REPORT OF THE COMMITTEE FOR
RATIONALIZATION & OPTIMIZATION OF THE FUNCTIONING OF
THE SECTOR SKILL COUNCILS

DECEMBER, 2016

VOLUME – I

REPORT

Constituted by
MINISTRY OF SKILL DEVELOPMENT AND ENTREPRENEURSHIP
GOVERNMENT OF INDIA
NEW DELHI
REPORT OF THE COMMITTEE
FOR RATIONALIZATION & OPTIMIZATION OF THE FUNCTIONING OF
THE SECTOR SKILL COUNCILS
December, 2016

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Rarely comes a time in the life of a nation which transforms it forever. This time came in India in 1980s in the shape of a demographic dividend when we started having a large young population and economy started growing at a rate of about 5.5%. Economic reforms started in 1991, in the wake of an economic crisis. It was time when we should have transformed our Vocational Education and Training System but we did not do it. The onset of millennium brought new challenges and opportunities when we started growing at the rate of 7-8%. The demand for skilled manpower from the economy started growing. In 2004-05, we started modernization of 100 ITIs at a cost of 160 crore. In 2007-08 the World Bank extended a credit assistance of US$280 million, the largest ever by the multilateral body to any country for modernization of another 400 ITIs. The same year the government decided to grant an interest free loan of Rs 3540 crore to the remaining 1395 government ITIs. The demand for skilled manpower from the industry was so big that government decided to impart short-term training under Skills Development Initiative Scheme the same year. In order to mobilize the private sector to participate in skill development, a public private partnership company, National Skill Development Corporation was created in 2008. The Corporation was supposed to mobilize resources to assist the private sector industry to create training infrastructure and provided training to large number of youth. A new governance structure was created- Prime Minister National Council on Skill Development under the chairmanship of the Prime Minister, which was conceived as an apex institution for policy direction and review. A National Skill Development Coordination Board was setup under the chairmanship of Deputy Chairman, Planning Commission for periodical review of the skill development efforts.

It was probably for the first time that the Prime Minister of a country was monitoring the skill development efforts at his level. The number of ITIs grew from 5114 in 2007-08 to 10344 in 2011-12 during the eleventh five-year plan. The Prime Minister announced setting up of 1500 ITIs and 50000 skill development centres on 15th Aug 2007 during his Independence Day speech. But what was being done was all incremental. In order to meet the new challenges successfully, what was required was transformational. We focused on monitoring rather than transforming the system. Had we done that, situation would have been different. China started in 1978 and set up large number of Vocational Schools and industry was closely involved in skill development. However, we did not critically look at our system and effect structural reforms. SSCs started setting up in 2010-11 but they created more confusion and mess than solving the problem.
The new government came in 2014 and a new Ministry was setup the same year. In order to look at Rationalization of the Sector Skill Councils and suggest reforms in the Vocational Education and Training System, the Ministry of Skill Development and Entrepreneurship (MSDE) appointed this Committee. The Committee has gone about its mandate systematically and looked at the Vocational Education and Training System holistically and has come up with recommendations of far reaching consequences.

We have used the term Vocational Education and Training together, though the mandate of the MSDE is vocational training. But we strongly believe that Education and Training go hand in hand together. In most of the developed societies, training is under the Ministries of Education. But in India, they have remained separate, probably, because of the social stratification, which places premium on education and stigma on skills. Though the academicians have been trying to mainstream training with education, it could not happen in the last more than 150 years. The present efforts also appear to be half hearted. But MSDE and MHRD need to work closely together as the future of the country is at stake.

Skill Development cannot happen without developing credible, sound, aspirational, national system, which is quality assured and internationally compatible with the close involvement of the industry. We need to mobilize finances from all possible sources to make it happen. It must become a national priority. We believe that it is doable. We need to concentrate on quality of training and focus on twin objectives, to meet industry skill needs and employment to youth. There is no need to chase numbers.

The country has about 20-25 years to realize the demographic dividend. We have suggested a framework, which can make it happen. If we take it up as a national goal we can transform India into a developed country by 2040 and make it the “Skills capital of the world”, as envisioned by the Prime Minister of India.
ACKNOWLEDGEMENTS

This work has been a monumental task and would not have been possible had the Ministry of Skill Development and Entrepreneurship not appointed this Committee. One morning the Secretary, MSDE rang me up and innocently asked whether I can spare some time to study the Sector Skill Councils and suggest rationalization. I could not estimate the amount of work it will require but I agreed as Skill Development has been my passion and will continue to be for life. The task seemed to be quite daunting but we all surveyed the international literature on vocational education and training systems and SSCs, had consultations with all the stakeholders and identified issues. We had mammoth sessions with practitioners and came out with the recommendations which are contained in the Report.

We would like to thank Ministry of Skill Development and Entrepreneurship for giving us this opportunity to go deeper into the subject, interacting with all the stakeholders and coming up with recommendations of far reaching consequences for transforming the country. We would also like to thank National Skill Development Agency for providing office space and logistics support. All the consultations have taken place in NSDA and they have successfully been able to organize meetings with all stakeholders and provide all logistic support.

We would like to also acknowledge support from NSDC who provided all documents and information for our analysis and research work. Their representatives attended various consultations. We also interacted with the senior officials of NSDC who made oral submissions and power points presentations on different subjects.

We would also like to thank Directorate General of Employment and Directorate General of Training who were always willing to provide relevant data for our analysis.

We had detailed consultations with all the 40 SSCs. It was great pleasure interacting with them. The CEOs participated in all the consultations. However, in some of them the Chairpersons and other senior officials also participated. Most of the discussions were free and frank without inhibitions, which helped us in understanding the issues clearly.

We would also like to thank representatives from Central Ministries/Departments, State Government, Employers, Vocational Training Providers, Industry Associations, members from the Central Trade Unions. They all contributed richly to the discussions and many of them also made written submissions.

Our special gratitude goes to Director General, Central Statistical Office and Former Director General, CSO, Ms Amarjeet Kaur who worked with us continuously for a couple of days on National Industrial Classification and helped in classification of SSCs into relevant sectors.
We are deeply indebted to Professor Johnny Sung, Institute for Adult Learning, Singapore who did monumental work on Sector Skill Councils. Many of the ideas owe their origin in Prof Sung’s work. I had an opportunity to have detailed discussion when we participated in a regional conference at Seoul organized by ILO and HRD Korea in October, 2016. Interaction with him has been a very enriching experience. We also would like to thank our German and European experts with whom we had very detailed discussion on various aspects of VET and SSCs.

Finally, we would place on record our sincere appreciation to the research team attached with the Committee, Ms Nidhi Gautam, Ms Tanavi Singh, Mr N Ramesh Babu, Mr Ritesh Raj Srivastava and Ms Ankita Verma. We would also like to thank our assistants Mr Ramesh Kumar Yadav, Mr Ankur Khatra, Mr Anand Gautam, Mr OP Sharma, Mr Arvind Rawal, Ms Hema Sharma and Mr Ravinder Singh.

A special word of appreciation should go to our consultant Mr Ashutosh Pratap Singh who agreed to join the Committee and helped us in collecting, compiling and analyzing voluminous data received from NSDC and various Sector Skill Councils. His analysis has been very useful in arriving at conclusions by the Committee. He also doubled up as a typist as the Committee did not have a proper secretarial support. It would have been difficult to complete the Report on time without his support.

We hope that this report helps in realizing the vision of the Prime Minister to make India as the “Skills capital of the world.”
Introduction

The Government of India, Ministry of Skill Development and Entrepreneurship vide its order No.B-12017/02/2015-SDE dated 18 May 2016 constituted a Review Committee for Rationalisation and Optimization of the Functioning of the Sector Skill Councils. The composition of the Committee is as follows:-

1. Shri Sharda Prasad, Chairman
   Former Director General,
   Directorate General of Employment and Training,
   Ministry of Labour & Employment,
   Government of India

2. Professor Santosh Mehrotra, Member
   Former Director General,
   Institute of Applied Manpower Research,
   Government of India

3. Shri RL Singh, Member
   Former Deputy Director General,
   Directorate General of Employment and Training,
   Ministry of Labour and Employment,
   Government of India

4. Professor Ashoka Chandra, Member
   Former Special Secretary,
   Ministry of Human Resource Development,
   Government of India

5. Shri Jawaid Ashraf, Member
   Executive Vice-President, HR,
   JCB, Ballabhgarh-121004

6. Shri Kuldeep Goel, Member
   Vice President – Corporate Affairs,
   Larsen & Toubro, New Delhi

7. Dr. Sunita Chhibba, Member Secretary
   Director General,
   National Skill Development Agency (NSDA),
   Government of India

2. The Committee was authorised to co-opt any member or members including State Secretaries in-charge of the State Skill Development Missions or invite experts from time to time as may be needed for finalising its recommendations. Accordingly, Shri R.L. Singh, former Deputy Director General, Directorate General of Employment and Training who has done significant work in development of course curricula, semesterisation of vocational courses under National
Council for Vocational Training and National Skills Qualification Framework (NSQF), was co-opted as an expert Member.

3. The Terms of Reference of the Committee are as follows:
   i. Review of the functions of SSCs;
   ii. Convergence and Synergy for SSCs;
   iii. Rationalisation of SSCs;
   iv. Laying down the domain area of each SSC; and
   v. Any other relevant issue considered essential for optimal functioning of SSCs.

The order further says that the Sector Skill Councils (SSCs) are industry-led and industry-governed bodies which have been mandated to ensure that skill development efforts being made by all the stake holders are in accordance with the actual needs of the industry. Presently, the National Skill Development Corporation (NSDC) has approved formation of 40 SSCs in different sectors. In order to ensure convergence and optimal functioning of the SSCs as per mandate given under the National Policy for Skill Development and Entrepreneurship, 2015, it has been decided to constitute a Committee to review the functioning of the SSCs and provide a road map for their harmonious growth so as to ensure effective development of skilling eco system in the country. The Committee, therefore, felt that though the focus of the review is the functioning of the Sector Skill Councils, it needs to look at the skill development system as a whole so that skill development efforts being made by all the stakeholders are in accordance with the actual needs of the industry. The Committee is also expected to provide a roadmap for harmonious growth of the SSCs which can ensure effective development of a sound skilling system in the country. A copy of the order is enclosed at Appendix-I.

4. Though no methodology has been suggested in the notification, keeping in view the vast mandate, the Committee decided to adopt the following approach in order to arrive at meaningful understanding of the issues:

   i) Undertake a detailed survey of the international literature available on Vocational Training systems and the Sector Skill Councils in different countries, particularly, United Kingdom, Australia, New Zealand, South Africa, China, Brazil, Japan, South Korea, Germany and Switzerland. A list of documents studied is enclosed at Appendix-II.
ii) Studied the National Policy on Skill Development, 2009 and National Policy for Skill Development and Entrepreneurship, 2015. Relevant extracts of both policies relating to SSCs are placed at Appendix III-A and III-B.

iii) Detailed discussions about the sectoral distribution of economy including workforce employed in different sectors and their contribution to Gross Domestic Product were held with the Director General, Central Statistical Office and Deputy Director General, Directorate General of Employment, Ministry of Labour & Employment, Govt. of India on 3 August 2016. A copy of the issues discussed with them is enclosed as Appendix-IVA.

iv) A detailed consultation with the relevant Central Ministries and Departments engaged in skill development was done on 8 August 2016. A list of issues discussed with them is enclosed at Appendix-IV B.

v) A detailed discussion was held with the State Governments and Heads of State Skill Development Missions on 29 August 2016. A list of issues discussed with them is enclosed at Appendix-IV C.

vi) A detailed consultation with the selected Employers and Chambers of Commerce and Industry was held on 30 August 2016. A copy of the issues discussed with them is enclosed at Appendix-IV D.

vii) A detailed discussion was held with major Central Trade Unions on 28 September 2016. A copy of the issues discussed with them is enclosed at Appendix-IV E.

viii) A detailed discussion was held with selected Vocational Training Providers on 9 August 2016 & 5 September 2016. A list of issues discussed with them is enclosed at Appendix-IV F.

ix) A detailed discussion was held with the representatives of Labour Bureau and Directorate General of Employment on 24 August 2016. A list of issues discussed with them is enclosed at Appendix-IV G.

x) A detailed discussion was held with Deputy Director General, Training and Deputy Director General, Apprenticeship Training on 26 August 2016. A list of issues discussed with them is enclosed at Appendix-IV H and Appendix-IV I respectively.
xi) Detailed discussions were held with all the 40 Sector Skill Councils between 5 September 2016 and 24 October 2016. List of the officers who attended the meetings and the dates on which the discussion took place are placed at Appendix-IV J, and the issues discussed with them are enclosed at Appendix-IV K.

5. Four meetings of the Committee were held to decide the issues relating to staffing needs, logistic support, remit of the Committee, requirement of data and documents, research work, content of the report and chapterisation scheme. However, the full time Members of the Committee met and deliberated on a regular day-to-day basis and also had detailed individual consultations with many experts in the field of skill development and Sector Skill Councils. Detailed written inputs have also been obtained from National Skill Development Agency, National Skill Development Corporation, Sector Skill Councils, Directorate General of Training, Directorate General of Employment, Labour Bureau, Pandit Sunderlal Sharma Central Institute of Vocational Education, Bhopal, etc. Many Central Ministries and Departments, State Governments and Vocational Training providers have also given their written submissions.

6. As far as the structure of the report is concerned, it was decided by the Committee to look at the present status of Vocational Education and Training in the Country and analyse various schemes undertaken by different Ministries and Departments. The Committee also looked at the present framework of Sector Skill Councils, various issues facing them, analysed their functioning and devoted maximum time and space in deliberating and suggesting reforms to the present system of Sector Skill Councils. The Committee also studied some of the international best practices but considered only those aspects which could be adapted to suit Indian conditions and serve our purpose the best. The Committee also looked at skills development institutional framework and suggested various reforms in order to create a wholesome and effective skill development system which can meet the emerging needs of the 21st Century India and be internationally competitive. Two other important aspects which have been looked at in detail are Skills Standards and Financing of Skills which are very crucial for the success of any skill development system.

7. The Report has been organized in three volumes:
   i) Volume-I is the main report which contains ten chapters. The recommendations have been given at the end of each chapter. However, in order to put all the recommendations at one place, a Summary of key Recommendations has been given in Chapter 10.
   ii) Volume-II contains the Appendices organized chapter wise for ease of reference.
iii) Volume-III contains Mapping of National Industrial Classification, 2008 with National Classification of Occupations, 2015 with an objective to show what work has been done and what further needs to be done to align our National Standards with International Standards.
Chapter 1
Status of Vocational Education and Training in the Country

1.1 Setting the Context

1.1.1 The Prime Minister of India, Mr Narendra Modi, while launching the “Skill India Mission” on 15 July 2015, said, “If China is like a manufacturing factory of the world, India should become the ‘human resource capital’ of the world. That should be our target and we should lay emphasis on that.” He also said that India has the potential to provide a workforce of about 4-5 crore to the world if the capabilities of the countrymen are honed through proper and dynamic training in skills. Noting that the world and technology is changing fast, ‘we need to have futuristic vision and prepare plans for the next ten years’. He further said that “while the Indian IITs made a name for themselves globally in the last century, it is the turn of ITIs to do the same in this century.”

1.1.2 The Ministry of Skill Development and Entrepreneurship appointed this Committee at an opportune time to look at the functioning of Sector Skill Councils and Vocational Training System in the country holistically and suggest roadmap for future growth. This sector has been neglected for long despite its potential to drastically transform the country. The last such Committee, the “Training and Employment Service Committee” called Shiva Rao Committee was setup 64 years back in 1952 on the basis of which certain reforms were carried out in the administration of Employment Exchanges and Industrial Training Institutes. The Committee, therefore, has taken upon itself, the task in the same spirit to actualize the vision of the Prime Minister stated above. While looking at the system of Sector Skill Councils and Vocational Education and Training System, the Committee has adopted a transformational approach, not incremental; the effort has been to design systems which can effectively deliver rather than ad hoc short term patchwork; the focus has been on an intense partnership between the government and the industry; systems have been designed on international standards and emphasis has been laid on quality rather than chasing numbers; the models which have been designed suit Indian conditions and are scalable, replicable and financially sustainable. The Committee has also considered technology as the single most important game changer in a fast evolving world. At

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1 Prime Minister, Mr. Narendra Modi, on National Skills Day at Vigyan Bhawan on 15 July 2015
present, the work of skill development is spread over many Ministries/Departments/Organizations without following uniform norms and standards. Effort has been made to bring skill development at one place, ensure accountability, design systems on national norms and standards which are internationally compatible and wherever necessary, bringing in new legislation has been suggested to ensure effective implementation by all stakeholders.

1.2 Why is Skill Development so critical for India- the demographic dividend?

1.2.1 The country has been debating about demographic dividend for the last two decades. It will, therefore, be useful to know what demographic dividend means and why it is so crucial to impart skills to our youth. India is at an extremely critical juncture of its development-the demographic dividend – according to United Nation Population Fund (UNFPA) means- “the economic growth potential that can result from shifts in a population’s age structure, mainly when share of the working-age population (15 to 64) is larger than the non-working-age(14 & younger and 65 & older) share of the population.” 2 Before the dividend begins, the country is burdened with a high dependency ratio with a large and growing share of the population below the working age population of 15. Once the dividend period has passed, the share of the elderly population rises, who are no more working and hence to be provided with pension, health benefits, etc. The dividend lying in between these two periods is characterised by a low dependency ratio and high share of working age population. This demographic transition affects labour supply in two ways. First, there is an essentially mechanical effect, based on ageing of the baby-boom generation between the fall in mortality and consistency in fertility that accompanies a demographic transition. The number of people who would like to work, therefore, gets bigger, provided the labour market can absorb the large number of workers, per capita rises. Besides, as women in this new generation are themselves more likely to have been brought up in small families, they are more likely to be educated. This increases their productivity in the labour market, leading towards a stronger workforce and smaller families and production increases. Second, women are more likely to enter the workforce as family size declines. The demographic transition also encourages the growth of savings, thus improving country’s prospects for investments. The children and the old consume more than they produce, whereas working age people tend to have a higher level of economic output and also a higher level of savings. Finally, the demographic transition has significant effects on investment in human capital. The demographic transition begins with changes in mortality that results in a population that lives

2 Source: www.unfpa.org/demographic-dividend
longer and stays healthier. As life expectancy increases, parents are likely to choose to educate their children to more advanced levels. Healthier children, in turn, learn more. All these mechanisms are possible only when people are educated and skilled.

1.2.2 India’s demographic dividend began in the early 1980s and is expected to come to an end towards latter part of 2030s. India is, therefore, just beyond the midpoint of its dividend and this once in a life time opportunity for our nation is unlikely to last beyond another quarter of a century from now. We therefore, need to increase and sustain our GDP growth, reduce poverty, and enhance human capabilities of our people. Every year lost will never return in the life of a child or youth and in the next 25 years, India will be an ageing society. The West European and Japanese populations are already aging and their total populations have been declining. China is at the end of its demographic dividend and although it’s GDP has grown at a rate for three decades unprecedented in human history and succeeded in reducing the numbers of poor at the same time. However, they are already complaining that “Europe became rich before they became old but we have become old without having become rich.” India will face the same challenge in the next 25 years. We, therefore, need to grow at a very fast rate, which is possible only when our youth are educated and armed with skills which can transform the society in an ever changing technology-driven age. According to an analysis done by the US Department of Labour and Boston Consulting Group, there will be skilled man-power shortage of 56.5 million by 2020 while India will have a surplus of about 47 million\(^3\). India will therefore, have to put its act together, create a sound and quality driven national vocational education and training system which can not only meet its own domestic requirement fully but also can become the supplier of skilled man-power to the rest of the ageing and aged world. Otherwise, 25 years down the line, we will also lament that “we became old without having become rich.” The country, therefore, needs to design its strategy accordingly, immediately without any further loss of time.

1.2.3 In order to design a new system, we need to review what we have done in the last 70 years; which institutions and mechanisms have been setup; to what extent they have been able to deliver; what are the gaps; have there been any contextual changes; what are the current and future requirements and what needs to be done to realize the benefits of the demographic dividend and the vision of the Prime Minister to make India as the “Skills capital of the world” and transform it into a developed nation for each citizen. Accordingly, we have reviewed various vocational education and training programmes, organizations and their major achievements. In the next chapter, we have identified major issues and suggested steps for reforms.

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\(^3\) Planning Commission, XI Five Year Plan, Vol I, Para 5.24, Page 91
1.3 Historical Evolution of Vocational Training

The Directorate General of Resettlement & Employment (DGR&E), renamed as Directorate General of Employment & Training (DGE&T), was set up in 1945 for re-settling demobilised defence service personnel and discharged war workers in civilian life after World War II. After independence in 1947, the Directorate General was also called upon to handle the work relating to displaced persons from Pakistan. Subsequently, the scope of the Directorate General was extended to cover employment services to all categories of job seekers in early 1948 and training services to all civilians in 1950. The DGE&T, functioning as an attached office of the Ministry of Labour and Employment and was the sole organization providing vocational training in the country. However, the part of DGE&T dealing with Craftsman Training Scheme (CTS) and the Apprenticeship Training Scheme (ATS) was transferred to the newly created Ministry of Skill Development and Entrepreneurship (MSDE) on 16 April 2015 and is now known as Directorate General of Training (DGT). The DGT has the following 4 major vocational training schemes:

(i) Craftsman Training Scheme (CTS)
(ii) Apprenticeship Training Scheme (ATS)
(iii) Skill Development Initiative Scheme (SDIS)
(iv) Craftsman Instructor Training Scheme (CITS)

1.3.1 Craftsman Training Scheme

The Craftsman Training Scheme was introduced by the Government of India in the year 1950 to ensure a steady flow of skilled workers in different trades for the domestic industry, to raise quantitatively and qualitatively the industrial production by systematic training, to reduce unemployment among the educated youth by providing them employable skills, and to cultivate and nurture a technical and industrial attitude in the minds of younger generation. The scheme being the most important in the field of vocational training, has been shaping craftsmen to meet the existing as well as future manpower need through the vast network of ITIs spread over various States and Union Territories in the country. The CTS was initiated in 1950 by establishing 50 Industrial Training Institutes (ITIs) by the Central Government. However, the day-to-day administration of ITIs under the CTS was transferred to the State Governments and Union Territory Administrations with effect from 1956. But, the financial control of the ITIs in the States as well as Union Territory Administrations was transferred to them from 1 April 1969 as a result of the decision of National Development Council. The financial assistance was granted to them by the Central Government in the form of bulk grants in consultation with the Planning Commission and the Ministry of Finance, Government of India.
Though the CTS was started in 1950 with the setting up of a modest number of 50 ITIs, several new private ITIs were established in 1950s in Southern States, mostly in Kerala, Karnataka and Andhra Pradesh from where the trained craftsmen found placement in the Gulf countries. In the year 1980, there were 831 ITIs and the number of Institutes rose to 1887 in the year 1987. It was during this period that the private training institutes were distinguished from Government Training Institutes by naming them as Industrial Training Centres (ITCs) but there was no justification to distinguish between Government and private ITIs as they were running the same courses and following the same course curriculum, assessment and certification standards. Accordingly, this distinction was done away with and now all the Institutes are called Industrial Training Institutes with prefix "Government" in case they are owned by Governments and “Private” in case they are owned by the private sector. At the end of 2015-16, there were 12,412 ITIs - 2,051 Government and 10,361 private and the total seating capacity of these ITIs is 25,51,330 - 6,93,925 Government and 18,57,405 private. State-wise presence of number of ITIs with their seating capacity is attached at Appendix-V.

These ITIs conduct courses of 1-year to 2-year durations. The entry qualification is Class X or XII in the 10+2 system of education. However, there are 11 courses where the entry qualification is 8th standard. Under the ITIs, there are 73 engineering and 48 non-engineering courses. In addition, they run five trades for the visually impaired; the list of these courses is attached at Appendix-VI.

1.3.1.3 Women Training
In order to provide impetus to the vocational training of women and pursuing long term policy related to women’s vocational training in the country, the project for establishment of National/Regional Vocational Training Institutes for women was started in 1977. At present, there is one National Vocation Training Institute (NVTI) and 15 Regional Vocational Training Institutes (RVTIs) for women in the country. While NVTI is located at Noida, 15 RVTIs are located in Mumbai, Bangalore, Trivandrum, Panipat, Kolkata, Tura, Allahabad, Indore, Vadodara, Jaipur, Shimla, Rajpura, Trichy, Patna and Agartala. These Institutes conduct courses in Secretarial Practice (English), Basic Cosmetology, Dress Making, Fruit & Vegetable Processing, Electronic Mechanic, Computer Operator and Programming Assistant, Architectural Draughtsmanship, Desk Top Publishing, Front Office Assistant, Stenography and Secretarial Assistant (Hindi), Fashion Design Technology, Interior Decoration and Designing, Food Production (General), Computer Aided Embroidery and Designing, Travel and Tour Assistant, Food and Beverages Service Assistant, Computer Hardware and Networking
Maintenance, Spa Therapy and Surface Ornamentation Techniques. A list of courses and seats available in each NVTI/RVTI are attached at Appendix-VII. These NVTI/RVTIs also run instructor training course. The list of such courses and seats available are at Appendix-VIII.

1.3.1.4 Advanced Vocational Training Scheme
In order to upgrade and update the skills of serving industrial workers, an Advanced Vocational Training Scheme (AVTS) has been in operation since 1977. The objectives of the scheme are to upgrade and update the skills of serving industrial workers specialised in their field of work. The duration of training ranges from 1 to 6 weeks and is imparted through six Advanced Training Institutes (ATIs) under the DGT and 16 Industrial Training Institutes of the 15 State Governments. The list of trades available in 6 ATIs is attached at Appendix-IX.

1.3.2 Apprenticeship Training Scheme (ATS)
It is well recognised that training imparted in an institution alone is not sufficient for acquisition of skills and needs to be supplemented by actual hands-on in-plant training in the actual work place environment. Accordingly, a National Apprenticeship Training Scheme (ATS) was started on voluntary basis in 1959. But when the desired result was not achieved from the voluntary Apprenticeship Scheme, it was decided to modify the existing scheme and implement it with the backing of legislation. The Apprentices Act was enacted in 1961 and came into force on 1 March 1962. Initially, the Act envisaged the Apprenticeship Training of Trade Apprentices only but it was amended in 1973 and 1986 to include Apprenticeship Training of graduates, technicians and technicians (vocational) apprentices respectively under its purview.

1.3.2.1 The minimum age prescribed for entry into the Apprentice Training Scheme is 14 years and the entry qualification varies from class 8th pass to 12th class pass under the 10+2 system. The period of training ranges from 6 months to 4 years. The training comprises basic training and practical training followed by related instructions as per prescribed syllabus for each trade. Basic training and related instructions are conducted in Basic Training Centres (BTCs) or at Related Instructions Centres (RICs) set up within the establishments or in a BTC or RIC set up by the Government.

1.3.2.2 There are 260 designated trades under the ATS in which 30,165 establishments conduct training of 2.3 lakh trade apprentices out of which 36,000 apprentices are engaged in Central Public Sector Undertakings/Central Government and 1.94 lakh in the State Public Sector
Undertaking/ State Government Departments and Private Sector. The list of designated trades under the Apprentices Act, 1961 along with duration of their training is attached at Appendix- X.

1.3.2.3 The rates of stipend payable per month to the trade apprentices have been enhanced by a gazette notification dated 22 September, 2014. The minimum rate of stipend is as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Stipend</th>
</tr>
</thead>
<tbody>
<tr>
<td>First year</td>
<td>70% of minimum wage of semi-skilled workers notified by the respective State or Union territory.</td>
</tr>
<tr>
<td>Second year</td>
<td>80% of minimum wage of semi-skilled workers notified by the respective State or Union territory.</td>
</tr>
<tr>
<td>Third and fourth year</td>
<td>90% of minimum wage of semi-skilled workers notified by the respective State or Union territory.</td>
</tr>
</tbody>
</table>

1.3.2.4 Training of Graduates, Technicians and Technicians (Vocational) Apprentices

The Department of Higher Education in the Ministry of Human Resource Development is responsible for implementation of the Act in respect of graduates, technicians and technicians (vocational) apprentices. 126 special subject fields have been designated for the category of graduate and technician apprentices. A list of these fields is at Appendix-XI. 128 special fields have been designated for the category of technicians (vocational) apprentices. A list of these fields is at Appendix-XII. The period of post qualification training for this category is one year. As per the latest available information, a total of 0.83 lakh apprentices were engaged under Graduate, Technicians and Technician (vocational) Apprenticeship Scheme.

1.3.2.5 The rates of stipend for graduates, technicians and technicians (vocational) apprentices are Rs.4984/- per month, Rs.3542/- per month and Rs.2758/- per month respectively with effect from 23 December, 2014. Expenditure on stipend for these categories is shared equally between the Employers and the Central Government.

1.3.2.6 Amendments in the Apprentices Act, 1961

In order to help large number of apprentices, some amendments have been made in the Apprentices Act, 1961 in December 2014 and the Apprenticeship Rules, 1992 have also been amended with effect from 18 June 2016.

The key amendments are:

(i) The system of trade wise ratio engagement of apprentices has been substituted with a band of 2.5% to 10% of total strength of establishment.

(ii) Establishments can also now engage apprentices in optional trades which are not designated with the discretion of entry level qualification and syllabus.
(iii) Scope of Apprenticeship Training has been extended also to non-engineering occupations.
(iv) Establishments have been permitted to outsource basic training in an institute of their choice.
(v) Aggregation of apprentices can now be done through Third Party Agency (TPA).
(vi) The procedural simplification has been provided through the following measures:-

(a) Submission of returns and other information through online portal.
(b) Submission of apprenticeship contract through portal and its time bound approval.
(c) Penalties are imposed now in the form of fine.
(d) Establishments operating in four or more states would now be interfacing with the Central Government authorities

1.3.2.7 National Apprenticeship Promotion Scheme (NAPS)

The National Policy on Skill Development and Entrepreneurship 2015, launched by the Hon’ble Prime Minister on 15 July, 2015, focuses on apprenticeship as one of the key programmes for creating skilled manpower in India. The policy proposes to pro-actively work with industry including MSME sector to facilitate a tenfold increase in apprenticeship opportunities in the country by 2020. Accordingly, Government has launched a National Apprenticeship Promotion Scheme (NAPS). The scheme provides for:

(i) Sharing of 25% of prescribed stipend subject to a maximum of Rs.1500/- per month per apprentice to all apprentices with the employers.
(ii) Sharing of cost of basic training with Basic Training Providers (BTP).

1.3.2.7.1 The main objective of the Scheme is to promote apprenticeship training and to increase the engagement of apprentices from present 2.3 lakh to 50 lakh cumulatively by 2020. Sharing of basic training cost in respect of apprentices who come directly to apprenticeship training without any formal trade training. Basic training cost will be limited to Rs.7500/- for a maximum of 500 hours/3 months. The Scheme will cover all categories of apprentices except the Graduate, Technician and Technician (Vocational) apprentices which are covered by the scheme administered by Ministry of Human Resource Development.

1.3.2.7.2 Target under the scheme shall be 5 lakh apprentices in 2016-17, 10 lakh apprentices in 2017-18, 15 lakh apprentices in 2018-19 and 20 lakh apprentices in 2019-20. The engagement of fresher apprentices shall be 20% of total annual target.
1.3.2.7.3 Regional Directorates of Apprenticeship Training (RDATs) under the control of Directorate General of Training will act as implementing agencies in their regions for Central Public Sector Undertakings and establishments operating their businesses in 4 or more States.

1.3.2.7.4 State Apprenticeship Advisers (SAAs) will act as implementing agencies for State Public Sector Undertakings and private establishments under their jurisdictions.

1.3.3 **Skill Development Initiative Scheme (SDIS)**

Skill Development Initiative Scheme was launched in May 2007 in order to provide skills to youth, particularly, the early school leavers, who face entry barriers because of lack of required educational qualification and released child labour through short term modular courses. The objective of the scheme was to meet the growing demand of skilled manpower, particularly, in the Services Sector in view of the GDP growing at a phenomenal rate of 8 to 9% per annum. The training in the Services Sector trades does not require huge investments in tools, equipments and machinery and the persons are required to do entry level jobs for about 4 to 5 years. The objective was to impart skills to youth so that they can enter into the job market and after sometime, they may acquire higher skills through advanced modules. This scheme was supposed to provide skilled manpower at a faster rate without joining two year – long courses under the Craftsmen Training Scheme and provide employment opportunities to a large number of youth entering the job market. It was also provided that skills of existing workers, particularly, those working in the unorganised sector will be certified through recognition of prior learning (RPL). However, it was not a substitute for long term craftsmen training scheme courses run through the network of Industrial Training Institutes in the country. It was also felt necessary to run these courses as not many of the ITIs run courses under the services sector.

1.3.3.1 During the 11\(^{th}\) Five Year Plan period, a total of 1632 short term modular courses in large number of sectors were formulated. A total of 13.67 lakh persons were trained and an amount of Rs.407 crores was utilised against an approved outlay of Rs.500 crores. Subsequently the number of modules was consolidated and reduced to 632. The training has been provided through a network of 13,700 vocational training providers throughout the country. Under the Scheme, assessment is done by 180 independent Assessing Bodies. Scheme has been continued during the 12\(^{th}\) Five Year Plan period with some modifications and an outlay of Rs.2000 crore has been kept for the scheme during the 12\(^{th}\) Five Year Plan period. As per latest information available, about 29.20 lakh youth have been trained/tested under the scheme and an amount of Rs.750.36 crore has been utilised during XII Five Year Plan period and successful candidates have been awarded National Council for Vocational Training (NCVT) Certificates.
1.3.4 Crafts Instructor Training Scheme (CITS)

When the Government started running such large system of vocational training, it was felt necessary to set up institutions for training of instructors. Accordingly, the then Directorate General of Employment and Training started Crafts Instruction Training Scheme. The first Craft Instructor Training Institute was established in 1948. Subsequently, five more institutes namely, Central Training Institutes for Instructors, now called Advanced Training Institutes (ATI), were set up at Ludhiana, Kanpur, Howrah, Mumbai and Hyderabad in 1960.

1.3.4.1 Objective of the Crafts Instructors Training Scheme is to train instructors in the techniques of transferring hands-on-skills, in order to train semi-skilled/skilled manpower for industry. Structure of training programme is such that comprehensive training both, in skill development and training methodology, is imparted to the trainees.

1.3.4.2 Under the programme, instructors from Government and private ITIs and Training Centres established by industries under the Apprentices Act, 1961 are provided training in 29 Engineering trades.

1.3.4.3 In order to meet the growing demand of trained instructors, the then DGE&T started Instructor Training Programme in all its Central Institutes, namely, Model Industrial Training Institutes (MITI) at Haldwani, Calicut, Choudwar & Jodhpur; two Advanced Training Institutes for Electronics for Process Instrumentation (ATI-EPI) at Hyderabad and Dehradun, Foremen Training Institute (FTI) at Bangalore with the total seating capacity of 3808 trainees per year.

1.3.4.4 During 2010, the Government also allowed setting up of the Instructor Training Institutes by State/UT Governments, companies in the private sector, societies and trusts registered under respective Acts in order to meet the huge demand of instructors in the market. In order to maintain quality and standards of Instructor Training, NCVT approved exhaustive standards for infrastructure and course curriculum. These Institutes are affiliated with NCVT and called Institutes for Training of Trainers (ITOTs). On completion of the training, the instructors are tested by NCVT and awarded National Craftsman Instructor Certificate. The guidelines for setting up of ITOTs were issued in 2012. So far, 16 ITOTs have been set up in the private sector with a total seating capacity of 3240. The detail of these ITOTs is at Appendix-XIII.

1.3.4.5 In addition to above, the National Vocational Training Institute for Women at Noida and all 15 Regional Vocational Training Institutes for Women in the country are also imparting
Crafts Instructor Training with a total seating capacity of 1500 in 12 trades. Thus, a total of 8,548 crafts instructors are trained every year through these institutes.

1.3.4.6 Admission in these Institutes is made through Common Entrance Examination for Crafts Instructor Training Course. The eligibility qualification to appear in the above examinations is NCVT Certificate in related trade or diploma or degree from recognised Board of Technical Education/ University or equivalent.

