.8 To further the aspiration and respect associated with skillling, National Skill Awards will be instituted in close association with major stakeholders. Participation of India at international platforms will be encouraged to showcase the skilling talent in the country. Moreover, a ‘National Skills Day’ will be declared to annually commemorate and celebrate skilling through skill fairs and camps across the country.

4.1.9 Counselling and guidance have emerged as the biggest challenges in the skill space today. Good counselling will be useful to create aspiration, reduce the attrition rates during training and employment by helping candidates make informed choices. The vast network of existing Post Offices and Citizen Service Centres (CSCs) would be leveraged with industry support to create such a support system for the youth. Further, the network of 2.85 lakh Youth Clubs/Mahila Mandal of Nehru Yuva Kendras with presence in 623 districts would also facilitate in providing counselling and guidance to the youth of the country about various skilling programmes and opportunities. Similarly, the cross-country network of volunteers of Nehru Yuva Kendra Sangathan and National Service Scheme will also be utilised to create awareness and build a favourable pro-skilling environment amongst the youth in the country. These agencies will be provided with necessary brochures and other material for dissemination of required information through its volunteers amongst the target audience.

4.1.10 The Prime Minister’s Skill Development Fellow scheme will be introduced to tap talented, young individuals who will work with the State and District administration to spread awareness about skill development, identify the local needs and steer skill development efforts in the region.
**Capacity**

4.2.1 The annual skilling in the country was estimated at around 7 million in 2014. In the current landscape, capacity is being created by private sector training organisations, industry in-house training, government and private Industrial Training Institutes (ITIs), Advanced Training Institutes (ATIs), tool rooms and in schools, colleges and polytechnics. For all existing and new capacity that will be generated, the focus will move from inputs to outcomes of skill training that include employability and placements of trainees. Incentives will be linked to placement in all training institutions. For Government supported schemes, funding will be linked to outcomes of the training programmes.

4.2.2 Government will support the creation and use of infrastructure in both public and private domain through appropriate equity, grant and loan support. It will continue to encourage entrepreneurs to enter into the skill training space by providing milestone linked funding support through existing and new institutional mechanisms. For ensuring greater accessibility and equity, a targeted approach of preferential empanelment, approval and funding of training providers will be put into place for the sectors and geographies where training capacity is clearly inadequate. Appropriate PPP models will be promoted to expand capacities in unserved areas.

4.2.3 India has a tremendous amount of hard and soft infrastructure which is underutilised. For instance, there are over 10 lakh institutional buildings that are used for less than 40 hours a week. Skilling is a challenge which requires the supply to be close to the skill catchment, thus it is essential to take skilling to the remotest parts of the country and scale up quickly which is only possible by using this existing infrastructure. By designing suitable incentive schemes, existing infrastructure both in terms of buildings and potential teachers would be optimally leveraged for skill training. There are over 1.55 million schools, 25000 colleges, 3200 polytechnics and 83 youth hostels; around 1.5 lakh post offices and over 1 lakh kiosks across the country. Schools/colleges will be used during holidays/off hours for training purposes; shop floors of industries will be utilized for practical training etc.

Existing institutions in the agriculture sector such as Krishi Vigyan Kendras, Agro-business
clinics, Indian Council of Agriculture Research (ICAR) will be utilized for providing skill training as well. There is availability of 65,000 kms of railway network in the country with over 8,000 stations, out of which a large proportion have adequate infrastructure facilities, electricity supply and an extensive optical fibre cable (OFC) network. The possibility of leveraging this to deliver short-term skilling courses and promoting awareness would be explored. Branding of the Skill India Initiative will also be ensured through railways.

4.2.4 New ITIs will be set up in PPP mode especially in unserved blocks of the country to expand outreach of skilling programmes. Further, higher order skilling will be promoted through ATIs and Multi Skill Institutes (MSIs) set up in PPP mode with strong industry linkages. These institutes will focus on long term skilling (1-3 years) and will be located near the demand centres as Skill Hubs fostering apprenticeship and placements. These institutes will be affiliated to Skill Universities to provide the bridge into general higher education through diplomas/certificates based on a credit framework aligned to the appropriate NSQF level. They will function in a hub and spoke model to ensure greater outreach. A network of spokes in the form of livelihood colleges/ITIs/ITCs/private training centres already exists across the country and will be further promoted to focus on imparting employable skills up to NSQF Level 4. This model will drive accessibility and flexibility of skills training programmes and ensure that it is able to draw on the research required to deliver world class training.

4.2.5 Special focus will be laid on youth who do not wish to continue with school or higher education so that they are provided skills for other sustainable livelihood options. Special programmes will be initiated for providing skill training to those who have eight years or more of schooling. Separate skill courses, aligned to the appropriate NSQF levels, will be held in existing schools/centres during evening hours to provide alternate career pathway to these students. NSQF as a means to integrate and provide multiple pathways between general and vocational education will help school drop-outs make choices about vocational courses.
4.2.6 State Governments would be encouraged to setup Kaushal Vardhan Kendras (KVKs) at panchayat level for mobilising and imparting skills pertaining to local employment/livelihood opportunities to school drop-outs, adolescent girls, housewives and rural youth. Each KVK will be linked to the nearest ITI/MSI/ATI for capacity building, curriculum development, assessment and certification. The KVKs will also function as counselling and guidance centres for youth to help them make informed choices. NGOs will also be empanelled for running of these centres in their areas of operation. Some State governments are already working in this direction. Their efforts would be further encouraged to ensure setting up of atleast one KVK in each block within the country over next five years.

4.2.7 The human resource requirements of the country will be addressed by aligning the supply and composition of skilled workers with demand. Training providers will be incentivized and Government schemes designed to enable the workforce to benefit from the requirements of industry and the country’s strategic priorities including flagship programmes. This will ensure that the supply of skilled workforce is relevant to projected needs and can be easily absorbed into the job market.

4.2.8 Private Sector initiatives in skilling will be encouraged and would be entrusted to NSDC to create skilling capacity in the country. For this purpose, NSDC would continue to catalyze the creation of market-based, scalable business by providing patient funding through a combination of debt, equity and grants to Private sector to build capacity. This capacity would be created on self-sustainable model through Private Training Partners to cater to skilling needs of educational dropouts in rural and urban landscape to bring them back to sustainable livelihood options.

4.2.9 The apprenticeship opportunities in the country are presently insignificant when compared to the size of the economy. Government has carried out comprehensive reforms in the Apprentices Act, 1961 to make it both industry and youth friendly. Government will work together with industry including MSME sector, to create a positive environment for increased apprenticeship opportunities in the country. The services sector will also be brought under the ambit of apprenticeship. Apprenticeship will further be incentivised in the MSME sector through appropriate schemes for sharing of stipend etc. Government will target a tenfold increase in apprenticeship opportunities in the next five years.
4.3 Quality

4.3.1 ‘One Nation One Standard’ should become the mantra to ensure that national standards and quality for skilling are globally aligned and Indian youth can aspire to secure local, national and international job opportunities. Quality of training can be measured by competency outcomes and employability of trainees. The following parameters have been identified for improving quality:

- Quality assurance framework embedded in NSQF
- Market relevant training programmes
- Recognition of prior learning
- Curriculum alignment
- National Certification Framework
- Employability skills
- Placements

Quality Assurance

4.3.2 A Quality Assurance (QA) framework embedded in NSQF\(^{13}\) will be finalised within next one year. This will build trust and confidence in the system by putting in place mechanisms that ensure the qualifications (and related training) produce consistent quality outcomes, and are relevant to the labour market. It will ensure that training providers have the capacity to deliver training that meets quality requirements. The QA framework will improve the consistency of outcomes linked to certification and consequently improve the status of skills training. It would also lay down the framework for independent assessment and certification system in the country. It will also promote use of ‘Skill India’ logo by certifying bodies (those conforming to QA framework) on their Certificates which can ensure national and international recognition of outcomes certified.

4.3.3 All formal and vocational education including skill training will have to align themselves with NSQF by December 2018. It is a nationally integrated education and competency based skill framework that will provide for multiple pathways, horizontal as well as vertical, within vocational education, vocational training, general education and technical education, thus linking one level of learning to another higher level. This would facilitate both horizontal and vertical mobility with formal education on outcome based equivalence linked to a uniform credit framework. A legal framework to support NSQF will also be put in place.

4.3.4 The QA framework for certification and assessment will set minimum standards and provide guidance for effective, valid, reliable, fair and transparent assessment within the context of the NSQF.

4.3.5 E-Assessment would be encouraged wherever feasible to scale up capacity and increase convenience. Complete transparency and accountability will be ensured in the assessment process by leveraging technology. CCTV monitored examinations, biometric attendance will be encouraged through appropriate incentives to compliant entities where Government support or funding is involved. A central repository of all assessments conducted and certificates issued, will be maintained on the National Portal. The central repository, in addition to being available to employers, will also be available to candidates to enable them to track their performance and future up-skilling options.

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NSQF is an important institutional mechanism that ensures consistency of nationally recognised qualifications both for formal and non-formal skills based education and training. It accommodates experiential life-long learning through mechanisms such as recognition of prior learning, improves the alignment of formal and non-formal training programmes with industry requirements; and increases options for students by broadening program and progression for learners through horizontal and vertical pathways.

\(^{13}\)Gazetted Notification No. 8/6/2013-Invt. dated 27th December, 2013.
4.3.6 Consolidated guidelines for accreditation of Training Providers, based on training capabilities, infrastructure, availability of trainers, tie up with industry etc. will be notified. This will facilitate accreditation at multiple levels and for multiple courses. The accreditation which will be revised periodically will help students to make informed choices about the Training Providers.

4.3.7 Assessment ecosystem will also be strengthened through a framework for accreditation of assessing bodies and evaluation of assessors, to ensure consistent outcomes.

Market led Standards

4.3.8 Sector Skills Councils (SSCs), as industry-led bodies, will be strengthened by making them more representative, expanding their outreach and increasing their efficiency. The development of National Occupational Standards (NOS) and Qualification Packs (QPs) for various job roles in a sector will remain the key responsibility of the SSCs. The outcome standards for each job role will need to be clearly defined and notified as per NSQF. SSCs will be responsible for ensuring that persons trained as per NOS/QPs are employed by employers in their sector.

4.3.9 Development of standards by SSCs will be under the aegis of National Skills Qualification Committee (NSQC) under NSQF. All NOSs and QPs developed by the SSCs will be examined and reviewed by the NSQC and thereafter, conferred the status of ‘National Standards’. All skill training in the country will necessarily align itself to these national standards.

Recognition of Prior Learning (RPL)

4.3.10 RPL is the key instrument which can help map the existing skills in the unorganised sector and integrate the informal sector to the formal skilling landscape. The RPL framework is an outcome-based qualification framework linked to NSQF against which prior learning through formal/informal channels would be assessed and certified. The RPL process would include a pre-assessment, skill gap training and final assessment leading to certification of existing skills in an individual. The RPL certification would be at par with the certifications following various skill trainings in the country. It will provide both horizontal and vertical pathways to an individual for acquiring additional skills for better livelihoods. Adequate resources will be earmarked under various government schemes for equitable access to RPL programmes. The government will provide detailed guidelines for RPL initiatives which will ensure quality and consistent outcomes.

\[^1\text{Gazetted Notification No. 8/6/2013-Invt. dated 27th December, 2013} \]
Creating a dynamic and demand-driven Curriculum framework

4.3.11 The curricula development will be promoted through sector mentor committees which will include representatives from concerned SSCs, sector experts and relevant academia, so as to ensure that the curricula is in sync with emerging market demands and aligned to latest NOSs and QPs. The curricula should also take into account the latest teaching aids which can be used to disseminate quality training on a large scale. The curricula will need to be reviewed every three years to align itself with the dynamic market needs. In addition, industry will be allowed to run high employment potential courses through appropriate affiliation framework.

National Certification Framework

4.3.12 Presently, the National Council for Vocational Training (NCVT), constituted in 1956, provides a national framework for setting curricula for various vocational courses, and also prescribes standards for equipment, scale of space, duration of courses, methods of training, conducting All India Trade Tests and awarding National Trade Certificates. NCVT will be further strengthened by scaling up industry representation through SSCs, and laying down a national framework for all certification in the skill space through an autonomous body.

Employability Skills

4.3.13 Language, basic IT and financial literacy is an integral part of most job roles in the economy today. Further, life skills are also an integral to a successful livelihood. Accordingly, all skill training programmes shall include basic modules of computer literacy, finance, language and soft skills like etiquettes, appreciating gender diversity in workplace, building positive health attitudes, social and life skills to enable the youth to be employable and market ready.

Placements

4.3.14 The most critical outcome of skill training is employment, whether self or wage employment. To assess quality of skill training, this critical outcome will need to be monitored objectively. Employment tracking of individuals for at least one year, post skill training, will be made mandatory under all skill programmes.
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4.4.1 Skill development programmes being implemented by various Ministries/Departments/agencies of the Central Government have different norms as regards the eligibility criteria, duration of training, maximum amount for training, outcomes, monitoring and tracking mechanism etc. This multiplicity of norms and parameters results in avoidable difficulties in implementation and makes it difficult to evaluate the performance of the skill development programmes across the Central Government in an objective manner.

4.4.2 Ministry of Skill Development and Entrepreneurship (MSDE), which has been set up to coordinate skill development efforts in the country will within three months, notify common norms for rationalization of Central Government Schemes on Skill Development. The norms shall include standards for inputs/output, funding/cost norms, third party certification and assessment cost etc across the various skill development programmes while allowing flexibility to meet the requirements of different parts of the country/ different socio economic groups. However, different ministries will be free to frame schemes at their discretion to meet local/sectoral needs while adhering to common norms.

4.4.3 A national Labour Market Information System (LMIS) will be created. This will be an integrated database, which contains socio-economic data in modules on (i) supply side skilled labour force statistics (ii) demand of skilled / unskilled labour (iii) market trends like wage structures and distribution, economic growth trends across sectors, focus areas for skilled manpower, occupational shortages etc. The LMIS is expected to use a business intelligence tool to generate key analysis and reports which will determine policy interventions by different government stakeholders and the industry at large. It will help inform candidates about the choices available to them in terms of sectors, modules and training providers leading them to better career opportunities. In addition, LMIS will cater to the following stakeholders: Trainees, Training Providers, Industry/Employers, Government Agency/Policy Makers, Assessment Agencies, Certifying Agencies, Funding Agencies, International Agencies, Sector Skill Councils, Labour Market Tracking Agencies and Placement Agencies. It is being developed in a modular manner. It will integrate all existing databases like NSDC’s Skill Development Management System (SDMS), National Career Service Portal, National Council for Vocational Training (NCVT) MIS portal, Skill Development Initiative Scheme (SDIS) portal, State databases, SSC databases etc.
4.4.4 LMIS will be part of larger National Portal which will also include details on skills courses, e-content, sector reports, trainers, assessors, etc. Data for all the persons mobilized and seeking skill training will be entered into the National Portal. It will be ensured that the National Portal is user friendly and is available in relevant regional languages to ensure that language does not become a barrier to access information. The system would be used for forecasting future demand and accordingly preparing a constant flow of skilled workforce. Further, all data will be maintained in gender disaggregated form to enable specific policy interventions to maintain equity.

4.4.5 States will also be encouraged to converge all skill development activities under a single entity on the pattern of SSDMs as already being implemented in a few States. They will also be requested to synergize their skill programmes with common norms as notified by Central Government in order to maintain uniformity in the entire skilling space. Skill database of States will also be integrated with LMIS to have a unified national picture of actual supply against demand in various sectors.

**Skill India and Make in India**

4.4.6 Make in India and Skill India are complementary to each other. The key objective of Make in India is to promote manufacturing in 25 sectors of the economy, which will lead to job creation and consequently need for skilled manpower. Some of these sectors include automobiles, chemicals, IT, pharmaceuticals, textiles, ports, aviation, leather, tourism and hospitality, wellness, railways, auto components, design manufacturing, renewable energy, mining, bio-technology, and electronics. Correspondingly, Skill India aims at preparing a highly skilled workforce which is completely aligned to the requirements of industry so as to promote growth through improved productivity.

4.4.7 Skilling efforts will be completely aligned with the requirements of 25 key identified sectors of Make in India. A joint committee of stakeholders under both initiatives will be constituted to closely monitor growth of manufacturing activity under Make in India programme and anticipate skill requirements for such initiatives so that the same can be developed in coordination with various SSCs and training institutions. Pre-assessment of skill requirements for all manufacturing activities at proposal stage will be made mandatory in order to ensure an industry ready workforce once the manufacturing facilities have been set up. States will also be encouraged to align their skilling efforts with upcoming industrial activities in the State.

4.4.8 Make in India could be leveraged to increase industry participation in skills through PPP mode viz. setting up of ATIs/MSIs with priority Make in India projects.