1.3.4.7 In order to make instructor training more flexible, modular pattern of the craft instructor training in place of conventional one-year training had been introduced in Central Training Institutes/Advanced Training Institutes with effect from session started from August, 2009. However, modular pattern has now been replaced with one year course comprising of 2 semesters each of 6 months duration as per following structure:-

i) For engineering trades:
   a) 1st Semester by combining Trade Technology I (TT-1) and Engineering Technology (ET)
   b) 2nd Semester by combining Trade Technology II (TT-II) and Training Methodology (TM)

ii) For non-engineering trades:
   a) 1st Semester by combining Trade Skill-I and Vocational Calculation & Science
   b) 2nd Semester by combining Trade Skill-II Training Methodology.

National Crafts Instructor Certificate is awarded only after successful completion of both semesters. However, despite such vigorous efforts, we are able to train only over 8000 instructors every year while the requirement in the country is more than 20,000 per annum. In addition, we also require quite a large number of qualified trainers to run short term modular courses under various schemes of the Government.

1.3.4.8 In addition to training of trainers, two more Institutes and a certification body require special mention as they could be leveraged for systematic improvement in vocational training eco-system in the country. These are:

   (i) Central Staff Training and Research Institute (CSTARI), Kolkata
   (ii) National Instructional Media Institute (NIMI), Chennai
   (iii) National Council for Vocational Training (NCVT)
i) Central Staff Training and Research Institute, Kolkata
This Central Institute was set up in 1968 in collaboration with Federal Republic of Germany an objective to prepare course curriculum for various trades, conduct training for executive staff such as principals, vice principals, etc., undertake applied research in the field of vocational training and develop and disseminate instructional material and projected/non-projected training aids. The Institute organises training programmes for trainers and junior/senior management personnel engaged in planning, execution, control and evaluation of vocational training. The Institute also conducts problem oriented research studies on different aspects of Vocational Training to bring qualitative improvement and for effective implementation of the National Vocational Training System. The research studies are related to development of course curriculum of new trades and revision/up-dation of existing trades, based on feedback from the industry. The Institute also develops instructional material for Craft Instructor Training Scheme. It undertakes development of teaching aids keeping the pedagogical aspects in mind.

ii) National Instructional Media Institute
One of its kind in the country, the Institute was set up in December, 1986 in collaboration with Federal Republic of Germany. The Institute was made autonomous on 1 April 1999. The main objective of the establishment of the Institute is to make available instructional material in various trades for use of the trainees and trainers to ensure overall improvement in the standards of institutional training being imparted under Craftsman and Apprenticeship Training Programmes. The present activity of the Institute includes development, production and dissemination of Instructional Media Packages (IMPs) comprising of books on Trade Theory, Trade Practical, Test/Assignment, Instructor’s Guide, Visual Aids, Support material such as books on Workshop Calculation and Science, Reference text books, Table books, etc. Institute also develops Question Banks to conduct All India Trade Text for Craftsman and Awareness Training Programme/Multiplier Training Programme for effective use of IMPs by the instructors of ITIs to enable effective implementation of the Vocational Training. It develops IMPs in English as well as in other major official languages enshrined in the Constitution.

iii) National Council for Vocational Training (NCVT)
NCVT was setup on the recommendation of National Trade Certification Investigation Committee and Training and Employment Services Organization Committee( known as Shiva Rao Committee) in August 1956 with an objective to coordinate the training programmes in the country, bring about uniformity in standards and award certificates of proficiency in craftsmanship on an all India basis. The Government resolved that, “such a step will be in the
interest of both the industry and the workers in as much as it will ensure that the holders of the certificate possess a minimum recognized degree of skill and will, in addition, facilitate mobility of tradesmen and their employment. It was entrusted with the functions relating to the establishing and awarding of National Trade Certificates for craftsmen, prescribing standards and curriculum for craftsmen training throughout the country and advising and assisting the Central Government on the overall training policy and programmes. The Council is chaired by the Union Minister of Labour and Employment and consists of Union Secretary of Labour and Employment and representatives of various Central Ministries/Departments, Planning Commission, representatives of State Governments and Union Territories, employer organizations, worker organizations, women, professional organizations, scheduled castes, scheduled tribes as Members and Director of Training as Member Secretary.

The Council has served its purpose well in the last 60 years and its certificate has high degree of credibility and not only accepted for employment within the country but also abroad. However, a lot of water has flown down the river. Number of ITIs in 1956 was only 59 which are now more than 13000. Economy has diversified and now about 60% of the GDP is contributed by the services sector while it is mainly concentrating on skill needs of the manufacturing sector which has been stagnant during the last decade and a half.

1.3.4.9 It would be observed from the above analysis that the vocational training system created by the DGE&T was the most comprehensive starting from laying down policies on vocational training, setting norms and standards, preparing and revising course curriculum, affiliation of ITIs, carrying out assessment and certification to setting up of various institutions for training of trainers, in-service training to implementation of CTS, ATS and MES. However, it could not cope up with the demand when the economy started growing at a phenomenal rate of 8 to 9%, primarily for two reasons. One, the number of institutions could not expand with the speed it required and two; it could not diversify to services sector which grew very fast. It did try hard. The number of ITIs more than doubled to 10,344 in 2011-12 from 5,114 in 2006-07 in just 5 years. SDIS was introduced in 2007-08 to run MES courses to meet huge demand of skilled manpower by the industry. But circumstances changed and a strong feeling grew that private sector should be involved in creating skill development infrastructure and skilling youth to meet growing skilled manpower needs of the country. A new and unique public private partnership organization called National Skill Development Corporation (NSDC) was setup in 2008 and many Ministries/Departments of the Central Government started conducting training programmes. The NSDC started mobilizing private sector training partners in right earnest and
assisted them by granting soft loans, equity and grants. However, NSDC was not able to develop a financially sustainable model as a result of which 15 companies defaulted in repayment of loans and loans of 3 companies were restructured (Appendix XIV). We will now give a brief summary of two schemes – STAR and PMKVY implemented by the NSDC and then a brief description about various schemes run by different Ministries/Departments of the Central Government.

1.4. National Skill Certification and Monetary Reward Scheme (STAR)

The Finance Minister in his Budget Speech of 2013 proposed a scheme to encourage skill development for youth by providing monetary rewards for successful completion of approved training programmes. The Finance Minister said that “a large number of youth must be motivated to voluntarily join skill development programmes. I propose to ask the National Skill Development Corporation to set the curriculum and standards for training in different skills. Any institution or body may offer training courses. At the end of the training, the candidates will be required to take a test conducted by authorised certification bodies. Upon passing the test, the candidate will be given a certificate as well as a monetary reward of an average of Rs. 10,000 per candidate. Skill-trained youth will give an enormous boost to employability and productivity. On the assumption that 10 lakh youth can be motivated, I propose to set apart Rs.1000 crore for this ambitious Scheme. I hope that this will be the trigger to extend skill development to all the youth of the country”. Accordingly, a new scheme called the National Skill Certification and Monetary Reward Scheme (STAR) was started in September 2013. The scheme was intended to cover all job roles in all sectors. Initially, it was decided to cover only a limited number of high-market-demand Job Roles in specified sectors from levels 1 to 4 in the National Skills Qualification Framework (NSQF). Sector Skill Councils were mandated to prepare National Occupational Standards (NOSs) and Qualification Packs (QPs) for these roles which were to constitute about 80% of the entry-level workforce in priority sectors.

1.4.1 The following strategy was designed for the implementation of the scheme:-

(i) Vocational Training Providers were to ensure that benefit was extended only to those trainees taking courses which are aligned to NOSs and QPs for eligible sectors and job roles.

(ii) All institutions, government or private who, during the last two years, have been selected by any State Governments, or any Ministry of the Government of India to implement any government funded or sponsored Scheme, or are NSDC partners, were to be deemed to be part of the approved list of training providers under this Scheme.
Those training providers, who have no prior affiliation with any government institution or NSDC, were required to go through a pre-screening process of the SSCs according to an Affiliation Protocol prepared by NSDC/SSC.

(iii) The training programmes were to be for a minimum duration of 30 days and were to include training on social skills like health, hygiene, communication skills, etc. The duration of training may also include on-the-job training, internship, etc, if required.

(iv) The assessments were required to be done by the assessing bodies appointed by the SSCs after completion of the training.

(v) The assessment fee was kept at Rs.1,500/- per candidate for job roles in manufacturing sector and Rs.1,000 for others.

(vi) The assessing bodies were required to collect an application fee of Rs.10,000/-, visit fee of Rs.40,000/- and assessors training fee per candidate per course at Rs.10,000/-

(vii) The monetary award for certification was fixed as follows:

<table>
<thead>
<tr>
<th>Sectors</th>
<th>NSQF Levels 1 &amp; 2</th>
<th>NSQF Levels 3 &amp; 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing Courses</td>
<td>Rs.10,000</td>
<td>Rs.15,000</td>
</tr>
<tr>
<td>Service &amp; Other Sectors</td>
<td>Rs.7,500</td>
<td>Rs.10,000</td>
</tr>
</tbody>
</table>

Under this scheme, a total of 14.15 lakh trainees have been trained, 8.79 lakh certified and 1.2 lakh persons have been placed which is 8.5 % at an average training cost of 7067/- per person (Appendix XV). However in our analysis, we found that lots of irregularities were committed in the implementation of the scheme, apart from very low placement outcomes. In addition, we found that it was a very ill conceived scheme. A similar scheme, called SDIS had been under implementation since 2007 and it was also continued in the XII Five Year Plan with an outlay of Rs 2000 crore. Under the scheme, a large number of short term modular courses covering different sectors of economy were designed, 13700 Vocational Training Partners (VTPs) and 180 independent Assessing Bodies were empanelled. About 29.20 lakh youth were trained at a cost of Rs 750.36 crore during the XII Plan. It was, thus, a repetition of the earlier scheme with the only difference that it was to be implemented by NSDC. Secondly, the NSDC was asked to develop curriculum and standards which is not its mandate.

1.5. **Prime Minister Kaushal Vikas Yojana (PMKVy)**

Prime Minister Kaushal Vikas Yojana (PMKVy) was approved by the Government on 20 March 2015 with an outlay of Rs.1500 crore with the aim to impart skills to 24 lakh persons (14 lakh fresh trainees+10 lakh under Recognition of Prior Learning). The scheme is being implemented
through the National Skill Development Corporation (NSDC). The scheme was launched by the Hon’ble Prime Minister on 15 July 2015.

1.5.1 The objective of this Skill Certification and Reward Scheme is to enable and mobilize a large number of Indian youth to take up outcome based skill training and become employable and earn their livelihood. Under the Scheme, monetary reward is provided to trainees who are successfully trained, assessed and certified in skill courses run by affiliated training providers. The training under the scheme is focused on first time entrants to labour market, mostly school drop outs. The targets have been assigned to different Central Ministries and Departments, Sector Skill Councils, State Governments, and various Vocational Training Providers on the basis of demand emanating from skill gap studies. Under the scheme, indicative reward amount of fresh trainees ranges from Rs.5,000 to Rs.12,500 with higher reward amount for manufacturing, plumbing and construction sectors. Indicative reward for RPL amounts to Rs.2,500 for manufacturing, plumbing and construction sectors and Rs.2000 for other sectors. The training has been provided through 8749 centres across 375 job roles. Under the Scheme, a total of 18.03 lakh persons have been trained, 12.9 lakh certified and 2.23 lakh placed at an average training cost of Rs 8,319/- per trainee. The placement percentage is 12.4% (Appendix XV)

1.5.2 The Committee analysed the Scheme in some detail and had extensive discussion with all State Governments, Central Ministries, the SSCs, employers and VTPs. The following points emerged:

i) Such an ambitious scheme with an outlay of Rs. 1,500 crore was started without conducting any evaluation of STAR which was provided a budget of Rs 1000 crore in 2013-14 but was badly implemented with very poor employment outcomes. Only 8.5% of the persons trained were able to get employment. That is what has been claimed by NSDC. But the real ground reality will emerge only after a detailed survey of trainees trained and placed.

ii) PMKVY, 2016 approved by the Union Cabinet on 13 July 2016 with an outlay of Rs 12,000 crore to impart skills training to one crore people over the next four years (2016-2020). However, no evaluation was conducted of PMKVY, 2015 to find out what were the outcomes of the scheme and whether it was serving the twin purposes of providing employment to youth and meeting the skill needs of the industry before launching such ambitious scheme.
iii) In our consultations with various stakeholders, all of them said in one voice that the targets allocated to them were very high and without regards to any sectoral requirement. Everybody was chasing numbers without providing employment to the youth or meeting sectoral industry needs. Many participants very eloquently said that it benefited VTPs, ABs and SSCs only.

iv) Even if the trained youth were able to access placement opportunities, they could get a monthly salary of Rs 5,000 to Rs 10,000/- while our aim should be to train in a manner and in skills which could command about 40,000 to Rs 50,000/- to make skills aspirational and attract youth towards it.

v) We do not need to chase numbers at all. The entry into the labour force between 2009-10 and 2011-12, for which the latest data is available, was only of the order 4.87 million per annum. The seating capacity of ITIs and Polytechnics alone is 3.85 million. With little effort and using part of the PMKVY outlay, we can increase the training capacity to double in long term competency based courses which could provide employment to the youth and meet the skill needs of the employers. Expenditure on PMKVY appears to be wastage of public resources without achieving the desired goals of providing employment to youth at decent wages and meeting the skill needs of the industry.

1.6 Vocational Training conducted by other Ministries and Departments of the Central Government

Ministry of Skill Development and Entrepreneurship is the nodal Ministry for Skill Development. However, in addition to MSDE, there are 17 other Ministries/Departments which are doing vocational training. These are Ministries of Agriculture, Rural Development, Micro, Small and Medium Enterprises, Human Resource Development, Housing and Poverty Alleviation, Textiles, Tourism and Culture, Communication and Information Technology, Tribal Affairs, Women and Child Development, Commerce and Industry, Development of North Eastern Region, Home Affairs, Social Justice and Empowerment, Food Processing, Minority Affairs, Chemicals and Fertilizers, A list of Ministries and Schemes they are implementing is at Appendix XVI. The physical targets allocated to them and their achievements in 2015-16 are at Appendix XVII. We observe from the analysis of targets and achievements that 58% of the total physical targets were achieved by MSDE while all other Ministries combined together could do only 42%. We also tried to get the financial allocation and expenditure Ministry wise but it was not available. However, the following significant points emerge from our analysis:-
i) Eight Ministries including Agriculture; Micro, Small and Medium Enterprises; HRD; Textile; Commerce and Industry; Tourism; Chemicals and Fertilizers and Food Processing Industries have set up their own training centre and training persons to meet the specific perceived skill needs of their sectors.

ii) Nine other Ministries including Rural Development; Housing and Urban Poverty Alleviation; Communication and IT; Tribal Affairs; Women and Child Development; Development of North Eastern Region; Home Affairs; Minority Affairs and Social Justice and Empowerment do not have any training infrastructure and conducting short term training courses of generic nature with the help of vocational training providers in the private sector or NSDC training partners. These are mostly run for the benefit of the youth which are subject matter of their Ministries, Such as, Ministry of Rural Development for persons below poverty line in rural areas; Housing and Urban Poverty Alleviation for youth in urban areas; Tribal Affairs for youth belonging to Scheduled Tribes; Women and Child Development for women; DONER for youth in North-Eastern Region; Minority Affairs for youth belonging to minorities; Social Justice and Empowerment for youth belonging to Scheduled Castes; Home Affairs for youth belonging to J&K, etc. However, they neither have skill needs of employers nor standard course curriculum for trainees, nor independent assessment and certification machinery. The training is mostly sub standard, supply driven and doesn’t have any correlation with the specific needs of the employers as a result it does not meet two basic objectives of the vocational training – meeting the exact skill needs of the industry and providing the youth with decent opportunities of livelihood at decent wages.

iii) It is surprising to note that many of these Ministries have even not been allocated the work of skill development under Allocation of Business Rules, 1961 such as Ministry of HRD, Textiles, Commerce and Industry, Tourism, Food Processing Industries, Housing and Poverty Alleviation, Communication and IT, Tribal Affairs, Women and Child Development, Development of North Eastern Region, Home Affairs, Minorities Affairs, etc. Relevant entries under the Allocation of Business Rules, 1961 (as amended up to 1 Aug 2016) are given in Appendix XVIII. Some Ministries have been allocated role of “Employment Generation” which ipso facto doesn’t mean that will do skill development also. They should create schemes for employment generation and prescribe qualifications which can be acquired from the relevant VET institutions.
Now we turn to another important aspect- Vocational Education imparted by Ministry of Human Resource Development through secondary and senior secondary schools.

1.7 Vocationalisation of Education

1.7.1 Vocational Education has been a matter of concern for the Government for about 200 years as many Committees and Commissions have been set up in the past to accord a rightful place to it in the education system, such as, Woods’ Despatch (1854), Hunter Commission (1882), Calcutta University Commission (1912), Hartog Committee (1929), Sapru Committee (1934), Wood-Abbot Commission(1936), Sargeant Report (1944), Radhakrishnan Committee (1948), Mudaliar Commission (1952), AICTE (1955), Kothari Commission (1964), Kulandaiswamy Report (1986), National Policy on Education (1986), Programme of Implementation of NPE, 1987, etc. The primary concern of these varied from economic development to solving unemployment and recommendations ranged from structural changes in school stage, introduction of two streams – academic and technical, introduction of multipurpose schools, to diversification of vocational courses and expansion of facilities for technical education. Perhaps, the most significant report after independence was Kothari Commission, which recommended 50% enrolment in higher secondary stage to the vocational stream. However, the vocational education at higher secondary level was seen to be terminal and the students were expected to join the world of work on completion. The effort was seen as Vocationalization of Secondary Education, not quite proper vocational education, the kind which was provided by the ITIs and the Polytechnics. The Kothari Commission, however, laid the foundations of the concept of vocationalization in earlier stages through proposing introduction of work experience whose primary purpose was to ‘sensitise’ the students to the ‘world of work’, not necessarily to prepare them for entering the world of work and inculcate in them an attitude of ‘dignity of labour.’ About a third of the time was to be spent on work experience. However, academics resented it and felt that allocating that much time to such programme would take away a large slice from already limited time available to complete a crowded syllabus. Also, arranging meaningful work experience was often not easy. Over a period, this programme was effectively renamed as Socially Useful Productive Work (SUPW). But all said and done, this did not succeed either in preparing students for entering the World of Work or motivating them to join the vocational stream at +2 stage. Despite the target of 50% in higher secondary, the enrolment in 1985 stood at mere 2.5%. The reasons cited for this were:

a) it was stigmatised as ‘inferior’ education,
b) it prevented them from moving to higher levels of education – ‘no vertical mobility’, it was terminal, and
c) It did not truly prepare them to enter and succeed in the World of Work. At the age of 16, when a student enters +2 stage, no one is prepared to foreclose opportunities for higher education by opting for the vocational stream.

1.7.2 The whole experience and environment surrounding the vocational stream was such that a strong demand developed for providing vertical mobility after the pass outs completed the +2 stage within vocational stream. It was in this environment that Kulandaiswamy Committee was set up. The Committee dealt with the issue of Vertical Mobility as a major area of concern and provided in some detail, the vertical routes to higher general as well as higher technical education and proposed range of bridge courses to allow horizontal and vertical mobility. It also recommended a host of measures to improve the quality of vocational education by dealing with the issues of teacher/trainer shortage, establishing/equipping laboratories for practical skills development and identifying the financial resources required for effective delivery. It also made recommendations about modifying government’s recruitment rules and accepting vocational qualification on par with academic qualifications for recruitment to positions under the Government and the Public Sector, among others.

1.7.3 Vocational Education was again accorded high priority in the National Policy on Education, 1986. It states, “the introduction of systematic, well planned and rigorously implemented programme of vocational education is crucial in the proposed educational organization.” Keeping this objective in view, the scheme of vocationalization of Secondary Education was launched in 1988. Under the scheme, since its inception 10,000 schools were covered with an intake capacity of about 10,00,000 students. The evaluation studies in various states led to the identification of bottlenecks in the implementation of the scheme. Some of these included lack or absence of regular teachers and their training/re-training, insufficient financial allocation, high financial implication on the part of the States, non-flexible duration and delivery of courses which at times were not need based, no change in recruitment rules, poor linkage with industry, poor vertical mobility, absence of separate management structures, absence of long-term commitment from the Central Government and inadequate monitoring.

1.7.4. The scheme of Vocational Education was revised in 1992-93 and continued after further revision in September 2011 with the approval of Union Cabinet for the above reasons including the dire need at present for high skilled human resource to sustain high growth rate of Indian economy and increased possibilities of international demand of skilled manpower, changes in technology and financial markets, the growing international competition and increasing demand from various segments of population for job oriented education. The present scheme echoes the ideology, inherent in National Vocational Education Qualification Framework (NVEQF) and
seeks to integrate academic education, vocational education, vocational training and higher education as a comprehensive system.

1.7.5. The main objective of the Vocationalisation of Education in the secondary and higher secondary schools is to prepare educated, employable and competitive human resource for various sectors of the economy and the global market. The specific objectives of the scheme are:-

i) Enhance the employability of youth through demand driven competency based modular vocational courses;

ii) Maintain their competitiveness through provisions of multi-entry, multi-exit learning opportunities and vertical mobility/interchangeability in qualifications;

iii) Fill the gap between educated and employable; and

iv) Reduce the drop-out rates at the secondary level and decrease the pressure on higher academic education.

1.7.6 According to the latest information received from the Ministry of Human Resource Development, 7448 schools across 32 States/UT have been approved under Rashtriya Madhyamik Shiksha Abhiyan (RMSA). Currently, a total of 4,47,350 students in 4817 schools are enrolled and undergoing vocational education in secondary and higher secondary levels. The details are attached as Appendix- XIX.

Under the scheme, the following 17 courses have been introduced:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Course</th>
<th>S.No.</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agriculture</td>
<td>10</td>
<td>Logistics</td>
</tr>
<tr>
<td>2</td>
<td>Apparel</td>
<td>11</td>
<td>Media &amp; Entertainment</td>
</tr>
<tr>
<td>3</td>
<td>Automobiles</td>
<td>12</td>
<td>Multiskill</td>
</tr>
<tr>
<td>4</td>
<td>Beauty &amp; Wellness</td>
<td>13</td>
<td>Physical Education &amp; Sports</td>
</tr>
<tr>
<td>5</td>
<td>BFSI</td>
<td>14</td>
<td>Retail</td>
</tr>
<tr>
<td>6</td>
<td>Construction</td>
<td>15</td>
<td>Security</td>
</tr>
<tr>
<td>7</td>
<td>Electronics</td>
<td>16</td>
<td>Travel &amp; Tourism</td>
</tr>
<tr>
<td>8</td>
<td>Healthcare</td>
<td>17</td>
<td>Telecom</td>
</tr>
<tr>
<td>9</td>
<td>IT-ITeS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1.7.7 The teachers/trainers have been largely engaged on contract basis from NSDC partners and empanelled Vocational Trainers Providers. Permission for construction of 2 workshops/laboratory-cum-classrooms has been given to school and a maximum of Rs. 10 lakh has been provided for tools, equipments and machinery, including furniture, computers, diesel generator set, etc. Rs. 14.50 lakh has been sanctioned per school for flexible pool for engaging
resource persons including teachers, skill trainers, skill knowledge providers, coordinators, guest faculty, etc. Another Rs.2.80 lakh has been provided for purchase of raw materials, maintenance of tools, equipments, books, software, e-learning material, etc. Rs.1.5 lakh has been provided as cost of imparting hands-on Skill training to students in industrial and commercial establishments. The cost of assessment and certification has been fixed @ Rs.600/- per student for classes IX and X and @ Rs.800/-for classes XI & XII. Another Rs.2 lakh per school has been provided for office expenses, contingencies including expenditure on awareness and publicity, guidance and counselling, transport, field units, stationery, electricity, water, etc. An amount of Rs.11,000 per teacher trainer has been provided for induction training for 30 days and Rs.5,000/- per teacher for in-service training of 5 days. Rs.2 lakh have been provided for development of course curriculum and learning material per skill level per job role including student’s handbook, teacher’s handbook, training manual, multi-media packages, e-learning/teaching material, bridge course, assessment guidance, etc.

1.7.8 In 2014-15, a total of 873 students were placed in various trades against an enrolment of 4,47,350 (0.19%). The details are as follows:

<table>
<thead>
<tr>
<th>Sector</th>
<th>No of Student Placed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>127</td>
</tr>
<tr>
<td>Automobile</td>
<td>178</td>
</tr>
<tr>
<td>Healthcare</td>
<td>100</td>
</tr>
<tr>
<td>Security</td>
<td>195</td>
</tr>
<tr>
<td>IT-ITS</td>
<td>273</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>873</strong></td>
</tr>
</tbody>
</table>

1.7.9 The skill gap analysis has been provided by NSDC which is based on general survey by consulting firms and training in schools is provided through trainers provided on contract basis by empanelled vocational training providers and assessment of competencies is done by Sector Skill Councils who are also required to provide placement assistance to the students. Pt. Sunderlal Sharma Central Institute of Vocational Education develops guidelines, national curricula, course-ware, training modules and e-learning material for vocational education under the scheme. For Vertical mobility diploma courses have been introduced by All India Council for Technical Education (AICTE) and called D.Voc and undergraduate vocational courses have been introduced by University Grants Commission (UGC) called B.Voc.
1.7.10 It will appear from the above analysis that though the Ministry has tried to improve upon the earlier provisions, the basic issue is the change in the mindset. It is not vocational education in real sense of the term, as it is done in the ITIs where full fledged classrooms, workshops, tools, equipments, machinery, qualified trainers, industry interface, etc. have been provided. It is still vocationalization of education and provided as voluntary additional optional subject, in addition to five subjects, at secondary school level and as an optional subject within five subjects at the senior secondary level. The following observations are worth mentioning:

i) “Vocational Education” or Vocational Education and Training” or “Vocationalization of Education” has not been allocated to the Department of School Education and Literacy under the Ministry of HRD, what has been allocated is “Vocational Guidance”

ii) The standards have been developed by Central Institute of Vocational Education (CIVE) Bhopal, but have not been approved by National Skills Qualification Committee (NSQC) which sets the standards;

iii) Required infrastructure is not available in schools;

iv) No regular trainers are there. Those providing training have been taken from private vocational training providers on contract basis at a paltry remuneration without any opportunity for further promotion or career progression as a result of which they leave at the first available opportunity;

v) There is no involvement of the industry;

vi) The assessment is done by the SSCs but the courses themselves have not been approved by the NSQC and SSCs have not developed those QP/NOS for those courses;

vii) The courses do not have any market linkage nor any interaction with the employers;

viii) The Ministry aims at providing skilled manpower to services sector. However, only 17 courses have been introduced so far;

ix) Though vertical mobility has been provided by introducing D.Voc. and B.Voc. courses but here also the same mindset is reflected that D.Voc and B.Voc are considered inferior to normal academic degrees, such as B.A, B.Sc, B.Com, otherwise, they would have been christened as Diploma in Retail or Bachelor in Tourism and Hospitality, etc. If we are convinced about its utility and want to make skills attractive, we must place premium on it and make it a preferred option.
Chapter 2

Major Issues Facing Vocational Education & Training System and Suggested Reforms

2.1 The Committee identified the following major issues facing the vocational education and training system in the country:-

i) Absence of a sound National Vocational Education and Training System;

ii) Absence of National Vocational Education and Training Standards;

iii) Absence of ownership of the National Standards;

iv) Vocationalization of Education in Schools;

v) Absence of an integrated in-plant Apprenticeship Training;

vi) Inadequate industry interface and lack of relevance of VET;

vii) Inadequate financing of VET system;

viii) Inadequate Training Capacity in the country;

ix) Poor Quality Outcomes;

x) Short term VET Courses;

xi) Large School Drop-outs;

xii) Recognition of Prior Learning (RPL);

xiii) Promotion of Soft and Life Skills;

xiv) VET for the Unorganized Sector;

xv) Shortage of qualified trainers;

xvi) Provision for Counselling, Guidance and Employment Services;

xvii) Skills for the Future; and

xviii) Need for a comprehensive legislation
2.1.1 Absence of a sound National Vocational Education and Training System

Every country in the world which has grown as a developed economy has got a very well defined vocational education and training system. It is unfortunate to note that a country of 1.21 billion which aspires to be a developed country and the third largest economy by 2040 has not been able to develop a sound vocational education and training system in the last 70 years. Our great country is characterized by an educated person who has no skills and a skilled person who has no education knowing well that education without skills is incomplete and skills without education cannot grow further. We have designed our vocational training system only for academically disadvantaged, such as school drop outs; socially disadvantaged, such as persons belonging to scheduled castes, scheduled tribes and minorities and economically disadvantaged such as persons below poverty line. By providing focus on vocational training for only these disadvantaged categories, we have put a stigma on it. We have also not made vocational training aspirational as we always talk about entry level jobs and an employment fetching a salary of Rs. 5000/- to Rs. 10000/- per month and think that a shop floor level worker will continue to be a shop floor level worker only, for the rest of his life. No parent or child wants to foreclose his options at the age of 16, but we have not provided for his upward mobility or ambition to acquire higher education at some point of time, if he wishes to. It also has to do with the mindset of employers. They pay poor wages to skilled workers and prefer to engage three unskilled workers in place of one highly skilled worker who can be more productive and produce better quality goods. If a skilled worker gets the same or marginally higher wages than the unskilled person, there is no incentive for him to get skilled. It has also to do with the mindset of the academicians who think that vocational education will dilute value of education. Nobody can dispute that education has a much higher purpose of learning cognitive skills, conceptualization, higher thinking, etc., but at some point of time, every educated person will require a decent means of livelihood. Nobody acquires education only for the sake of learning. The result of this mindset has been that we are producing millions of unemployable and unemployed graduates, on the one hand and different sectors of the economy are crying for skilled manpower, on the other. Education is a “process by which societies transmit their accumulated information, knowledge, understanding, attitudes, values, skills, competencies and behaviours across generations.”(International Standard Classification of Education, 2011). This definition does not only talk about transmitting information, knowledge or understanding but also includes skills and competencies. For a moment, if we assume that the purpose of education is only to acquire knowledge, how are economic activities going to take place as economic activities will not require only knowledge but also skills and competencies and, therefore, an ideal society is the one where a person is educated, and has skills and competencies so that he can meaningfully
contribute towards economic growth of the society, and at the same time, earn a decent livelihood for himself and his family. It is, therefore, necessary that education and skills go hand in hand. Education is incomplete without skills and competencies, and skills are incomplete without education. As we have seen, DGE&T under the Ministry of Labour and Employment was mandated to be a national body for skill development. However, it could not evolve into a comprehensive and all encompassing National Vocational Education and Training System of the country. Upward mobility in vocational education and training requires developing higher education and vocational training standards and setting up higher level institutions, which is the prerogative of the Ministry of HRD. This straight jacketed approach of the two Ministries could not bring the vocational education and training together and ensure vertical mobility. The Committee, therefore, recommends as follows:-

i) The Government should create a sound and well defined National Vocational Education and Training System of the country which should ensure the following:-

a) Every child irrespective of his caste, creed, religion, gender, region or economic status should get 10 years of schooling so that the three Rs – Reading, Writing and Arithmetic form the basic foundation on which the higher vocational education and training system could be successfully built upon. If the child does not acquire these at this stage, he will not be able to acquire, ever thereafter howsoever skilled he might become.

b) At the secondary school level, the children should be sensitized about the dignity of labour, world of work and career options but vocational education and training should start only after 10 years of schooling which is the case in most of the developed world.

c) Every child should be given an option to go for higher vocational education and training as he is permitted to go to humanities, science, commerce, technical education or medical education streams.

d) The Government should promote setting up of required number of Vocational Education and Training Colleges (VETCs) on the pattern of Engineering and Medical Colleges where option should be available to a student to choose any of the sectors of his choice for training. The MSDE has made a good start by setting up Prime Minister Kaushal Kendras (PMKK), one in each district of the country with iconic state-of-the-art modern skill development infrastructure for providing high end skill training. Let these PMKKs be renamed as VETCs and allowed to run Diploma, Advanced Diploma and Degree level courses in vocational education and training to make vocational stream aspirational.
e) The VETCs should run vocational courses but along with, they should also be taught two academic subjects such as a language and another subject from humanities or science or commerce depending upon his future career growth options, as is currently mandated for vocational training graduates of ITIs after 10 years of schooling to get equivalence with XII Standard.

f) The VETCs should run Certificate, Diploma and Degree level courses. If the student completes 2 years of training, he should be given a certificate and equivalence with 12th Standard; if he has done further one year course, he should be given a Diploma in that trade/sector; if he has done a further one year course, he should be awarded an advanced diploma in that trade/sector and if he has done another one year course, he should be awarded a degree in that trade/sector as is currently mandated under the B.Voc Scheme. It will open pathway for his post graduate or doctorate in that trade/sector or he can join world of work at any point of time but he will always have the option to either move horizontally or vertically in academic or vocational stream. But the person doing these vocational courses will be required to opt for two academic subjects also depending upon his future choice of career or academic attainment. There are 1, 31,287 secondary schools in the country. If we want to setup at least one VETC for 5 secondary schools, we will require about 26,257 VETCs. We already have 12,412 ITIs, 3541 Diploma colleges and 2674 Diploma Nursing colleges which makes it a total of 18,627 certificate/diploma level colleges. If all these colleges are rechristened as Vocational Education and Training Colleges then only 7630 more such institutions will be required to be opened which does not appear to be a daunting task to create a National Vocational Education and Training System. These new VETCs maybe setup in the private sector with the financial support of the National Skill Development Corporation. NSDC was created primarily with a purpose to mobilize private sector and augment its vocational education and training capabilities.

g) The existing ITIs have been mainstay of skilled manpower for the manufacturing sector for long and it has served its purpose well. But now the economy has diversified and 60% of the GDP is contributed by the services sector. The manufacturing sector has been almost stagnant in the last decade and half. The ITIs, therefore, must also undergo transformation. Most of the ITIs are running only engineering courses. In order to meet the emerging demand from the services sector, they should also start running trades which provide the skilled manpower to the services sector as well. All the ITIs, therefore, should be renamed as VETCs and provide training not only up to the certificate level but also to diploma, advanced diploma and degree
level. They will also have to provide education in two academic subjects along with the vocational trade.

h) Presently, ITI graduates with 2 years of training in engineering trades are provided upward mobility in diploma engineering courses in the 2nd year. However, their intake has been limited to a ceiling of 20% students. This ceiling of 20% should be removed as they already have two years training and will be much better skilled than a fresh secondary pass student.

i) Similarly, Diploma Engineers have been provided upward mobility in the second year of engineering courses. Here also a ceiling of 20% has been imposed. It is discriminatory as the Diploma Engineer will be having better skills than a fresh senior secondary pass student. Secondly, the Diploma Engineer will take five years after 12 years of schooling/Vocational training to complete Engineering degree while the fresh entrant will be able to do it in four years, thus the Diploma Engineer looses one year. In order to remove this anomaly and make skills aspirational, a diploma engineer should be allowed admission in the third year of engineering and the ceiling of 20% should be removed here also. Two academic subjects have already been proposed to be introduced at the vocational certificate/diploma level and therefore, his cognitive skills will not be inferior to the fresh entrant and he would have much better vocational skills than a new entrant and will turn out to be a thorough-bred practicing engineer which the current engineering graduates lack. Now with the introduction of NSQF, all these certificates, diploma and engineering courses should be aligned in a manner that vocational education and training takes place in a seamless manner fulfilling the aspirations of youth.

j) In order to enable the VETCs to run diploma and degree level courses, Ministry of HRD should bring in these qualifications under their higher education system. They have already notified Diploma in Vocation (D.Voc) and Bachelor in Vocation (B. Voc) courses in their system. These nomenclatures appear to be discriminatory and, therefore, the Committee suggests that they should be rechristened as Diploma in Retail or Diploma in Hospitality and Tourism. Similarly, B.Voc should be rechristened as Bachelor in Retail or Bachelor in Hospitality and Tourism, etc. so that they are not discriminatory.

k) The Ministry of HRD has already notified starting of B.Voc courses in the university education system. This effort is laudable and suggests a positive change in the mindset of academicians. But when they are going to run these courses in colleges and universities, they will have to create suitable classrooms, workshops with adequate tools, equipments, machinery and appoint regular qualified trainers/professors. Such high level courses cannot be
run with the help of part time, contract or guest faculty, as has been currently envisaged by the Ministry of HRD. The courses run must follow the national standards designed under the National Skills Qualifications Framework (NSQF) in letter and spirit.