4.4.9 All new industrial/development clusters will be mandated to set up quality training institutes in the area to take care of skilling needs of the region.
Mobilization and Engagement

4.5.1 Industry needs to be closely involved in providing job opportunities to the skilled workforce. Industry will be encouraged to increasingly move towards employing only certified skilled people. In addition, employers need to rationalize the compensation paid across different levels of skills to award a skill premium for increased productivity as a result of higher skills.

4.5.2 Skill Development is a shared responsibility of both Government as well as industry. Since industry is one of the major stakeholders, it needs to actively contribute to the cause of skill development. The industry should earmark at least 2% of its payroll bill (including for contract labour) for skill development initiatives in their respective sector. These funds can be channeled for skill development activities either through the respective SSCs or through National Skill Development Fund (NSDF).

4.5.3 Industry should actively participate in designing curricula and standards for skill training courses. Industry members will be requested to contribute as guest faculty at ITIs, ATIs, MSIs and other skill training institutes. Industry houses including the MSMEs will be incentivized to make shop floor available for practical training of trainees and institutionalize paid apprenticeship. Workplace training will be promoted as part of overall skill curriculum aligned to NSQF and embedded in appropriate credit framework. Industry will also be encouraged to participate more actively in training of youth, so that the latter are able to get actual on-the-job and hands-on experience during training programmes.

4.5.4 Every training provider (TP) including ITIs should tie up with industry in the relevant trades to improve placement opportunities for candidates. Similarly, every industry should also tie up with suitable training centre(s) in its vicinity for supply of skilled workforce and apprentices. There should be a placement cum apprenticeship cell within each training centre that will counsel trainees on successful completion of their training and help them get employed. Industry mentors will be assigned wherever possible to trainees of government supported schemes. The aforesaid cell will maintain a complete database of all trainees and their employment record thereafter. Government support to TPs would be linked to placement performance and tie ups with industry.
4.5.5 Special efforts will be made to organize and streamline efforts of the Non-Governmental Sector in their skill development initiatives. Mentorship support will be provided to eligible NGOs through NSDC to scale and create sustainable models for skill development for Green jobs (agriculture, horticulture, renewable energy, recycling, eco-tourism etc), Grey collar jobs (informal manufacturing and services) and local trades especially in rural India through KVKs.

4.6 Global Partnerships

4.6.1 The main objective of global partnerships and international collaborations is to leverage best practices from across the world. Such collaborations will immensely enrich domestic training programmes by enhancing their quality through learnings from successful international models of vocationalization of education, engaging with industry, etc. Institutional arrangements through joint working groups, secretariats, etc will be established for regular exchange of knowledge, experiences, research findings, teaching and learning materials, and innovations in skill development.

4.6.2 Foreign Governments, corporate and agencies will also be encouraged to set up skill centres and universities as well as participate in content creation, design of curricula and delivery of training. Exchange and capacity building programmes for teachers, administrators and students will be facilitated.

4.6.3 Government would promote a skills training ecosystem that would also enable training and placement of Indian boys and girls in overseas jobs. The ageing developed world is expected to face a huge skill shortage while our country has the potential to reap its demographic advantage and export skilled labour to the world. A focused team would be formulated for identification of countries and trades where skill shortages exist or, are likely to develop in near future.

4.6.4 According to US Census Bureau estimate, by 2022, countries like USA, UK and China will fall short of skilled labour by 17 million, 2 million and 10 million respectively while India will have a surplus of almost 47 million in the age group of 19-59 years. This strength can be leveraged by countries of destination to meet their labour and skill shortages. Labour mobility is the only long term solution for sustaining global growth rates. To address this aspect of skill mobility the government will pro-actively build Human Resource Mobility Partnerships (HRMP) with key countries in collaboration with the concerned parties.

4.6.5 Currently there are about 14 million overseas Indians, 70% of whom are unskilled or semiskilled labourers. Due to several reasons such as lack of skills, inadequate information, lack of knowledge of basic language, etc, they often have to work in adverse circumstances with biased terms of employment. To address the existing issues faced by Indian labourers abroad the government will further enhance the scheme of skill up gradation and pre-departure orientation training to emigrant workers. The scheme will have the objective of institutionalizing the process of skill development of emigrant workers and to equip them with the basic knowledge about laws, language, and culture of the destination countries for the purpose of overseas employment.
4.6.6 The National Skills Qualifications Framework will be aligned to globally recognized qualification frameworks for ensuring quality and uniformity. Consequently, transnational standards will be created for sectors where there is an opportunity for international workforce mobility. Close partnerships with the concerned countries would enable certified Indian youth to get employed in these countries. Assessment and certification framework will be benchmarked to international standards. National Skills Qualification Committee (NSQC), with assistance from the concerned SSCs, would be capacitated to develop working standards, assessments and certifications with respective agencies in the destination countries.

4.6.7 In addition, there are countries and regions where India will support development of their skill development ecosystem through sharing our institutional models, occupational standards and qualification packs.

4.7 Outreach

4.7.1 The proposed KVKs will play a pivotal role in identifying local employment opportunities and providing adequate training and post-training support according to needs of local areas such as migration support for skilled workers. The centres will also function as information centres for training and employment opportunities, as well as for various support schemes. KVKs in the form of mobile training facilities, will also be deployed to reach out to remote and difficult areas.

4.7.2 More than 93% of India’s workforce is in the unorganized sector. Hence strengthening and certifying the skills of the unorganized workforce will contribute to overall economic development of this sector. RPL will be encouraged in the unorganized sector for certification of existing skills and integration with formal labour market. This will also open up options for up-skilling and further vertical mobility. Multi-skilling in complementary areas will be promoted to enable sustainable livelihood in this sector.

4.7.3 To develop the unorganized sector, LMIS will be used to aggregate the availability of labour along with their certified skill levels that can help some of them to move to organized sector. Technology will be also be leveraged for aggregation of informal sector workers through mobile-based IT applications to link them directly to the job market and also make them accessible to prospective employers. Efforts will be made to include details of skill training and skilled manpower working in the unorganized and MSME sectors through the periodic Sample surveys of the National Sample Survey Office (NSSO).
4.7.4 An unrecognized apprentice system or on the job training exists in the informal sector. The RPL programme will enable trainees/apprentices at such informal establishments to obtain certification and access to add on classes. If required, financial support could be provided for such efforts.

4.7.5 Government believes that inability to pay training fees should not stop any citizen in the country from acquiring certified skill training. Government will promote grant of scholarships, rewards and Skill Vouchers (SV) for funding of training costs. All desirous candidates would be able to access credit for all certified NSQF aligned skill development programmes through targeted Skill Vouchers (SVs), which will be linked to their Aadhaar and their Jan Dhan Account or bank account. Levy from future incomes would be linked for recovery of loans through SVs. This is proposed to promote an environment of “Learn, Earn, and Pay”. Skill Vouchers can be redeemed by TPs based on performance linked payment schedule subject to successful completion of training. Scholarships and grants up to 100% linked to SVs will also be provided for certain identified disadvantaged sections of society. However, 30% of any grant will be linked to continuous employment for at least one year.

4.7.6 A National Skills Research Division (NSRD), will be constituted within NSDA at the national level. The role of the division will be to conduct skill surveys including aggregation of the environmental scans done by SSCs, study emerging demand trends, operate the LMIS and other skilling platforms and databases. This body will have close involvement of private sector subject experts and will be the strategy think tank for MSDE. It will also keep a close watch on developments taking place internationally in these areas and align our policy response to enable engagement with various stakeholders in the skilling ecosystem and ensure that skill sets of our people are also aligned with international requirements/benchmark, ensuring their global mobility.

4.7.7 As discussed in Section 4.1.2, a National Campaign including through a dedicated TV and radio channel, and skilling camps will be initiated to promote interest and mobilize the youth for skilling. Timely circulation of success stories in electronic as well as print media will also be ensured.
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ICT Enablement

4.8.1 Promotion of only brick and mortar facilities will not ensure the speed and scale desired to transform the skill development efforts. The use of technology will be leveraged to scale up training facilities, enable access to remote areas and increase cost-effectiveness of delivery of vocational training. Government will also look to support innovative products, solutions and models that address critical gaps in skill ecosystem in an effective manner. Use of existing available networks such as the widespread Optical Fibre Network will be optimized.

4.8.2 An open platform for e-content on skill development will be created where further curated content will be crowd sourced. Mechanisms will be put in place to incentivize high quality content aggregation. This platform would provide standardized training content to be used by trainers/training institutes for delivery of vocational training. Stakeholders will be encouraged to develop Massive Open Online Courses (MOOC) and virtual classrooms for easy access and convenience. Creation of blended learning environments to deliver high quality vocational training in under-served regions of India will be promoted. Curriculum and teaching methodologies for online learning tools will be provided in regional languages to cater to the various geographical needs.