I) We feel that the National Vocational Education and Training System can succeed only and only if the Ministry of Skill Development and Entrepreneurship and Ministry of HRD work closely together, hand in hand keeping in mind the national goal of making India “Skills capital of the world”. However, if the Ministry of HRD feels otherwise, MSDE should setup a National Vocational University which should conduct research, train the trainers/professors for the higher vocational education and training system of the country and become affiliating university for all VETCs. Subsequently, the State Governments may establish similar vocational universities at state level and conduct vocational courses, train trainers for higher vocational training system and conduct research in Vocational Education and Training field. The Prime Minister has already made a good beginning by laying the foundation stone of Indian Institute of Skills (IIS) at Kanpur. Let it be given the status of a University as has been done in the case of Indian Institutes of Technology (IITs). If we are able to put in place such National Vocational Educational and Training System, we shall be comparable to the best anywhere in the world, claim the rightful place in the comity of nations and achieve the goals of being the “Skills capital of the world.”

2.1.2 Absence of National Vocational Education and Training Standards

17 Ministries of the Central Government in addition to MSDE are conducting vocational training courses without any connect with the actual industry demand. Most of them run short term courses with the result that they do not get employment. The basic purpose of vocational education and training is twofold. One, it should meet the exact industry skills needs and two, provide employment to youth. However, with this kind of sub standard, short term and supply driven training, none of the purposes is met. After setting up of the SSCs, it has been claimed that these short term courses are aligned to NSQF. However, we have seen that NOSs/QPs developed by the SSCs are narrow, are of 150-300 hour duration and do not meet the real industry needs as a result of which the trained persons have not been employed by the sectoral industries. The big question which arises is, are we going to realise the vision of making India “the skills capital of the world” with the help of youth who are 8th or 10th standard drop-outs by giving them training of 150-300 hours. The clear answer is, “No”. Then what do we do? The Committee has gone into these questions in detail and recommends the following:-
i) Create National Labour Market Information System, National Occupational Standards, National Competency Standards, National Training Standards, National Accreditation Standards, National Assessment Standards and National Certification Standards and align them to the International Standards. International Standard Classification of Occupations 2008 (ISCO 2008) is a four-level hierarchically structured classification that allows all jobs in the world to be classified in 436 unit groups. These groups form the most detailed level of classification structure and are aggregated into 130 minor groups, 43 sub major groups and 10 major groups based on their similarity in terms of their skill level and skill specialisation required for the jobs. This allows the production of a detailed internationally comparable data as well as summary information for the 10 groups at the highest level of aggregation. The list of major, sub major, minor and unit group is at Appendix XX

ii) All these unit groups have been defined in detail in the ISCO 2008 and all tasks included in the unit group also have been listed out. If a person acquires competencies in one task listed under the unit group, it should be treated as one Competency Unit or NOS as presently called and when a person acquires competencies in all the tasks listed under a unit group, he should be awarded National Competency Standard Certificate (NCSC) or QP as presently called. Acquisition of competencies in all the tasks listed under a unit group will enable him to access employment anywhere in the world as this is the International Standard. These competencies may be imparted to him through short term modular courses or semesterization, but NCSC can be granted only when he acquires competencies in all the tasks listed under a unit group. Detailed examination of this has been done in Chapter VIII.

iii) NSDA along with Directorate General of Employment (DGE) and SSCs concerned in close coordination with the industry experts should create the National Competency Standards on the basis of ISCO 2008. Though DGE has prepared NCO 2015 on the basis of ISCO 2008, first four digits they have mapped correctly. But, in the last four digits, they have taken the QPs/NOSs developed by the SSCs which are very narrow and do not reflect the real needs of employers. NCS, thus prepared will be industry aligned, ISCO 2008 compliant and will ensure employment to the certificate holder. It will be aspirational and a person can always confidently look for an employment even outside the country, if wishes so.

2.1.3 Absence of ownership of National Standards

There are seventeen Ministries in addition to the Ministry of Skill Development and Entrepreneurship out of which only eight Ministries have developed their own course curriculum. It has been happening for long, probably, in absence of any national standards. We
have seen earlier that most of these Ministries run short term supply driven courses unable to provide employment to the trainees. This confusion has been confounded by a notification No 14/27/2012-EC dated 6th June 2013 issued by Department of Economic Affairs, Ministry of Finance which says, “(c) The Central Ministries and NSDC will continue to implement schemes in their remit”. Now, the subject has been allocated to MSDE vide notification No. S.O.3105 (E) dated 8th Dec 2014 issued by the Cabinet Secretariat has allocated the work as follows:-

“1. Coordination with all concerned for evolving an appropriate skill development framework, removal of disconnect between the demand for and supply of skilled manpower through vocational and technical training, skill up-gradation, building of new skills, innovative thinking and talents not only for the existing jobs but also the jobs that are to be created.

2. Mapping of existing skills and their certification”

The question, therefore, arises, why other Ministries should carry out skill development, particularly, by those who do not have any domain expertise nor have set up any specialised vocational training institutions to meet the specific skill needs of their sectors. It can be understood better with an example. Ministry of Petroleum has been allocated the work relating to availability of petroleum products to the people. Can Ministry of Tribal Affairs say that Petroleum products to the persons belonging to Scheduled Tribes should be provided by them or Can Ministry of Minority Affairs say that Petroleum Products to the persons belonging to the minorities should be provided by them? Similarly, the work of providing education to children is done by Ministry of HRD. Nobody says that education to Scheduled Castes should be done by Ministry of Social Justice and Empowerment or children belonging to below poverty line by the Ministry of Rural Development. The work in the Ministries is done on the basis of domain expertise which they acquire over a period of time. It avoids overlaps and confusion. The training provided by these Ministries neither meets skill needs of their sectoral employers nor provides employment to the youth trained by them. It appears to be wastage of public money without any visible outcomes. The Committee, therefore, recommends as follows:-

i) MSDE should become the owner of all National Vocational Education and Training Standards and get them developed though intense industry involvement by NSDA/DGE/SSCs.

ii) Be made responsible and accountable for skilling youth for providing them employment and meeting the exact skill needs of employers though the National Vocational Education and Training System.
iii) Create a national LMIS with the intense involvement of the industry and NSDA/DGE/SSCs.

iv) 9 Ministries including Rural Development, Urban Housing and Poverty Alleviation, Communication and IT, Tribal Affairs, Women and Child Development, Development of North Eastern Region, Home Affairs, Minority Affairs and Social Justice and Empowerment should stop skill development work and transfer budget and personnel, if any, to the MSDE.

v) The remaining 8 ministries including Agriculture, MSME, HRD, Textile, Commerce and Industry, Tourism, Chemicals and Fertilizers and Food Processing Industries who have setup their own training infrastructure may continue training through their own training centres but they must align their courses with the National Standards, and their certification be done by the National Board of Assessment and Certification with an objective the meet exact skill needs of their sectoral employers.

vi) As has been brought out earlier (Para 1.6), most of the Ministries have not even been allocated the work of “Skill Development/Training” under the Allocation of their Business Rules, 1961. If some Ministries want to continue with their skill development work as recommended in sub para (v) above, they should get Allocation of Business Rules, 1961 amended accordingly.

2.1.4 Vocationalization of Education in Schools

We have analyzed earlier (Para 1.7) the efforts made by Ministry of HRD to impart vocational education to students. There has been a long debate about whether the Ministry should impart Vocation Education or Vocationalise education. One is not clear what the difference between the two is, but it appears that vocational education is concerned with providing hardcore skills and vocationalization of education relates to academic aspects of vocational education. Finally, the debate has ended and the Ministry opted for “Vocationalization of Education”. We have seen earlier that various efforts made by the Ministry to impart vocational education have not succeeded. The enrolment of students at +2 stage was at 2.5% in 1985 against a target of 50% after the Kothari Commission Report of 1964. Similarly, the enrolment at the end of the 11th Five Year Plan stood at 4.8% against a target of covering 25% students. This happened after creating a massive infrastructure of 21,000 sections in over 10,000 schools catering to over 10,000,000 students. It would appear that despite the best efforts made by the Ministry, it has not succeeded in imparting vocational education, at least since the Woods’ Despatch in 1854. The current efforts with the Ministry also appear to be half hearted as the major issues, which caused the failure of the scheme earlier still continue, such as lack of qualified regular trainers, absence of
full fledged workshops, tools, equipments, machinery and linkage with the industry. They are also not following the National Occupational Standards and their courses have not been approved by the NSQC. The Committee would like the Ministry of HRD to do proper vocational education with twin basic objectives of providing employment to youth and meeting the skill needs of the employers. In order to make vocational education aspirational, they should create institutions of higher learning for vocational education and training, as has been done to promote technical education. Running an educational system which produces millions of unemployable and unemployed graduates doesn’t serve any purpose. However, looking at the history of last 162 years, it does not appear to be possible. The Ministry, therefore, should decide clearly as to what they want. If they can’t provide proper vocational education, they should confine their role to imparting “Secondary Education and Vocational Guidance”, the work which has been allocated to them under the Allocation of Business Rules, 1961. The present scheme of Vocationalization of Education should be discontinued as it neither provides employment to youth nor meets the exact skill needs of the employers. They should concentrate on providing quality education and provide vocational guidance at the secondary level so that the students could decide about future career options as they do for technical and medical education. However, in order to do vocational education and training at senior secondary level, which the Committee would strongly wish, the following is recommended:

i) The Ministry of HRD should get the Allocation of Business Rules amended to include “Vocational Education and Training” under their mandate.

ii) Set up state of the art Vocational Education and Training Colleges to impart vocational education and training with a clear objective of meeting the skills needs of the industry and providing employment to youth.

iii) They must follow the national standards and course curriculum decided by the NSQC.

iv) Ensure upward mobility of VETC graduates to access higher education in the field of Vocational Education and Training.

2.1.5 Absence of an integrated in-plant-Apprenticeship Training

Hallmark of any sound Vocational Education and Training System is that a person is given theoretical training and practical training in a vocational school and in-plant hands-on training in the enterprise. The National Skills Qualification Framework (NSQF) also requires 5 attributes for any level - Process, Professional Knowledge, Professional Skill, Core Skill and
Responsibility. In our system of VET, we have been giving theoretical as well as practical training. Even in ITIs, theoretical training is to the extent of 30% and practical 70%. However, apprenticeship training is not an integral part of VET. It has been conducted as a stand alone activity in which ITI graduates as well as fresher from school system can participate. Even in case of engineering graduates, polytechnic graduates and VE pass outs, in-plant apprenticeship training has not become an integral part of the course curriculum. The result has been that it has not been well received either by the trainees or by the employers. The apprenticeship training conducted by 30,165 establishments in 260 designated trades under the Ministry of Skill Development and Entrepreneurship, despite best efforts has been able to engage only 2.3 lakh apprentices. Similarly, apprenticeship training of graduate engineers, technicians and technicians (vocational) under the Ministry of HRD could attract only 0.83 lakh apprentices. The reason for poor response is that neither the employers nor the trainees see any benefit from the Apprenticeship Training Scheme. The trainees think that the stipend paid to them is very low and even after getting apprenticeship training; they are not likely to get the desired employment. Similarly, the employers think that the targets have been imposed on them and conducting apprenticeship training and paying stipend to the trainees is an additional burden on their establishments. Instead the trainees prefer to work in low a paid job which gets them higher salary than the meagre amount of stipend. In most of the advanced countries, in-plant apprenticeship training is combined with the vocational school training. For example, in Germany, a child spends one or two days in a week in the vocational school doing theoretical and practical training and remaining three or four days of the week undergoes in-plant apprenticeship training in the company. Both trainings go hand-in-hand for three and half to four and half year duration. For about two years, the trainee is trained in all possible tasks and in the remaining period, he actually is required to work in the company at the same stipend. That is how the cost of the training is cross subsidized. In-plant company training makes a person highly skilled and is ready for work from day one. We should, therefore, combine all our institutional training with the in-plant company training. The trainee must spend at least one third of the total training period in the company for hands on training. The final assessment of his competencies will be done at the end of this training and certificate granted only when he has acquired all the five attributes in the relevant NSQF level i.e. process, professional knowledge, professional skill, core skill and responsibility. The Committee, therefore, recommends as follows:-

i) In-plant apprenticeship training should be made an integral part of the Vocational Education and Training for all trainees. The trainees must learn core skills in the company and devote at least one third of the total training period for this training.
There should be mapping of training institutions with the companies located nearby for conducting apprenticeship training, including the MSMEs.

The SSCs should work closely with the employers and facilitate this training.

The trainees should be paid stipend during this period which should be close to the minimum wages notified by the State Government concerned where the company is located.

The Government should financially support the MSMEs in conducting apprenticeship training.

The companies should create infrastructure for in-plant training and engage qualified trainers for this purpose.

The companies should be permitted to take work from the trainees so that they can learn by doing while they earning.

The Apprentice Act, 1961 was brought in a different era suiting the requirement of those times. Despite amendments, it has outlived its utility and therefore, it should be repealed and a new Vocational Education and Training Act be brought in which should define the National Vocational Education and Training System; the National Vocational Education and Training Standards; System for Assessment and Certification; Roles and Responsibilities of various stakeholders involved in Vocational Education and Training, such as the Vocational Training Providers, the employers, the SSCs, the trainees, etc.; bring agriculture, allied sector and services sector under the fold of Vocational education and training; National Skills Qualification Framework; Financing Mechanism, etc.

2.1.6 Inadequate Industry Interface and lack of relevant of VET

There are four major players in the skills ecosystem- the Government, the Employers, the VET system and the Youth. The Governments, being the democratically elected entities, are repository of people’s ambitions and aspirations. They are required to provide education and skills to youth in order to access opportunities for decent livelihood and fulfil their aspirations. The employers, in order to be productive and competitive, need educated and skilled manpower. The VET system is required to provide education and skills to youth which are relevant to meet the requirements of the employers. The youth are the greatest asset which a nation can have provided they are given quality education and skills so that they can get decent opportunities of livelihood at decent wages and can fulfil their ambitions and aspirations, on the one hand and contribute to the development of society, on the other. For creating a sound and healthy skills ecosystem, we need to forge a partnership of all the four. However, if any of the four actors is
missing or inactive, the system will have serious problems. For example, if the employers find that they are not getting the relevant skills for their industries, but they do not participate in the system of skilling, the system will fail. It will become supply driven and the employers can’t blame anybody else but themselves for this. We have tried several methods in the past to bring in the employers to the centre stage of skill development. In 2007-08, the concept of Institute Management Committees (IMCs) was introduced by the government while undertaking modernization of the government ITIs. These IMCs were required to be headed by a prominent industrialist of the area with four other industries represented on it, five government officials such as District Industries Officer, District Employment Officer, etc., and the principal of the ITI was Member Secretary. Each government ITI was provided with an interest free loan of Rs 2.5 crore and autonomy was given to the IMCs to introduce new courses, drop old redundant courses, add or modify course curriculum according to their own requirement, appoint trainers, create required training infrastructure in the ITIs, conduct apprenticeship training in their establishments and offer placement as per their needs. This experiment has been successful where the employers understood the spirit of public private partnership. In fact, many of them contributed significantly to the infrastructure of ITIs on their own and transformed them into vibrant institutions. Another experiment started in 2010-11 when SSCs as employer bodies were constituted for different sectors but involvement of the employers remained peripheral. If the skills ecosystem has to succeed, the employers must be closely and intensely involved with the Vocational Education and Training System. The Committee, therefore, recommends that the SSCs must become the vibrant institutions of interface between the government, VET system and the youth of the country. The employers must own, finance and drive them in order to discharge their responsibilities efficiently and effectively. We will deal with this issue in detail in subsequent chapters.

2.1.7 Inadequate Financing of VET System

Providing quality skills to a large number of youth requires adequate resources to create VET infrastructure; run courses; provide counselling, guidance and employment services and meet recurring expenses. As we have seen above, there are three major stakeholders- Government, industry and youth. Government benefits from skill development as it promotes equity, social justice, prosperity and fulfils the aspirations of the people. Individual youth benefits as he gets opportunities for decent livelihood and achieving his ambition. The industry benefits as it gets skilled manpower to make it productive, competitive and profitable. The standard principle is that the person, who benefits, should pay the cost. It, therefore, implies that all the three stakeholders should pay towards financing of the VET system. The industry happens to be the
biggest beneficiary and therefore, it should assume the role of a keystone in the whole VET system. Germany, a country of 82 million people, spends about 35 billion Euros on vocational education and training every year out of which about 86% is borne by the industry and 14% by the government- both federal and states. The Committee, therefore, recommends as follows:-

i) The industry must come together to contribute towards a National Skill Development Fund which we would like would like to call as “Reimbursable Industry Contribution (RIC)”. It should be levied on all small, medium and large enterprises employing 10 or more persons and should be about 2% of their annual wage bill including that of the contract workers.

ii) Each individual industry should prepare their annual training plan and can claim reimbursement from this fund based on their skilled manpower requirement and cost incurred on their training. We have discussed this issue in detail in Chapter X.

iii) The industry can create its own training infrastructure or get trained through the VET system. This training should continue as long as all employees/workers are not fully trained. This fund also can be accessed for up skilling or Recognition of Prior Learning by the employers.

iv) The assessment and certification of all such trained workers will be done by the proposed National Board for Assessment and Certification to ensure best quality training.

v) Individual person should also be made to compulsorily pay for training to the extent of about 10 to 20% of cost as anything free is not valued at all.

vi) The persons belonging to disadvantaged groups such as scheduled castes, scheduled tribes, minorities, below poverty line, etc. maybe supported by the government by paying them stipend.

vii) The VETCs may be run by the government, government aided, and private sector or in public private partnership.

viii) The parents or children don’t opt for vocational education and training primarily because they are not aspirational. If we have to promote VETCs and make VET a preferred mode of acquiring skills and accessing employment, we must design our policies and financing structure in a manner that it becomes a preferred destination for all children. For example, gross enrolment ratio of girls increased in the schools by providing them concessions in fee, bicycles, transportation facilities, mid day meal etc.
2.1.8 Inadequate Training Capacity in the country

If we want to provide quality training to youth, we must have adequate training infrastructure. But before talking about infrastructure, let us consider what infrastructure will be required for how many persons. There are broadly two considerations for skill development. One, to meet the skill needs of the industry, and two, provide employment to all youth entering the labour force. If we develop a demand responsive system, instead of a supply driven system, the demand of the industry will emerge from the Labour Market Information System which is dynamic, interacts with all the sectoral employers, aggregated at the national level and fed to the VET system. However, we should not confuse skills with creation of jobs. Skills ipso facto do not create jobs. Jobs are a function of growth of economy in terms of increase in gross domestic product, setting up of new industries their capital/labour intensity, expansion of services sector enterprises, export growth, infrastructure development and active labour market policies, etc. The demand side of skills will come from the employers of various sectors which will change from time to time. However, in order to create adequate infrastructure for training, another approach could be based on entry into the labour force every year. We analysed the NSSO data from 1999-2000 to 2011-12 (Appendix XXI) which suggests that the labour force increased at the rate of 12.8 million per annum between 1999-2000 and 2004-2005. This increase was the largest ever. However, the labour force grew at a meagre 1.01 million per annum between 2004-2005 and 2009-2010 which is probably one of the lowest. It grew at the rate of 4.87 million per annum between 2009-2010 and 2011-12 which gives us an indication that training capacity of about 5 million per annum should be good enough for the country. We carried out another analysis. There are 1,31,287 secondary schools in the country where about 3.7 crore children enrol every year. If we take a pass percentage of 75%, about 2.77 crore children will pass out every year. There are a total of 1,02,558 senior secondary schools in which 2.22 crore children enrol every year. So, about 55 lakh children drop out after ten years of schooling. If we can attract these and about 20% of children who enrol in senior secondary schools, we will get a total of about 9.9 million students. The training infrastructure, therefore, should be such which may be able to accommodate about 10 million students every year. The argument given for reduction in labour force in 2004-05 and 2011-12 is that most of the children who should have joined the labour force stayed back in education. Now, after 5 years, all those would definitely join the labour force after completing education. The number, therefore, appears to be somewhere between 5 to 10 million persons per annum. At present, we have 3925 polytechnics with a capacity of 12.45 lakh, at a capacity of 317 per polytechnic; Similarly, there are 12,412 ITIs with a seating capacity of 25, 51,330 at an average capacity of 206 per ITI. If we can increase the capacity of our diploma colleges and ITIs to about 500 trainees per annum, we will get a capacity of 19.62
lakh in diploma colleges and 62.06 lakh in ITIs which makes it a total of 81.68 lakh. If we have to augment the training capacity to about 10 million per annum, we will need only about 3600 new VETCs at an average seating capacity of 500 per annum which does not seem to a daunting task. If we don’t increase their capacity, we will require 7,630 VETCs (Para 2.1.1). The Committee, therefore, recommends as follows:

i) All diploma colleges and ITIs should be renamed as VETCs and their capacities should be enhanced to about 500 trainees per annum running about 10 trades which may include 3-4 engineering, 6-7 services sector trades along with two academic subjects.

ii) Setup 3600 new VETCs in government, government aided, private and public private partnership. They may be financially supported by NSDC. There are more than 10,361 private ITIs in the country with a seating capacity of about 18, 57,405. They have come up on the strength of the entrepreneurship of individual promoters, industrial houses, private sector, nongovernmental organizations, charitable trusts, etc. They will be very happy to modernize the infrastructure, expand the capacity and run diploma and degree level courses, however, they do not have the financial muscle to do so and, therefore, they should be financially supported by the NSDC.

iii) The new 3600 VETC should be setup close to industrial townships and industrial clusters. However, some VETCs may come up in backward and left wing extremism affected areas so that youth from these areas could access these institutions as ultimately, the youth trained here will have to look for employment elsewhere.

2.1.9 Poor Quality Outcomes

One of the major challenges facing the VET in the country is substandard quality leading to non employment. Basic reason for this has been the absence of national standards and national credible assessment and certification system. If the VET does not fulfil the twin objectives of meeting the industry’s demand and providing employment to youth, the expenditure there on is wasteful. The Committee has already recommended to create a National Vocational Education and Training System, National Vocational Education and Training Standards and setup a National Board for Assessment and Certification. The Committee, therefore, wants to re-emphasize that in order to make VET credible, serve the skill needs of the industry, provide employment opportunities to youth and be internationally comparable; it must be of very high quality. It is recommended that all the vocational training institutions must be accredited on the basis on National Accreditation Standards by independent professional bodies such as
Quality Council of India, create annual surveillance and oversight mechanism and ensure best quality training by way of assessment and certification.

2.1.10 Short Term VET Courses

DGE&T started Modular Employable Skills (MES) under SDIS in 2007 and 1632 short term modular courses were developed. These MES courses were adopted by most of the Ministries and Vocational Training Providers. Even NSDC training partners were conducting training programs under MES. Though SDIS was continued in the 12th Five year plan, NSDC started STAR in 2013-14 and PMKVVY in 2015. It has been further continued from 2016 to 2020. But the spirit of MES continued in STAR and PMKVVY conducting courses of 150-300 hours duration. It is shocking to note that some courses are only of 8 hour duration (Gems and Jewellery); about 12% courses are of 100-150 hour duration; 51.3% of 150-300 hour duration and 17% courses of 300-400 hours duration. It is further shocking to note that level 4 certificate is granted for training of an average 296 hours for which an ITI trainee takes two years; level 5 certificate for an average training duration of 392 hours for which a polytechnic trainee takes 3 years; level 7 certificate for an average of 472 hours which is equivalent to a graduate; level 8 certificate for an average training of 400 hours which is equivalent to a postgraduate and level 9 certificate for an average duration of 240 hours which is equivalent to a doctorate (Appendix XXX). So, the QPs/NOSs developed by the SSCs have made a mockery of the whole skill development system in the country. Most of the Central Ministries have also been running short term courses through the private vocational training providers. However, the Committee found that the short term courses do not meet the twin objectives of meeting the exact skills needs of the employers and provide decent opportunities of livelihood to youth at decent wages. If we continue with these short term courses without ensuring employment to youth and fulfilling the requirement of the industry, industry will feel frustrated and the youth will be disillusioned which may create social tensions in the country. The big question then is whether the short term courses are going to meet the needs of the Indian industry or the person trained under these schemes are competent enough to work anywhere in the world to achieve the vision of the Prime Minister. Then what do we do? The Committee discussed this issue in great detail. We have already said that the National Competency Standards (NCS) should be developed on the basis of ISCO 2008 and a task under a unit group may be treated as “Competency Unit”. Modular courses/semester system may be developed for each competency unit but a person should be awarded National Competency Standard Certificate (NCSC) only after he acquires competencies in all tasks included in the unit group and assessment should be done by the National Board of Assessment and Certification, as a person having NCSC will be eligible to get employment in the
country or abroad and will be able to meet the skills needs of the industry. The Committee strongly recommends that the various short term courses run presently under various schemes must be discontinued. It is sheer wastage of public money without achieving any results.

2.1.11 Large School Drop-outs

According to the latest information available from U-DISE 2013-14, about 19.58 crore children enrol from I to VIII standard and the dropout rate is 36.7% which means that about 7.11 crore children drop out up to VIII Standard. This is a mind boggling figure. It is not the problem of vocational education and training but the problem of our educational system. While there may be various reasons for drop-outs, but the fact still remains that the parents and students do not consider education necessary for their lives. We have not been able to provide them knowledge, values or aspirations which may attract them to continue their education. However, they will still need some means of livelihood when they grow up. There are large numbers of opportunities for jobs in agriculture, allied and other unorganized sectors in the local economy. Such early school leavers could be used gainfully after providing them training. The then Prime Minister had announced setting up of 50,000 Skill Development Centres on 15th August 2007 from the ramparts of the Red Fort. The basic idea was that there should be one Skill Development Centre (SDC) in a cluster of about 10-12 villages, which would provide skills to the youth so that they can access employment opportunities in the local economy. This is an important area and such large number of youth cannot be left unattended. The state of Gujarat has already set up a good number of such SDCs called Kaushal Vardhan Kendras which are doing excellent work. The Committee, therefore, recommends as follows:-

i) We should set up about 50,000, Vocational Education and Training Schools (VETS) at the rate of one in a cluster of about 10-12 villages. These VETS may be setup by the government, government aided, private sector, public private partnership, local bodies and nongovernmental organizations. They may be financially supported by the NSDC.

ii) The courses run in these VETSs should be according to the needs of the local economy. However, the skills certificate should be provided for the full NCS and if the person is not in the position to do NCS in one go, it may be provided in competency units but he will be eligible to employment only when he acquires all the competencies in the unit group. The person should also learn two academic subjects so that after two years, he can acquire NCSC and graduate to VETC. He may join the labour market after acquiring NCSC or join VETC for vertical mobility.
2.1.12 Recognition of Prior Learning

As we have observed earlier, a typical feature of rural and unorganized economy is the prevalence of informal apprenticeships. In absence of formal vocational training institutions in these areas, they do not get an opportunity to get skilled formally, but they acquire competencies while engaged as informal apprentices. However in absence of certification of their skills, they command low wages and are unable to move vertically or horizontally. Therefore, there is a need for recognition of their learning acquired informally. NSDC started RPL under STAR and PMKVY but they did not follow the essence and spirit of RPL. The concept was misused for inflating numbers by certifying existing employed contractual workers after giving 2-3 hours training. That is not the purpose of RPL. The Committee, therefore, recommends to create a well established framework for RPL as follows:-

i) The person who claims to have acquired skills informally and wants to be certified, he should be tested and gaps in terms of process, professional knowledge, professional skills, core skill and responsibility identified

ii) After the identification of the gaps he should be trained according to the requirements of the level of NSQF at which he wants to be certified in relevant Competency Units.

iii) Once he has attained those attributes, he should be assessed by the National Board for Assessment and Certification.

iv) The assessment should be for the NCS as a whole but if he has acquired competencies in competency units, he should be encouraged to acquire competencies in all the units and then certified so that he becomes a skilled person of a certain level and commands higher wages. This way he will also be eligible for upward mobility and lifelong learning.

2.1.13 Promotion of Soft and Life Skills

Soft Skills for a skilled person are as important as hard skills. He has to always interact with the colleagues, superiors and customers and, therefore, communication skills, interpersonal behaviour, team work, a positive attitude – all become very important for the job he is doing. He should also have computer skills as in today’s world; it has become a daily necessity. Similarly, quality consciousness about everything he does and precautions for occupational safety and health become crucial for his functioning. The Committee, therefore, recommends, that the following soft skills should be made an integral part of each trade/course curriculum:-

i) Communication Skills including interpersonal behaviour, team work, oration, presentation, problem solving approach, positive attitude, etc.
ii) Computer and digital literacy
iii) Quality Management Tools
iv) Occupational Safety & Health
v) English Proficiency
vi) Entrepreneurial Skills
vii) Basic Financial Literacy

2.1.14 VET for the Unorganised Sector

Skills in the unorganized sector are very important to improve its productivity, value addition and profitability. It employs about 93% of the total workforce of the country. Many youth learn skills through informal apprenticeships in the unorganized sector enterprises and, therefore, a systematic and focused approach towards skilling needs of the unorganized sector is very crucial for growth of the sector. The Committee devoted considerable time on this issue and recommends the following:-

i) In order to recognize and value the informal apprenticeships, a sound framework of recognition of prior learning should be evolved. We have dealt with this aspect separately.

ii) As most of the youth working in the unorganized sector will have low educational attainments, a system of Vocational Educational and Training Schools (VETS) should be evolved. These VETSs should be setup close to the MSME clusters so that the youth working there could formalise their skills in these schools and hands-on training in the enterprises.

iii) The SSCs should work intensely with the MSME clusters and ensure that at least one apprentice is trained by each unit. The theoretical training can be given in the VETSs.

iv) The assessment of the competencies of the trainees trained should be done by the proposed National Board for Assessment and Certification.

2.1.15 Shortage of Qualified Trainers

We have observed that there is huge shortage of qualified trainers in the VET system. One cannot imagine quality training without a quality trainer. The role of trainer is so crucial and could be understood by a quote by John Wooden who said

“No written word, no spoken plea can teach our youth what they should be. Nor all the books on all the shelves, its what the teachers are themselves.”
The NSDC and SSCs made a mockery of trainers training by giving fresh diploma and engineering graduates 2-5 day training to become a qualified trainer. The importance of trainer could be judged by the efforts of the Central Government who started Crafts Instructor Training Scheme as early as 1948. The instructor training is of one year duration but despite the efforts of the government, the training capacity of the trainers still stands at 8268 per annum while we require at least 20000 trainers per annum. The Committee, therefore, recommends as follows:-

i) A framework for training of trainers should be evolved which should include entry qualifications, subjects to be taught, duration, pedagogy skills, etc.

ii) Each training institution should be mandated to engage only qualified and trained trainers with industry experience.

iii) The existing institutions for training of trainers- Advanced Training Institutes, ITOTs, NVTI for women, and RVTI for women, etc should run to the fullest capacity in two shifts.

iv) New ITOTs should be setup to meet the growing requirement of trainers.

v) The trainers must be given at least six months industry training so that they are well rounded and wholesome to impart training and values to the trainees.

vi) As the best teachers in the country are given recognition by awarding them annually, we should also introduce the system of awarding the best trainers from various institutions every year on the National Skills Day and these awards should preferably be handed over by the President or the Prime Minister.

vii) The persons who work in the industry are highly paid but when they come to the training institutions as trainers, they are paid much lower. There is, therefore, no incentive for the industry experts to work in the training institutions. The trainers, therefore, should be paid higher salaries than their counterparts in the industry so that the experts from the industry prefer to work in the training institutions as trainers.

2.1.16 Provision for Counselling, Guidance and Employment Services

Providing Counselling, Guidance and Employment Services to trainees is as important as providing them skills. This work was earlier done by the Employment Exchanges in the country. However, with time they have lost their relevance. We have 976 employment exchanges in the country and at least one in each district. Children should be sensitized right from nursery to college level about job opportunities, career options and self employment opportunities. South Korea has taken a very path-breaking initiative by setting up a “Job World-Korea” where
children from nursery to college are sensitized about various jobs, what was their nature in the ancient times and how they evolved, what is their present status and what will be its future. The children also are given an opportunity to experience the job themselves; they are also given an employment psychometric test at the end of which the child is told what could be his preferred career options where he could excel. Unfortunately in India, employment cadre has been declared a dying cadre and no fresh recruitment is taking place in many states. If we want our country to grow, youth must be at the centre of our thinking and investment must be made in providing them education, skills, and counselling guidance & employment facilities. The Committee strongly feels that providing counselling, guidance and employment facilities should be one of the focus areas of the government and recommends the following:-

i) Directorate General of Employment should be brought under the control of MSDE and given the responsibility of developing a national labour market information system in close coordination with NSDA and SSCs. The purpose of skill development is employment only and therefore, there is no reason for it to remain separate.

ii) All the Employment exchanges in the country should be modernized, converted into state of the art Counselling, Guidance and Employment Facilitation centres armed with modern technological tools to counsel, guide and provide employment services to the youth. The children should visit these centres regularly by rotation and the experts from employment exchanges should visit the schools particularly at the secondary level to sensitize all children about various career opportunities. They should also carry out psychometric tests to guide children and parent what careers they can excel at, particularly to those who are at the secondary level.

iii) The DGE and SSCs should work closely to facilitate placement to the trainees.

2.1.17 Skills for the future

We have discussed above, the development of skills for the existing jobs. However, the technologies, manufacturing practices and service delivery systems are changing so fast that in order to keep pace with them, we need to create sound institutional mechanism so that we can visualize and prepare people with those skills. It is not an easy job. But if we can create an institutional mechanism which can do research in collaboration with leading technology innovators, bring those skills to their institute, develop faculty, infrastructure for training in those skills, and train master trainers. There is already an institute called Apex HiTech Institute (AHI) in Bangalore which may be designated as the institute for developing future skills. They are already conducting courses such as Mechatronics, instrumentation, industrial automation, etc. It may be strengthened and expanded and disciplines such as nano technology, artificial
intelligence, robotics, etc be brought in. They should also be entrusted with the work of conducting research in new technologies, evolving skills and train master trainers for the VET system. The NSRD is located in NSDA and therefore, the Committee recommends the NSRD and AHI should work together on future skills.

2.1.18 Need for a comprehensive legislation

We have tried to design a new framework for 21st century developed India. But many of these things may be difficult to implement without strong backing of legislation. The Committee, therefore, recommends that the two existing Acts i.e. Apprentices Act, 1961 and The Employment Exchanges (Compulsory Notification of Vacancies) Act, 1959 should be repealed and a new Vocational Education and Training Act (VETA) should be enacted which may encompass the following subjects:

i) National Vocational Education and Training System

ii) The National Vocational Education and Training Standards

iii) The Roles and Responsibility of various stakeholders in the VET system such as MSDE, MHRD, SSCs, Employers, Trade Unions, etc.

iv) Implementation of Reimbursable Industry Contribution(RIC)

v) Compulsory Apprenticeship Training

vi) Compulsory employment of only skilled manpower

vii) Providing information about the skill needs to the SSCs

viii) Any other subject considered necessary for legislative support
Chapter 3

Sector Skill Councils:
Conceptual Framework and International experiences

3.1 Sector Skill Councils are the main interface between employers, trade unions, governments and various components of Vocational Education and Training (VET) system. The need for setting up these employer-led and employer governed bodies arose as manufacturing processes and technologies became more and more complex and the VET systems of the country were not able to deliver the skilled manpower which could help in improving productivity, quality and gross value addition to the industry. The governments and industry over a period of time realized that the VET system has become supply-driven and is not able to meet the exact skill needs of the employers. The SSCs, therefore, were conceptualized to transform the supply driven system to a demand-responsive VET system.

As the UK Skills White Paper says, “Employers will have new powers to shape the design, content and delivery of training to meet their needs. In return we look to employers to invest more in training, where there is a clear return to the employer and the learner. We look to them to engage more actively in developing and deploying skills to meet business priorities and articulate their need in a way that school, colleges, universities and training providers can understand and act on.”

The sectoral skills developmental framework is seen as one of the key means of building this increased investment among employers. SSCs are expected to have representation from leading employers on their board and to consult other employers in their sector and other stakeholders when developing their strategies and targets in meeting four key goals:

i) Reducing skill gaps and shortages;
ii) Improving productivity, business and public service performances;
iii) Increasing opportunities to boost the skill and productivity of everyone in the sector work force, including action on equal opportunities; and
iv) Improving learning supply, including apprenticeships, higher education and national occupational standards.
3.2 The Indian VET system, even before independence in 1945, it was based on centralized planning model. When the economy was growing at a modest rate of 3.5% per annum in the first three decades, the system was able to serve the needs of the industry. But when the economy started growing at the rate of 5.5% per annum in the 1980s, the system started showing strain. But in the new millennium when the economy started growing at a phenomenal rate of 8-9% per annum, the cracks in the VET system were clearly visible. Prominent industrialists started complaining to the government that the system was not able to meet their exact skills requirements. 2005 NASSCOM- McKinsey World Institute study brought out that over 75% of engineering and 85% of arts, science and commerce graduates in India were unemployable. The government, therefore, started many steps to address the situation. A National Skill Development Mission was setup and a National Policy on Skill Development approved in February, 2009. In order to transform the centralized planning and provisioning skill development system into a demand responsive system, the concept of sector skill councils was introduced in the new policy. The basic objective was to create SSCs in different sectors to come together and pool their knowledge, experience, expertise and resources to articulate the demand side requirement of skills. Accordingly, the first four sector skill councils on Automotive, Retail, IT/ITeS and Security were setup in 2010-11.