4.8.3 As discussed in Section 4.4.3, a responsive and agile central LMIS will be created for aggregating demand and supply of skills to help align efforts towards bridging the existing and expected skill gaps. The LMIS will be responsible for a reliable and realistic assessment of economic trends and labour market needs (both existing and projected) that will be publicly available to reduce information asymmetry.

4.8.4 There are approximately 900 million cell phone users in the country, of which 120 million use smartphones. Location Services capability has added another layer in communication and value. It is thus possible to have high end data collection and assimilation for intelligent matching. The Government aims to promote in private domain a matching online/mobile platform for connecting supply and demand of skilled workers. Private sector will be encouraged to develop mobile applications for aggregating informal sector workers such as plumbers, carpenters etc. for household services, through innovative commercial models.
4.8.5 Government envisions to leverage the facility of Digital Locker for creation of Skill Cards linked to Aadhaar for the labour force trained and certified as per NSQF. The Skill Cards will be a portable, online record of an individual’s education, qualifications, competencies, Aadhaar, employment history, training record and objectives, details of which can be independently verified. Skill Cards shall reduce duplication of training, simplify statutory & mandatory training, and provide an overview of the skills and abilities of the entire workforce. The work performance of the worker can also be rated by trainers or employers which can act as a signalling mechanism.

4.8.6 Technology would be leveraged in monitoring of Government schemes related to skill development including the entire ecosystem- from the Government agency to the training provider to the trainee to the financial transactions.

4.8.7 To meet the objective of making skilling aspirational, networks and special interest groups will be created through advanced and easily accessible technological tools, in order to spread awareness and increase outreach.

4.9 Trainers and Assessors

4.9.1 To achieve the massive target of skilling, it is of utmost importance to have quality trainers who are capable of training people in several fields. Similarly, quality assessors in sufficient numbers are also required to ensure consistent outcomes of assessment and certification process. Government will decisively intervene directly or through other stakeholders, to bring more experienced people in training and assessment space, especially ex-servicemen in defence and retired/working people from industry.

4.9.2 A trainer/assessor portal will be set up as a part of the National Portal to act as a repository and registration database for all certified and interested trainers/assessors. All retiring employees in industry or government domain, who are interested to use their experience gainfully by extending their career as trainers/assessors, will have freedom to register themselves on the portal. This portal can be easily accessed by training providers and assessment bodies as per their relevant sector, experience, and location of the registered certified trainers/assessors.
4.9.3 Short term modules for training of interested persons, with relevant industry experience, will be promoted through instructor training institutes to enable them to attain the requisite certification for being a certified trainer/assessor. Career pathways will be redefined for trainers to make the profession more attractive and lucrative for the youth. The job of skill trainers will be made aspirational by benchmarking their pay scales with secondary school teachers.

4.9.4 New institutes for training of trainers will be set up in PPP mode, at least one in each State, to increase the overall capacity of ToT in the country. With increase in availability of certified trainers, all training institutes will be mandated to engage certified trainers only.

4.9.5 As a part of the promotion of industry-institute linkage, working industry professionals would also be empanelled as adjunct faculty in relevant areas during off hours

4.9.6 Centres of Excellence, under the proposed National Skills Universities, will also be set up to ensure continuous supply of quality trainers in each sector. Special training programmes would be developed for training of trainers meant for overseas employment, including language training in collaboration with the concerned country. This could include exchange programmes, industry visits and simulated training. ICT enabled training and certification program for the trainers to train them within comforts of their homes, wherever feasible would also be promoted. Moreover, appropriate training in the latest technological developments for upgrading the technical skill of trainers, as per the requirement of the present scenario by the industry will also be undertaken.

4.9.7 In Defense sector, it is estimated that 50,000 armed forces personnel retire every year with majority between 35 to 45 years of age. MSDE through its institutions, will work with Directorate General of Resettlement (DGR), to provide them future livelihood opportunities through skill training in sectors where their experience can be put to good use, including as trainers and assessors.

Inclusivity

4.10.1 It is necessary to promote skill development initiatives that will ensure inclusivity, irrespective of gender, location, caste, sector etc. One of the key objectives is to safeguard the skilling needs of SCs, STs, OBCs, minorities, and differently abled persons, as well as those living in difficult geographical pockets.

4.10.2 Government attaches high priority to socio-economic growth of rural areas since India lives in her villages. Adequate focus will be given to youth from deprived households by establishing skill development centres in areas which are underserved.

4.10.3 The border, hilly and difficult areas, including North Eastern states, J&K, and the hilly forested areas of central and eastern India, face additional challenges arising from inadequate infrastructure, poor investment and low industrial opportunities. Special attention needs to be given to youth residing in these regions to address their needs for employment and employability. In order to provide more equitable access across the country, special efforts including earmarking of funds for establishing training facilities in deficient regions and need based subsidisation of skill training for disadvantaged groups, will be initiated. Natural aptitude of youth will also be kept in view while implementing training programmes in these geographies.
4.11.1 According to Census Data 2001, women account for 48% of the entire population in India. Women have the capability to further drive the economy of the country if their participation in the workforce is increased. With the help of skilling, women can have viable incomes, decent work and be major players who can contribute equally to the economic growth of the country.

4.11.2 Women participation in vocational education and training is especially low as compared to men. Special mechanisms in the delivery of training such as mobile training units, flexible afternoon batches, training based on the local needs of the area, will be introduced to ensure participation and mobilization of women. The government will promote setting up of more training and apprenticeship seats exclusively for women. Appropriate incentive mechanism will be designed to achieve the same.

4.11.3 Training in non-traditional fields for women will be promoted through the establishment of specific training programmes that focus on life skills training modules and literacy training. Apart from that, efforts will be made to increase the pool of women trainers and providing them certification by earmarking a certain percentage of intake in training of trainers institutes, for women. New institutes exclusively for training of women as trainees and trainers, will also be promoted by Government.

4.11.4 Women related issues will be incorporated in the guidelines for skill training procedures. These could include issues of safe and gender sensitive training environment, employment of women trainers and equity in remuneration, and complaint redressal mechanism.

4.11.5 An internet or mobile based platform for women employment, by connecting skilled women and employers, will be promoted. This platform could focus on women willing to re-enter the workforce after a break and those affected by migration.
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4.10.4 Areas such as North-Eastern States, J&K and Himachal Pradesh face peculiar problems that are different from the rest of the country. Comparatively, there are very few training centres in the entire north-east region. Youth in such regions seek jobs but are not complemented with adequate job opportunities in the region. Government will create Special Regional Structures for difficult areas, which will be cross-sectoral, and work closely with SSCs to address the existing problems of such sensitive regions with aptitude based training and employment.

4.10.5 For differently abled persons, a horizontal SSC comprising of stakeholders and representatives of relevant SSCs would be created to identify specific trades for each category of differently abled candidates where they can improve their competencies through skill training and get rehabilitated/employed for a sustainable livelihood.

4.10.6 Government will allow flexibility in various skill schemes to address special needs of various sections of society through innovative models within the overall architecture of the scheme. Skill training will be aligned to specific requirements of the community and local ecosystem. Earmarking of funds for disadvantaged sections of society like SC, ST, minorities etc. will be enforced as per existing Government guidelines. Existing schemes for disadvantaged groups will be further strengthened and made more effective.
The entrepreneurship policy framework has been developed to address the objectives underlined in Chapter three of the document. Vibrant entrepreneurship requires support from an enabling ecosystem of culture, finance, expertise, infrastructure, skills and business friendly regulation. Many government and non-government organizations are playing enabling roles across each of these crucial supporting elements. This policy framework, cognizant of the need for the full ecosystem to be present to unlock entrepreneurial potential, proposes a nine part entrepreneurship strategy:

- Educate and equip potential and early stage entrepreneurs across India
- Connect entrepreneurs to peers, mentors and incubators.
- Support entrepreneurs through Entrepreneurship Hubs (E-Hubs).
- Catalyse a culture shift to encourage entrepreneurship.
- Encourage entrepreneurship among under-represented groups.
- Promote Entrepreneurship amongst Women
- Improve ease of doing business.
- Improve access to finance.
- Foster social entrepreneurship and grassroots innovations
Policy Framework For Entrepreneurship

3000 College based, 1 National, 30 State, 50 Nodal Entrepreneurship Hubs will be set up to deliver support covering the entire nation

Educate and equip potential and early stage entrepreneurs across India

5.1.1 In partnership with experts, a world class entrepreneurship education curriculum will be developed. Through a blend of online and experiential learning, potential entrepreneurs will go through hands-on, student centric courses that help them acquire skills they need to start an enterprise. This curriculum will build on and adapt the best entrepreneurship education content available globally.

5.1.2 This curriculum will be delivered to all aspiring entrepreneurs at no cost. Leveraging online learning, entrepreneurship courses can be taken as and when needed by students and business people alike through Massively Open Online Courses (MOOCs).

5.1.3 In addition, entrepreneurship education will be integrated into the mainstream curriculum in 3,000 colleges around India. These colleges will also be provided with additional support and re-training of existing faculty to deliver entrepreneurship courses to enrolled students from all tracks and courses. Students will be able to choose entrepreneurship courses to suit their needs, and Universities will be encouraged to award credits for entrepreneurship courses.

5.1.4 Entrepreneurship education courses will also be delivered in approximately 325 industrial clusters across the nation. Through 50 nodal Entrepreneurship Hubs (E-Hubs) set up across all states, existing and potential entrepreneurs will be targeted for entrepreneurship education modules that suit their need.

Connect entrepreneurs to peers, mentors, incubators

5.2.1 To support young entrepreneurs, a web and mobile based platform connecting the entire entrepreneurial ecosystem will be established. Students, young entrepreneurs, mentors, incubators, funding agencies and basic service providers will all be able to log in and connect to each other in their respective industries and locations.

5.2.2 Platform members will also access content, including information on government services and special packages offered by service providers. ‘Entrepreneur Information Handbooks’ – in Hindi, English and regional languages – providing relevant information associated with establishing and operating a business will be published and updated periodically. The portal will also provide relevant online application forms and procedures.

5.2.3 The creation of new incubators, far above and beyond the 120 that currently operate, will be encouraged. Support will be provided to help successful incubators scale further. A national network of incubators and accelerators will also be established to support young entrepreneurs. This network will also feed in to the online platform connecting the entrepreneurial ecosystem. Industry will also be encouraged to support aspiring entrepreneurs within its sector through appropriate incubation support.
5.2.4 A national network of high quality, screened mentors will be created, leveraging existing networks and successful local entrepreneurs where possible. Mentors will be of a high quality, ensured by selection against a pre-determined criteria. Building on these two critical elements, the rest of the entrepreneurial community can then be mobilized to join the online community through education programs and other mobilization drives.

5.2.5 Align entrepreneurship activities in innovative and cutting edge technology areas, with initiatives in innovation domain such as Atal Innovation Mission (AIM) - a platform to promote a network of world class innovation hubs, and Self Employment Talent Utilisation (SETU) - a Techno-Financial, Incubation and Facilitation Programme to support all aspects of start-up businesses, and other self-employment activities, particularly in technology-driven areas.

### Support entrepreneurs through Entrepreneurship Hubs (E-Hubs)

5.3.1 Support to entrepreneurs, including coordinated delivery of national and state government entrepreneurship programs and access to enabling resources, a national network of Entrepreneurship Hubs (E-Hubs) will be established.

5.3.2 One national, 30 state, 50 Nodal and 3,000 college based E-Hubs will be set up to deliver support. These E-Hubs will, collectively, cover the entire nation.

5.3.3 The National Entrepreneurship Hub (E-Hub) will be advised by a National Advisory Committee (NAC) comprising of representatives from government ministries, entrepreneurs, NGOs and academia. The National E-Hub will lead efforts to improve inter-ministerial coordination and align entrepreneurship efforts with industry trends as well as other national flagship programmes like Make in India, Smart Cities, Skill India, Digital India, Green India and Swachh Bharat Abhiyaan.

### Catalyse a culture shift to encourage entrepreneurship

5.4.1 To promote entrepreneurship, state and national level interaction with stakeholders will be convened. Keynote speakers from industry – both domestic and international – will be invited to share best practice from the field. International linkages will also be established through internship opportunities and exchange trips to global entrepreneurship hubs such as Silicon Valley and Israel.

5.4.2 To build awareness of competitions and opportunities, national brand ambassadors will be created to champion entrepreneurial culture in India.

5.4.3 Institute Awards for young achievers (for both men and women entrepreneurs separately) at all levels viz., district, state and national levels to recognize the achievements of entrepreneurs below the age of 30 years.
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5.4.4 Institute celebration of National Entrepreneurship Day.

5.4.5 International linkages will also be deepened to increase the flow of ideas to India. A regional (South Asian) network of entrepreneurs, with a focus on trending sectors such as social entrepreneurship or tech-based entrepreneurship, could be established. This network could provide fellowships and exchanges to entrepreneur members, with hubs in leading management and entrepreneurship centres in India (e.g., IIM-Ahmedabad) and abroad. Periodic workshops could connect all entrepreneur members. A digital platform could connect these entrepreneur members and be used to share their stories and knowledge with the broader public.

Encourage entrepreneurship among under-represented groups

5.5.1 Special focus will be given to the inclusion of scheduled castes & scheduled tribes, minorities, differently abled, etc., and regionally under-represented areas including large part of Eastern and North Eastern India in entrepreneurship programs.

5.5.2 These groups will be prioritized for delivery of entrepreneurship education programs, both in and outside formal education institutions, through Nodal E-Hubs.

5.5.3 Special mobilization drives to enrol members of these groups in the online entrepreneurial ecosystem will also be conducted.

5.5.4 Special efforts will also be made to enrol incubators and mentors catering to these groups will in the national entrepreneurial ecosystem. This includes organizations that promote rural entrepreneurship activity, especially in traditional arts and crafts like artisans, goldsmiths, handlooms, blacksmiths, etc. A pool of experts (e.g retired bankers etc.) would be promoted to act as mentors to rural entrepreneurs and help them connect to all related services eg. banks, regulatory requirements, writing proposals for funding etc.

5.5.5 Access to Government supported testing facilities (like IITs/IIScs) and infrastructure could be offered to these groups, to potential and new entrepreneurs in general at a subsidised rate.
Promote Entrepreneurship amongst Women

5.6.1 The Economic Survey conducted for India by OECD in November 2014 clearly enlists low female economic participation as one of the major findings. Creating more and better employment for women has high growth potential. Currently the contribution of women in workforce is limited to only 24%. Head of UN Women has also indicated that India's GDP will leapfrog by another 4.2% if women in India can contribute their full potential to the economy.

5.6.2 Women-owned enterprises are an important component of the Indian Economy and play a strategic role in the growth and development of the nation. However, as far as support for women entrepreneurs is concerned there exists no reliable data on the public contracts which go to Women Owned Business (WOB). Efforts will be made to encourage women entrepreneurs through appropriate incentives for women owned businesses under the public procurement process. It will also be ensured that gender neutral incubation/accelerator, network of mentors, industry, resource centres and credit institutes are developed to facilitate Women Entrepreneurs.

5.6.3 Ensure priority for mentorship and support system for women entrepreneurs in existing business centres and incubators. Build entrepreneurial capacity for women by facilitating access to capital at relaxed credit terms. Steps will also be taken to assemble gender disaggregated data.

Improve ease of doing business

5.7.1 A business friendly environment with easy entry and exit procedures will encourage entrepreneurial activity. The following actions to rationalise business procedures and regulations through the following initiatives should be investigated:

- Introduce Unique Enterprise Number (UEN) that a new enterprise could use for various registrations including taxes, labour laws and social security. Once UEN is available, all regulatory and support agencies shall use it to fasten the process of setting up an enterprise.
- Introduce an online Composite Application Form (CAF) that will help entrepreneurs file a single application for obtaining all approvals and clearances from various government authorities.
- Encourage States to strengthen existing ‘Single Window System’ with a High Power Committee empowered to give all necessary clearances for setting up a business.
- Convert the present District Industries Centres (DICs) into Business Development Centres (BDCs) with an objective to provide technical and procedural hand-holding support and counselling to pre-start-up, nascent, early start up and growth ventures.
- Permit flexibility to start-ups in ‘hiring and retaining’ workforce for operational adjustments and rationalisation during the first three years of operation of an enterprise, assuming that by the end of three years it will either stabilise and grow or become sick and close down.
- Allow easy exit to enterprises if they have been in operation for less than three years. Such enterprises will be facilitated to close their operations, if not found viable, within a period of three months. Special fast track court would be set-up to expedite the process of closure of such firms.
- Consider tax incentives to new and existing entrepreneurs.