3.3 National Policy on Skill Development 2009 has defined the functions of SSCs, which are as follows:

1. 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.

2. Development of a sector skill development plan and maintain skill inventory.

3. Determining skills/competency standards and qualifications.

4. Standardization of affiliation and accreditation process.

5. Participation in Affiliation, accreditation, examination and certification.

6. Plan and execute Training of Trainers.

7. Promotion of academies of excellence.

8. Establishment of a well structured sector specific Labour Market Information System (LMIS) to assist planning and delivery of training.

3.4 Similarly, the National Policy for Skill Development and Entrepreneurship, 2015 says that, “in order to ensure skill development efforts made by all stakeholders in the system are in
accordance with actual needs of the industry, SSCs are being setup. SSCs are industry-led and industry-governed bodies, which will help link, the requirements of industry with appropriately trained manpower. The policy also defines the function of the SSCs and when we look at these functions closely, we find that the same functions as were assigned in the 2009 policy have been listed out with the following modifications:

i. In the 2009 policy, assessment and certification was not within the mandate of SSCs but in the 2015 policy, “skill based assessment and certification for QP/NOS aligned training programmes” was added.

ii. The 2015 policy also included special emphasis on the skilling needs of the SC/ST, differently abled and minority populations.

iii. The 2009 policy mandated establishment of a well-structured sectors specific a labour market information system (LMIS) to assist planning and delivery of training while the 2015 policy has deleted it.

iv. The 2015 policy also mandates SSCs that they shall ensure that the persons trained in accordance with norms laid down by them are assured of employment at decent wages.

3.5 While analyzing closely the modifications done in the 2015 policy, a significant additional role, which has been assigned to SSCs, is assessment and certification. It presumably has been done to create a regular source of revenue to the SSCs. While it might appear that it helps SSCs sustain financially, it has created an anomalous situation where there has been grave compromise in quality of assessments in order to earn maximum revenue out of assessment and certification. The SSCs have appointed a large number of assessing bodies but the quality of assessors is very poor. Most of the assessors were found to be ether diploma or degree holders without having experience of working in the industry. In order to maximize their revenue, the SSCs tried to carry out maximum number of assessments and certification without regard to quality and whether they have acquired relevant competencies or not. The result was that the sectoral industries themselves refused to employ such trainees. It has eroded the credibility of assessment and certification system and the trust reposed in the SSCs. On top of that, there are 40 SSCs in existence and each of them is trying to maximize its revenue through assessment and certification which has created confusion, particularly, when the training institutions/vocational training providers are conducting training programs in many courses coming under the jurisdiction of many SSCs.

3.6 Another significant modification, which has been done in the 2015 policy, is the deletion of labour market information system from the mandate of the SSCs. The SSCs are required to
articulate the demand of skilled manpower on real time basis and, therefore, they necessarily need to have some mechanism to collect the exact skill needs of its members on annual or periodical basis. During our consultation with the SSCs, we asked them how they would project demand side of skills if they do not have a credible sectoral Labour Market Information System. Most of them admitted that at present, they do not have any such system but also assured that they would develop an online portal to collect such data to project the demand side of the skills for their sector for use by all the stakeholders.

3.7 SSCs are very important industry-led and industry-governed bodies. Almost all the countries of the world have got the concept of SSCs working with minor modifications to suit their own domestic needs. Various studies have been carried out to understand the functioning of SSCs in different countries and to what extent they have been able to deliver according to the mandate given to them. A compilation of the SSCs in some countries is at Appendix XXII. Proper employer engagement is the single most important element in devising a successful sectoral strategy. Broadly, there are four models of employer engagement prevailing in the SSCs. These are represented in the Box 2.0. Employer engagement in each model has its own distinctive relationship with other components within the national skills system with specific roles and effectiveness in driving up the demand for skills in the different national contexts. These are:

i) Employer-involved;
ii) Employer-owned;
iii) Employer-modelled; and
iv) Employer-driven

Table I: Sectoral Models of Employer Engagement

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<thead>
<tr>
<th>Employer-involved (2 variants)</th>
<th>Employer-modelled</th>
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<tbody>
<tr>
<td>a) Voluntary engagement of employers in sectoral skills debates, primarily via consultation</td>
<td>Best practice model of skills development used to shape training practices within the sector</td>
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<tr>
<td>b) Statutory engagement of employers in financing sectoral skills delivery and voluntary consultation</td>
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<tr>
<th>Employer-owned</th>
<th>Employer-driven (2 variants)</th>
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<tr>
<td>Employer-funded sectoral approach which ties into sectoral skill strategies and needs, as indentified by employer’s association and representative groups</td>
<td>a) Public VET system determined by employer-demand</td>
</tr>
<tr>
<td></td>
<td>b) Private Partnerships bringing employers together in order to identify and invest in training</td>
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</table>
3.7.1 Employer-Involved

There are two clear variants within this model of employer engagement, namely voluntary involvement and statutory involvement.

3.7.1.1 Voluntary employer-involved

Despite the need to promote greater employer involvement in skills provision, ‘voluntarism’ is still an important feature within the formation of this type of sectoral approach to engaging employers. Such sectoral approach can be found in the United Kingdom, Australia, New Zealand and Canada. The emphasis in all these countries is on the sector bodies to reach out and engage employers in a dialogue about their demands and the wider skills agenda. The aim is to increase awareness of and involvement in training and development. Thus, employers remain fairly reactive and the sector bodies are primarily government backed/financed organizations. The SSCs are positioned as the main interface between employers, trade unions and the government in relation to skill development and industry needs. The role of employers in the U.K system is to feed information, via the SSCs to the government and the VET system about their skill needs and priorities about the future shape of the sector. While there is room for individual SSCs to take different approaches with the partners in their sectors, the nature of employer involvement in many of the SSCs is one of ‘being involved’ and ‘being consulted’- employers are represented on the board and are consulted about the strategic direction of the SSC and the skill strategies in the sector.

3.7.1.2 Statutory employer-involved

Within this variant of the employer-involved model, employers are required by law to invest in training and development. This model is being implemented in South Africa, France and Quebec in Canada. As well as contributing to South Africa’s productivity, competitiveness and employement, education and training have been identified as fundamental to developing social cohesion, citizenship, equity and stability for the future. In order to deliver on the South African government’s skills strategies, employers are required to invest in training and development via a statutory levy. The Department of Labour Skill Development Act, 1998 with a particular focus on skill development in the workplace established a framework for a compulsory training levy and a network of Sector Education and Training Authorities (SETAs). The levy was setup on April 1, 2000 and is collected monthly through taxation through South Africa Revenue Service. This is currently set at 1% of wage bill. The levy supports the government’s skills strategy in various ways:
i) Establish a national network of 25 SETAs;

ii) Encourage workers to develop workplace skills, plans and invest in skills by moving beyond compliance towards the development of an embedded culture of skills development and lifelong learning; and

iii) Fund national priority skill development programs through the National Skills Fund (NSF) providing a range of training programs and strategies to fill skill gaps and increase employment opportunities and social cohesion. The SETAs started operating in 2000 covering all public and private sectors. Currently there are 25 SETAs the funding of which depends on the size of the sector and the levy paid. The current level is about UK £190 million for each year. SETAs are bipartite, bringing together industry and trade unions and are entirely funded via the employer levy. The key roles of the SETAs are:

i) Organize and administer the levy funds and grants, 80% of which are passed on to them after payment of 20% to the national fund;

ii) Develop a sector skills development plan and a strategy for the sector;

iii) Develop, register, promote and monitor learner ships, ensuring access to quality training within the national quality framework;

iv) Help companies develop their workplace skills, training and development practices; and

v) Provide information about current and future skill needs in the sector.

The role of employers within this approach is primarily to finance skill development in a collective manner via the levy system and to recognize the role of skills and training in the enterprise, within the sector and more widely in the national economy. Employers can then work with their respective SETAs to reclaim up to 70% of the levy payment through engagement in certain required skill development activities. This approach seeks to engage employers in sectoral skill development and to take responsibility for training through statutory means.

3.7.2 The Employer-Owned Approach

The Employer-owned approaches are characterized by employer funding and a singular focus on meeting the employer demand within the same sector. Unlike the employer –involved approach, this model is wholly employer-funded and employer-owned with little government intervention. The employer owned sectoral bodies are relatively rare and are only possible under certain conditions, such as Hong Kong Industry Training Associations (ITAs). Rather than being a current national approach that covers all industries, these are legacy from the former colonial
governments and a number of them have remained active in certain key sectors since their introduction in the 1970s. The ITAs were setup by the Hong Kong Government under the Industrial Training Ordinance. The aim was to ensure that employers in key economic sectors were investing in training and development. The Construction Industry Training Association (CITA) in Hong Kong is a typical example of this model. The CITA supports and implements the skills and future industry growth policies set out by the Hong Kong Construction Association (HKCA). CITA has the following roles:

i) Working with the industry to identify and set skill standards;

ii) Run dedicated industry training centres;

iii) Design and provide demand-led training programmes that will help to meet the skills shortages and policy goals;

iv) Assessment, examination and accreditation;

v) Facilitate placement and employment for individuals who have completed CITA training programs; and

vi) Recommend the level of training levy for the industry.

In such cases, the government puts initial policies in place that enable sectors to setup an employer owned, employer funded sectoral body. Part of the legislation will include an ability to setup a statutory levy, which is then used to establish the sector body and to organize sectoral initiatives and programs. This is the way of ensuring that companies invest in training and development and organization of programs at sectoral level. The sector body then focuses on skills needed for the sector but the funding role of the government is negligible.

3.7.3 The Employer-modelled approach.

There are relatively few formal sectoral bodies in Singapore. However, an employer-modelled approach to skills development has been taken within the sectors since 1993 as part of the workforce training system. This involves an on-the-job training (OJT) blueprint approach and is specific to Singapore. This government-led initiative involves developing excellence by creating a blueprint of training and development practice in a leading organization and this forms the basis of structured training documents that outline standards of performance in a number of important job functions within the leading organization and how these can be achieved. A key emphasis is on OJT. Although individual companies can work to develop their own blueprints according to their own objectives and job roles, the government developed a number of leading edge company blueprints. These blueprints are intended to improve the quality of training
through learning from the very best companies providing a best practice model that companies could consult and learn from and speed up the process of developing these across industry. The skills so developed are assessed and certified through the National Skills Recognition System (NSRS). As an incentive, companies that develop an OJT program in accordance with the blueprint can also take certain steps to become a certified deliverer of OJT. Once certified, the program will attract support from the skill development fund which covers a percentage of the costs of OJT developed both by internal and external trainers. The role of employers within this model is primarily to recognize the importance of skills as a source of national competitive advantage and to strive for excellence in their provision of OJT by learning from the ways in which leading companies in their sector undertake training. So the employers play three roles within this system:

i) As a leading company providing best practices for other employers;

ii) Learning from best practices so that their own company can utilize training resource more effectively; and

iii) Supporting the system by contributing towards the skill development fund levy

3.7.4 The Employer-driven approach

There are two variants in employer-driven approach. These reflect the underpinning model of the national vocational training framework of each country namely: public VET and partnership VET.

3.7.4.1 Employer driven – Public VET

This system is being followed by Netherlands where employers work through sectoral bodies, the Kennicentra (Knowledge Centres) to identify and express their skills that are required by the sector. This is fed through BVE Raad, the umbrella body of the regional technical colleges that then feeds to the regional colleges to develop the curriculum primarily based on the standards and requirements set by the employers. Although, there is room for regional variation. The role of employers within this framework is to drive the VET system by identifying the skill needs and the demands of the sector via the sectoral body (Knowledge Centre). Once the curriculum has been developed, employers play a vital role. Vocational education programs are generally delivered in one of the two ways, either work based or school based with different percentages of training time within it, be workplace or school depending on which pathway is chosen. Employers are the primary training providers within the work based pathway which involves a work contract for each trainee up to 80% on-the-job training and release for school-based
training or in-house training provided by a visiting trainer from the school for up to 20% of the training time. The sector body must accredit such employers before they can take on a training ensuring the quality of training provision. Accredited employers are expected to pay a trainee wage and to cover the cost of training; however, they receive a 15% tax rebate in order to do this. With the school-based route, the emphasis is on the technical college to provide up to 80% of the training within the institution and a minimum of 20% as part of a work placement. Trainees on this pathway received support for their school fees and a small allowance whilst training within the workplace. Within this approach, the employers have two key roles- to identify skills and to provide skills training at their workplaces.

3.7.4.2 Employer driven – Partnership VET

An alternative employer driven approach is via partnerships such as in the USA where instead of a nationalized sectoral system, workforce training is often localized. The High Job Growth Training Initiative (HJGTI) is one such initiative; Introduced in 2003, HJGTI works alongside the wider Workforce Investment Act (WIA) and its resulting provision. HJGTI is designed to be employer-led and focuses on partnerships that support job training for twelve key industrial sectors. These twelve sectors are expected to experience significant job growth in the next 10 years. Common to all 83 HJGTI partnerships, currently in practice, is the need to develop seven sectoral-related dimensions. These dimensions in turn form a ‘challenges and solutions’ proposal that partnerships have to submit to the U.S Department of Labour to gain approval and funding. Public funding is often limited to seeding early initiatives. The participants in the partnership include colleges, employers, employer associations, coalition of skill providers, One-Step Centres (which are like job centres) and other key stakeholders. The role of employers in such partnerships is critical in terms of developing an effective training system that will meet the needs of a particular industry. They design specific partnerships to tackle set of particular issues. Employers determine what targets have to be achieved as a result of implementing the partnerships. The relevant skill sets are also specified by the employer-led industry forum. Unlike competency standards in other national sectoral systems, the skilllets in HJGTIs are more traditional, ranging from apprenticeships and diplomas to associate degrees.

3.7.5 Conclusion

It will appear from the above discussion that the employers are expected to play a range of roles in national and sectoral skill development, whether advisory, leading or financial. Each national approach is developed within a specific social, political, historical and cultural context. Very few national systems or policy approaches can be transferred directly to another country with the
same outcomes. Each of the sectoral approaches seeks to make use of skills development to bring together employer demand for skills and national skills policy aims. In model 1, employer demand for skills is identified and delivered by engaging at an advisory level within each sector, and then delivered either through voluntary means or through statutory levy based financing. In model 2, employer demand is the very basis on which the sector bodies perform with employer owned and run sectoral bodies acting as the ‘training department’ for the sector. In model 3, this demand is shaped by models of practice based on the very best performing companies in the sector. In model 4, employers drive the skill agenda either by leading the VET system or by forming project-driven or tailor made partnerships to solve the specific skills problems. All these four models raise three central issues of ownership, financing and responsibility. If we look closely on the above four models, Hong Kong which is employer-owned and employer-funded system appears to be the most effective as it gains a high level of support from within the sector. However, there is no government intervention in it. The sectoral approach in this model primarily focuses on improving the productivity, quality, gross value addition, competitiveness of the industry and higher return to shareholders. If the government wants them to focus on social inclusion, equity, employability, reduction in poverty or any other social or economic objective, the sectoral body may not be interested. This approach may therefore, serve the purpose of the industry but may ignore government’s social and economic objectives. The government, therefore, will be required to incentivize the sectoral body to take care of the government’s social and economic objectives while meeting their own goals.

3.7.6 While following the sectoral approach which may be ‘employer-owned, employer-funded’, the Government cannot fully withdraw primarily for two reasons. One, India is still a developing economy and the Government have many important economic and social objectives to be met such as skilling and providing employment to youth belonging to various social denominations, such as scheduled castes, scheduled tribes, minorities, OBCs or persons below poverty line. Two, the VET system in India is still not in place. In order to address the basic issues of access, equity, quality and upward mobility, the government is required to make huge investment. The government will, therefore, have to follow an approach where the skill development system is owned, funded and driven by the private sector but the government makes adequate investment in achieving its social and economic objectives with the participation of the private sector. This partnership with the private sector will be based on a strategic framework where the investment is made to achieve measurable outcomes. The Committee, therefore, recommends a model of Sector Skill Councils which is owned, funded and driven by the sectoral employers, put in place a sound and credible National VET system and support the private sector through a strategic framework to meet the basic issues of access, equity, quality and upward mobility.
Chapter 4
Sector Skill Councils- Review

4.1 Constitution of SSCs

4.1.1 In the very first meeting of the Committee for Review of Sector Skill Councils, NSDC was requested to give a detailed note on concept of SSCs; conceptual framework of Sector Skill Councils as defined in the National Skill Development Policies, 2009 & 2015; the instructions given to SSCs regarding their constitution, particularly, in the context of ‘industry-led’ and ‘industry-governed’; current status of functioning of SSCs; specific definitions of sectors, particularly, with coverage of number of industries and percentage of manpower employed in the sector; governance structure, financing and international experience, particularly, of UK, Australia, New Zealand, Canada, Germany, South Africa, South Korea, Japan, China, Brazil, etc. and evaluation reports on different aspects of SSCs by different countries. The NSDC made a powerpoint presentation in which they brought out the following three criteria for constitution of the Sector Skill Councils:

- i) 20 High growth Priority Sectors identified by the Planning Commission;
- ii) Sectors with large organized workforce; and
- iii) Sectors with large informal workforce.

4.1.2 The Planning Commission in the 11th Plan document had listed 20 high growth priority sectors, which are as follows:

- i) Automobile and Auto-components
- ii) Banking/Insurance and Finance Services
- iii) Building and Construction Industry
- iv) Chemicals and Pharmaceuticals
- v) Construction Materials/Building Hardware, etc.
- vi) Educational and Skill Development Services
- vii) Electronics Hardware
- viii) Food Processing/Cold Chain/Refrigeration
- ix) Furniture and Furnishings
x) Gem and Jewellery

xi) Health Care Services ANNEXURE

xii) ITeS or BPO

xiii) IT or Software Services/Products

xiv) Leather and Leather goods

xv) Media, Entertainment, Broadcasting, Content Creation and Animation

xvi) Organised Retail

xvii) Real Estate Services

xviii) Textiles, Apparel and Garments

xix) Tourism, Hospitality and Travel Trade

xx) Transportation Logistics, Warehousing and Packaging, etc.

4.1.3 The NSDC has created 26 SSCs under this category. The SSCs which are beyond the list of 20 high growth priority sectors identified by the Planning Commission are: Iron and Steel, Infrastructure Equipment, Hydrocarbons, Strategic Manufacturing, Green Jobs and Persons with Disabilities. A significant inclusion in the list of the Planning Commission was Education and Skill Development Services. However, no SSC has been constituted on this so far.

4.1.4 Under the category of ‘Large organized workforce’, they have included Rubber, Telecom, Capital Goods, Agriculture, Aviation, Mines, Management, Paints and Coatings, Sports and Instrumentation. However, ‘large organized workforce’ has not been defined. On closer scrutiny, it has been revealed that sectors such as Rubber, Telecom, Capitals Goods, Aviation, Paints & Coatings, Sports and Instrumentation employ very small percentage of total workforce. Many of these sectors are not even defined as sectors by Central Statistical Office (CSO); such as Rubber is Subclass 01291 of Class 0129 of Group 012 – ‘Growing of Perennial Crops’ under Agriculture Sector.

4.1.5 Another criterion used by NSDC for creating an SSC was that a sector should have over 10 lakh existing workforce but the data which has been used is not based on any authentic official source. National Sample Survey Office (NSSO) under the Ministry of Statistics, Planning and Program Implementation (MOSPI) is the only organization which conducts quinquennial surveys on Employment and Unemployment in different sectors of economy. However, it appears that the NSSO data for this purpose has not been used at all. Instead, NSDC has used data brought out by a study conducted by a consulting organization whose authenticity is difficult to establish.
Even the criterion of 10 lakh workforce has not been followed strictly. According to the survey got conducted by NSDC, Media and Entertainment had a baseline employment in 2013 of 4 lakh only for which a separate SSC has been created. Even the criteria of 10 lakh of existing workforce does not appear to be justifiable for a country whose workforce in 2011-12 stood at 47.41 crore.

4.1.6 The NSDC has included ‘Agriculture’ Sector under the ‘Organized with Large Workforce’. The Agriculture sector is considered to be the large unorganized sector as, according to 68th round of NSSO survey of 2011-12, it commanded a workforce of 48.9 %. But it is not clear how NSDC has categorized it into organized sector.

4.1.7 Under the category of ‘Large Informal Workforce’, NSDC has included Security, Plumbing, Beauty & Wellness and Domestic Workers. However, some of these sectors do not qualify to be a ‘sector’ even though their workforce is in the informal category, such as Plumbing, which is defined as Group 432 of Division 43 of Construction Sector. Another significant issue which arises is that unorganized sector in the country accounts for about 93% of the total workforce. It appears that the issue of skilling the labour force in the unorganized sector has not been considered holistically. Apparently, these four sectors cannot be said to cover the whole gamut of unorganized sector workforce in the country. A strategy for addressing the skill needs of the unorganized sector through the system of SSCs does not seem to have been given adequate consideration. The list of SSCs constituted as per the criteria of NSDC is at Appendix XXIII.

4.1.8 Another criterion adopted by the NSDC was ‘No Overlap with segments of existing SSCs’. However, if we scrutinize closely ‘Construction’ sector has overlap with ‘Plumbing’ and ‘Paints & Coatings’; ‘Rubber’ with ‘Agriculture’; ‘Strategic Manufacturing’ with ‘Capital Goods’ and ‘Infrastructure Equipment’; ‘Power’ with ‘Hydrocarbon’ and ‘Green’; ‘Life Sciences’ with ‘Chemicals & Petrochemicals’; ‘Textiles’ with ‘Apparels’ and ‘Leather’, ‘Instrumentation’ with ‘Electronics’ etc.

4.1.9 Yet another criterion prescribed by the NSDC was that 40-50% industry of the sector concerned in the organized segment should be represented in the SSC. That would have been an ideal situation as larger the number of participation of the sectoral industry, larger the possibility of success of the SSC. If 40-50% of the industry joins in the initial phase, the number could be further increased to about 70-80%, which then would be in a position to take the whole sector forward in terms of not only skill development but also its overall growth in the long-term perspective. However, no data has been provided by the NSDC to support this position. In fact,
during our consultations with the SSCs, it was discovered that many large employers of the sector concerned were not represented on the SSCs at all. During our consultation with the employers and industry bodies, it was very strongly brought out that large number of employers even did not know that such an SSC exists and suggested that NSDC should carry out an intense sensitization campaign and persuade the sectoral employers to be part of the SSC.

4.1.10 The NSDC issued Proposal Submission Guidelines and Template for seeking proposals for setting up SSCs, which, among others, prescribed that the Trade Unions should be part of the SSC. Trade Unions play very important role in skilling their members and help them improve their productivity. However, no Trade Union representative has been involved in any of the SSCs. In our consultation with the Trade Unions, they were very positive and enthusiastic to contribute significantly to the skilling of the workforce and improving their productivity.

4.1.11 The NSDC had directed the SSCs to either get registered as a Section 25 company or a Society. Our analysis shows that 21 SSCs have been registered as societies and 17 as Section 25 companies. IT-ITeS SSC is neither a company nor a society but a part of NASSCOM. One company has not given its status (Appendix XIV).

4.1.12 After the NSQF notification on 27 Dec 2013, all the SSCs were required to be proposed by NSDC and approved by the NSQC. However, NSDC did not follow this order. Out of 12 SSCs constituted after this notification, only 3 have been approved by NSQC (Appendix XIV).

4.1.13 Normally, the date of registration of SSC should follow the date of approval of NSDC/NSQC. However, in case of Furniture and Fittings SSC and Power Sector Skill Council, the date of registration precedes the date of approval. 13 SSCs have not shared their dates of registration (Appendix XIV).

4.1.14 The NSDC had requested the industry associations to sponsor/promote SSCs. Though theoretically, they should have been promoted by the employers themselves, 11 SSCs have been promoted by CII and 5 by FICCI. The remaining SSCs have been sponsored by the sectoral industry associations (Appendix XIV).

4.1.15 It will appear from the above analysis that the sectors were identified on an ad hoc consideration without any scientific basis. Many of these so-called sectors do not even qualify to be sectors based on manpower employed or their contribution to the economy. They are small activities, which are included in a defined sector. There are significant overlaps among the SSCs,
omission of role of trade unions, inadequate consideration given to the skilling needs of the unorganized sector, etc.

4.2 Governance of SSCs

4.2.1 The NSDC in its instructions for setting up governing councils has prescribed that the governing council should cover all sub segments in the sector with representation from industry associations, individual companies, MSME representatives, Government nominee, training providers, academicians and NSDC representative. It appears that all aspects of constitution of the governing council have not been considered in depth. It is well established that the success of the SSC depends upon the ownership of the employers and therefore, all major employers of the sectoral industry concerned should be part of the SSC. While membership of the SSC should be given to all the employers of the sector, the governing council should be constituted through a process of election by all the members of the SSC. The chairman should be elected by the members of the governing council and should be a prominent industrialist to lend credibility and stature to the SSC.

4.2.2 The NSDC has provided for inclusion of industry associations in the Governing Council, which appears to be anomalous. Industry associations are constituted for a different purpose. Most of the time they are required to interact and influence the government on policy initiatives, tax concessions, policy reforms and advocacy on different aspects of the industry. All above functions are discharged by the bureaucracy of the association who are removed from the day-to-day functioning of the industry. They also don’t carry the same stature and commitment to such issues as financing or placement and therefore, ideally the employers themselves should be represented on the SSCs. Many of these associations are directors on the board of NSDC, which again creates an anomalous situation.

4.2.3 Workers participation in the SSCs is very important in the sense that they have a huge stake in skilling and improving the productivity of the individual workers as well as of the industry. NSDC has mandated that trade unions should be part of the SSC. However, none of the SSCs have included any member of the trade union in their Governing Council.

4.2.4 While NSDC has shown concern about the skilling of manpower in the unorganized sector and the task of training such huge manpower is so daunting, none of the SSCs has any member in its Governing Council from the unorganized sector. Nowhere has it been mentioned how NSDC or network of SSCs is going to take care of the huge skill requirement of the unorganized sector.
4.2.5 The concept of sponsorship of the SSC also appears to be flawed. The committee has observed that in one of the SSCs, out of 11 members, 5 are from the sponsoring industry association. In another case, 16 members out of total of 17 members are from sponsoring organizations. Similar is the situation in most of the SSCs. These sponsoring organizations/associations contribute equity/initial contribution and become owners of the SSC. It is not clear how they will look after the interest of all members of the sector concerned. The compilation of Governing Council members of all SSCs against NSDC approved Governing Council is at Appendix XXV.

4.2.6 The SSCs are required to identify skill needs of their sectors, develop skill development plan and skill inventory, determine skills/competency standards and, develop norms and standards for accreditation, affiliation, assessment, certification, carry out training of trainers, promote academies of excellence, create a credible and real time sectoral labour marker information system and ensure placement of all trained persons at decent wages. Huge manpower is required to carry out all above important functions. However, the committee found that most of the SSCs have a skeleton staff which cannot meet even the day-to-day minimum functioning of the SSCs. Many SSCs do not have CEOs; many CEOs come from promoting organizations. A detailed analysis of details of the CEOs is at Appendix XXVI. Many of the staff members are part time and many of them share responsibilities with their sponsoring organizations or belong to them. A detailed list of all the staff members of the SSCs is at Appendix XXVII.

4.3 Functioning of SSCs

4.3.1 India has been following a centralized planning model for skill development, which essentially meant that it was largely supply driven. The concept of SSCs was introduced in order to make the system demand responsive. The first function of the SSCs, therefore, was 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. However, none of the SSCs has been able to design a credible and dynamic demand aggregation system indicating exact skill needs of the sectoral employers. During our consultations with various SSCs, it was informed by some of them that they are trying to create an online portal to collect skill needs of the employers on real time basis. However, none of the SSCs has been able to do it, which, essentially, means that despite the setting up of the SSCs, the system still continues to be supply driven. The detail of the functioning of the SSCs as per their term sheets is at Appendix XXVIII.
4.3.2 The second major function of the SSCs was to prepare a sector skill development plan and maintain skill inventory. The purpose of this exercise was to consider holistic growth of the sector by identifying skill needs and providing skilled manpower to improve their productivity, gross value addition and competitiveness. This exercise was dependent upon the identification of skill development needs. As identification of skill development needs could not be done by any of the SSCs, sector skill development plans could also not be prepared by them.

4.3.3 The third major work required to be done by the SSCs was determination of competency standards and qualifications and getting them notified as per National Skills Qualification Framework (NSQF). The SSCs did develop National Occupational Standards (NOSs) and Qualification Packs (QPs) but the process followed and the persons used for this purpose was highly flawed. The NOSs/ Competency Standards should have been developed by trade experts from the sectoral industry as they are the people who exactly know, what are the kinds of jobs performed in the industry and what are the competencies required to perform those jobs. It is normally a multidisciplinary exercise wherein the industry experts, academicians, trainers, pedagogy experts, etc. are involved. In South Korea, this exercise has been done recently; they have followed the same process and have been able to develop only 847 National Competency Standards in the last three years. However, our SSCs outsourced this work to the consultants who have no experience of actual working in the industry. On top of that, the payment to the consultants was based on the number of NOSs they develop. The result was that in order to maximize their revenue, they created NOSs, which are quite narrow and not able to provide employment to the trainees. Normally, 10-30 NOSs make a competency standard/QP, which can provide employment to a person. NSDC has informed that SSCs have developed 9912 NOSs as on 4th Nov 2016 against which there are 4783 unique NOSs and 1801 QPs. It means that each QP will have an average of 5.5 NOSs, which is very narrow and cannot provide a job to a trainee. As we have seen in case of Korea, a national competency standard will consist of about 10-30 NOSs, which makes a trainee learn fairly large number of skills, which entitle him to a job. These competencies provide him comprehensiveness, which makes him a well-rounded worker, which is hallmark of the South Korean system of skill development.

4.3.4 Though 1765 (as shared by NSDC, latest number is 1801) QPs have been developed, even under Prime Minister Kaushal Vikas Yojana (PMKVY), only 395 have been used so far. The usage of QPs by sectors is at Appendix XXIX. Even under Fee Based Programs, only 137 QPs have been used which clearly shows that the development of QPs had no correlation with the need and the urgency of the industry. Normally, the NOSs/QPs should have been developed in order of priority of requirement of skills by the industry concerned. The average duration of
training of Level 1 courses is 276 hours, Level 2- 264 hours, Level 3- 246 hours and Level 4-296 hours. The details analysis of the number of hours in QPs by their levels is at XXX. No meaningful skills can be imparted in such short duration and that explains why even after training 18.03 lakh of youth, only 12.4% of trainees have been placed under PMKVY (Appendix XV).

4.3.5 The NSDC has informed that the QPs and NOSs were validated by 10 large, 10 medium and 10 small-scale industries. However, in many cases the SSCs have not provided details of persons who have validated from these industries. Many of the validation sheets are unsigned. However, this kind of validation does not serve the real purpose. Validation is not the same thing as preparing QP/NOSs based on exact functioning in the industry which is much more in-depth exercise rather than mere signing a paper which has been prepared by somebody else. It is also not clear how these 10 or 30 industries were selected. This exercise appears to be a mere formality in order to show that industry has been consulted, which is further proved by a mere small number of QPs/NOSs used for training and a miniscule placement.

4.3.6 Another important function of the SSC was development of accreditation, affiliation, assessment and certification standards. Normally, SSCs develop the norms and standards for accreditation, affiliation, assessment and certification and actual accreditation is done by an independent third party professional body on the basis of which affiliation is granted by an affiliating body. Similarly, assessment and certification is done by an independent body such as awarding bodies in U.K. But in our case, the standards developed by SSCs were not up to the mark and the persons who were deputed for accreditation or assessment did not have training and experience of working in the industry concerned as a result of which quality of training and assessment suffered. Many of these assessors were fresh diploma or engineering graduates with short term training of a couple of days as a result of which the quality was compromised and the trainees could not get employment which eroded credibility of the SSCs concerned.

4.3.7 Yet another function of the SSCs was training of trainers. The committee is not aware whether any of the SSCs has setup credible institutes for training of trainers. Normally, training of trainer after the basic qualification is of one year duration consisting of four modules of three months each out of which Technical Training I and II are hardcore subject skills, III is engineering and workshop calculation and the IV is pedagogy and communication skills. The trainer must have also got experience of working in the industry to be in a position to teach the nuances of skills being imparted to the trainees. The Committee failed to understand how a short term training program of two or five days to train the trainer can really entitle the person to be a qualified trainer. One cannot imagine the quality of training without a quality trainer. It,
therefore, appears that there has been compromise in quality at both training as well as assessment levels.

4.3.8 The SSCs were also required to set up academies of excellence. However, it appears that there is no clarity about what the ‘academy of excellence’ means. German chambers have used this concept beautifully. They have set up these academies with latest technologies, tools, equipments and machinery where they train the trainers as well as existing workers in new technologies which have just come to the market and no training centres are available outside. The purpose of setting up these academies of excellence was to provide high-end training to master trainers in disciplines, which have just come to the market, and not many training centres are available to impart those high-end skills. These academies are also required to conduct long-term quality training of trainers who could work as quality trainers to the trainees. However, the Committee could not be informed about setting up such academies of excellence by any of the SSCs. Some of them were told to be at the planning stage.

4.3.9 Another function of the SSCs was to ensure that the persons trained and skilled in accordance with the norms laid down by them were employed at decent wages. However, as we have seen earlier, SSCs trained 18.03 lakh persons in 2015-16 under PMKVY out of which only 12.4% persons could be placed. It would, therefore, appear that the SSCs have deviated from the original objective of articulating the demand of the skills needs of sectoral industry and meet it through the VET system. Their entire focus seems to have been on implementation of the PMKVY without regard to whether it will really meet the exact skill needs of the sectoral industry or turn out skilled manpower of global standards or persons would get placed after the training. The entire effort seems to make the SSCs financially strong by way of different mechanisms of accreditation, affiliation, assessment, certification, training of assessors, training of trainers, etc. but in the process, there was a compromise on quality and basic objectives of their creation at every stage. A complete analysis of each of the 40 SSCs is at Appendix XXXI.

4.4 Financing of SSCs

4.4.1 Financing of SSCs is a very important aspect of ensuring their commitment to articulate the skill needs of the employers, on the one hand and meeting the needs of the employers as well as setting norms and standards for alignment of VET system. We have seen earlier that the best system is the one where SSCs are owned, funded and driven by the employers. However, in our case, SSCs are being funded by the government through the NSDC. The other sources include accreditation fee, affiliation fee, assessment fee, certification fee, training of trainer fee, training of assessor fee, etc. While these sources of revenue may appear to make the SSCs financially
sound, the basic character and strength of the SSCs has been compromised. The SSCs are required to be an interface between the employers and the VET system. On the one hand, they identify the exact skill needs of the employers on real time basis and develop a credible sectoral labour market information system and on the other, develop norms and standards for competencies and share with the VET system so that the VET system could be aligned to the exact skill needs of the employers. Whatever be the size of the SSC, it will never be able to take over the role of the VET system and therefore, what it can do is to align the VET system to the skill needs of the employers. The SSCs should have created sectoral labour market information system, prepared the sectoral skill development plan, developed national occupational and competency standards, developed national training standards and shared with the VET system to make it demand responsive. The SSCs should have helped in providing in-plant hands-on apprenticeship training in their sectoral industries for which they could have requested support from the government. Their role is primarily that of research, development and facilitation but, in reality, they took up the role of implementation. The NSDC, in order to make them financially strong, designed schemes for training of youth in short term modules of 150-300 hours, assigned targets to the SSCs and asked them to empanel vocational training providers and assessing bodies to carry out training and assessment and earn revenue for themselves in the process. All the vocational training providers, assessors, etc. belong to the private sector but the resources for training, assessment, certification, etc. are being borne out of the schemes which are funded by the government. So the private sector has been enabled to earn money by training, assessment, certification, etc. from out of the government funds. It would have been all right if the youth trained were provided jobs at decent wages and met the skill needs of the sectoral industry but it could not happen. As we have seen, out of 18.03 lakh persons trained under PMKVY in 2015-16 only 12.4% persons were placed. Similarly, under the STAR scheme, out of 14.15 lakh persons trained and certified in 2014-15 only 8.5% persons were placed. Government of India provided Rs 1000 crore under STAR and Rs 1500 crore under PMKVY. The unmistakable conclusion is that government an amount of Rs. 2500 crore of public funds was spent to benefit the private sector without serving the twin purposes of meeting the exact skill needs of the industry and providing employment to youth at decent wages.