5.8 Improve access to finance

5.8.1 As per RBI data, the share of small scale industries in gross bank credit from scheduled commercial banks has been continuously decreasing. Its share has fallen from 15.42 per cent of the gross bank credit in 1991 to 6.34 per cent in 2006-07. To reinvigorate the flow of credit to deserving entrepreneurs, the following interventions could be considered:

- Ensure that credit delivery norms are met by financial institutions without compromising the quality of the projects submitted for credit.
- Strengthen venture capital companies in quasi-public sector by infusing capital through equity participation.
- Incentivise Angel financing by providing appropriate rebates on capital gains made by investors.
- Promote a ‘rescue’ culture by revisiting bankruptcy rules and facilitate counselling and advisory service to troubled firms by appropriately addressing legal status.
- Encourage national and state bodies viz. National Scheduled Cast Finance and Development Corporation (NSCFDC), National Minorities Development and Finance Corporation (NMDFC), National Backward Classes Finance and Development Corporation (NBCFDC), National Schedule Tribes Finance and Development Corporation (NSTFDC), etc., to provide credit to micro enterprise start-ups launched by their target population.
- Explore the possibility of setting up a National Fund for the Unorganised Sector, as recommended by the National Commission for Enterprise in the Unorganised Sector in 2007, to hasten the process of achieving inclusive growth of entrepreneurship.
- Encourage and support financial institutions to develop innovative micro-level financial tools to enhance investibility in micro ventures. Further, they would also be encouraged to increase lending in rural areas through self-help groups and innovative micro-financing.
Social enterprises have emerged as important business instruments to address the issues of poverty, unemployment and inequity in society, through socially oriented business innovations. Social innovation seeks to answer these social problems by offering new products and services which allow the poor to interact with markets as active participants rather than passive recipients. Considering the need to encourage such social enterprises, the following will be undertaken:

5.9.1 Encourage universities and academic institutions to launch a course on ‘Social Entrepreneurship’, including through online distance education, to actively promote social entrepreneurship in the country.

5.9.2 Foster a social capital market place by offering fiscal incentives to attract investors and make provision for funding support under a separate scheme(s) like social venture fund, to facilitate social entrepreneurs’ access to credit.

5.9.3 Facilitate creation of Social Enterprises even with a modest capital base, through social incubates across the country.

5.9.4 Encourage innovators, universities and institutions to patent innovative entrepreneurship ideas and technologies by promoting and strengthening Intellectual Property Rights.

5.9.5 Create grass-root technology innovation hubs to harness the innovation potential of grass-roots innovators.

5.9.6 Promote and encourage grass-root innovations and assist innovators to commercialise and up-scale their products and services.

5.9.7 To encourage innovation, collaborate with organisations such as the National Innovation Foundation to encourage grassroots technological innovation and integrate with the national research and innovation ecosystem. Using the national network of E-Hubs and other platforms, assist entrepreneurs in commercializing and scaling up their products and services.
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Governance Structure

Ministry of Skill Development and Entrepreneurship has been created to fulfill the vision of a ‘Skilled India’ where human resource development is the primary focus. MSDE will be responsible for coordination with all concerned for evolving an appropriate skill development framework, removal of disconnect between demand for, and supply of, skilled manpower, skill up-gradation, building of new skills, innovative thinking and talents for existing and future jobs. MSDE will also play the lead role in ensuring the implementation of the National Policy for Skill development and Entrepreneurship.

Skill development and entrepreneurship are complementary to each other. The key stakeholders include Central Ministries/Departments, State Governments, and industry/employers. There is a need to ensure alignment of the efforts of all stakeholders in skill and entrepreneurship landscape towards a common goal. While, MSDE will co-ordinate and converge all efforts in this space, the relevant Central Ministries/Departments, State Governments and industry/employers are expected to fulfil the roles and responsibilities pertaining to their domain as laid down in the National Policy for Skill Development and Entrepreneurship.
Governance Structure And Financing

The objectives and targets under the National policy will be met in mission mode approach. The National Skill Development Mission will be launched to implement and coordinate all skilling efforts in the country towards the objectives laid down in the policy. The Mission will be housed in MSDE and the key institutional mechanisms for achieving the objectives of the Mission will be divided into a three-tier structure at the Centre to steer, drive and execute the Mission’s objectives. The Mission will consist of a Governing Council at apex level, a Steering Committee and a Mission Directorate (along with an Executive Committee) as the executive arm of the Mission. At State level, States will be encouraged to create State Skill Development Missions (SSDM) along the lines of National Skill Development Mission with a Steering Committee and Mission Directorate at State level. States will in turn, be supported by District Committees at the functional tier.

Mission Directorate will be supported by three other institutions: National Skill Development Agency (NSDA), National Skill Development Corporation (NSDC), and Directorate General of Training (DGT) – all of which will have horizontal/vertical linkages with Mission Directorate to facilitate smooth functioning of the national institutional mechanism.

National Skill Development Agency (NSDA): NSDA was set up as a Society in June 2013. NSDA will focus on the two verticals of Quality Assurance and policy research in the skills space. It will be majorly responsible for the following activities:

- Operationalise and implement National Skills Qualification Framework (NSQF)
- Establish and operationalise a QA framework embedded in NSQF to improve consistency of outcomes in the skills landscape, which will include laying down a framework for training, assessment and certification processes and agencies in the country.
- Operationalise National Skills Qualification Committee (NSQC) to meet its objectives
- Design and implement the National Labour Market Information System
- Develop national protocols for registration and accreditation of private training providers.
- Promote use of ‘Skill India’ logo on skill certificates by SSCs/Agencies adhering to the QA framework.
- Anchor Prime Minister’s Skill Development Fellow Programme

National Skills Research Division (NSRD), under NSDA will be established to serve as the apex division for providing technical and research support to the Mission. This division will act as a think-tank for MSDE and be the core skill development hub, which will connect implementation of the Mission with academic research and data. Its four key functions will include research, policy advisory/inputs, career support and knowledge exchange networks.

National Skill Development Corporation (NSDC): NSDC, a Public Private Partnership was set up in 2008 as a Section 25 company under Companies Act 1956 with shareholding of GOI 49% and private sector 51%. It will be the nodal organization for all private sector initiatives in the short term skilling space. Its mandate will primarily include -
Governance Structure And Financing

- Catalyse the creation of market-based, scalable business by providing funding through a combination of debt, equity and grants
- Implementing skills voucher programme
- Driving engagement with industry and businesses
- Promote centres of excellence for training of trainers in coordination with States and SSCs
- Initiating and incubating Sector Skills Councils (SSCs)
- Discharge any other function as may be assigned to it by the Ministry.

Directorate General of Training: The two verticals of Training and Apprenticeship Training under DGET, MoLE have been shifted to MSDE from 16th April 2015. Its large institutional framework consisting of ITIs, ATIIs, RVTIs and other national institutes will act as tools of execution for Mission activities. Other functions will include:
- Setting up framework for structure of courses, assessment, curricula creation, affiliation and accreditation of institutes, under NCVT
- Develop national standards on syllabi, equipment, scale of space, duration of courses and methods of training
- Advise on training policy in its network of training institutes
- Coordinate functioning of Industrial Training Institutes (ITIs)
- Run training programmes for training of trainers/instructors
- Run special institutes for training of women
- Leverage field infrastructure for strong industry interface in all facets of training, including on-the-job training
- Provide technical support to vocational education across the country
- Anchor and operationalise Apprentices Act, 1961 as overhauled by comprehensive amendments in Dec, 2014
- Operationalise various training schemes through ITIs and Vocational Training Providers (VTPs)

Sector Skill Councils (SSCs): In order to ensure that skill development efforts being made by all stakeholders in the system are in accordance with actual needs of industry, SSCs are being set up. SSCs are industry-led and industry-governed bodies, which will help link the requirements of industry with appropriately trained manpower.