4.4.2 It is surprising to note that without preparing the sectoral labour market information system and sectoral skill development plan, the SSCs proposed huge physical targets of training trainees, their certification, training of trainers, training of assessors and affiliation of training institutions on arbitrary basis without any regard to what exact skill needs of sectoral employers were and this was agreed to by the NSDC. The term sheets were signed accordingly. The financial assistance to the SSCs was linked to the achievement of these targets. In fact, many of the SSCs
told the Committee during consultations that these high targets were assigned by the NSDC arbitrarily and they were asked to sign on the dotted lines to claim funding from the NSDC. The result was that most of the SSCs in their quest to achieve the targets, compromised in quality of training, assessment and certification leading to the current situation of mess.

4.4.3 In the Proposal Submission Guidelines issued for creation of SSCs, the NSDC had asked for details of amounts raised from different sources such as industry members, industry associations, individual donors, banks, financial institutions, state governments, donor agencies, etc. During our consultations with the SSCs, we asked them what is the contribution of members of the industry and whether they would be willing to contribute financially towards making SSCs discharge their responsibilities effectively and ensure their accountability to the sectoral employers. While their responses suggest that many of the members have made financial contributions, the amounts are small and they have come mostly from the sponsoring industry associations rather than individual members. The NSDC informed us that they have so far approved an amount of 18931.35 lakh, released 10790 lakh amount to the SSCs against which the members of the SSCs have contributed 2185.6 lakh (as mentioned by NSDC, 2425 lakh as compiled from SSCs) only. The details are at Appendix XXXII. However, a very positive feedback was that the sectoral employers were willing to contribute financially provided they get value for their money.
Chapter 5

Issues Facing the Sector Skill Councils and Suggested Reforms

5.1 The Committee had detailed consultations with all the 40 SSCs, employer organizations, Central Ministries, State Governments, Central Trade Unions, and a large number of vocational training providers. The Committee also had detailed discussions with the Secretary, Ministry of Skill Development and Entrepreneurship. The following major issues have been brought out during these consultations:

i) The number of SSCs is too large;

ii) There is overlap of jurisdiction among various SSCs;

iii) There is peripheral involvement of the employers in the SSCs;

iv) The National Occupational Standards and Qualification Packs are very narrow and not able to meet the skill needs of the industry;

v) The sustainability plan of SSCs does not envisage financing role of the employers;

vi) Skill needs of the unorganized sector are not factored in the functioning of the SSCs;

vii) SSCs do not have their presence in the States;

viii) There has been no effort by the SSCs to make the skill development system demand responsive;

ix) Very limited interface with the VET system of the country; and

x) Conflict of Interest among various stakeholders.

5.1.1 No Standard Classification followed

The United Nations Statistical Commission has designed International Standard Industrial Classification (ISIC). The ISIC has divided the whole economy into 21 sectors. Central Statistical Office (CSO) in India is responsible for setting up of statistical standards. It has adopted ISIC and created National Industrial Classification, 2008 (NIC 2008). It seeks to provide a basis for standardized collection, analysis and dissemination of industry wise economic data for India. Apart from being the standard industrial classification that underpins Indian Industrial Statistics, NIC is widely used by the government agencies, industry associations and academics.
for various administrative, analytical and research purposes. The revised NIC 2008 provides a contemporary industrial classification system. Changes in structure and composition of the economy, changing user requirements and comparability with international standards have been taken into account in NIC 2008. Ideally, therefore, the NSDC should have followed this nationally and internationally accepted classification for the purposes of setting up of the SSCs. In fact, the notification issued by Ministry of Finance, Department of Economic Affairs on 27th Dec 2013, while delineating the functions of National Skills Qualifications Committee (NSQC) prescribed that “it shall determine the definition of sectors and approve the creation of Sector Skill Councils based on the National Classification of Occupations/National Industrial Classification or any other nationally accepted classification system”. It, therefore, appears that creation of 40 SSCs was done on ad hoc basis without following any nationally or internationally accepted industrial classification. However, we will consider rationalization of SSCs in the following chapter.

5.1.2 Overlap of Jurisdiction among SSCs

The second issue which was brought to the notice of the Committee was overlap between jurisdictions of different SSCs. As we have seen in the foregoing paragraph, no standard classification of sectors was followed by the NSDC and, therefore, there is bound to be overlap between jurisdictions of different SSCs. However, we will deal with this issue in the following chapter.

5.1.3 Peripheral Involvement of Employers in SSCs

Conceptually, the SSCs are constituted by the sectoral employers with an objective to come together to articulate the skill needs of the sector, design norms and standards and share them with the VET system of the country to make it responsive to their needs. The SSCs also look at other interests of the sector, such as improving productivity, making it internationally competitive; improving the quality of products and gross value addition, etc. In fact, SSCs are “of the industry, by the industry, for the industry”, as was told to us by the NSDC in a power point presentation. But, in essence, the way they have been constituted by the NSDC, the SSCs are neither ‘of’ the industry, nor ‘by’ the industry and nor ‘for’ the industry. The involvement of the industry in the SSCs is quite peripheral. In fact, most of them have been sponsored/promoted by various industry associations which is not the same thing as being promoted by employers. The NSDC document says that 40-50% of the employers of the sector should be members of the SSC. However, there is no evidence to suggest that 40-50% employers are involved in the constitution of the SSCs. Another important point is that until the 10-20% of the top employers
are part of the SSC, it is not going to be effective. Though, some eminent employers are present on the Governing Councils of the SSCs, however, ‘One swallow does not make a summer’. If the SSCs have to be owned by the employers, majority of the members should be part of it. Another important consideration is that the employers must see value for themselves in coming together. Unfortunately, we have not been able to demonstrate value for them. The SSCs have been created only with a small number of employers; the actual needs of the employers have not been captured; norms and standards developed do not address their needs; the training, assessment and certification don’t meet their exact skill needs and therefore, the so-called skilled persons don’t find placement in their establishments. The system continues to be supply driven and no wonder that their involvement in the SSCs is peripheral. We have been informed by the SSCs in our consultations that the employers don’t share their skill needs on real time basis with the fear that their business secrets may be leaked out. This argument does not appear to be sound as in many countries, such as Germany, South Korea, etc. this data is freely shared. The Committee, therefore, recommends that legislation may be brought in to make it mandatory for each enterprise employing 10 or more workers to be member of an SSC and share the skill needs with that SSC on periodical basis. It is worth mentioning here that in order to make the VET system demand responsive, a legislation called Employment Exchanges (Compulsory Notification of Vacancies) Act, 1959 was enacted and each enterprise employing 10 or more workers was mandated to share the quarterly skilled manpower requirement with the Employment Exchange concerned under whose jurisdiction the enterprise is located. This data was required to be fed to the VET system to make it responsive to the labor market needs. The government may, therefore, amend this Act. But elsewhere we have discussed issues relating to Reimbursable Industry Contribution, etc. which will require enactment of a new law and therefore, it is recommended to include this aspect also in the proposed legislation.

5.1.4 Development of Narrow NOSs and QPs

The SSCs are bodies which identify the skill needs of the sector, develop norms and standards for course curriculum, accreditation, assessment and certification to ensure that skills imparted by the VET system are able to meet the exact needs of the employers. They feed the skill needs, called sectoral labor market information system, National Occupational Standards, Qualification Packs, to the schools, colleges, universities and other training providing institutions so that they align their course curriculum accordingly. The accreditation standards, affiliation standards, assessment and certification standards are shared with the assessment and certification bodies which affiliate training institutions on the basis of accreditation done by third party independent professional bodies. Similarly, the standards for training of trainers are fed to the institutions,
which provide training to the trainers. However, the SSCs themselves are not supposed to undertake training, assessment or certification. Their role is strategic and they are supposed to ensure that the norms and standards are followed by all stakeholders so that there is no compromise in quality of training. In case of Indian SSCs, they have been mandated to develop NOSs/QPs, conduct training and certification, which take away most of their time, and have resulted in the dilution of quality of training. Development of NOSs/QPs is a strategic role, which should have been played by the SSCs themselves by using the professional experts from the industry concerned. However, this work was assigned to big multinational consulting companies, which did not have experience of working in the industry concerned. Their payment was also linked to the number of NOSs/QPs they develop which resulted in preparing very narrow NOSs/QPs. As per the latest information provided by the NSDC, a total of 9912 NOSs and 1801 QPs have been developed which means an average of 5.5 NOSs constitute a QP. However, if we take the unique NOSs, their number is 4,420 which gives us an average of 2.5 NOSs only per QP. The duration of training has also been limited to 150-300 hours while, in Korea, a National Competency Standard/QP consists of 10-30 NOSs making a trainee fully skilled to perform large number of tasks. Germany has about 350 long-term competency based courses and Australia has about 345, which cover the whole economy, and, therefore, there was no need to develop such a large number of NOSs/QPs. The Committee strongly feels that the country should introduce long term competency based courses consisting of 20-30 NOSs each to develop a well rounded worker followed by in-plant hands-on training in the establishment concerned to make him job ready from day one. These standards should be aligned to the international standards. We should, therefore, review all the NOSs/QPs developed so far by the top experts of the sectoral industry, academicians, trainers, pedagogy experts, etc. and henceforth these standards should be developed in close consultation with the professional institutes such as Central Staff Training and Research Institute (CSTARI), Kolkata and Pundit Sunder All Sharma Central Institute of Vocational Education (CIVE), Bhopal. Similarly, the content/courseware should be developed in close coordination with professional institutes such as National Instructional Media Institute (NIMI), Chennai. National Skill Development Agency (NSDA) has been tasked to operationalize the National Skills Qualification Framework (NSQF) and National Skills Qualification Committee (NSQC) has been given the responsibility for approval of all standards developed by the SSCs. The Committee feels that the NSDA should be made regulator and its name changed to National Skills Development Authority. As its mandate is also to operationalize NSQF, it should also be assigned the role of National Skills Qualification Authority (NSQA). All the three national institutes dealing with development of course curriculum and content-CSTARI, NIMI and CIVE should be brought under the functional
control of NSDA. However, the NSDA, in the present shape cannot discharge this responsibility and, therefore, it should be expanded and strengthened with multidisciplinary professionals from different sectoral industries, experts from schools, education, colleges, universities, technical education and vocational education and training. The above three Central institutes will provide all the research support and development of course curriculum and content. NSQC also does not have the required professional expertise and, therefore, apart from the representatives of concerned Ministries/Department of the Central Government, State Governments, Trade Unions, sectoral experts from the industry should also be involved to ensure that the course curriculum approved meets the needs of 21st century developed India.

5.1.5 Financial Sustainability

The SSCs must be financially sustainable in order to be effective, but linking their sustainability to the activities such as training, assessment and certification fritters away their energies. It is not their core competence. We have gone through their term sheets where each SSC has proposed very ambitious targets for training in NOSs/QPs, which have been developed by them for the sector. They do not have in-house capacity for conducting training and, therefore, they have to appoint vocational training providers, train trainers/assessors and empanel assessing bodies, which takes away all their time. Their role is strategic and that of creating, upholding and nurturing the system by developing a sectoral Labor Market Information System, setting norms and standards, defining competencies and ensure that system is competent to impart world-class skills, which will meet the exact skill needs of the employers on a real time basis. In order to discharge this role, they should not fend for resources from here, there and everywhere compromising their strategic role. If the employers are really concerned about the shortage of skilled manpower in their sectors, they can’t remain silent spectators. If one’s house is on fire, he will not cry from the rooftop that his house is burning but will put at least a bucket of water to extinguish the fire. The employers, therefore, must financially contribute towards the sustainability of the SSCs and make them effective to discharge their responsibilities. It has been done by different countries by using different means. However, most of them have imposed a levy of 1-2% of wage bill of the enterprises which is contributed by the employers and managed by them for skilling their manpower. There are reported to be at least 62 countries in the world that have used this method. The SSCs identify the skill needs of the sector, help in getting skilled manpower which improves productivity of the sector, help make industries competitive globally and enhance quality and gross value addition. A small contribution from industry, therefore, brings them enormous benefits. These SSCs could also be used by the government for apprenticeship training or conducting sector specific research for which the government may
suitably support them financially. The government may also provide resources for setting up academies of excellence. There could be other methods by which resources could be generated but all this, should not interfere with their strategic role. The Committee, therefore, recommends that a Reimbursable Industry Contribution (RIC) of about 2% of the wage bill of the enterprise per annum should be collected to create a corpus called National Skill Development Fund, which could be used for skilling efforts of the industry. With this effort, the enterprises will be able to train youth according to their exact requirement, their commitment to skilling will increase and over a period of time, we can think of an India, which will have 100% skilled manpower.

5.1.6 Training for Unorganized Sector

The unorganized sector accounts for about 91% of the total workforce in the country. The enterprises in the unorganized sector cover all sectors of economy; they are spread all over the country and their skill needs are different, their productivity is low, quality of products not up to the mark and, therefore, skill development is a dire necessity to improve their quality, productivity and gross value addition. However, they do not have wherewithals to conduct training. It is, therefore, necessary that the SSCs extend their helping hand in a systematic manner and help them get skilled manpower. There are 15.64 lakh micro, small and medium enterprises employing about 93.01 lakh workers, so, at an average, each MSME employs about 6 workers. SSCs can help them engage at least one apprentice per enterprise. The trainee can undergo theoretical training in the nearby ITI/VETC/VETS or Basic Training Center and undergo in-plant hands-on training in such enterprise. The SSCs can adopt cluster approach as in most of the cases one cluster will be confined to one sector. It will help in providing the skilled manpower to the MSMEs, which will help improve their productivity and quality. The cost of such apprenticeship training may be borne by the government. The SSCs should also ensure a fair representation of MSME employers on their governing councils.

5.1.7 Presence of SSCs in the States

‘Training’ appears under concurrent list of the Seventh Schedule of the Constitution. It broadly means that the policy formulation, development of norms and standards, assessment and certification are done by the Central government and day-to-day implementation of the policies is done by the State Governments. So, most of the training is conducted in the States. However, the SSCs have not been able to set up their offices in the States. The Committee feels that SSCs should set up their offices in the States, to take care of their skill needs, particularly in Agriculture and Allied sector and MSME clusters. All the ITIs are located in the States and are under their control. Presence of ITIs in the States, therefore, will help SSCs in leveraging their
infrastructure for training manpower for their sectors. They should first set up regional offices and then offices in all States.

5.1.8 Creation of Labour Market Information System

The basic objective of setting up of SSCs was to move from a supply-driven to a demand responsive system. The SSCs are required to identify the exact skill needs of the sectoral employers and feed the requirement to the VET institutions. However, none of the SSCs has been able to do so. Even after setting up of large number of SSCs, the skill development system continues to be supply-driven. The Committee, therefore, recommends that all the SSCs should be tasked to create a sectoral Labour Market Information System, create a database of all employers in the sector, develop a web portal to collect data on their skill needs on real time basis, aggregate and share with all concerned so that training institutions could align their efforts according to employer needs. The SSCs should also maintain an inventory of skilled manpower to support the employers on real time basis.

5.1.9 Limited Interface of SSCs with VET system

Currently, the SSCs have a very limited interface with the training providers except those conducting short-term training programs under PMKVY or DDU GKY or Vocational Schools under Rashtriya Madhyamik Shiksha Abhiyan or those organizations, which are conducting short-term training under NOSs/QPs, developed by them. Their role is broadly limited to training, assessment and certification and they do it happily because their major revenue stream is linked with this. So, the SSCs, have confined themselves to a very limited role of having interface with only those organizations which conduct training under NOSs/QP, developed by them, while their strategic role is to feed the VET system the labor market information, develop norms and standards which are national in character but aligned to international standards and share with the national VET system, such as ITIs, Polytechnics, schools, colleges, technical institutions, universities, and other vocational training institutions and persuade them to incorporate these standards in their course curriculum so that the national VET system becomes aligned to the exact skill needs of the employers and is demand responsive. In a way, the SSCs themselves have restricted their role. The Committee, therefore, recommends that they should play the role of national level bodies and have intense interface with the national VET system and all those institutions, which provide manpower to their sectors.

5.1.10 Conflict of Interest

The SSCs are required to be employer -led and employer-governed bodies and it is expected that the employers of high repute, standing and integrity will form part of the governing council.
They will be able to attract and influence other sectoral employers because of their stature to participate in the SSCs. However, we have observed in many cases that a person is holding a governance position and at the same time is also a beneficiary of public funding, primarily, under PMKVY either as a training partner or an assessing body. Some of these cases are as under:-

i) One training company is an assessing body in several SSCs.
ii) One CEO of an SSC is also a director in company funded by NSDC.
iii) Many SSCs have employees from their parent sponsoring organizations.
iv) One CEO has been found to be son in law of Chairman.
v) Many CEOs have been found to be from their promoting organizations.
vi) Many training partners have also been found to be assessing bodies in multiple SSCs.

vii) Many SSC promoters have also been found to be training partners themselves.

viii) Many Governing Council members have been found to be training partners.
ix) Two NSDC board members have been found to be SSC promoters and training partners.

x) One NSDC Board member is promoter of 11 SSCs and the only assessing body in many SSCs.

xi) In one case, father has been found to be the chairman and his son co-promoter and owner of a training company and an assessment company in the same SSC.

xii) 4 SSC promoters have also been found to be assessing bodies.

It would appear from our analysis that though the SSCs were setup with very high goals and ideals, they have turned into hotbed of crony capitalism. It appears that many of them have tried to extract maximum benefit from out of the public funds. It is sad to know that it has all been happening under the nose of NSDC. In fact, it will not be an exaggeration to say that the NSDC closed its eyes from these ignominious happenings. In many cases, the NSDC itself has promoted them as the governance mechanism of NSDC fosters such functioning. It happened, primarily, because NSDC is hundred percent funded by the government but accountable to its board which consists of majority of private sector industry associations and there has been no strong oversight mechanism created by the Government. In fact, from the time of its establishment, it was kept away from Parliamentary oversight, audit by Comptroller and Auditor General of India and supervision by Reserve Bank of India. It is using the funds from the Consolidated Funds of India, through NSQF and should have, therefore, been accountable to Parliamentary oversight and audit by the CAG. It is non-banking financial company and therefore, should have been under the supervisory control of RBI. Board members of the NSDC are the representatives of various industry associations and these associations themselves have sponsored/promoted SSCs. Many
of these associations and individuals have also doubled up as Vocational Training Providers and assessing bodies in various SSCs. Power without accountability is a recipe for disaster. In fact, SSCs have become “of the associations, by the associations and for the associations.” All these public funds have been used without serving the two basic objectives of meeting the exact skill needs of the industry and providing employment to youth. The question hence arises is, “had the same thing happened if the funds were contributed by the industry or industry associations.” The NSDC was required “to establish, manage, run and promote institutes and polytechnics for imparting skills; to play the role of market maker by establishing a price mechanism, correlating and bridging demand-supply asymmetries and creating a viable skill development chain and to perform the role of multiplier organization by engaging with the best and the most innovative on-the-ground practitioners from different fields as the sources of both innovation and practice dissemination”. However, it appears that NSDC has failed to discharge its responsibilities and deviated from its original role. The Committee, therefore, recommends that the Government should review its role and functioning comprehensively with reference to its Memorandum of Association and create a strong oversight mechanism to ensure that such conflicts of interest do not arise in future.
6.1 We have observed in Chapter 4 that the NSDC did not use any scientific method or criterion for creating SSCs. The three broad criteria they used were 20 high growth sectors indicated by the Planning Commission, sectors with large organized workforce and sectors with large unorganized workforce. However, they did not strictly stick to even these criteria. The criteria they decided to create the Sector Skill Councils, to say the least, are novice and without any serious application of mind. The Committee decided to consult the Central Statistical Office (CSO) and the National Sample Survey Office (NSSO) who collect all statistics about various sectors of economy and feed data to Government and numerous other organizations for their use, research and analysis. The Government itself uses the data to monitor health of the national economy. The Committee, therefore, decided to, consult Director General, Central Statistical Office and Director General, National Sample Survey Office under the Ministry of Statistics, Planning and Programme Implementation and Directorate General of Employment under the Ministry of Labour and Employment. The questions posed to them were: how are different sectors of economy organized; do we have sector wise manpower employed and what is sector wise contribution to Gross Domestic Product (GDP). Detailed questionnaire is attached as Appendix IVA.

6.2 Director General, CSO made a presentation and informed the Committee that Indian economy is divided in 21 sectors. These sectors are represented as English alphabets from A to U as follows:

**Table II: Industry Sections as per CSO**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>INDUSTRY SECTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agriculture Sector</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Section A: Agriculture, forestry and fishing</td>
</tr>
<tr>
<td><strong>Secondary Sector (Section B to Section F)</strong></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Section B: Mining and quarrying</td>
</tr>
<tr>
<td>3</td>
<td>Section C: Manufacturing</td>
</tr>
<tr>
<td>4</td>
<td>Section D: Electricity, gas, steam and air conditioning supply</td>
</tr>
</tbody>
</table>
### Tertiary Sector (Section G to Section U)

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>Wholesale and retail trade; repair of motor vehicles and motorcycles</td>
</tr>
<tr>
<td>H</td>
<td>Transportation and storage</td>
</tr>
<tr>
<td>I</td>
<td>Accommodation and Food service activities</td>
</tr>
<tr>
<td>J</td>
<td>Information and communication</td>
</tr>
<tr>
<td>K</td>
<td>Financial and insurance activities</td>
</tr>
<tr>
<td>L</td>
<td>Real estate activities</td>
</tr>
<tr>
<td>M</td>
<td>Professional, scientific and technical activities</td>
</tr>
<tr>
<td>N</td>
<td>Administrative and support service activities</td>
</tr>
<tr>
<td>O</td>
<td>Public administration and defence; compulsory social security</td>
</tr>
<tr>
<td>P</td>
<td>Education</td>
</tr>
<tr>
<td>Q</td>
<td>Human health and social work activities</td>
</tr>
<tr>
<td>R</td>
<td>Arts, entertainment and recreation</td>
</tr>
<tr>
<td>S</td>
<td>Other service activities</td>
</tr>
<tr>
<td>T</td>
<td>Activities of households as employers; undifferentiated goods and services producing activities of households for own use</td>
</tr>
<tr>
<td>U</td>
<td>Activities of extraterritorial organizations and bodies</td>
</tr>
</tbody>
</table>

6.3 This classification of economy in 21 sectors is called National Industrial Classification (NIC) and the latest version was evolved in 2008 and, therefore, it is called NIC 2008. He also informed that this classification is based on International Standard Industrial Classification (ISIC) designed by United Nations Statistical Commission and has been adopted by the Government of India. It is uniformly followed by all the countries in the world. NIC 2008 is, therefore, fully internationally compatible. Under NIC, economic activities are first grouped into “Sections” alphabetically coded from A to U, every section then divided into “Division” with 2-digit numeric code, every division into “Group” with 3-digit numeric code, every group into “Class” with 4-digit numeric code and every 4 digit class into a 5-digit code “Sub class”. It is illustrated through an example as follows:
Table III: Illustration of Digit Codes of NIC 2008

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section C</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Division 13</td>
<td>Manufacture of textiles</td>
</tr>
<tr>
<td>Group 131</td>
<td>Spinning, weaving and finishing of textiles</td>
</tr>
<tr>
<td>Class 1311</td>
<td>Preparation and spinning of textile fibres</td>
</tr>
<tr>
<td>Sub-Class 13111</td>
<td>Preparation and spinning of cotton fibre including blended cotton</td>
</tr>
</tbody>
</table>

6.4 He also informed that the NSSO conducts quinquennial surveys and collects data on the basis of this classification. The latest 68th Round of NSSO survey conducted in 2011-12 gives the figure of workers per 10000 population as follows (complete list is at Appendix XXXIII):

Table IV: Employment Percentage of Sections as per NSSO 68th round survey according to NIC 2008

<table>
<thead>
<tr>
<th>S.no</th>
<th>Section Code</th>
<th>Industry Sections</th>
<th>Per 10000 NSSO 68th Round</th>
<th>%age employment in the economy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Section A</td>
<td>Agriculture, forestry and fishing</td>
<td>4890</td>
<td>48.9</td>
</tr>
<tr>
<td>2</td>
<td>Section B</td>
<td>Mining and quarrying</td>
<td>54</td>
<td>0.54</td>
</tr>
<tr>
<td>3</td>
<td>Section C</td>
<td>Manufacturing</td>
<td>1260</td>
<td>12.6</td>
</tr>
<tr>
<td>4</td>
<td>Section D</td>
<td>Electricity, gas, steam and air conditioning supply</td>
<td>27</td>
<td>0.27</td>
</tr>
<tr>
<td>5</td>
<td>Section E</td>
<td>Water supply; sewerage, waste management and remediation activities</td>
<td>25</td>
<td>0.25</td>
</tr>
<tr>
<td>6</td>
<td>Section F</td>
<td>Construction</td>
<td>1060</td>
<td>10.6</td>
</tr>
<tr>
<td>7</td>
<td>Section G</td>
<td>Wholesale and retail trade; repair of motor vehicles and motorcycles</td>
<td>932</td>
<td>9.32</td>
</tr>
<tr>
<td>8</td>
<td>Section H</td>
<td>Transportation and storage</td>
<td>406</td>
<td>4.06</td>
</tr>
<tr>
<td>9</td>
<td>Section I</td>
<td>Accommodation and Food service activities</td>
<td>164</td>
<td>1.64</td>
</tr>
<tr>
<td>10</td>
<td>Section J</td>
<td>Information and communication</td>
<td>77</td>
<td>0.77</td>
</tr>
<tr>
<td>11</td>
<td>Section K</td>
<td>Financial and insurance activities</td>
<td>91</td>
<td>0.91</td>
</tr>
<tr>
<td>12</td>
<td>Section L</td>
<td>Real estate activities</td>
<td>20</td>
<td>0.2</td>
</tr>
<tr>
<td>13</td>
<td>Section M</td>
<td>Professional, scientific and technical activities</td>
<td>55</td>
<td>0.55</td>
</tr>
<tr>
<td>14</td>
<td>Section N</td>
<td>Administrative and support service activities</td>
<td>66</td>
<td>0.66</td>
</tr>
<tr>
<td>15</td>
<td>Section O</td>
<td>Public administration and defence; compulsory social security</td>
<td>167</td>
<td>1.67</td>
</tr>
<tr>
<td>16</td>
<td>Section P</td>
<td>Education</td>
<td>298</td>
<td>2.98</td>
</tr>
<tr>
<td>17</td>
<td>Section Q</td>
<td>Human health and social work activities</td>
<td>92</td>
<td>0.92</td>
</tr>
<tr>
<td>18</td>
<td>Section R</td>
<td>Arts, entertainment and recreation</td>
<td>22</td>
<td>0.22</td>
</tr>
<tr>
<td>19</td>
<td>Section S</td>
<td>Other service activities</td>
<td>213</td>
<td>2.13</td>
</tr>
<tr>
<td>20</td>
<td>Section T</td>
<td>Activities of households as employers; undifferentiated goods and services producing activities of households for own use</td>
<td>83</td>
<td>0.83</td>
</tr>
</tbody>
</table>
The Committee was also informed that a decision has been taken by the Government that the NSSO now would be conducting annual surveys on employment and unemployment. With the availability of annual data on employment and unemployment, there is now a possibility of it being used by the SSCs for identifying their sectoral skill needs and preparing annual sectoral skill development plans.

6.5 The Committee looked at the basis of setting up of SSCs by various countries. Many of the countries identified the sectors on the basis of manpower employed and contribution of the sector to the GDP. A few countries have created some SSCs on the basis of export potential or international competitiveness of sectoral industries. We, therefore, organized the sectors in the descending order of workforce employed and contribution of the sector to GDP (complete list is at Appendix XXXIV) using 68th Round of NSSO, 2011-12, data which is the latest available. This is presented in the following table:

**Table V: Key Sectors & Divisions wise workforce & GDP contribution by CSO in 2011-12**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Sector/Division</th>
<th>% Workforce</th>
<th>% GVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Agriculture &amp; Allied</td>
<td>48.90%</td>
<td>18.5%</td>
</tr>
<tr>
<td>2.</td>
<td>Manufacturing</td>
<td>12.60%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(a) Manufacturing of Wearing Apparel</td>
<td>16.11%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(b) Manufacturing of Textile</td>
<td>15.48%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(c) Manufacturing of Food Products</td>
<td>10.08%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(d) Manufacture of other non metallic mineral products</td>
<td>8.33%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(e) Manufacturing of Tobacco Products</td>
<td>8.17%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(f) Manufacturing of Wood Products</td>
<td>6.43%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(g) Other Manufacturing</td>
<td>5.48%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(h) Manufacturing of Fabricated Metal Products</td>
<td>5.00%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(i) Manufacturing of Furniture</td>
<td>3.97%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(j) Manufacturing of Basic Metals</td>
<td>2.54%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(k) Manufacturing of Leather &amp; Related Products</td>
<td>2.22%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(l) Manufacturing of Chemicals and Chemical Products</td>
<td>1.98%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(m) Manufacturing of Rubber &amp; Plastic Products</td>
<td>1.90%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(n) Repair and Installation of Machinery and equipment</td>
<td>1.67%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(o) Manufacture of Electrical Equipment</td>
<td>1.67%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(p) Manufacturing of Machinery &amp; Equipment</td>
<td>1.59%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(q) Manufacturing of Motor Vehicles &amp; Trailers and semi trailers</td>
<td>1.59%</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Construction</td>
<td>10.6%</td>
<td>9.6%</td>
</tr>
<tr>
<td>4.</td>
<td>Wholesale &amp; Retail Trade &amp; Repair of Motor Vehicles</td>
<td>9.32%</td>
<td>10.9%</td>
</tr>
<tr>
<td>5.</td>
<td>Transportation &amp; Storage</td>
<td>4.06%</td>
<td>6.5%</td>
</tr>
<tr>
<td>6.</td>
<td>Education</td>
<td>2.98%</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Other Services</td>
<td>2.13%</td>
<td>6.6%</td>
</tr>
<tr>
<td>8.</td>
<td>Public Administration &amp; Defence</td>
<td>1.67%</td>
<td>6.1%</td>
</tr>
<tr>
<td>9.</td>
<td>Human Health &amp; Social Work</td>
<td>0.92%</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Financial &amp; Insurance A</td>
<td>0.91%</td>
<td>5.9%</td>
</tr>
<tr>
<td>11.</td>
<td>Real Estate Activities</td>
<td>0.20%</td>
<td>13.00%</td>
</tr>
</tbody>
</table>

**Total covered** | 94.29% | 94.5% |
6.6 After doing the above exercise, we mapped the existing SSCs and the subsectors included therein with the above NIC classification indicating workforce employed and GDP contribution. Wherever the existing SSCs matched with the NIC classification, we classified them accordingly in one or two digit code and where they did not match; we matched with digit 3 or 4 or 5 codes of the NIC and classified them accordingly. Some SSCs were earlier doing manufacturing and services activities together while internationally accepted classification of manufacturing and services in the NIC is very clear. We, therefore, separated those activities and put them as per NIC classification into manufacturing and services separately. The basic objective has been to classify activities according to similarity/commonality of skills.

Table VI: Matching of current SSCs at the digit levels of NIC 2008

<table>
<thead>
<tr>
<th>S.no.</th>
<th>SSC Name</th>
<th>Match at 1 digit</th>
<th>Match at 2 digit</th>
<th>Match at 3 digit</th>
<th>Match at 4 digit or later</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agriculture Skill Council of India</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Construction Skill Development Council of India</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Indian Plumbing Skills Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Retailers Association’s Skill Council of India</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Textile Sector Skill Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Apparel, Madeups &amp; Home Furnishing Sector Skill Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Leather Sector Skill Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Handicrafts &amp; carpets Sector Skill Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Logistics Skill Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Food Industry Capacity &amp; Skill Initiative</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Rubber Skill Development Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Paints and Coatings Skill Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Life Sciences Sector Skill Development Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Chemical &amp; Petro Chemical Sector Skill Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Tourism &amp; Hospitality Skill Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Domestic Workers Sector Skill Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Indian Iron &amp; Steel Sector Skill Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Strategic Manufacturing Sector Skill Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Capital Goods Skill Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Infrastructure Equipment Skill Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Furniture &amp; Fittings Skill Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Gems &amp; Jewellery Skill Council of India</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Sports, Physical Education, Fitness and Leisure Sector Skill Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Aviation &amp; Aerospace Sector Skill Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Automotive Skills Development Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Healthcare Sector Skill Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Beauty &amp;Wellness Sector Skill Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Banking, Financial Services &amp; Insurance (BFSI) Sector Skill Council of India</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Electronic Sector Skill Council of India</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Instrumentation, Automation, Surveillance &amp; Communication Sector Skill Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Media &amp; Entertainment Skills Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>IT-ITeS Sector Skill Council</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Telecom Sector Skill Council of India</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
N.B. In the above, match means first occurrence of the core activities SSC seeks to achieve. The match maybe partial. Blanks mean that either they were nowhere or everywhere and hence needed further analysis.

6.7 Some of the Sector Skill Councils created by NSDC were given specific names such as Infrastructure Equipment Skill Council and Strategic Manufacturing Skill Council while the NIC classification uses a generic nomenclature called Machinery and Equipment Manufacturing. Essentially, both these SSCs are manufacturing equipments and machinery and their skill needs are the same. It was argued by the Construction Sector Skill Council that Infrastructure Equipment Council should be with them as they carry out construction activities for the sector. However, it has been observed that they primarily carry out manufacturing activity and their service activity is spread over not only to construction but also to mining and many other sectors.

6.8 Beauty and Wellness forms part of 9602 Hair Dressing and Beauty Treatment, which is a class of Division 96 Other Personal Service Activities which is part of Sector S Other Service Activities. It, therefore, appears to be anomalous to make a separate Sector Skill Council for Beauty and Wellness.

6.9 Some SSCs constituted by the NSDC have such a wide coverage that they cover many other sectors, such as, Instrumentation, Automation, Surveillance and Communication Sector Skill Council; Management, Entrepreneurship and Professional Sector Skill Council. They need to be rationalized and accorded suitable place in a sector of NIC, which is the most proximate to activities they cover.

6.10 Some SSCs created by the NSDC have omnibus presence in all sectors of economy, such as, Green Jobs and People with Disabilities. These are not economic activities as defined by the NIC. Green Jobs means use of methods or technologies, which have zero effect on the environment. Similarly, People with Disabilities are a section of society which is physically
challenged and needs special care and protection in education, employment and other aspects of life. They should, therefore, be the concern of each SSC. They will be ineffective if they create their separate existence because they will have to depend upon every SSC and without their support, they cannot move an inch.