SSCs will discharge the following functions:
- Identification of skill development needs including preparing a catalogue of types of skills, range and depth of skills to facilitate individuals to choose from them.
- Development of a sector skill development plan and maintain skill inventory.
- Determining skills/competency standards and qualifications and getting them notified as per NSQF.
- Standardization of affiliation, accreditation, examination and certification process in accordance with NSQF as determined by NSQC. May also conduct skill based assessment and certification for QP /NOS aligned training programmes.
- Participation in the setting up of affiliation, accreditation, examination and certification norms for their respective sectors.
- Plan and facilitate the execution of Training of Trainers along with NSDC and States.
- Promotion of academies of excellence.
- Will lay special emphasis on the skilling needs of ST/SC, differently abled and minority populations
Governance Structure And Financing

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• Plan and facilitate the execution of Training of Trainers along with NSDC and States.
• Promotion of academies of excellence.
• Will lay special emphasis on the skilling needs of ST/SC, differently abled and minority populations

Entrepreneurship Institutes: National Institute for Entrepreneurship and Small Business Development (NIESBUD) and Indian Institute of Entrepreneurship (IIE), Guwahati were transferred to MSDE on 2nd May, 2015. NIEBUD is a society engaged in Training, Consultancy, Research and Publication, in order to promote entrepreneurship. It is operating from an integrated campus in Noida, Uttar Pradesh, and its major activities include training, conducting research/evaluation studies, developing course curricula/syllabi for Entrepreneurship Development Programmes, undertaking development programmes in clusters, running an incubation centre etc. IIE’s objectives include promotion and development of entrepreneurship, conducting research, providing consultancy for entrepreneurship development, providing consultancy and monitoring service to MSMEs/ potential entrepreneurs and enhancing employability of participants. Further, a National Advisory Committee comprising of representatives/ members from all relevant Ministries/Departments, industry, academia, specialized institutions, funding agencies and young entrepreneurs engaged in promoting entrepreneurship, etc., will be set up to institutionalise entrepreneurship development in the country, as discussed in section 5.3.3 above.
Governance Structure And Financing

Financing

Public funds (comprised of funding by Central government, state government and grant based schemes) are finite and will not be able to cover the magnitude of the challenge of Skilling India, hence alternative sources of funds are required. Therefore, all stakeholders, the Government both at Centre and States, the enterprise – public and private, and the direct beneficiary – the individual, would contribute in mobilizing financial or in-kind resources for skill development. The success of the policy will depend upon the quantum of resources mobilised from all stakeholders.

National Skill Development Fund (NSDF) has been set up by Government of India with the objective of encouraging skill development in the country. A public Trust set up by Government of India is the custodian of the Fund. The Fund acts as a receptacle for all donations, contribution in cash or kind from all Contributors (including Government, multilateral organizations, corporations etc) for furtherance of the objectives of the Fund.

To channelize the interest of a plethora of organisations to participate in the mission of Skill India, a strategic vehicle to create a multiplier effect on skilling has been devised. A ‘Resource Optimization for Skilling at Scale Platform’ has been proposed by the Government to act as a demand-responsive and flexible vehicle to tackle the issues of skills shortages through skill development, job creation and placement at scale. It will serve as the aggregator vehicle for pooling the funds of multilateral agencies, companies, foundations, NGOs and individuals for skilling interventions by leveraging existing infrastructure and resources. The platform will also be subjected to timely audits to ensure that the contributions are used for the intended purpose.

To attract funds from industry, companies will be encouraged to spend at least 25% of their Corporate Social Responsibility (CSR) funds on skill development initiatives directly or through NSDF. Further, industry should earmark at least 2% of its payroll bill (including for contract labour) for skill development initiatives in their respective sectors. These funds can be channelized for skill development activities either through respective SSCs or through NSDF.

All Government schemes across sectors will be encouraged to apportion a certain percentage (10%) of the scheme budget towards skilling of human resources in local regions in the required sector. These funds could be used for implementation directly or be routed through NSDF. Government may consider other options including cess etc. to raise funds for meeting the requirements of this sector.

End user funding through a basic fee paying model will also be a key medium for funding training activities. However, the Government believes that the inability to pay training costs should not stop any desirous citizen in the country from acquiring any certified skill training. The government will promote grant of scholarships, rewards and Skill Vouchers (SV) for funding of training costs as already discussed in section 4.7.5. It will also be ensured that for all government schemes, Direct Benefit Transfer (DBT) will be used as a mechanism for payment disbursement.

A Credit Guarantee Fund for skill development and a ‘National Credit Guarantee Trustee Company’ (NCGTC) has been set up to support the initiative of loans for the purpose of skilling and will be used to leverage credit financing in the skill landscape. It will be further expanded to ensure greater outreach and access to all citizens. Similarly, a Credit Guarantee Fund for Entrepreneurship Development worth Rs. 3000 Crore per year has already been initiated under Prime Minister MUDRA Yojna through NCGTC.
Governance Structure And Financing

Financing

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Monitoring and Evaluation

The National Policy for Skill Development and Entrepreneurship has been structured as an outcome oriented policy. It is therefore desirable that there should be regular monitoring and evaluation of the initiatives to ensure that best practices can be scaled and corrective measures can be introduced. The main idea of having a robust monitoring and evaluation mechanism is to ensure successful implementation of the policy initiatives.

Government desires to set up a ‘Policy Implementation Unit’ (PIU) so as to review the implementation and progress of the various initiatives under this policy. The PIU will be housed in MSDE with Secretary as the Chairperson and representation from NITI Aayog. For the smooth functioning of the PIU, it will also ensure constant consultation with stakeholders to get feedback so as to enable improvements, if required.

The PIU will perform the following functions:

- List all the action points as mentioned in the policy on which further action is required
- Identify all the agencies involved and map the actionable points to the responsible agency
- To coordinate with all the agencies involved and help them devise a draft outline as well as timelines for the implementation of the initiatives assigned to them

Impact Assessment: For the purpose of undertaking impact assessment, annual as well as five year targets will be set for each stakeholder by the PIU. Impact assessment will be undertaken to ensure that the targets are met well within the time frame. The stakeholders will also be subject to a quarterly review. For the purpose of impact assessment, the following monitoring indicators, amongst others, are prescribed:

- Number/registrations of youth interested in skilling
- Number of youth registered in training programmes
- Number of youth assessed and certified by regulatory authorities
- Placement rate of skilled trainees
- Number of accredited/affiliated training providers/centres
- Number of certified trainers, sector-wise
- Number of certified assessors, sector-wise
- Number of job roles for which QPs and NOS have been developed
- Existing public infrastructure leveraged for training
- Number of skilled persons engaged in overseas employment
- Reduction in sectoral demand and supply gap
- Amount of private funds mobilised for encouraging skill development and entrepreneurship
- Percentage of socially and geographically disadvantaged groups enrolled in training programmes
- Percentage of skilled youth that are self employed
- Infrastructure dedicated for entrepreneurship support
- Number of schools running skills and entrepreneurship courses
- Percentage of socially and geographically disadvantaged groups engaged in self employment

With the help of the PIU, it will be easier to monitor the implementation of the policy initiatives and take corrective measures in case of non-compliance. A mid-term review of the policy will be undertaken based on impact assessment by a third party. The policy can be considered for review after five years, based on learnings from implementation of the policy.
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- Identify all the agencies involved and map the actionable points to the responsible agency
- To coordinate with all the agencies involved and help them devise a draft outline as well as timelines for the implementation of the initiatives assigned to them
- Timelines that are explicitly mentioned in the policy for certain initiatives will supersede over other timelines
- To act as a coordinating body for all the implementing agencies and support them to enhance their efficiency
- The PIU will also conduct monthly review of the action points and nudge them if the progress is not as expected.

The PIU will be made responsible to the NSDM. It will present its reports, findings and the way forward to the Steering Committee of the Mission every quarter. The PIU will be the main body overlooking the implementation of policy.

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## Table 1: Break Up of Incremental Requirement Across Sectors

<table>
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<td>14.88</td>
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<td>10.06</td>
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<tr>
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<td>31.13</td>
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<td>7.39</td>
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<td>17</td>
<td>Security</td>
<td>7</td>
<td>11.83</td>
<td>4.83</td>
</tr>
<tr>
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<td>7</td>
<td>11.83</td>
<td>4.83</td>
</tr>
<tr>
<td>18</td>
<td>Agriculture</td>
<td>240.4</td>
<td>215.6</td>
<td>(24.8)</td>
</tr>
</tbody>
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### Table 1: Incremental Human Resource requirements across states (2013-2022)

<table>
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<tbody>
<tr>
<td>19</td>
<td>Education/ skill development</td>
<td>13.02</td>
<td>17.31</td>
<td>4.29</td>
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<td>20</td>
<td>Transportation and Logistics</td>
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<td>Electronic and IT Hardware</td>
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<td>8.94</td>
<td>4.61</td>
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<td>22</td>
<td>Pharma and Life Sciences</td>
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<td>3.58</td>
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<td>BFSI</td>
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<td>24</td>
<td>Retail</td>
<td>38.6</td>
<td>55.95</td>
<td>17.35</td>
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<td></td>
<td><strong>Grand Total</strong></td>
<td><strong>461.1</strong></td>
<td><strong>581.89</strong></td>
<td><strong>120.79</strong></td>
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</table>

#### Removal of Duplications in Retail Sector

To make the individual reports as actual representation of the sectors requirement, the below projections have been counted in both the standalone retail sector and their respective larger sectors. To avoid the double counting in terms of the total requirements, the component has been removed from the retail segment.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Retail segment of Auto and Auto Components</td>
<td>1.5</td>
<td>1.95</td>
<td>0.45</td>
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<tr>
<td>2</td>
<td>Retail segment of Gems &amp; Jewellery</td>
<td>1.5</td>
<td>3.14</td>
<td>1.64</td>
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<tr>
<td>3</td>
<td>Retail segment of Food Services</td>
<td>4.6</td>
<td>10.49</td>
<td>5.89</td>
</tr>
<tr>
<td>4</td>
<td>Retail segment of Furniture and Furnishing</td>
<td>0.29</td>
<td>0.61</td>
<td>0.32</td>
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<tr>
<td>5</td>
<td>Retail segment of Electronics &amp; IT Hardware</td>
<td>1.58</td>
<td>3.34</td>
<td>1.76</td>
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<tr>
<td>6</td>
<td>Retail segment of Pharma and Life Sciences</td>
<td>0.9</td>
<td>1.9</td>
<td>1</td>
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<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>10.37</strong></td>
<td><strong>21.43</strong></td>
<td><strong>11.06</strong></td>
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<td></td>
<td><strong>Grand Total of the Requirement (After removing duplication)</strong></td>
<td><strong>450.73</strong></td>
<td><strong>560.46</strong></td>
<td><strong>109.73</strong></td>
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### Table 2: Incremental Human Resource requirements across states (2013-22)

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<th>State</th>
<th>Incremental HR Requirements</th>
<th>Total 2012-22</th>
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<tr>
<td>Arunachal Pradesh</td>
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<tr>
<td>Assam</td>
<td>1234357</td>
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<td>Chhattisgarh</td>
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<td></td>
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<tr>
<td>Delhi</td>
<td>6341921</td>
<td></td>
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<tr>
<td>Goa</td>
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<td></td>
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<tr>
<td>Gujarat</td>
<td>5756711</td>
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<td>Haryana</td>
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<td>Haryana</td>
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<td>Himachal</td>
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<td>Jammu and Kashmir</td>
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<td>Jharkhand</td>
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<td>Karnataka</td>
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<td>Maharashtra</td>
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<tr>
<td>Manipur</td>
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<td>Meghalaya</td>
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<td>Tripura</td>
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<tr>
<td>West Bengal</td>
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<td>Grand Total</td>
<td>120334478</td>
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</table>
Estimated requirement for skilling by 2022

Part A:

1. This part is an estimation of total existing workforce to be trained by 2022 in India. This estimation is based on NSSO and CENSUS data. NSS 66th and NSS 68th round data is used to calculate the existing workforce in Indian economy and workforce with formal vocation training within it. We have also assumed that people with higher education are always not interested in formal VET. So, from the entire calculation, the people with higher education without VET have been kept out of purview. We have made calculation for all the age groups in the workforce.

<table>
<thead>
<tr>
<th>Workforce</th>
<th>Time Period</th>
<th>For All Age Groups &amp; for All the Education categories</th>
<th>For All Age Groups and except higher education without VET category</th>
<th>Proportion of workforce with Higher education without VET</th>
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<td>66th Round</td>
<td>1st January, 2010</td>
<td>463.2</td>
<td>433.9</td>
<td>6.33%</td>
</tr>
<tr>
<td>68th Round</td>
<td>1st January, 2012</td>
<td>472.9</td>
<td>440.5</td>
<td>6.85%</td>
</tr>
<tr>
<td>Estimated based on linear trend</td>
<td>1st January, 2015</td>
<td>487</td>
<td>450.4</td>
<td>7.52%</td>
</tr>
</tbody>
</table>

2. We further calculate the proportion of manpower within the workforce who has formal VET training. We observe the following -

Total formal VET trained manpower from the workforce (after excluding the higher education without VET category), we observe that in 68th round the proportion of workforce who have formal VET is 3.61%. Similarly under 66th round the proportion of workforce who have VET is 2.42%. In 2 years time, the percentage growth of VET trained manpower in the workforce is (3.61 - 2.42)% = 1.19% Assuming a linear growth, we could expect that in 2015, the percentage of labor force that will have VET training is 3.61 +.6*3 =5.4%

3. We could include the declining trend in the participation in agricultural sector.

   In 61st Round – the participation was 56.14% (2004-05)
   In 66th Round – the participation was 51.6% (2009-10)
   In 68th Round – the participation was 47.04% (2011-12)

If we take the whole period of 2005 to 2012 for participation in agricultural sector, the annual decline figure will be = 1.3%. So in 2015, the figure for agricultural participation is estimated at (47 – 4) = 43%
4. Calculation of Skilled Manpower Requirement for the workforce in 2015

<table>
<thead>
<tr>
<th>Total Workforce without higher education(In Million)</th>
<th>450.4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Formal Skilled</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>% of WF*</td>
<td>Nos</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>2011-12</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Farm</td>
<td>193.672</td>
</tr>
<tr>
<td>non-farm</td>
<td>256.728</td>
</tr>
</tbody>
</table>

Total need for Skilling, re-skilling and up-skilling of existing workforce 298.25

The workforce has been divided in farm and non-farm sector based on the calculation discussed above. Share of agricultural sector in 2015 is likely to be 43% and share of non-agricultural sector is likely to be 57%. Further an approximation has been used that both in agricultural sector and in non-agricultural sector – we will have same proportion of formally skilled manpower. Based on the analysis in para 2 above, proportion of workforce with formal VET in 2015 is 5.4%. The absolute figure for agricultural and non-agricultural sector turns out to be 10.46 Million and 13.86 Million.

5. In these two respective sectors – we have remaining manpower to be trained is 183.21 Million and 242.86 Million. Assuming that we are going to skill (RPL, reskilling and upskilling) workforce with age below 45 years (or 70% of the labor force) – we obtain 128.3 Million in farm sector and 170 Million to be trained in non-farm sector. Altogether we will have to skill 298.3 million of the existing workforce.

Part B: Skilling the newly entrant labor force (2015 to 2022)

6. Apart from skilling the existing workforce without formal VET, we also need to skill manpower who would be fresh candidates in the work force. For this we calculate the fresh entrants in the labor force. Of this labor force, we again exclude the manpower that is estimated to move for higher education without VET based on proportions found in 68th NSS round.

We calculate fresh entrants in the labor force in the following way.

<table>
<thead>
<tr>
<th>(in millions)</th>
<th>male</th>
<th>female</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population in 0-14 year age group as per 2011 census</td>
<td>194</td>
<td>172</td>
<td>366</td>
</tr>
<tr>
<td>Assuming even distribution and zero morality, average entry in workforce age group per year</td>
<td>13.86</td>
<td>12.29</td>
<td>26.14</td>
</tr>
<tr>
<td>Estimated LPR</td>
<td>90%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated annual entry in workforce</td>
<td>12.47</td>
<td>3.69</td>
<td>16.16</td>
</tr>
<tr>
<td>Proportion going the Higher education route, at 2015 levels (7.5%)</td>
<td>0.94</td>
<td>0.28</td>
<td>1.21</td>
</tr>
<tr>
<td>Estimated annual entry in workforce net of higher education</td>
<td>11.54</td>
<td>3.41</td>
<td>14.95</td>
</tr>
<tr>
<td>Total fresh entrants between 2015-22 requireing skill/ VET</td>
<td>80.75</td>
<td>23.87</td>
<td>104.62</td>
</tr>
</tbody>
</table>

7By Training we mean - RPL, Reskilling, Upskilling as well as fresh training
Part C:

7. It is thus evident that the total need for skilling in the country is as below:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) RPL, reskilling, upskilling and skilling of the existing workforce especially below 45 years of age</td>
<td>298.25</td>
</tr>
<tr>
<td>b) Skilling for new entrants over 2015-22</td>
<td>104.62</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>402.87</strong></td>
</tr>
</tbody>
</table>
7. It is thus evident that the total need for skilling in the country is as below:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Need (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RPL, reskilling, upskilling and skilling of the existing workforce especially below 45 years of age</td>
<td>298.25</td>
</tr>
<tr>
<td>Skilling for new entrants over 2015-22</td>
<td>104.62</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>402.87</strong></td>
</tr>
</tbody>
</table>