6.11 Accordingly, the Committee after detailed deliberations and analysis recommends the constitution of the following 21 SSCs giving workforce employed therein and GDP contribution in descending order:-

Table VII: Rationalized SSCs with their workforce and GVA contributions

<table>
<thead>
<tr>
<th>Name of the rationalized SSC name</th>
<th>Workforce %age by NSSO 2011-12</th>
<th>%age GVA by CS0 2011-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 AGRICULTURE AND ALLIED SSC</td>
<td>48.9</td>
<td>18.5</td>
</tr>
<tr>
<td>2 CONSTRUCTION AND REAL ESTATE SERVICES SSC</td>
<td>10.8</td>
<td>9.6</td>
</tr>
<tr>
<td>3 WHOLESALE TRADE AND RETAIL SSC</td>
<td>8.63</td>
<td>9.8</td>
</tr>
<tr>
<td>4 EDUCATION, TRAINING AND PROFESSIONAL SERVICES SSC*</td>
<td>4.91</td>
<td>6.1+</td>
</tr>
<tr>
<td>5 TEXTILES APPARELS AND LEATHER SSC</td>
<td>4.26</td>
<td>1.9</td>
</tr>
<tr>
<td>6 TRANSPORTATION AND LOGISTICS SSC</td>
<td>4.06</td>
<td>5.1</td>
</tr>
<tr>
<td>7 FOOD, BEVERAGES AND TOBACCO SSC</td>
<td>2.39</td>
<td>2.1</td>
</tr>
<tr>
<td>8 CHEMICAL, PHARMACEUTICALS AND RUBBER MANUFACTURING SSC</td>
<td>1.77</td>
<td></td>
</tr>
<tr>
<td>9 TOURISM AND HOSPITALITY SSC</td>
<td>1.64</td>
<td>1.1</td>
</tr>
<tr>
<td>10 MACHINERY AND EQUIPMENT MANUFACTURING SSC</td>
<td>1.36</td>
<td></td>
</tr>
<tr>
<td>11 WOOD AND FURNITURE SSC</td>
<td>1.3</td>
<td></td>
</tr>
<tr>
<td>12 GEMS, JEWELLERY AND CREATIVE ARTS SSC</td>
<td>1.04</td>
<td></td>
</tr>
<tr>
<td>13 AUTO AND TRANSPORT MANUFACTURING SSC</td>
<td>0.99</td>
<td></td>
</tr>
<tr>
<td>14 HEALTH AND PERSONAL CARE SSC</td>
<td>0.93</td>
<td></td>
</tr>
<tr>
<td>15 BANKING FINANCE &amp; INSURANCE SSC</td>
<td>0.91</td>
<td>5.9</td>
</tr>
<tr>
<td>16 MANUFACTURE OF ELECTRICAL AND ELECTRONICS GOODS SSC</td>
<td>0.89</td>
<td></td>
</tr>
<tr>
<td>17 HOUSEHOLD PERSONNEL SSC</td>
<td>0.83</td>
<td></td>
</tr>
<tr>
<td>18 INFORMATION AND COMMUNICATION SSC</td>
<td>0.77</td>
<td></td>
</tr>
<tr>
<td>19 ENERGY AND UTILITIES SSC</td>
<td>0.55</td>
<td>2.3</td>
</tr>
<tr>
<td>20 MINING AND QUARRYING SSC</td>
<td>0.54</td>
<td>3.2</td>
</tr>
<tr>
<td>21 SECURITY, MANAGEMENT &amp; ADMINISTRATIVE SUPPORT SERVICES SSC</td>
<td>0.54</td>
<td></td>
</tr>
</tbody>
</table>

*Has not been created so far.

6.12 In accordance with the above convergence, synergy and rationalization exercise, the following paragraphs define the domain area of each SSC as per NIC. It also gives towards
the end what subsectors form part of the existing SSC and why they have been included or excluded.

6.12.1 AGRICULTURE AND ALLIED SSC

Based on the NSSO 2011-12 surveys, the work force contribution of the sector to the economy is 48.9 %. The percentage of Gross Value Added (GVA) at constant (2011-12) prices to the economy is 18.5 % as per the CSO 2011-12 data.

The SSC domain area would be the following:-

**Section A**  
*Agriculture, forestry and fishing*

- **Division 01**  
  - Crop and animal production, hunting and related service activities
  - Group 011  
    - Growing of non-perennial crops
  - Group 012  
    - Growing of perennial crops
  - Group 013  
    - Plant propagation
  - Group 014  
    - Animal production
  - Group 015  
    - Mixed farming
  - Group 016  
    - Support activities to agriculture and post-harvest crop activities
  - Group 017  
    - Hunting, trapping and related service activities

- **Division 02**  
  - Forestry and logging
  - Group 021  
    - Silviculture and other forestry activities
  - Group 022  
    - Logging
  - Group 023  
    - Gathering of non-wood forest products
  - Group 024  
    - Support services to forestry

- **Division 03**  
  - Fishing and aquaculture
  - Group 031  
    - Fishing
  - Group 032  
    - Aquaculture

The present Agriculture Sector Skill Council of India has its subsectors as Agriculture Crop Production, Allied Sectors, Forestry, Environment and Agriculture related renewable energy and Agriculture Industries.
The “Manufacture of Agriculture Equipment” currently being done by the SSC is not part of the NIC activities covered above, therefore, should not be covered by this SSC and come under the Machinery and Equipment Manufacturing SSC.

The Rubber SSC has the following subsectors-Tyre, Non Tyre and Natural Rubber.

The natural component of the present Rubber SSC i.e. The “Growing of Rubber Trees” is Subclass 01291 of class 0129 of Group 012 “Growing of Perennial Crops” under the Agriculture Section of the NIC 2008 hence it should be a part of this new SSC. However, tyre and non tyre will be dealt with separately.

6.12.2. CONSTRUCTION AND REAL ESTATE SERVICES SSC

Based on the NSSO 2011-12 Surveys, the work force contribution of the SSC to the economy is 10.8 %. The percentage of Gross Value Added (GVA) at constant (2011-12) prices by the sector to the economy is 9.6 % as per CSO 2011-12 data.

The domain area of the SSC will be as follows:-

<table>
<thead>
<tr>
<th>Section F</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division 41</td>
<td>Construction of buildings</td>
</tr>
<tr>
<td>Group 410</td>
<td>Construction of buildings</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Division 42</th>
<th>Civil engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 421</td>
<td>Construction of roads and railways</td>
</tr>
<tr>
<td>Group 422</td>
<td>Construction of utility projects</td>
</tr>
<tr>
<td>Group 429</td>
<td>Construction of other civil engineering projects</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Division 43</th>
<th>Specialized construction activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 431</td>
<td>Demolition and site preparation</td>
</tr>
<tr>
<td>Group 432</td>
<td>Electrical, plumbing and other construction installation activities</td>
</tr>
<tr>
<td>Group 433</td>
<td>Building completion and finishing</td>
</tr>
<tr>
<td>Group 439</td>
<td>Other specialized construction activities</td>
</tr>
</tbody>
</table>
Section L  Real estate activities

Division 68  Real estate activities

Group 681  Real estate activities with own or leased property

Group 682  Real estate activities on a fee or contract basis

The present Construction SSC has the following subsectors- Real Estate: Residential, Commercial, Retail Space, Hospitality Space, SEZs, Industrial complexes Infrastructure -Roads & Highways, Others: Ports, Railways, Power Plants, Civil Engineering- utility projects, other civil engineering projects (Industrial facility, Refineries, Chemical Plants) and Rural Construction.

The present Plumbing SSC has the following subsectors- Plumbers and Contractors, Plumbing Consultants, Manufacturers of Plumbing Products. As can be seen from the above activities, Plumbing comes under Division 43 “Specialized Construction Activities” represented by Group 432 of the Section F; therefore, Plumbing should be a part of the Construction SSC. However, the manufacture of plumbing products which is currently one subsector in Plumbing SSC should not be part of this SSC.

The present Paints and Coating SSC has the following subsectors- raw material testing and receipt into paint factories (right up to the final application of the product on the final surface at the customer end), dealers, architectural Painters and wood polishers. Its two segments are decorative and industrial.

The application of paints in general will be a part of this SSC. The application of paints in industry e.g. automotive industry is a part of the manufacturing activity there and will be part that SSC. The manufacture of paints is not even a division in the NIC Classification it is a class “Manufacture of Paints, varnishes and similar coating, printing ink and mastics”. With regards to application of paints, it forms a subclass 43303. Hence, the manufacturing of paints should be part of the Chemical SSC.

6.12.3. WHOLESALE TRADE AND RETAIL SSC

Based on the NSSO 2011-12 Surveys, the employment of the SSC to the economy is 8.63 %. The percentage of Gross Value Added (GVA) at constant (2011-12) prices by the sector to the economy is 9.8 % (including Division 45) as per CSO 2011-12 data.

The domain area of the SSC will be as follows:-
Section G  Wholesale and retail trade; repair of motor vehicles and motor cycles

Division 46  Wholesale trade, except of motor vehicles and motor cycles
Group 461  Wholesale on a fee or contract basis
Group 462  Wholesale of agricultural raw materials and live animals
Group 463  Wholesale of food, beverages and tobacco
Group 464  Wholesale of household goods
Group 465  Wholesale of machinery, equipment and supplies
Group 466  Other specialized wholesale
Group 469  Non-specialized wholesale trade

Division 47  Retail trade, except of motor vehicles and motor cycles
Group 471  Retail sale in non-specialized stores
Group 472  Retail sale of food, beverages and tobacco in specialized stores
Group 473  Retail sale of automotive fuel in specialized stores
Group 474  Retail sale of information and communications equipment in Specialized stores
Group 475  Retail sale of other household equipment in specialized stores
Group 476  Retail sale of cultural and recreation goods in specialized stores
Group 477  Retail sale of other goods in specialized stores
Group 478  Retail sale via stalls and markets
Group 479  Retail trade not in stores, stalls or markets

The present Retail SSC is proposed to be widened to also cover wholesale skills. All sales components of all sectors will come under this SSC as detailed above. The sales component of Automotives has been treated separately in NIC and since it forms a complete value chain, it will not be part of this SSC and is included under Automotive SSC. All sales components of each SSC must use the courses created by the retail SSC as the base/mother course. The Wholesale trade and Retail SSC will have to ensure there is no duplication of training numbers.
6.12.4. EDUCATION, TRAINING AND PROFESSIONAL SERVICES SSC*

Based on the NSSO 2011-12 Surveys, the work force contribution of the SSC to the economy is 4.91%. The percentage of Gross Value Added (GVA) at constant (2011-12) prices by the sector to the economy is 6.1% (only for Public administration and defence) as per CSO 2011-12 data.

The domain area of the SSC will be as follows:-

<table>
<thead>
<tr>
<th>Section M</th>
<th>Professional, scientific and technical activities (workforce contribution 0.26%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division 69</td>
<td>Legal and accounting activities</td>
</tr>
<tr>
<td>Group 691</td>
<td>Legal activities</td>
</tr>
<tr>
<td>Group 692</td>
<td>Accounting, bookkeeping and auditing activities; tax consultancy</td>
</tr>
<tr>
<td>Division 70</td>
<td>Activities of head offices; management consultancy activities</td>
</tr>
<tr>
<td>Group 701</td>
<td>Activities of head offices</td>
</tr>
<tr>
<td>Group 702</td>
<td>Management consultancy activities</td>
</tr>
<tr>
<td>Division 71</td>
<td>Architecture and engineering activities; technical testing and analysis</td>
</tr>
<tr>
<td>Group 711</td>
<td>Architectural and engineering activities and related technical consultancy</td>
</tr>
<tr>
<td>Group 712</td>
<td>Technical testing and analysis</td>
</tr>
<tr>
<td>Division 72</td>
<td>Scientific research and development</td>
</tr>
<tr>
<td>Group 721</td>
<td>Research and experimental development on natural sciences and Engineering</td>
</tr>
<tr>
<td>Group 722</td>
<td>Research and experimental development on social sciences and humanities</td>
</tr>
<tr>
<td>Division 73</td>
<td>Advertising and market research</td>
</tr>
<tr>
<td>Group 731</td>
<td>Advertising</td>
</tr>
<tr>
<td>Group 732</td>
<td>Market research and public opinion polling</td>
</tr>
<tr>
<td>Division 74</td>
<td>Other professional, scientific and technical activities</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td>Group 741</td>
<td>Specialized design activities</td>
</tr>
<tr>
<td>Group 742</td>
<td>Photographic activities</td>
</tr>
<tr>
<td>Group 749</td>
<td>Other professional, scientific and technical activities not elsewhere covered</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Division 75</th>
<th>Veterinary activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 750</td>
<td>Veterinary activities</td>
</tr>
</tbody>
</table>

**Section P**  
**Education** *(work force contribution 2.98%)*

<table>
<thead>
<tr>
<th>Division 85</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 851</td>
<td>Primary education</td>
</tr>
<tr>
<td>Group 852</td>
<td>Secondary education</td>
</tr>
<tr>
<td>Group 853</td>
<td>Higher education</td>
</tr>
<tr>
<td>Group 854</td>
<td>Other education</td>
</tr>
<tr>
<td>Group 855</td>
<td>Educational support services</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Division 94</th>
<th>Activities of membership organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 941</td>
<td>Activities of business, employers and professional membership Organizations</td>
</tr>
<tr>
<td>Group 942</td>
<td>Activities of trade unions</td>
</tr>
<tr>
<td>Group 949</td>
<td>Activities of other membership organizations</td>
</tr>
</tbody>
</table>

**Section O**  
**Public administration and defence; compulsory social security** *(Work force contribution 1.67%)*

<table>
<thead>
<tr>
<th>Division 84</th>
<th>Public administration and defence; compulsory social security</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 841</td>
<td>Administration of the State and the economic and social policy of the Community</td>
</tr>
<tr>
<td>Group 842</td>
<td>Provision of services to the community as a whole</td>
</tr>
</tbody>
</table>
Group 843  Compulsory social security activities

It is recommended to create this new SSC.

6.12.5 TEXTILES APPARELS AND LEATHER SSC

Based on the NSSO 2011-12 Surveys, the work force contribution of the sector to the economy is 4.26 %. The percentage of Gross Value Added (GVA) at constant (2011-12) prices to the economy is 1.9 % as per CSO 2011-12 data.

The domain area of the SSC will be as follows:-

<table>
<thead>
<tr>
<th>Division 13</th>
<th>Manufacture of textiles (workforce contribution 1.95%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 131</td>
<td>Spinning, weaving and finishing of textiles</td>
</tr>
<tr>
<td>Group 139</td>
<td>Manufacture of other textiles</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Division 14</th>
<th>Manufacture of wearing apparel (workforce contribution 2.03%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 141</td>
<td>Manufacture of wearing apparel, except fur apparel</td>
</tr>
<tr>
<td>Group 142</td>
<td>Manufacture of articles of fur</td>
</tr>
<tr>
<td>Group 143</td>
<td>Manufacture of knitted and crocheted apparel</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Division 15</th>
<th>Manufacture of leather and related products (workforce contribution 0.28%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 151</td>
<td>Tanning and dressing of leather; manufacture of luggage, handbags, saddlery and harness; dressing and dyeing of fur</td>
</tr>
<tr>
<td>Group 152</td>
<td>Manufacture of footwear</td>
</tr>
</tbody>
</table>

The following present SSCs are included in this SSC:

Textile & Handloom Skill Council has the following subsectors- Spinning, Weaving, Knitting Processing and Handloom Sector. These are part of Division 13 as discussed above.

Apparel, Madeups and Furnishing Sector Skill Council has the following subsectors - Apparel, Made-Ups and Home Furnishing. These are part of Division 14 as discussed above.

Handicrafts Sector Skill Council has the following subsectors - Handicraft and Carpet which are part of Division 13 above.
Leather Sector Skill Council has the following subsectors - Footwear, Goods & Garments, and Finished Leather. These are part of Division 15 of the NIC 2008.

The above SSCs have been subsumed to cover skill development in the above economic activities

**6.12.6 TRANSPORTATION AND LOGISTICS SSC**

Based on the NSSO 2011-12 Surveys, the work force contribution of the SSC to the economy is 4.06 %. The percentage of Gross Value Added (GVA) at constant (2011-12) prices by the sector to the economy is 5.1 % as per CSO 2011-12 data.

The domain area of the SSC will be as follows:-

**Section H**  
**Transportation and storage**

**Division 49**  
Land transport and transport via pipelines

**Group 491**  
Transport via railways

**Group 492**  
Other land transport

**Group 493**  
Transport via pipeline

**Division 50**  
Water transport

**Group 501**  
Sea and coastal water transport

**Group 502**  
Inland water transport

**Division 51**  
Air transport

**Group 511**  
Passenger air transport

**Group 512**  
Freight air transport

**Division 52**  
Warehousing and support activities for transportation

**Group 521**  
Warehousing and storage

**Group 522**  
Support activities for transportation

**Division 53**  
Postal and courier activities

**Group 531**  
Postal activities
Group 532  Courier activities

The present Logistics Sector Skill Council has the following subsectors-Warehouse (Storage & Packaging), Land Transportation, Courier / Express Services, Terminals, ICDs’ and CFS Operations, Air Cargo Operations, EXIM Logistics, Freight Forwarding & Customs Clearance, Cold Chain Solutions, E-Commerce, Inland Waterways and Supply Chain.

For the creation of the new SSC, the subsectors should be created as the NIC activities above. Additionally, since the driving component of the Automotive SSC is also included in the activities above and will only be done by this SSC.

6.12.7 FOOD, BEVERAGES AND TOBACCO SSC

Based on the NSSO 2011-12 surveys, the work force contribution of the sector to the economy is 2.39 %. The percentage of Gross Value Added (GVA) at constant (2011-12) prices to the economy is 2.1 % as per CSO 2011-12 data.

The domain of the SSC will be as follows:-

Division 10  Manufacture of food products
Group 101  Processing and preserving of meat
Group 102  Processing and preserving of fish, crustaceans and molluscs
Group 103  Processing and preserving of fruit and vegetables
Group 104  Manufacture of vegetable and animal oils and fats
Group 105  Manufacture of dairy products
Group 106  Manufacture of grain mill products, starches and starch products
Group 107  Manufacture of other food products
Group 108  Manufacture of prepared animal feeds

Division 11  Manufacture of beverages
Group 110  Manufacture of beverages

Division 12  Manufacture of tobacco products
Group 120  Manufacture of tobacco products

The present Food Industry Capacity & Skill Initiative SSC has the following subsectors- Fruits and Vegetables, Dairy, Meat and Poultry, Fish and Sea Food, Grain Milling and oilseeds, Beverages, Alcoholic Beverages, Bread and Bakery, Soya Foods, Ready to eat Foods, Quality Assurance, refrigeration and packing (common).

The SSC will cover the skill development in the above NIC economic activities only.

6.12.8. CHEMICAL, PHARMACEUTICALS AND RUBBER MANUFACTURING SSC

Based on the NSSO 2011-12 Surveys, the work force contribution of the SSC to the economy is 1.77 %.

The domain area of the SSC will be as follows:-

Division 20  Manufacture of chemicals and chemical products  (*workforce contribution 0.25%*)

Group 201 Manufacture of basic chemicals, fertilizer and nitrogen compounds, plastics and synthetic rubber in primary forms

Group 202 Manufacture of other chemical products

Group 203 Manufacture of man-made fibres

Division 22  Manufacture of rubber and plastics products  (*workforce contribution 0.24%*)

Group 221 Manufacture of rubber products

Group 222 Manufacture of plastics products

Division 23  Manufacture of other non-metallic mineral products  (*workforce contribution 1.05%*)

Group 231 Manufacture of glass and glass products

Group 239 Manufacture of non-metallic mineral products not elsewhere covered

Division 21  Manufacture of pharmaceuticals, medicinal, chemical and botanical products
Group 210 Manufacture of pharmaceuticals, medicinal chemical and botanical products

The present Chemical and Petro Chemical Skill Council has the following subsectors- Chemical-Organic, Basic Inorganics, Specialty Chemicals, Agro chemicals and Petrochemicals- Basic Petrochemicals.

The present Life Sciences SSC has the following subsectors- Pharmaceuticals, Biotechnology and Contract research.

For the formation of this SSC, The manufacturing component of Paint and Coating Sector Skill Council, Manufacturing component of Life Sciences Sector Skill Council and Manufacturing component of the Rubber Skill Development Council will be combined. No sales skilling will be done by this SSC.

6.12.9 TOURISM AND HOSPITALITY SSC

Based on the NSSO 2011-12 Surveys, the work force contribution of the SSC to the economy is 1.64 %. The percentage of Gross Value Added (GVA) at constant (2011-12) prices by the sector to the economy is 1.1 % as per CSO 2011-12 data.

The domain area of the SSC will be as follows:-

**Section I Accommodation and Food service activities**

Division 55 Accommodation

Group 551 Short term accommodation activities

Group 552 Camping grounds, recreational vehicle parks and trailer parks

Group 559 Other accommodation

Division 56 Food and beverage service activities

Group 561 Restaurants and mobile foodservice activities

Group 562 Event catering and other foodservice activities

Group 563 Beverage serving activities

Division 79 Travel agency, tour operator and other reservation service activities
Group 791  Travel agency and tour operator activities
Group 799  Other reservation service activities

The Tourism and Hospitality Sector Skill Council has the following subsectors- Hotels, Restaurants, Travel & Tourism, Facility Management, and Cruise Liners. This SSC will now cover the economic activities listed above.

6.12.10. MACHINERY AND EQUIPMENT MANUFACTURING SSC

Based on the NSSO 2011-12 Surveys, the work force contribution of the SSC to the economy is 1.36%.

The domain area of the SSC will be as follows:-

Division 24  Manufacture of basic metals (workforce contribution 0.32%)

Group 241  Manufacture of basic iron and steel
Group 242  Manufacture of basic precious and other non-ferrous metals
Group 243  Casting of metals

Division 25  Manufacture of fabricated metal products, except machinery and equipment
(Workforce contribution 0.63%)

Group 251  Manufacture of structural metal products, tanks, reservoirs and steam Generators
Group 252  Manufacture of weapons and ammunition
Group 259  Manufacture of other fabricated metal products; metalworking Service activities

Division 28  Manufacture of machinery and equipment not elsewhere covered (workforce contribution 0.20%)

Group 281  Manufacture of general purpose machinery
Group 282  Manufacture of special-purpose machinery

Division 33  Repair and installation of machinery and equipment
Group 331  Repair of fabricated metal products, machinery and equipment
Group 325  Manufacture of medical and dental instruments and supplies

The present Iron and Steel SSC has the following subsectors- Steel Plants (Large, Medium and Small, Rerollers (Medium and Small), Sponge Iron Units (Medium & Small), Ferro Alloys (Medium & Small) and Refractory (Medium & Small)

The present Capital Goods Skill Council has the following subsectors-Machine Tools, Textile Machines &Accessories, Plastic Machines, Process Plants, Power Equipment, Tool and Gauges (cutting across all CG sub sectors) and Light Engineering (supporting all sub sectors)

The present Strategic Manufacturing Sector Skill Council has the following subsectors-Defence Equipment Manufacturing, Shipbuilding and Ship Repair, Homeland Security Equipment, Safety and Fire Fighting Equipment.

The present Infrastructure Equipment Sector Skill Council SSC has the following subsectors - Earthmoving, Road Construction, Concreting, Material Preparation & Processing, Material Handling and Defence.

All the above mentioned SSCs will be subsumed in this new SSC and perform skilling only in the above mentioned NIC activities.

6.12.11. WOOD AND FURNITURE SSC

Based on the NSSO 2011-12 Surveys, the work force contribution of the SSC to the economy is 1.3 %.

The domain area of the SSC will be as follows:-
Division 16  Manufacture of wood and products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials (workforce contribution 0.81 %)
Group 161  Sawmilling and planing of wood
Group 162  Manufacture of products of wood, cork, straw and plaiting materials

Division 31  Manufacture of furniture (workforce contribution 0.50%)
Group 310  Manufacture of furniture

Division 17  Manufacture of paper and paper products (workforce contribution 0.11 %)

Group 170  Manufacture of paper and paper products

The present Furniture and Fitting Sector Skill Council has the following subsectors- Wooden Furniture, Plastic Furniture, Metal Furniture, Bamboo, Furniture, Other Furniture, Fittings and fixtures, Woods and Corks.

The Furniture and Fitting Sector Skill Council will carry out skill development in the above economic activities.

6.12.12. GEMS JEWELLERY AND CREATIVE ARTS SSC

Based on the NSSO 2011-12 Surveys, the work force contribution of the SSC to the economy is 1.04 %.

The domain area of the SSC will be as follows:-

Division 18  Printing and reproduction of recorded media (workforce contribution 0.13%)

Group 181  Printing and service activities related to printing

Group 182  Reproduction of recorded media

Division 32  Other manufacturing workforce contribution (workforce contribution 0.69%)

Group 321  Manufacture of jewellery, bijouterie and related articles

Group 322  Manufacture of musical instruments

Group 323  Manufacture of sports goods

Group 324  Manufacture of games and toys

Group 329  Other manufacturing not elsewhere covered

Section R  Arts, entertainment and recreation (workforce contribution 0.22 %)

Division 90  Creative, arts and entertainment activities
Group 900  Creative, arts and entertainment activities

Division 91  Libraries, archives, museums and other cultural activities
Group 910  Libraries, archives, museums and other cultural activities

Division 92  Gambling and betting activities
Group 920  Gambling and betting activities

Division 93  Sports activities and amusement and recreation activities
Group 931  Sports activities
Group 932  Other amusement and recreation activities

The present Gems and Jewellery Skill Council of India has the following subsectors- Cast and diamonds- set jewellery, Diamond processing, Gemstone processing, Handmade Gold and gem-set Jewellery, Jewellery Retail, Fashion/Imitation Jewellery and Silversmithing.


The above SSC subsumes Gems and Jewellery Skill Council of India and Sports, Physical education, Fitness and Leisure Sector Skill Council. Activities of current sports SSC not in the NIC Divisions need to be dealt by individual federations of sports under the Ministry of Youth Affairs and not to be done by the SSC.

6.12.13. AUTO AND TRANSPORT MANUFACTURING SSC

Based on the NSSO 2011-12 Survey, the work force contribution of the SSC to the economy is 0.99 %.

The domain area of the SSC will be as follows:-
Division 29  Manufacture of motor vehicles, trailers and semi-trailers
(Workforce contribution 0.20%)

Group 291  Manufacture of motor vehicles
Group 292  Manufacture of bodies (coachwork) for motor vehicles; manufacture of Trailers and semi-trailers
Group 293  Manufacture of parts and accessories for motor vehicles

Division 30  Manufacture of other transport equipment (workforce contribution 0.11%)

Group 301  Building of ships and boats
Group 302  Manufacture of railway locomotives and rolling stock
Group 303  Manufacture of air and spacecraft and related machinery
Group 304  Manufacture of military fighting vehicles
Group 309  Manufacture of transport equipment not elsewhere covered.

Division 45  Wholesale and retail trade and repair of motor vehicles and motorcycles
(Workforce contribution 0.68%)

Group 451  Sale of motor vehicles
Group 452  Maintenance and repair of motor vehicles
Group 453  Sale of motor vehicle parts and accessories
Group 454  Sale, maintenance and repair of motorcycles and related parts and accessories

The present Automotive SSC has the following subsectors- Manufacturing, R&D. Sales, Service, and Driving/Road Transportation and Petrol Pump Operations.

The present Aviation & Aerospace Skill Council has the following subsectors- Aerospace Design & Development, Aerospace Manufacturing & Assembly, Airline Operations, Airport Operations, Cargo & Ground Handling and Maintenance Repair & Overhaul (MRO).

This is primarily a manufacturing SSC; it will not perform Driving/Transportation skill development. The Petrol Pump operations of the current Automotive SSC are part of the
Wholesale and Retail Trade SSC and hence will not be performed by this new SSC. The maintenance and repair work of all manufactured products by the SSC lies with the SSC.

### 6.12.14. HEALTH AND PERSONAL CARE SSC

Based on the NSSO 2011-12 Surveys, the work force contribution of the SSC to the economy is 0.93 %.

The domain area of the SSC will be as follows:-

**Section Q**  **Human health and social work activities**

**Division 86**  **Human health activities** *(work force contribution 0.80%)*

- Group 861  Hospital activities
- Group 862  Medical and dental practice activities
- Group 869  Other human health activities

**Division 87**  **Residential care activities** *(work force contribution 0.04%)*

- Group 871  Nursing care facilities
- Group 872  Residential care activities for mental retardation, mental health and substance abuse
- Group 873  Residential care activities for the elderly and disabled
- Group 879  Other residential care activities not elsewhere covered

**Division 88**  **Social work activities without accommodation** *(work force contribution 0.08 %)*

- Group 881  Social work activities without accommodation for the elderly and disabled
- Group 889  Other social work activities without accommodation not elsewhere covered

**Division 96**  **Other personal service activities** *(work force contribution 1.3%)*

- Group 960  Other personal service activities
- Class 9601  Washing and dry cleaning of textile and fur products
- Class 9602  *Hair Dressing and other beauty treatment*
The present Healthcare Sector Skill Council has the following subsectors- Diagnostic Services, Curative Services, Non-Direct Care, Rehabilitative Care, Community Related Services, Allopathy, AYUSH (Ayurveda, Yoga & Naturopathy, Unani, Sidhha, Homoeopathy), Dietetics & Nutrition, Dentistry, Traditional Medicine, Complementary/Alternative medicine/Therapeutic System, Nursing and Pharmacy.

The present Beauty & Wellness Sector Skill Council has the following subsectors-Beauty & Salon- Skin, Hair, Nails, Makeup, Tattoo, Aesthetic Dermatology rejuvenation (core spa industry services, spa operations, niche spa services) Fitness and weight management centers-Gym & Aerobics, Weight Management Centers, Nutritionists, Alternate Therapy-Ayurveda, Yoga, Naturopathy, Aromatherapy & Reflexology, Neurotherapy, Beauty products and counter sales (beauty& salon products & equipment).

The above SSCs will be subsumed in this new SSC.

6.12.15. BANKING, FINANCE & INSURANCE SSC

Based on the NSSO 2011-12 Surveys, the work force contribution of the SSC to the economy is 0.91 %. The percentage of Gross Value Added (GVA) at constant (2011-12) prices in 2011-12 by the sector to the economy is 5.9 % as per CSO 2011-12 data.

The domain area of the SSC will be as follows:-

**Section K Financial and insurance activities**

**Division 64 Financial service activities, except insurance and pension funding**

**Group 641 Monetary intermediation**

**Group 642 Activities of holding companies**

**Group 643 Trusts, funds and other financial vehicles**

**Group 649 Other financial service activities, except insurance and pension funding**

**Activities**

**Division 65 Insurance, reinsurance and pension funding, except compulsory social security**
The present Banking, Finance Services and Insurance (BFSI) SSC has the following subsectors-
Lending Institutions, Fund Management Institutions, Financial Advisory and Distribution, Broking, Back Office Operations, Payment Banks and Mobile Wallets.

This SSC will cover skill development in the above NIC economic activities.

6.12.16 MANUFACTURE OF ELECTRICAL AND ELECTRONICS GOODS SSC

Based on the NSSO 2011-12 Surveys, the work force contribution of the SSC to the economy is 0.89%.

The domain area of the SSC will be as follows:-

Division 26  Manufacture of computer, electronic and optical products (workforce contribution 0.09%)

Group 261  Manufacture of electronic components
Group 262  Manufacture of computers and peripheral equipment
Group 263  Manufacture of communication equipment
Group 264  Manufacture of consumer electronics
Group 265  Manufacture of measuring, testing, navigating and control equipment; watches and clocks
Group 266  Manufacture of irradiation, electro medical and electrotherapeutic equipment
Group 267  Manufacture of optical instruments and equipment
Group 268  Manufacture of magnetic and optical media

Division 27  Manufacture of electrical equipment (*workforce contribution 0.21%*)

Group 271  Manufacture of electric motors, generators, transformers and electricity distribution and control apparatus

Group 272  Manufacture of batteries and accumulators

Group 273  Manufacture of wiring and wiring devices

Group 274  Manufacture of electric lighting equipment

Group 275  Manufacture of domestic appliances

Group 279  Manufacture of other electrical equipment

Division 95  Repair of computers and personal and household goods (*workforce contribution 0.59%*)

Group 951  Repair of computers and communication equipment

Group 952  Repair of personal and household goods

The Electronics SSC has the following subsectors- Consumer Electronics, IT Hardware, PCB Assembly, Communication & Broadcasting, Passive Components, Industrial Electronics, Strategic Electronics, Automotive Electronics, PCB Manufacturing, Active Components, Solar Electronics, Medical Electronics, LED Lighting and PCB Design

The present Instrumentation, Automation, Surveillance, Communication SSC has the following subsectors- Instrumentation, Automation, Surveillance, Communication (Broadcast).

The above SSCs are subsumed in this new SSC and will only perform activities as per NIC activities listed above.

**6.12.17. Domestic Personnel SSC**

Based on the NSSO 2011-12 Surveys, the work force contribution of the SSC to the economy is 0.83 %.

The domain area of the SSC will be as follows:-

Division 97  Activities of households as employers of domestic personnel
Group 970 Activities of households as employers of domestic personnel

Domestic Workers SSC has the following subsectors- the workers of a household but also covers the administrative support staff of the offices, institutions, hospitals etc., Live in, Live out and Part time.

6.12.18. INFORMATION AND COMMUNICATION SSC

Based on the NSSO 2011-12 Surveys, the work force contribution of the SSC to the economy is 0.77%.

The domain area of the SSC will be as follows:-

**Section J Information and communication**

**Division 59** Motion picture, video and television programme production, sound recording and music publishing activities (*work force contribution 0.02%*)

Group 591 Motion picture, video and television programme activities
Group 592 Sound recording and music publishing activities

**Division 60** Broadcasting and programming activities (*work force contribution 0.01%*)

Group 601 Radio broadcasting
Group 602 Television programming and broadcasting activities

**Division 58** Publishing activities (*work force contribution 0.08%*)

Group 581 Publishing of books, periodicals and other publishing activities
Group 582 Software publishing

**Division 61** Telecommunications (*work force contribution 0.22%*)

Group 611 Wired telecommunications activities
Group 612 Wireless telecommunications activities
Group 613 Satellite telecommunications activities
Group 619 Other telecommunications activities
Division 62 Computer programming, consultancy and related activities

(Work force contribution 0.33%)

Group 620 Computer programming, consultancy and related activities

Division 63 Information service activities (work force contribution 0.11%)

Group 631 Data processing, hosting and related activities; web portals

Group 639 Other information service activities

IT –ITeS SSC has the following subsectors- IT Services, Business Process Management, Engineering R&D and Software Products.

All of the above subsectors of IT-ITeS activities are covered in the above mentioned NIC activities

Telecom SSC has the following subsectors- Network Management, Infrastructure Provider, Handset segment, and Service Providers- all subsectors have associated manufacturing activities.

The Manufacture of Telecom equipments of existing Telecom SSC will now not be part of this SSC and would come under Manufacture of Equipment SSC.

Media and Entertainment SSC has the following subsectors- Film, TV, print, radio, animation, gaming, advertising, OOH media, and digital content creation.

The above SSCs are subsumed in this new SSC.

6.12.19. ENERGY AND UTILITIES SSC

Based on the NSSO 2011-12 Surveys, the work force contribution of the SSC to the economy is .55 %. The percentage of Gross Value Added (GVA) at constant (2011-12) prices by the sector to the economy is 2.3 % as per CSO 2011-12 data.

The domain area of the SSC will be as follows:-

Section D Electricity, gas, steam and air conditioning supply

(Work force contribution 0.27%)

Division 35 Electricity, gas, steam and air conditioning supply
Group 351 Electric power generation, transmission and distribution
Group 352 Manufacture of gas; distribution of gaseous fuels through mains
Group 353 Steam and air conditioning supply

Section E Water supply; sewerage, waste management and remediation activities
(Work force contribution 0.25%)
Division 36 Water collection, treatment and supply
Group 360 Water collection, treatment and supply

Division 37 Sewerage
Group 370 Sewerage

Division 38 Waste collection, treatment and disposal activities; materials recovery
Group 381 Waste collection
Group 382 Waste treatment and disposal
Group 383 Materials recovery

Division 39 Remediation activities and other waste management services
Group 390 Remediation activities and other waste management services
Division 19 Manufacture of coke and refined petroleum products
(Workforce contribution 0.03%)
Group 191 Manufacture of coke oven products
Group 192 Manufacture of refined petroleum products

The Power SSC has the following subsectors- Power Sector (Conventional), Power Generation – through multiple sources, i.e. Thermal, Gas, Hydel, Nuclear, etc., Power Transmission, Power Distribution, Power Equipment Manufacturing, Downstream Activities and Renewable Energy-Solar & Wind.
The manufacture of Power equipment will not be part of the SSC as clearly stated in the NIC activities list above.

Hydrocarbon SSC has the following subsectors- Petroleum, Natural Gas; Petrochemicals divided by upstream, downstream and midstream services.


The Green Construction skilling will be integral part of Construction SSC, and Green Transportation Manufacturing of the Automotive and Transport Manufacturing SSC.

The above SSCs are subsumed in this new SSC.

**6.12.20 MINING AND QUARRYING SSC**

Based on the NSSO 2011-12 surveys, the work force contribution of the Mining SSC to the economy is 0.54 %. The percentage of Gross Value Added (GVA) at constant (2011-12) prices to the economy is 3.2 % as per CSO 2011-12 data.

The SSC domain area would be as follows:-

<table>
<thead>
<tr>
<th>Section</th>
<th>Mining and quarrying</th>
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</thead>
<tbody>
<tr>
<td>Division 05</td>
<td>Mining of coal and lignite</td>
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<tr>
<td>Group 051</td>
<td>Mining of hard coal</td>
</tr>
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<td>Group 052</td>
<td>Mining of lignite</td>
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<td>Division06</td>
<td>Extraction of crude petroleum and natural gas</td>
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<tr>
<td>Group 061</td>
<td>Extraction of crude petroleum</td>
</tr>
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<td>Group 062</td>
<td>Extraction of natural gas</td>
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<td>Division 07</td>
<td>Mining of metal ores</td>
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<tr>
<td>Group 071</td>
<td>Mining of iron ores</td>
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<tr>
<td>Group 072</td>
<td>Mining of non-ferrous metal ores</td>
</tr>
</tbody>
</table>
Division 08 Other mining and quarrying
Group 081 Quarrying of stone, sand and clay
Group 089 Mining and quarrying not elsewhere covered

Division 09 Mining support service activities
Group 091 Support activities for petroleum and natural gas mining
Group 099 Support activities for other mining and quarrying

The current Mining SSC would cover the above economic activities.

6.12.21 SECURITY, MANAGEMENT & ADMINISTRATIVE SUPPORT SERVICES

SSC

Based on the NSSO 2011-12 Surveys, the work force contribution of the SSC to the economy is 0.54 %.

The domain area of the SSC will be as follows:-

Section N Administrative and support service activities

Division 77 Rental and leasing activities (work force contribution 0.12%)
Group 771 Renting and leasing of motor vehicles
Group 772 Renting and leasing of personal and household goods
Group 773 Renting and leasing of other machinery, equipment and tangible goods not elsewhere covered
Group 774 Leasing of non financial intangible assets

Division 78 Employment activities (work force contribution 0.02%)
Group 781 Activities of employment placement agencies
Group 782 Temporary employment agency activities
Group 783 Human resources provision and management of human resources functions

Division 80 Security and investigation activities (work force contribution 0.15%)
Group 801 Private security activities
Group 802  Security systems service activities
Group 803  Investigation activities

Division 81  Services to buildings and landscape activities (*work force contribution 0.06%)

Group 811  Combined facilities support activities
Group 812  Cleaning activities
Group 813  Landscape care and maintenance service activities

Division 82  Office administrative, office support and other business support activities (*Work force contribution 0.21%)

Group 821  Office administrative and support activities
Group 822  Activities of call centres
Group 823  Organization of conventions and tradeshows
Group 829  Business support service activities not elsewhere covered

The present Management & Entrepreneurship & Professional Skill Council (MEPSC SSC) has the following subsectors- Professional Skills, Entrepreneurship Skills, Office Management, Training & Assessment, and Non-Teaching Education Sector.

The above subsectors of MEPSC SSC are too wide. Professional Skills, Non teaching education sector, Training & Assessment will be under Education Training and Professional Services SSC and not under the current SSC.

Security Sector Skill Development Council has the following subsectors- Commercial, Industrial, Personal protection, Training and assessment, Investigation and Vocational Education.

It is not rational to have training and assessment, vocational education under the Security SSC.

The above SSCs are subsumed in this new SSC and will only cover the NIC 2008 activities listed above.

6.13  The Committee further tried to create a concordance of new SSCs with the existing SSCs, which is reflected, in the following table.
<table>
<thead>
<tr>
<th>S.no.</th>
<th>Name of the new proposed SSC</th>
<th>Existing SSC Name</th>
</tr>
</thead>
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<td>1</td>
<td>AGRICULTURE AND ALLIED SSC</td>
<td>Agriculture Skill Council of India</td>
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<td>2</td>
<td>CONSTRUCTION AND REAL ESTATE SERVICES SSC</td>
<td>Construction Skill Development Council of India</td>
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<td>Indian Plumbing Skills Council</td>
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<td>3</td>
<td>WHOLESALE TRADE AND RETAIL SSC</td>
<td>Retailers Association’s Skill Council of India</td>
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<tr>
<td>4</td>
<td>EDUCATION TRAINING AND PROFESSIONAL SERVICES SSC*</td>
<td>Not set up so far</td>
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<tr>
<td>5</td>
<td>TEXTILES APPARELS AND LEATHER SSC</td>
<td>Textile Sector Skill Council</td>
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<td>Apparel, Madeups &amp; Home Furnishing Sector Skill Council</td>
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<td>Leather Sector Skill Council</td>
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<td>Handicrafts &amp; carpets Sector Skill Council</td>
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<td>TRANSPORTATION AND LOGISTICS SSC</td>
<td>Logistics Skill Council</td>
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<td>CHEMICAL, PHARMACEUTICALS AND RUBBER MANUFACTURING SSC</td>
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<td>Paints and Coatings Skill Council</td>
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<td>Life Sciences Sector Skill Development Council</td>
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<td>Chemical &amp; Petro Chemical Sector Skill Council</td>
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<td>9</td>
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<td>Tourism &amp; Hospitality Skill Council</td>
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<td>10</td>
<td>MACHINERY AND EQUIPMENT MANUFACTURING SSC</td>
<td>Indian Iron &amp; Steel Sector Skill Council</td>
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<td>Strategic Manufacturing Sector Skill Council</td>
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<td>Capital Goods Skill Council</td>
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<td>Infrastructure Equipment Skill Council</td>
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<tr>
<td>11</td>
<td>WOOD AND FURNITURE SSC</td>
<td>Furniture &amp; Fittings Skill Council</td>
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<td>12</td>
<td>GEMS, JEWELLERY AND CREATIVE ARTS SSC</td>
<td>Gems &amp; Jewellery Skill Council of India</td>
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<td>Sports, Physical Education, Fitness and Leisure Sector Skill Council</td>
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<tr>
<td>13</td>
<td>AUTO AND TRANSPORT MANUFACTURING SSC</td>
<td>Aviation &amp; Aerospace Sector Skill Council</td>
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<td>Automotive Skills Development Council</td>
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<td>14</td>
<td>HEALTH AND PERSONAL CARE SSC</td>
<td>Healthcare Sector Skill Council</td>
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<td>Beauty &amp; Wellness Sector Skill Council</td>
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<td>15</td>
<td>BANKING, FINANCE &amp; INSURANCE SSC</td>
<td>Banking, Financial Services &amp; Insurance (BFSI) Sector Skill Council</td>
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<td>MANUFACTURE OF ELECTRICAL AND ELECTRONICS GOODS SSC</td>
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<td>17</td>
<td>DOMESTIC PERSONNEL SSC</td>
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<td>INFORMATION AND COMMUNICATION SSC</td>
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<td>IT-ITeS Sector Skill Council</td>
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<td>ENERGY AND UTILITIES SSC</td>
<td>Telecom Sector Skill Council of India</td>
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<td>20</td>
<td>MINING AND QUARRYING SSC</td>
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<td>21</td>
<td>SECURITY, MANAGEMENT &amp; ADMINISTRATIVE SUPPORT SERVICES SSC</td>
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<td>Management &amp; Entrepreneurship and Professional Skills Council</td>
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6.14 The SSCs after being restructured on the basis of NIC 2008, which is compliant with ISIC, will be internationally comparable. NIC has been mapped with National Classification of Occupations (NCO) which is compatible with International Standard Classification of Occupations (ISCO). Now if the SSCs develop their National Occupational Standards and Qualification Packs on the basis of ISCO and provide the best quality training to a person, he will not only be competent to work within the country but also anywhere else in the world.

6.15 While implementing the proposed rationalization of SSCs, the following steps should be taken:-

i) The SSCs are concerned basically with collection and compilation of Labour Market Information, Identifying the skill needs of sectoral employers and developing norms and standards. The work of SSCs, therefore, should be allocated to NSDA which has been allocated the responsibility of developing labor market information system and approving norms and standards. NSDC is a private sector body and not competent to handle regulatory function. However, in order to discharge its role effectively, National Skill Development Agency will have to be strengthened, expanded and transformed into National Skill Development Authority and allocated regulatory role and responsibilities.

ii) All the existing SSC should be dissolved.

iii) All new SSCs should be created under Section 25(now 8) of the Companies Act, 2013

iv) All funds of the old SSCs should be transferred to the new SSCs.

v) Governing Council of the new SSC should have representation from all divisions/old constituent entities.

vi) The new SSC should function like an organic whole, giving importance to all constituent entities.
vii) All sectoral industries should become members of the SSC

viii) The members of the Governing Council should be democratically elected by all the members of the SSC.

ix) The members of the Governing Council should elect the Chairman in a democratic manner.

x) The term of the Chairman and the members of the Governing Council should be at least for a period of 3 years so that they can get sufficient time to contribute and maintain continuity.

xi) The CEO must be identified by an independent selection procedure and the person should be an outstanding professional having at least 20 years of experience of working in that particular sector.

xii) In order to provide professionalism, Chief Operating Officers may represent the constituent entities.

xiii) In order to discharge their responsibilities effectively and efficiently, the following officials at the senior level may be appointed:

a) Head, Standards and Quality Assurance
b) Head, Industry Interface and LMIS
c) Head, Government/VET Interface (Central & State)
d) Head, Finance
e) Head Unorganized Sector

All these positions must be manned by experts/professionals having at least 15 years of experience in the respective fields.

xiv) A representative of NSDA and the concerned administrative Ministry should be represented in the Governing Council.

xv) In order to ensure participation of the States, 2 State Governments may be represented on the Governing Council on rotation basis.

xvi) At least two members of the Central Trade Unions should be represented on the Governing Council.

xvii) The members of the SSC should be employers and not the representatives of the industry associations.
Chapter 7

Institutional Framework

7.1 Effective skill development in the second largest country of the world is dependent on the availability of a strong, robust and complete institutional framework that can address all dimensions of the huge and varied task. The purpose of this chapter is to examine the various pillars of this framework, look at the roles and responsibilities entrusted to each, and find out if there is any apparent or real overlap or omission which could be a source of confusion and suggest remedial measures. The chapter also takes into account inputs received during interactions with the main agencies involved in skill development, key authorities, the Sector Skill Councils and various other stakeholders. At the end, establishment of new institutional mechanism is proposed which would make the institutional framework complete.

7.2 Skill Development Ecosystem

7.2.1 In India, the common perception about skill development is that it is a stand alone activity i.e. a person goes to a vocational training center and gets some skills. It is a wrong notion. Skill development system consists of the following six components:-

i) A credible and real time Labour Market Information System (LMIS) which informs us about the requirement of skills in different sectors of economy in short term, medium term and long term time frame. In fact, this is the starting point for all skill development efforts as, if we don’t know what kind of skills are required, in what time frame and in which organization; skilling will be a futile exercise. If we do not have a credible and dynamic LMIS, the skilling efforts will only be supply-driven.

ii) National Occupational Standards which define what kind of jobs are performed in an industry.

iii) National Competency Standards which define what kinds of competencies are required to perform those jobs.

iv) National Training Standards which define what course curriculum is required to impart those skills to perform.

v) National Accreditation Standards which ensure that the institutions which impart training have required infrastructure in terms of classrooms, workshops, tools, equipments, machinery, qualified trainers and can impart quality training.
vi) National Assessment System which tests independently the competencies acquired by the trainees.

vii) A National Certification System which ensures that the competencies acquired are nationally and internationally acceptable and enables a person to work anywhere in the country or abroad.

7.2.2 As industry is the ultimate user of skills, all these standards are required to be developed in close consultation with the industry and the government plays an important role in facilitating the development of the above standards.

7.3 Ministry Of Skill Development & Entrepreneurship

7.3.1 Recognizing the need and urgency of quickly coordinating the efforts of all concerned stakeholders in the field of skill development and entrepreneurship according to the needs of the industry, Government of India notified the formation of Department of Skill Development and Entrepreneurship on 31st July 2014. The Department was subsequently upgraded to a full fledged Ministry of Skill Development and Entrepreneurship on 9th November 2014. It started functioning from 1st April 2015. The Ministry is responsible for co-ordination of all skill development efforts across the country, removal of disconnect between demand and supply of skilled manpower, building the vocational and technical training framework, skill up-gradation, building of new skills, and innovative thinking not only for existing jobs but also jobs that are to be created. The Ministry aims to skill the country on a large scale with speed and high standards in order to achieve its vision of a 'Skilled India’. Following are the roles and functions assigned to the Ministry as per notification dated 31st July 2014 –

i) Co-ordination with all concerned for evolving an appropriate skill development framework, removal of disconnect between the demand for and supply of skilled manpower through vocational and technical training, skill up-gradation, building of new skills, innovative thinking and talents not only for the existing jobs but also the jobs that are to be created;

ii) Mapping of existing skills and their certification;

iii) Expansion of youth entrepreneurship education and capacity through forging strong partnership between educational institutions, business and other community organizations and set national standards for it;

iv) Role of co-ordination relating to skill development;

v) Doing market research and devising training curriculum in important sectors;
vi) Industry - Institute linkage;

vii) Bringing Public Private Partnership element in this activity- partnership with the industry that needs the skilled manpower;

viii) Making broad policies for all other Ministries/Departments with regard to market requirements and skill development;

ix) To frame policies for soft skills;

x) Large skill development related to Information Technology and computer education;

xi) Academic equivalence of skill sets;

xii) Work relating to Industrial Training Institutes;

xiii) Work relating to:

   a) National Skill Development Corporation
   b) National Skill Development Agency
   c) National Skill Development Fund

xiv) Skilling for entrepreneurship development for Science and Technology; and

xv) Work relating to:

   a) National Institute for Entrepreneurship and Small Business Development, Noida.
   b) Indian Institute of Entrepreneurship, Guwahati.

7.3.2 MSDE is assisted in these initiatives by its functional arms – National Skill Development Agency (NSDA), National Skill Development Corporation (NSDC), National Skill Development Fund (NSDF) and 40 Sector Skill Councils (SSCs) as well as more than 267 training partners registered with NSDC. The DGT has also become a part of MSDE. The Ministry also intends to work with the existing network of skill development centres, universities and other alliance partners in the field. Further, collaborations with relevant Central Ministries, State Governments, international organizations, industry and NGOs have been initiated for multi-level engagement and for more impactful implementation of skill development efforts.

7.3.3 Keeping these roles in view and taking into account the roles assigned to other formations, which will be discussed later in the chapter, the committee would like to make the following observations:

i) One of the primary roles given to the Ministry is Coordination of all players who are concerned with skill development. Indeed, it is expected to make policies for all other Ministries/Departments with regard to skill development. This is a tall order and
question can be raised whether this has been possible for the Ministry, whether the Ministry enjoys sufficient authority to effectively coordinate the skill related work of all Ministries; whether making policies for all other Ministries/Departments has been, or could be possible, and whether it has been possible to enforce various skill standards across the whole skill ecosystem. Indeed, even earlier, NCVT, under the Ministry of Labour and Employment, was charged with the responsibility of laying down national policies for skill development, but was unable to do so except for the institutions that came directly under the control of the Ministry of Labour and Employment. While one can understand how difficult it is to operationalize this mandate, it is nevertheless critical that there should be real, effective coordination of skilling initiatives of all players, including other Ministries and Departments. Otherwise the skill development eco-system would remain fragmented with different players pulling in different directions, pursuing different policies, deploying different strategies and standards, and so on. It would also be worth considering what institutional structure should be created with sufficient authority to bring about this coordination – of both policies and actions.

ii) There is also some real/apparent overlap of roles and responsibilities across some formations, such as NSDC, NSDA, NSQC, NCVT and DGT that needs attention. These will be pointed out at relevant places. The Ministry needs to work on such duplication of roles and responsibilities of different agencies/stakeholders involved in different dimensions of skill development.

iii) Skilling for employability is only a ‘means’ to the ‘end’ of placement of the trainee. If this link is not directly addressed, it would be hard for the trainees to enter the world-of-work. This does not find explicit mention. The Committee feels that the placement role should be added to the roles and responsibilities of the Ministry. There is also no provision related to counselling and guidance to the students, which is critical for effective outcome of skilling efforts.

iv) The role related to industry -institute linkage is clearly very important. However, it would be desirable to expand on the dimensions and scope of industry-institute linkage that the MSDE is responsible for.

v) The Directorate General of Training represents a valuable resource available to the Ministry. It would be for consideration how this resource can be integrated more fully within and utilized.
vi) The certification system is bifurcated as there is a repetition of the certification authority as NCVT conducts certification for long term courses, whereas SSCs are doing certification for short term courses. It is for consideration whether it is not desirable to have one certification agency for all skill development schemes.

vii) The Committee feels that there are some missing formations related to-

a. National Testing and Certification Authority;

b. National Labour Market Information System; and

c. Framework for Unorganized Sector Training

These will be discussed in detail at the end of this chapter.

7.4 Directorate General of Training

7.4.1 The Directorate General of Training (DGT) under the Directorate General of Employment and Training was transferred to the Ministry of Skill Development and Entrepreneurship vide Cabinet Secretariat order No. 1/21/9/2014 dated 16 April 2015 and Ministry of Labour and Employment Order no. DGE&T-A-22020/01/2015-Adm-II dated 24 April 2015. DGT now under MSDE is an organisation for development and national level coordination of programmes relating to vocational training, including Women's Vocational Training. The Directorate General of Training consists of the Directorate of Training and Directorate of Apprentice Training. This includes a network of Industrial Training Institutes (ITIs) in States; Advanced Training Institutes (ATIs), NIMI, Regional Vocational Training Institutes (RVTIs) and other Central institutes. A number of training programmes catering to students, trainers and industry requirements are being run through this network. DGT implements the Apprentices Act, 1961. DGT also operates Vocational Training Schemes in some of the specialised areas through field institutes under its direct control. Development of these programmes at national level, particularly in the area concerning common policies, common standards and procedures, training of instructors and trade testing are the responsibility of the DGT.

7.4.2 Major functions of the DGT are:

i) to frame overall policies, norms, and standards for vocational training;

ii) to diversify, update and expand training facilities in terms of craftsmen and crafts instructors’ training;

iii) to organise and conduct specialised training and research at the specially established training Institutes;
iv) to implement, regulate and increase the scope of training of apprentices under the Apprentices Act, 1961;

v) to organise vocational training programmes for women;

vi) grant affiliation to ITIs; and

vii) carry out testing and certification of trainees.

7.5 National Council for Vocational Training (NCVT)

7.5.1 The National Council for Vocational Training, an advisory body, was set up by the Government of India resolution No. TR/EP. 24156 dated 21/24 August 1956. The Council is entrusted with the responsibilities of prescribing standards and curricula for craftsmen training, advising the Government of India on the overall policy and programmes, conducting All India Trade Tests and awarding National Trade Certificates.

It has been noticed that many functions of the Council overlap with those of the SSCs. Main function of the NCVT are as follows:

i) establish and award National Trade Certificates in engineering, building, textile and leather trades and such other trades as may be brought within its scope by the Government of India;

ii) prescribe standards in respect of syllabi, equipment, and scale of space, duration of courses and methods of training;

iii) arrange trade tests in various trade courses and lay down standards of proficiency required for a pass in the trade test leading to the award of National Trade Certificate;

iv) arrange for ad-hoc or periodical inspections of training institutions in the country to ensure that the standards prescribed by the Council are being followed;

v) recognise training institutions run by Government or by private agencies for purposes of the grant of National Trade Certificates and lay down conditions for such recognition;

vi) advise the Central Government regarding distribution to State Governments of the contribution of the Government of India towards expenditure on the Craftsmen Training Scheme;

vii) prescribe qualifications for the technical staff of training institutions;
viii) prescribe the standards and conditions of eligibility for the award of National Trade Certificates;

ix) recommend the provision of additional training facilities, wherever, necessary and render such assistance in the setting up of additional training institutions or in the organisation of additional training programmes, as may be possible; and

x) perform such functions as are assigned by, or under, the Apprentices Act, 1961 and perform such other function as may be entrusted by the Government of India.

7.6 National Skill Development Agency

7.6.1 The National Skill Development Agency (NSDA), an autonomous body, (registered as a Society under the Society's Registration Act, 1860) was created with the mandate to co-ordinate and harmonise the skill development activities in the country, is part of the Ministry of Skill Development & Entrepreneurship (MSDE). It has been given the following responsibilities:

i) take all possible steps to meet skilling targets as envisaged in the 12th Five Year Plan and beyond;

ii) coordinate and harmonize the approach to skill development among various Central Ministries/Departments, State Governments, the NSDC and the private sector;

iii) anchor and operationalize the NSQF to ensure that quality and standards meet sector specific requirements;

iv) be the nodal agency for State Skill Development Missions;

v) raise extra-budgetary resources for skill development from various sources such as international agencies, including multi-lateral agencies and the private sector;

vi) evaluate existing skill development schemes with a view to assessing their efficacy and suggest corrective action to make them more effective;

vii) create and maintain a national data base related to skill development including development of a dynamic Labour Market Information System (LMIS);

viii) take affirmative action for advocacy;
ix) ensure that the skilling needs of the disadvantaged and the marginalized groups like SCs, STs, OBCs, minorities, women and differently able persons are taken care of; and

x) discharge any other function as may be assigned to it by the Government of India.

7.6.2 It would be seen from the functions assigned to the NSDA and comparing them with what the MSDE’s roles are, basically, the NSDA has been assigned with regulatory functions as the operational arm of the MSDE, through which the MSDE discharges its mandate. The coordination function, for example, has been delegated/passed-on to the NSDA. We have noted earlier that coordination across different Ministries and Departments is not an easy function, even for the Ministry itself. Passing it on to an organisation under the Ministry, which does not command the authority that the Ministry has, makes co-ordination not only very difficult, but virtually a non-starter. This needs urgent consideration.

7.6.3 According to the functions listed earlier, NSDA has been mandated to raise extra-budgetary resources for skill development from various sources. Raising funds and external linkages are already the responsibility of NSDC and NSDF. Quite apart from this, should NSDA, as a regulatory body be involved in raising funds? The regulatory function, a difficult and complex function in its own right, could well suffer at the altar of raising funds. NSDA, therefore, does not need to involve in the fund raising activities for skill development as it will result in duplication of work.

7.6.4 Regarding LMIS, NSDA does not have much experience in LMIS design. Professional experts would be required to assist NSDA in this work; therefore, NSDA should take help of other research institutes for the establishment and implementation of LMIS.

7.6.5 NSDA is also responsible for evaluating existing skill development schemes but the agency neither has enough professional expertise within nor wherewithal to carry on this work. Furthermore, the agency is working with a few short-term consultants who are good but depart after a while when they get better opportunities or career options, carrying away with them whatever expertise and experience they have acquired in that short period. This arrangement is not conducive for accumulation of domain expertise and experience within the agency, and does not help to build a consistent, stable, and robust system. The Agency would, therefore, benefit by having an adequate strength of long-term sectoral experts from the industry and the academia.
7.7 National Skill Development Corporation

7.7.1 The National Skill Development Corporation, (NSDC) is a unique Public Private Partnership in India, under the Ministry of Skill Development & Entrepreneurship. It aims to promote skill development by catalyzing creation of large, quality and for-profit vocational institutions. NSDC provides funding to build scalable, for-profit vocational training initiatives. Its mandate is also to enable support systems such as quality assurance, information systems and train the trainer academies either directly or through partnerships. NSDC acts as a catalyst in skill development by providing funding to enterprises, companies and organisations that provide skill training.

A. The main objects to be pursued by the Company are –

i) to promote simple, easily understood “core” employability skills and competency standards, which link the demand of the private sector to the training methodology and curricula and provide a common platform for collaboration amongst private sector employers, training providers and the labour force not with the motive of the profit;

ii) to establish, manage, run and promote institutes and polytechnics for imparting skills training in a number of areas;

iii) to play the role of a “market maker” by establishing a price mechanism, co-relating and bridging demand – supply asymmetries, and creating a viable skill development chain, with particular emphasis on sectors where the market mechanism is ineffective or missing e.g., as in the unorganized sector jobs;

iv) to create communication, interlink age amongst partnering institutions at various points in the spectrum e.g. youth, industry, training institutions, funding agencies and grass root mobilization organizations from public, private and NGO sectors;

v) to perform the role of “multiplier” organization, by engaging with the best and most innovative on the ground practitioners from different fields as the sources of both innovation and practice dissemination;

B. The objects incidental or ancillary attainments of the above main objects are:

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5 According to the Certificate of Incorporation dt. 31st July 2008
i) to establish Sector Skills Councils (SSCs) as institutional mechanisms to co-ordinate participation of the social partners, employers in private sector, training providers, professional societies and NGOs/Civil Society Groups in the process of skill development;

ii) to develop sector specific skill development plans after identifying the skill development needs, on the one hand, and supply chains of labour (including inter regional migratory patterns) and skill shortages within the sector, on the other;

iii) to establish or assist in the establishment of – sector specific Labour Market Information Systems (LMIS) and Human Resource Planning (HRP) models, at national, state and sub-state levels, in order to continuously update the sectoral skill development plans;

iv) to recognize, identify or promote sector specific Assessment and Certification Bodies (ACBs) with proper accreditation to the authorized institutions in the regard, for assessing candidates on the basis of competency guidelines established by SSCs, awarding certificate to successful candidates, and assisting in continuous up-gradation of sectoral assessment standards and national vocational standards;

v) to institute programmes in collaboration with international agencies in accordance with defined competency standards;

vi) to provide “accredited trainer” status to trained persons, for a certain defined duration, to be renewed after lapse of the defined period;

vii) to create “guarantee” structures for selected sectors in order to facilitate binding commitments on the side of producers (training institutions in this case);

viii) to provide assistance – in the nature of a viability gap funding (VGF) – to industry associations, registered societies and trusts, individual entrepreneurs, NGOs, to set up training infrastructure, specific to sectors or regions;

ix) to assist the training providers – new and existing – in obtaining accreditation status from the proposed National Accreditation Authority (NAA) and to set up affiliates of the NAA on sectoral/regional basis;

x) to create mechanisms/structures for information “outreach”, for generating awareness about the prospects which would open up on acquiring specific skills;

xi) to establish a clearing house for placements, i.e. industry specific trainee placement and tracking systems, for effective evaluation and future policy planning;
xii) to provide assistance in creating housing infrastructure for fresh labour in big urban centres;

xiii) to build strong and sustainable linkages with funding partners, i.e. industry, financial institutions, banks, multilateral and bilateral external aid agencies, private equity provides and Ministries/Departments of Central and State Governments;

xiv) to forge partnerships with agencies which have aptitude and capability to conduct training;

xv) to provide support for installation of state of the art machinery, as well as for training of trainers being brought in by training partners;

xvi) to set up a “passbook” mechanism for ensuring that loans given to trainees for capability enhancement, by a particular employers, are recovered from the salary of the skilled worker, for reimbursing training organizations and loan providers, irrespective of the mobility of the worker from one employer to another;

xvii) to set up a fund in the nature of a Provident Fund with contributions from the employers and workers, for lifelong skill building and not merely for initial skills at the time of entry;

xviii) to mobilize funds for skill development in the areas to be decided by the Shareholders of the Company and to manage those funds for the purpose of the same; and

xix) to do all such other lawful things as are incidental or conducive to the attainment of the main objects.

7.7.2 A couple of observations may be in order here:

i) Since the Government provides most, if not all, funds to the NSDC, the matter of financial accountability becomes important. At the same time, a feeling has prevailed in some quarters that government procedures and accounting framework could burden the NSDC unnecessarily with a bureaucratic mind set, which can hamper its effective functioning and that a large degree of freedom should be available to the NSDC in taking financial decisions. Keeping these two points of view in mind, it is suggested that, instead of controlling inputs and processes for the purposes of accountability, the NSDC could be made accountable for pre-defined and pre-agreed ‘outcomes’. A related thought that could be considered is that the NSDC should operate as a Non-Banking Financial Company (NBFC), as it is already financing different stakeholders involved in skill development schemes, which then would be subjected to audit on outcome basis.
ii) As NSDC has been providing funds to various SSCs and private training partners, it can be argued that it should also support the private ITIs that come under DGT which is part of the MSDE. Indeed, the private ITIs should have the first claim as they are quite old in this system and have been operating successfully. Before providing funds and loans to the new, untested entrants, NSDC could well support the oldest, more established players, with an established track record.

It has also been noted that the NSDC should work hand in hand with the DGT, taking infrastructural support from the existing ITIs and the ITIs should benefit from the NSDC funding opportunities.

### 7.8 National Skill Development Fund

The National Skill Development Fund was set up in 2009 by the Government of India for raising funds both from Government and Non-Government entities for skill development in the country. The Fund is contributed by various Government sources, and other donors/ contributors to enhance, stimulate and develop the skills of Indian youth by various sector specific programs. A public Trust set up by the Government of India is the custodian of the Fund. The Trust accepts donation, contribution in cash or kind from the contributors for furtherance of objectives of the Fund. The Fund is operated and managed by a Board of Trustees. The Chief Executive Officer of the Trust is responsible for day-to-day administration and management of the Trust. The Trust meets its objectives through National Skill Development Corporation (NSDC)\(^6\). It also develops appropriate models to enhance, support and coordinate private sector initiatives. Accounts of the Trust are subject to CAG Audit and are also audited by a Chartered Accountant for every financial year and in such manner as may be directed by Government of India. It was been noted by the Committee that the Joint Secretary looking after the work of NSDC is also the CEO of NSDF. In our view, it is desirable to appoint an independent person, not connected with NSDC as CEO of NSDF to ensure objectivity and independence of his functioning as NSDF has been assigned supervisory role over the functioning of NSDC. Another important point noted by the Committee is that Governance Structure of NSDF is flawed. Board of Trustees of NSDF consists of three members, viz. Secretary, Department of Economic Affairs (DEA), Secretary, Planning Commission and Chairman, NSDC. NSDF is required to oversee the work of NSDC. How can

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\(^6\)Till 31st March 2015, NSDF has released Rs. 2333 crore to NSDC towards skill development programmes including National Skill Certification and Monetary Reward Scheme (STAR) and UDAAN Scheme (J&K oriented). NSDC with 160 training partners and 1722 training centres has so far trained around 35 lakh persons across India.
The supervisory body consist of head of the supervised body as a member? The Committee feels that this governance structure compromises with the supervisory role of the NSDF and, therefore, the Chairman NSDC should be excluded from NSDF and instead Chairman of NSDA included in it as member.

7.9 National Skill Qualification Committee

7.9.1 As per the notification No. 8/6/2013- Invt. dated 27 December 2013, NSQF is anchored in the National Skill Development Agency (NSDA), and is implemented through the National Skills Qualification Committee (NSQC). A permanent secretariat for the NSQC was required to be set up under NSDA. The composition of National Skills Qualification Committee is as follows:-

i) Chairman, NSDA..........................................................Chairman
ii) Secretary, Dept of School Education & Literacy, Ministry of HRD..........................................................Member
iii) Secretary, Dept of Higher Education, Ministry of HRD............Member
iv) Secretary, Ministry of Labour & Employment..........................Member
v) Member Secretary, Planning Commission..........................Member
vi) Mission Directors, from three State Skill Development Missions (in rotation)..........................Members
vii) Sectoral Representatives as below..........................Members
viii) Director General, NSDA..............................................Member Secretary

For each sector that is being discussed, the sectoral representatives would comprise:

ix) Secretary, Administrative Ministry..........................Member
x) Chairman/CEO of the concerned Sector Skill Council(s)..............Member
xi) Heads of all Regulatory Bodies, including where relevant UGC, AICTE, CBSE, NCVT, State Boards, etc. in the Sector..................Members
xii) Heads of two training institutions (one Govt and one private)........Members
xiii) Any other person/agency relevant for the sector*..................Member

*Note: Where more than one Ministry / Department is related to a particular sector, a representative from each of these Ministries/Departments is to be invited under this provision so that all concerned are represented. The representative could be a technical person from an expert agency or body under the Ministry dealing with the issue of training and skills in that particular
sector. In sectors that focus on skilling for overseas job markets, representatives of the Ministry of Overseas Indian Affairs would be included.

The NSQC has the liberty to set up specific sub-committees for addressing sectoral issues. However, all Members of the NSQC representing specific sectors, and listed under the group of “sectoral representatives” would necessarily have to be part of the sub-committee(s) on the sector.”

7.9.2 Functions of the NSQC are as under:

i) approve and notify the NOSs and the QPs prepared by the Sector Skills Councils, including job roles that exist across various sectors;

ii) approve the accreditation norms developed by the concerned Sector Skills Councils for training providers in the sector;

iii) develop/approve the accreditation norms for non-statutory certification agencies;

iv) based on the National Standards for Occupation/National Industrial Classification or any other nationally accepted classification system, to determine the definitions of sectors, and approve the creation of additional Sector Skills Councils including on the recommendation of the NSDC;

v) prescribe guidelines for ensuring that implementing agencies, including training providers, address the special needs of disadvantaged sections of the population, including persons with disabilities, members of Scheduled Castes and Tribes, OBCs, minorities, women etc;

vi) review and resolve any issues/disputes among Ministries/Departments/Regulatory Bodies regarding alignment of courses to NSQF, credit transfer, etc;

vii) all matters requiring cross-sectoral approach, such as credit accumulation and transfer, recognition of non-formal learning, apprenticeship, online and distance learning, lateral mobility and bridge courses;

viii) coordinate and align Indian qualifications to international qualification frameworks to allow international mobility;

ix) addressing all transition issues, including developing suitable mechanism for recognizing and aligning to the NSQF all qualifications pre-dating the implementation of the NSQF;

x) any other activity as may be entrusted by the Government.
xi) map all existing certificate, diploma, degree and other courses available in the sector, and identify gaps if any;

xii) determine whether progression from one level to another should be allowed for a specific course/discipline (e.g., should a progression link be established between a nursing qualification and a medical one?)

xiii) map all the progression pathways so determined and agreed, and decide how the progression will take place – how much credit would be allowed for movement from one level to the next, and how such progression can be facilitated;

xiv) determine progression links between courses and certifications that are granted by regulatory and/or professional bodies and those that are currently unregulated;

xv) identify and specify bridge courses and processes if any, that would be needed to permit progression from one level to another;

xvi) establishing and maintaining high standards for skill training in each sector.

provided that functions (i) to (xvi) would have to be discharged by the NSQC itself, and would not be delegated to any sub-committee.

7.9.3 Accreditation

While national accreditation norms would be approved by the NSQC, actual accreditation of training providers will be done by relevant regulators. The identification, registration and accreditation of the institutes/training providers would be done through a mechanism determined by the concerned Ministries and regulators in consultation with SSCs/industry as the case may be.

7.9.4 Assessment and Certification

Assessment and certification will be done by the respective agencies of the Government/private sector as is done now. However, assessment and certification norms developed by the concerned regulatory bodies, SSC/industry would be approved by the NSQC to ensure that outcomes conform to the appropriate NSQF level. Certificates issued post assessment will mention the level of the NSQF at which it lies.

7.9.5 In relation to some of these functions, the committee would like to make the following observations:-
i) An important function assigned to the NSQC is to approve and notify NOS and QPs prepared by the different SSCs. The purpose clearly is for the NSQC to examine each NOS and QP in some depth and ensure that they meet all the desired criteria and requisite quality is maintained throughout the whole system. Yet, there are instances of 400-500 NOSs and QPs being approved in just one sitting of the NSQC (Appendix XXXV). NSDA and NSQC have been notified separately. The Chairman of NSDA is the chairman of NSQC and DG of NSDA is the Member Secretary of NSQC. NSQC is implementing NSQF provision whereas the NSQF is anchored by NSDA. It is to be noted that NSDA as an institution has no overriding authority or appellate power over NSQC. This raises question on the credibility of approvals, particularly, when the NSQC does not have stable professionally trained and competent staff in sufficient number to be able to examine these in depth and provide inputs and recommendations to the NSQC for its consideration before they are put up for approval. The Committee feels that a suitable structure and Standard Operating Procedure should be established for scrutiny of NOSs and QPs.

ii) Also, it would be desirable that professionally trained staff with experience of working in the concerned industry should be inducted for examining the QPs and NOSs and they should be on long term basis as this function is of a continuing nature and requires expertise of higher order. In Germany, this support is provided by Federal Institute of Vocational Education and Training (BIBB) which has about 600 industry professionals on its rolls for this purpose.

iii) The Committee feels that there is no clarity between the functions of NSDC and NSQC in regards to establishment of SSCs. It would appear that NSDC is expected to examine the proposal for establishment of an SSC and then make recommendations to NSQC for its approval. Once the NSQC approves it, the burden of establishment of the “approved SSC” is shifted back to NSDC. The moot question is whether NSDC has an appropriate stable internal institutional mechanism for examining the proposal for setting up new SSCs.

iv) From discussions on the subject with relevant stakeholders, it has been brought out that this procedure was not necessarily followed in all cases. There are many instances where NSDC has approved SSCs on its own. One can understand it in case of SSCs setup before 27 December 2013, when the notification regarding implementation of NSQF was issued. But there are cases where NSQC approval has not been taken even after issue of this notification. There are other issues also, many SSCs have been created/incorporated first but approved later (Appendix XXIV). This has given rise to some confusion and may need re-examination for proper reinforcement of the prescribed procedure. It is also desirable that NSQC should have adequate internal strength available for it to discharge functions which require a very high degree of multidisciplinary professional expertise and experience which is not available at present.
7.10 National Skill Research Division

7.10.1 The National Skill Research Division is being set up within NSDA at the national level to serve as a think tank for inputs on research related to skill development and evolve as a credible research organization in skill development at the national level. Its mission is to serve as an authentic, qualitative and accessible think tank for research related to skill development in India.

7.10.2 The main objectives of the division are:

i) To serve as a think tank for inputs on research related to skill development;

ii) To evolve as a core research organization in area of skill development;

iii) To provide evidence based policy advisory/ inputs to guide government in the process of policy formulation and implementation;

iv) To bring together policy makers, social partners, researchers and practitioners to share their ideas on ways to improve vocational education and training policies;

v) To fill the knowledge gap by identifying trends and challenges for vocational education and training;

vi) To develop and facilitate innovative approach and make research findings more accessible to the stakeholders; and

vii) To establish research collaborations between universities and institutes in India and abroad in the field of skill development and adopt international best practices in India.

7.10.3 The functions listed for NSRD are crucial for professional functioning of the National Vocational Education and Training System in continuous evolving times. Research would be needed into a variety of issues, not necessarily all of them would be anticipated at this juncture. Those issues may require a wide range of expertise which may not always be possible to find internally. It is, therefore suggested that NSRD would have a small pool of researchers internally who would be supplemented by relevant experts drawn from the larger research echo system outside. The internal core group would (i) identify the issues which need to be researched, (ii) identify relevant external institutions which can take up the research activity on their behalf, (iii) draw up the terms of reference of the study, (iv) award research projects to identified institutions, (v) examine their proposed methodologies, and on completion of the project, (vi) review whether the research project meets the TORs and delivers the desired outputs. This whole set of activities require research expertise which the internal core-group would be required to process and
discharge. The advantage of this approach would be that NSRD would be able to draw upon the whole set of research institutions available in the country as per requirement. It may be worth mentioning that in drawing upon external research institutions, one could make use of existing institutes under the Ministry such as Central Staff Training and Research Institute (CSTARI), Kolkata, Central Institute for Research and Training in Employment Services (CIRTES), Noida and National Institute of Labour Economic and Research Development (NILERD) under NITI Aayog, etc.

7.11 Issues Facing Institutional Framework and Suggested Reforms

7.11.1 Ministry of Skill Development and Entrepreneurship

7.11.1.1 We have observed earlier that the role of coordination across the whole ecosystem of training, whether at the Centre with Central Ministries/Departments or the State Governments is quite complex and difficult. Even if MSDE takes very good decisions, various Ministries/State Governments may not implement them in letter and spirit. It can happen only when their viewpoints and concerns are solicited and accommodated through a regular high level consultative mechanism. The Committee, therefore, recommends that a Central Advisory Board on Skill Development (CABSD) be created in which Ministers of all the Central Ministries/Departments doing skill development, the Ministers of all the State Governments dealing with skill development and all Heads of regulatory bodies dealing with different aspects of skill development be made members. The Committee feels that this mechanism will be effective in coordinating the efforts of skill development seamlessly across the country.

7.11.1.2 We have observed earlier that LMIS is the starting point for any skill development efforts. The Directorate General of Employment and Training under the Ministry of Labour and Employment was setup as early as 1945. Training and Employment were put together to support each other. The ITIs were setup to conduct training in various trades and Employment Exchanges were set up to provide counselling, guidance and placement services to the skilled persons. In order to create an LMIS, a legislation called Employment Exchanges (Notification of Vacancies) Act, 1959 was enacted under which all the enterprises employing 10 or more persons were mandated to provide quarterly data on their manpower requirement. It served two purposes. One, Employment Exchanges, on the request of companies, provided them list of eligible skilled persons for being employed by them and two, the information collected was compiled annually and fed to the Directorate General of Training to design courses according to the requirement of industry through its Central Staff Training and Research Institute. However, even after the
creation of a new Ministry of Skill Development and Entrepreneurship, Directorate General of Employment still continues to be under the Ministry of Labour and Employment. Directorate General of Employment is repository of all information relating to employment and unemployment and skill needs of the employers. It provides counselling, guidance and placement services through a network of 978 employment exchanges across the country. It also implements the National Classification of Occupations which is based on International Standard Classification of Occupations and aligns our national standards to international standards. There is no reason why it should continue with the Ministry of Labour and Employment when Directorate General of Training, training arm of Ministry of Labour and Employment has already been transferred to the Ministry of Skill Development and Entrepreneurship. The Committee, therefore, recommends that in order to synergise the efforts of training and employment, the Directorate General of Employment should be transferred to the MSDE and the Ministry rechristened as ‘Ministry of Skill Development and Employment’. Entrepreneurship is primarily for self employment which is covered under ‘Employment’.

7.11.2 Directorate General of Training

7.11.2 As has been observed earlier, the erstwhile Directorate General of Employment and Training was the only body for policy formulation on vocational training, laying down norms and standards, designing and revising course curriculum, granting affiliation to the ITIs, trade testing and certification. Subsequently, many other Ministries and Departments started conducting training but the jurisdiction of DGE&T could not extend to those Ministries/Departments/Organizations. The system, over a period of time, became fragmented though the long term training conducted by the DGE&T through the ITIs still remains the mainstay of skilled manpower to the industry. Now, the NSDA has been given the mandate of anchoring NSQF and approving National Occupational Standards, Qualification packs, Accreditation standards, etc. The Committee, therefore, feels that role of DGT in so far as it concerns policy formulation on vocational training, laying down norms and standards and development and revision of course curricula should be mainstreamed and integrated with that of the NSDA. As NSDA does not have enough expertise to carry out this work, at present, DGT may form the nucleus for this purpose and become an integral part of the National Vocational Education and Training System. There cannot be two bodies under the same Ministry doing same work.
7.11.3 National Council for Vocational Training

7.11.3.1 NCVT was the only assessment and certification body but now large number of assessing bodies have been floated by the SSCs and NSDC. There are large numbers of training providers who train the trainees as well as assess their competencies. It greatly compromises on quality of training. The assessing bodies appointed by the SSCs and NSDC have basically been concerned with their financial sustainability. The assessors did not have professional expertise and industry experience as a result of which there has been compromise on quality of assessment. The focus has been mainly on turning out numbers. It resulted in non placement or very poor placement outcomes. NCVT is still carrying out assessment and certification in respect of ITIs. But over a period of time, there has been a compromise on quality as, though, the question papers are set by NCVT at the national level, but assessments are conducted by the State Governments through their instructors from the ITIs. They also evaluate their scripts and send marks to the NCVT for issuing certificates. So even in case of NCVT, the quality is dependent on the quality of assessment conducted by the State Governments which varies from State to State. The biggest flaw in our system has been that we have not been able to ensure quality of training to international standards. It has happened primarily because there are large number of assessment and certification bodies which neither have neither high professional expertise nor standards to ensure high quality. The Committee, therefore, recommends that the Government should set up a National Board of Assessment and Certification to carry out assessments for all training providers and institutions in the country. It should be manned by professionals of high repute and industry experience. The assessment should, preferably, be conducted by a tripartite assessment committee consisting of a trainer who maybe different from who has trained the trainees, a representative of the trade union and a representative of the industry, as is done in Germany. These assessors should be trained and have relevant industry background before they undertake assessment as the number of persons to be assessed is very large and spread throughout the length and breadth of the country, the National Board must have sufficient number of Regional Boards and subsequently, its offices in every state. NCVT has huge domain expertise, manpower and brand image and therefore, it should form the nucleus of the proposed National Board for Assessment and Certification.

7.11.4 National Skill Development Agency

7.11.4.1 As we have observed earlier, the NSDA mainly performs the regulatory functions such as implementation of NSQF, development of LMIS, approve norms and standards. The Committee feels that the name National Skill Development Agency is not appropriate and,
therefore, it recommends that it should be rechristened as ‘National Skill Development Authority’.

7.11.4.2 When it is rechristened, it will become the sole regulatory authority for skill development in the country and, therefore, the role of leadership in the NSDA will become very important. The Committee, therefore, recommends that the Chairman and CEO/DG of NSDA should be of very high repute and have experience of working in the vocational education and training sector for long.

7.11.4.3 The NSDA is presently manned by a dozen and half short term consultants who are good but do not have experience of working in the industry and there is nobody to train, guide and mentor them. The staffing structure is such that there is no career path for them. Whenever they get an opportunity or better career option, they leave with all the information stored in their laptops and therefore, no institutional memory or domain expertise is left behind. The Committee, therefore, recommends that befitting the status of NSDA, an organizational structure should be created and professionals with the experience of industry and academia are recruited on regular basis and provided vertical mobility.

7.11.4.4 The organizational structure, in accordance with the role assigned to NSDA should have four verticals- Qualification Framework, Quality Assurance, LMIS and Research in Skill Development, each to be headed by an additional CEO.

7.11.5 National Skill Development Corporation

7.11.5.1 As we have observed earlier, NSDC was created as a unique public private partnership for mobilizing resources from industry, financial institutions, banks, multilateral and bilateral external aid agencies, private equity providers and Ministries/Departments of Central Governments and State Governments; act as catalyst in skill development by providing funding to enterprises, companies and organizations that provide skill training and help establish, manage, run and promote institutes and polytechnic to promote skill training in number of areas. It was required to play role of a market maker by establishing a price mechanism, correlating and bridging demand-supply asymmetries and create a viable skill development chain with particular emphasis on sectors where the market mechanism is ineffective or missing e.g. as in the unorganized sector. We have further observed that the Central Government has provided 99.78% funding to NSDC which means that they have not been able to mobilize resources from multiple sources mentioned above. The NSDC provided equity, loans, or grants to large number of private sector vocational training providers but many of them defaulted in repaying the loans, in order to help them in making profits, STAR and PMKVY were launched with Rs 1000 crore
and Rs 1500 crore funding by the Central Government. Large targets were allocated to these vocational training providers. It has been established that the training provided was of short term duration and substandard. The assessments were done by the assessing bodies created by SSCs. It has also been established that the assessors were not professionally competent to carry out assessment and therefore, the assessment and certification were such that only a very small percentage of persons trained could be placed. But in the process, the vocational training providers, the assessing bodies and the Sector Skill Councils have made huge revenues from out of the Government funds, which was not the intention of the setting up of NSDC. It was required to be a market maker but all the trainings have been conducted out of the government funds benefitting private sector in the process, in a big way. In fact, it, instead of being a “market maker”, has turned out to be a “market destroyer”. There is hardly any paid training now. The Committee, therefore, recommends the following:-

i) According to its original mandate, it should mobilize resources for skill development from industry, financial institutions, banks, multilateral and bilateral external aid agencies, private equity providers and Ministries/Departments of Central Government and State Governments.

ii) These resources should be used to help private sector setup large number of Vocational Education and Training Colleges to run long term competency based courses of certificate, diploma and degree level according to exact requirement of industry.

iii) Though most of the Government ITIs have been modernized in the last 8-9 years, the private ITIs are still in bad shape. The NSDC should help modernize, expand and diversify the courses in these private ITIs so that they can meet the exact skill needs of the industry.

iv) As NSDC will be a funding company in the private sector in the nature of a Non Banking Financial Company, it should function under the relevant regulations applicable to NBFCs.

v) The NSDC is a public private partnership and because 51% equity is that of the private sector, it is essentially a private sector body, therefore, not competent to undertake regulatory functions. In UK, the SSCs were licensed by a Government body called Sector Skill Development Authority and subsequently this work was transferred to UK Commission on Employment and Skills (UKCES). We have observed that the NSDC has not been able to discharge the responsibility given to it for setting up SSCs effectively. There have been lots of instances of conflict of interest and unethical practices. The work of setting up of SSCs, therefore, should be transferred to the regulator, NSDA and their Memorandum of Association amended accordingly.
vi) The NSDC being a private sector led body does not come under any of the regulatory systems of the government. The argument given is that they will not be able to perform their role if they have to follow regulatory mechanism. We have seen that power without accountability leads to mismanagement. The government has so far allocated about Rs. 2362.90 (up to 31 March 2015) crore, but they are not accountable to Government while the resources to them flow from the government. The Committee, therefore, recommends, a strong oversight mechanism be created for monitoring the outcomes as a result of the government funding.
Chapter 8

Skills Standards

8.1 Need for uniform Skills Standards

8.1.1 The work of skill development in India is quite fragmented. The erstwhile DGE&T was responsible for policy formulation on vocational training, laying down norms and standards, develop various course curricula, grant affiliation, carry out trade testing and certification at Central Government level. But over a period of time, many Central Ministries/Departments, State Governments and other organizations started running vocation training programmes, according to their own convenience and requirement. The norms as developed by DGE&T could not become national standards, though it was probably, the most comprehensive and accepted by the industry. In absence of the national standards, there was compromise in quality. When we are designing a holistic VET system, it is very important to create national standards which become benchmarks for all employers, vocational training providers, Central Ministries/Departments. State Governments, etc. and are not only nationally acceptable but also internationally comparable. It will help trainees in acquiring skills which can provide them employment, employers in selecting persons possessing right skills and help trainees move horizontally and vertically.

8.1.2 Skills standards help recognize what people need to know and what need to do to successfully perform work-related functions within an industry sector. It refers clearly the work to be performed, how best it should be performed, and the intensity of knowledge and skills required therefor. Skills standards, therefore, is a worker/job-seeker performance specification developed for use by business, industry-based organizations, etc. Skill standard prescribed, therefore, can be the national standards for the outcomes of learning that help improve the social and / or the economic value of a qualification.

8.1.3 In the context of education & training, skill standards clarify on expectations of a student’s performance. Accordingly, the greatest implication of skills standards has been the evaluation of student performance. It is important to mention that skill standards have the potential to a) improve the country’s workforce, b) provide uniform measures for the national and international business and market, c) provide portability of employment for workers in the country, d) increase accountability, and e) meet the needs of business and industry. The positive impact of skills standards on education and training are i) improved communication between
education & training and business and industry; ii) improved relevance of curriculum content; iii) improved teaching and learning processes; iv) enhanced connections between educational and training institutes and employment for the passed-out graduates; v) better prepared entry-level workers; and vi) improved accountability. A uniform skills standard, therefore, functions as a quality-warranty, a goal-indicator, and a change-promoter.

8.1.4 We have observed earlier that the following standards are necessary for a holistic VET framework:

i) Labour Market Information System (LMIS);

ii) National Occupational Standards (NOS);

iii) National Competency Standards (NCS);

iv) National Training Standards (NTS);

v) National Accreditation Standards (NAcS);

vi) National Assessment Standards (NAsS); and

vii) National Certification Standards (NCeS).

8.1.4.1 Labour Market Information System

LMIS is basically a tool to know about skills requirements of various sectors of the economy on real time basis. It is difficult to develop national standards until we know what kind of skills are required, what levels of skills are required, how many skilled persons are required, in which enterprises they are required and in what time frame they are required. In a way, it is the starting point for all skilling efforts and helpful in making the skill development system demand responsive. Such a National Labour Market System would (i) develop a robust conceptual framework of data collection, and analyses, keeping in mind the variety of specific information output required for purposes of planning and policy interventions, both at the National and State levels as well as individual SSCs; (ii) work closely with individual SSCs and take their help in collecting vital information as per its overall national design; (iii) provide expert advice on labour market issues that SSCs face; (iv) produce regular reports on important issues as demand and supply trends for specified skills, likely gaps that may emerge in future; (v) reports on the training capacities, outputs, and skill development training programmes of various training providers; (vi) guidance to potential trainees on available job opportunities, expected emolument
level at entry, and career guidance and prospects of growth in representative enterprises belonging to relevant sectors, among others; and (vii) establish a portal wherefrom different categories of users can access latest information. Experience suggested that establishing such an LMIS is quite a complex task and requires significant number of experts in a range of areas.

8.1.4.2 National Occupational Standards

ILO defines “job” as set of tasks and duties executed, or meant to be executed, by one person; a set of jobs whose main tasks and duties are characterized by a high degree of similarity constitutes an occupation. Persons are classified by occupation through their relationship to a past, present and future job. “Skill” has been defined as the ability to carry out the tasks and duties of a given job.

United Kingdom Commission on Employment & Skills (UKCES) defines National Occupational Standards (NOS) as statements of the standards of performance individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding.

- NOS are National because they can be used in every part of the country where the functions are carried out.
- NOS are Occupational because they describe the performance required of an individual when carrying out functions in the workplace, i.e. in their occupation (as a plumber, police officer, production engineer, etc.).

It is evident from the above two statements that National Occupational Standards refer to long term employment, sometimes, it may be a life-time employment. It does not refer to a task or activity.

8.1.4.3 National Competency Standards

Competency standards define the requirements for effective workplace performance in a discrete area of work, work function, activity or process. They are used as the basis for defining learning outcomes and assessment benchmarks within the Vocational Education and Training (VET) sector. Competency is the ability to apply knowledge and skills to produce a required outcome. It is the ability to perform activities within an occupation; to function as expected for employment; and the ability to do a job under a variety of conditions, including the ability to cope with contingencies. Competency Standards are used by professions and governments to define the
qualifications required for professionals to practice in a discipline. They define a range of levels of competency and the capabilities that are assumed to be achieved at these levels. Practically, the levels of competency are reflected in the level descriptors of National Skills Qualification Framework from where training standards and assessment standards would be drawn. The competencies are generally defined for specific levels in the level descriptors. They can further be divided into “Competency Units” (CUs) to facilitate designing training standards, training programs, assessment standards etc. The contents of the C.Us should be a complete source of structured information that defines sets of standards for competencies.

8.1.4.4 National Training Standards

National Training Standard refers to standards which help to design, conduct, promote and improve the quality of training. It sets out the basic minimum requirement which should be addressed when drawing up a training specification of a training programme. While setting the training standards, it is assumed that identification of training needs, rationale and cost implications have been considered and agreed upon. The training specification is a detailed statement of the items to be addressed when designing any block of training e.g. programme, course, module, and unit. It takes into account such items as training aim, objectives, approach, outline of training program, duration, approach to training, equipment/materials to be used, the types of records to be kept, the assessment and certification system, etc. The training standard may include the learning goals, learning situations, period, methods of testing and evaluation. Training Standards can be divided into unit standards to facilitate implementation of training program, testing and evaluation.

8.1.4.5 National Accreditation Standards

The standards for accreditation articulate the quality and effectiveness expected from a training provider. Collectively, it is a framework for continuous improvement within institutions. The standards of accreditation help to evaluate any institution whether it meets the customer’s expectations, whether it indeed delivers on the implied promise of quality and relevance, and whether customers – prospective trainees and future employers can invest their resources in it with confidence. In this sense, ‘accreditation of an institution and its programmes’ amounts to ‘Quality Assurance’ to the prospective user. The standards guide, on the one hand, institutions in a process of self-reflection, and, accreditation agency, on the other, in examining whether the institution deserves to be accredited. The following standards may serve as indicators by which institutions can be evaluated and accredited:-
i) its ‘Mission’ and ‘Core Themes’;

ii) the translation of the Mission's Core Themes into assessable objectives supported by programs and services;

iii) the appraisal of the institution's potential to fulfil the Mission;

iv) the planning and implementation involved in achieving and assessing the desired outcomes of programs and services; and

v) an evaluation of the results of the institution's efforts to fulfil the Mission and assess its ability to monitor its environment, adapt, and sustain itself as a viable institution.

8.1.4.6 National Assessment Standards

Assessment is the process of documenting, usually in measurable terms, knowledge, skill, attitudes, and beliefs. It is a tool or method of obtaining information from tests or other sources about the achievement or abilities of individuals. Assessment helps in making inferences about learning and development of a trainee. The list of learning outcomes forms the basis of a competency assessment. Typically a competency assessment focuses on how well the trainee is performing the required job skills, in specific situation in relation to specified performance standards. In defining the assessment standards, threshold competency should be defined. Threshold competencies include minimum knowledge, skills, traits, motives, self-image, and social role, etc. as desired by the level descriptors or competency standards. The assessment standards must be defined un-ambiguously and should be known to the trainees before starting the training programme.

8.1.4.7 National Certification Standards

A credible, quality assured, nationally acceptable and internationally comparable certification system is the backbone of any VET system. We have already recommended that an independent National Board for Assessment and Certification should be setup with professional experts of high repute manning it. It should conduct assessment and certification according to established national standards for vocational education and training courses coordinated by all training institutions in the country. It will be able to realise the dream of “One Nation, One Standard and One certificate” in due course of time. It will have the highest degree of credibility and acceptability by all stakeholders.
8.2 National Skills Qualification Framework

8.2.1 National Skills Qualification framework is an instrument for the classification of qualifications according to a set of criteria for specified levels of learning achieved. Qualification frameworks aim to bring coherence and clarity to qualification systems. National qualification frameworks are usually seen as the tools for reforms. The framework has to improve the social and / or economic value of qualifications, improve quality, increase trust, gain international recognition for skills, relate qualifications and improve access/ progress routes and provide a basis for co-operation between the stakeholders.

8.2.2 The main features of a National Skills Qualification framework are:

i) qualifications are described in terms of single set of criteria or a single definition of what is to count as a qualification;

ii) qualifications are ranked on a single hierarchy expressed as a single set of levels – each with its distinct level descriptors;

iii) qualifications are classified (in the case of vocational qualifications) in terms of comprehensive set of occupational fields;

iv) qualifications are described in terms of learning outcomes that are independent of the site, the form of provision and the type of pedagogy and curriculum through which they may be achieved;

v) a national framework of qualifications provides a set of benchmarks against which any learning can be assessed in terms of potential contribution to a qualification; and

vi) all qualifications are defined in terms of elements (sometimes referred to as units).

8.2.3 The qualification framework is beneficial to schools, vocational education and training providers, higher education institutes, accrediting authorities as well as industry and its representative bodies, unions, professional associations and licensing authorities. The biggest beneficiaries of such a framework are the learners who can judge the relative value of a qualification at a particular level on the framework and make informed decisions about their career progression paths. The National Skills Qualification Framework (NSQF) organizes qualifications according to a series of levels of knowledge, skills and aptitude. These levels are defined in terms of learning outcomes which the learner must possess regardless of whether they were acquired through formal, non-formal or informal learning. It is, therefore, a nationally integrated education and competency based skill framework that will provide for multiple pathways, horizontal as well as vertical, both within vocational education and vocational training.
and among vocational education, vocational training, general education and technical education, thus linking one level of learning to another higher level.

8.2.4 The National Skill Development Policy, 2009 recognized need for establishment of National Qualifications Framework. Two-skill qualification frameworks (NVEQF and NVQF) were developed by MHRD in 2012 and Ministry of Labour and Employment in 2013 respectively and a Single Unified Qualifications Framework (NSQF) notified on 27th December 2013. NSQF is a quality assurance framework, organizing qualifications according to levels of competencies (professional knowledge, professional skills, core skills and responsibilities). NSQF is anchored in the NSDA and is operationalized through the National Skills Qualifications Committee (NSQC).

8.2.5 The key elements of the NSQF provide:

i) national principles for recognizing skill proficiency and competencies at different levels leading to international equivalence;

ii) multiple entry and exit between vocational education, skill training, general education, technical education and job markets;

iii) progression pathways defined within skills qualification framework;

iv) opportunities to promote lifelong learning and skill development;

v) partnership with industry/employers;

vi) a transparent, accountable and credible mechanism for skill development across various sectors; and

vii) increased potential for recognition of prior learning.

8.2.6 In existing NSQF, the level descriptor has 10 levels. The levels are referred by level-1., level-2, etc. But there are qualification systems as in Scotland, Australia and United Kingdom, which have assigned titles such as Certificate, Diploma, Degree, etc. to various levels. While writing NSQF level descriptors, existing qualification systems are taken into consideration and qualification frameworks do not change the existing qualification system of the country. Instead, they add value by improving various components and methodologies involved in development of qualifications, increase participation of stakeholders and methods of assessment and certification. Accordingly, NSQF level descriptors are not written to change the existing qualification system in the country. A certificate or degree of any level is awarded after passing through all the competencies defined at that level. That means, in the present NSQF, any certificate or degree at any level shall be awarded after attaining the desired competencies in professional skills, professional knowledge, core skills, etc. as defined in the level descriptor. Contrary to this,
NSQF notification (Para 7(ii)) states “it is not the case that every qualification will or should have all of the characteristics set out in the level descriptors”. This has potential to distort the competency of the qualification system. It needs a serious look. In view of the above, a system can be designed where partial achievements can be allowed through credit awards which can be accumulated but the certificate/diploma/degree shall be awarded after achieving all the relevant competencies. The Committee feels that this will lead to its misuse and therefore, recommends that it should be deleted.

8.2.7 Implementation schedule of NSQF is as follows:

i) Immediately on notification of NSQF

All other Frameworks (NVEQF by MHRD in 2012 and NVQF by MOLE in 2013) would be superseded by NSQF. NSQF compliant courses will receive Govt. funding on preferential basis.

ii) After the 3rd anniversary date of NSQF notification: 27th Dec 2016

Govt. funding—only for NSQF-compliant courses. All Govt. funded training & educational institutions shall define eligibility criteria for admission to various courses in terms of NSQF levels. Recruitment rules of the GOI & PSUs of the Central Govt. shall define eligibility criteria for all positions in terms of NSQF levels. State Govts. shall be encouraged to amend recruitment rules as well as those of their PSUs to define eligibility criteria for all positions in terms of NSQF levels.

iii) After the 5th anniversary date of the notification of the NSQF: 27th Dec 2018

Mandatory for all training/educational programmes/courses to be NSQF-compliant. All training & educational institutions shall define eligibility criteria for admission to various courses in terms of NSQF levels.

As review of existing QPs/NOSs, creation of new NCS and setting up and strengthening of NSQA will take some time, the above implementation will require modification.

8.2.8 Current Process of Making QP/NOS

As per the information provided to the Committee the following process is undertaken in making QP/NOS:
Stage 1: The SSC Governing Council appoints NOS Sub-Committee and issues request for proposal for contractors/consultants and by technical and financial bids appoints the contractor. The NOS Sub Committee undertakes stakeholder analysis and planning and appoints a sector expert group to advise on content.

Stage 2: The contractor prepares industry occupational map. The NOS sub-committee agrees on priority areas. The contractor then undertakes functional analysis.

Stage 3: The contractor then prepares first draft along with sector expert group. The contractor and the SSC get industry validation through industry networks. The SSC then notifies the drafts for comment on SSC website. The contractor analyses feedback and prepares final draft. The NOS Sub Committee follows the SSC quality assurance process.

Stage 4: The NOS Sub Committee prepares case for approval and submits to NSDC. The NSDC QRC secretariat undertakes quality control process and convenes Qualification Registration Committee. They, then, make QP-NOS available for final comment on the website. The QP NOS is thereafter entered in the national register.

8.3 Issues facing the Skills Standards and Suggested Reforms

8.3.1 It would appear from the above discussion that the process of development of standards is not underpinned by an in-depth research and adequate consultation as could be surmised by the very limited usage of these standards by the industry. The present pattern of consultation with industry, which basically involves seeking their inputs/reactions to a document presented to them, does not make for an intensive involvement of the industry. There is no real substitute for the industry being directly involved in framing standards, where industry experts, along with domain experts in training and education, sit together and develop standards. The standards so developed are likely to have greater acceptance and buy-in by the industry, and will also be pedagogically on a sound basis. This is an important issue and therefore, the Committee went deeper into it. We looked at Unit group 8322 relating to Car, Taxi and Van Drivers under ISCO 2008 and compared with QPs developed by Automotive SSC for ‘LMV Driver Level 3’, ‘Taxi Driver’, ‘Chauffeur’ and ‘Chauffeur Level 5’ which is illustrated below:
Comparison of QP/NOSs of Driver with ISCO, 2008

1. The ISCO 2008 classifies all jobs in the world into four digit unit groups. There are a total of 436 unit groups. Each unit group has comprehensive details of the tasks that are required to be done for the job. The unit group begins with a lead statement summarizing the job.

2. A job is defined in ISCO-08 as “a set of tasks and duties performed, or meant to be performed, by one person, including for an employer or in self employment.

3. As per ISCO 08, Occupation refers to the kind of work performed in a job. The concept of occupation is defined as a set of jobs whose main tasks and duties are characterized by a high degree of similarity. A person maybe associated with an occupation through the main job currently held, a second job, a future job or a job previously held.

An example of a sample unit group 8322 Car, Taxi and Van Drivers is reproduced below:

“8322 Car, Taxi and Van Drivers

Car, taxi and van drivers drive and tend motorcars and vans to transport passengers, mail or goods.

Tasks include –

(a) driving and tending passenger vans, cars or taxis;
(b) driving and tending cars, vans or small trucks to deliver mail or goods;
(c) assisting passengers with handling of luggage;
(d) collecting fares, payments for deliveries, or documents certifying deliveries;
(e) operating telecommunications equipment to report location and availability, and following directions of control centre;
(f) determining most appropriate route;
(g) assisting physically challenged passengers;
(h) operating equipment to facilitate the loading and unloading of physically challenged passengers.

Examples of the occupations classified here:

- Ambulance driver
- Car driver
- Parking valet
- Taxi driver
- Van driver

Some related occupations classified elsewhere:

- Driver (motorized rickshaw) – 8321
- Bus driver – 8331
- Heavy truck driver – 8332
- Pedal vehicle driver – 9331
- Rickshaw puller – 9331

Animal-drawn vehicle driver – 9332”

4. As can be seen from above, there are 8 key tasks to become a driver. It emphasises on the needs of the physically disabled. These tasks have been arrived from consultation across countries, and enables international comparison.

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5. The 8 tasks can be the Competency Units for the National Competency Certification (NCS). Issuance of NCS can indicate job readiness of the trainee while completion of Competency Unit indicate the completion of a step for job readiness and the need for further learning enabled by modularity and lifelong learning incentives. If we were to skill drivers in the above mentioned tasks, we would need one job role or NCS. Such holistically skilled manpower will be globally exportable and universally acceptable.

6. Currently in India, we have many job roles for Driving, more than 5 roles have been developed by Automotive SSC, 1 role being done by Hospitality SSC, etc. The job roles are incomplete and there are overlaps and duplication, some of them are mentioned below

   - ASC/Q9702 - LMV Driver Level 3
   - ASC/Q9705 - Taxi Driver
   - ASC/Q9712 Chauffeur
   - ASC/Q9711 Chauffeur L5
   - THC/Q4202 Tour Vehicle Driver

7. Each of the above job roles contains 3 core NOSs and are not comprehensive enough as in the case of ISCO. They also do not embed needs of the physically disabled into it. The NOSs for four similar job roles of the Automotive SSC are mentioned below:

<table>
<thead>
<tr>
<th>ASC/Q9702-LMV Driver Level 3</th>
<th>ASC/Q9705 - Taxi Driver</th>
<th>ASC/Q9712 Chauffeur</th>
<th>ASC/Q9711 Chauffeur L5</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASC/N9703. <strong>Ensuring road worthiness of vehicle</strong></td>
<td>ASC/N9703 <strong>Ensure road worthiness of vehicle</strong></td>
<td>ASC/N9703 <strong>Ensure road worthiness of vehicle</strong></td>
<td>ASC/N9703 <strong>Assess and ensure road worthiness of the vehicle</strong></td>
</tr>
<tr>
<td>ASC/N9704. <strong>Drive safely on the assigned route within limited geography</strong></td>
<td>ASC/N9706 Coordinate with control room and reach to the customer pickup point</td>
<td>ASC/N9707 <strong>Drop the customer safely using the quickest route and collect the applicable fare</strong></td>
<td>ASC/ N9719 Coordinate schedule and complete the assigned activities</td>
</tr>
<tr>
<td>ASC/N0012 Practice HSE and security related guidelines</td>
<td>ASC/N0002. <strong>Work effectively in a team</strong></td>
<td>ASC/N0012. <strong>Practice HSE and security related guidelines</strong></td>
<td>ASC/N0002. <strong>Work effectively in a team</strong></td>
</tr>
<tr>
<td>Optional: N.A.</td>
<td>ASC/N0002. <strong>Work effectively in a team</strong></td>
<td>ASC/N0012 Practice HSE and security related guidelines</td>
<td>ASC/N0025 Develop abilities to communicate with senior members of the society</td>
</tr>
</tbody>
</table>

8. Moreover, currently additional job roles, mentioned as related occupations in the ISCO like Ambulance Driver are treated uniquely and do not reuse the NOSs of the Driving job roles. In effect, we do not have a mechanism to establish that it is related to driving job role by looking at the current qualification pack. NOSs like “Taking the patient to the destination” in the Ambulance Qualification Pack is a generic NOS. This NOS should not have been recreated. It should have been reused or it would have been far better if we had provided them as additional key tasks for skills of the Ambulance Driver and enumerated it under optional NOS of the Driving QP.
9. Additionally, for tasks that are part of the driver in ISCO, we have broken and narrowed to make job roles with only one NOS. These job roles have further been duplicated by multiple SSCs. For example, Automotive SSC has job role ASC / Q 6101 – Loading/Unloading/Loader with one NOS only and Logistics SSC has a job role of Unloading Operator/ Loader Loader/Unloader LSC/Q1110

That explains how QPs developed by our SSCs are narrow. QP appears like one NOS and even 6 QPs do not compare with one international standard for driver. That explains why our so called ‘skilled manpower’ is not employable. The Committee, therefore, recommends that the process of development of standards should be changed. Henceforth, no consultants should be engaged. Their motivation in developing these standards is entirely different. In fact, it will not be wrong to say that the entire mess has been created by them under the direct supervision of SSCs and NSDC. Now, sector wise multidisciplinary teams of industry domain experts, academicians, pedagogists, trainers and training professionals should be constituted which should prepare the National Occupational Standards on a sound basis according to exact skills needs of the industry concerned. The basis for development of these standards should be 436 unit groups contained in ISCO 2008 in which all the employments existing in the world have been included. We may call these “National Competency Standards” (NCS) and the tasks contained therein should be called “Competency Units” (CUs). The person who acquires competency in all tasks contained in a unit group should be granted National Competency Standard Certificate (NCSC). This way, we shall be able to train our manpower to the international standards which will enable them to access jobs anywhere in the world. We should develop NCS first for those jobs which are in high demand and then move to others which are in less demand. About 300 to 350 NCS should be good enough for the country and will cover all sectors of economy. We should review the use of QPs/NOSs which has created so much confusion

8.3.2 NSQC is mandated for setting the standards. It is doing so on the recommendation of SSCs or Ministries concerned. The issue of inadequate resource with NSQC has been discussed in an earlier chapter. The Committee recommends that NSQC should be strengthened and industry domain experts should be included in it. There should be regular support of professional industry experts in processing the proposals being put up for consideration of NSQC.

8.3.3 It would appear that the present QP/NOS format is not user-friendly to industries; it is overly complicated geared with technicalities, interspersed with many abbreviations and jargons, and, with more than 25 pages in each QP, perhaps too long to be easily readable. The Committee recommends that the proposed NCSs should be simple and easy to use, not just by experts but by other users and trainees as well.
8.3.4 The Qualification Packs used in schools have not been approved by NSQC. In many cases, a QP for a level needed in a school does not exist; hence a QP at a higher level has been broken to teach in different years of schools. For example, Unarmed Security Guard (Level 4 minimum eligibility class 8, total training- 160 hours) is broken into 4 parts to be used in class 9, class 10, class 11 and class 12. Such a course that can be done in 160 hours elsewhere is taught over 4 years in schools! As the SSC has only one assessment criterion to grant a level 4 course, question arises on assessing the parts taught in classes 9, 10, and 11. The presence/absence of lower level courses is illustrated in Appendix XXXVII. While this example is for illustration purposes only, all QPs/NOSs used in schools must get the approval of NSQC. Whether it is schools or any training provider, all must use the same national standards, as objective is to provide them high quality skills to be used by the industry. An important point here is that if the courses are not aligned to the NSQF and not approved by NSQC, how are the students being assessed by the assessing bodies and certified by the SSCs and what purpose the training serves if they are not going to be employed by the industry. It is, therefore, recommended that the Ministry of HRD should also use the same NCS as the other training providers.

8.3.5 SSCs, by their design and composition, are geared essentially to the organized sector. There has been very little/no focus on the unorganized sector. It is a large, varied and complex area, where, even the occupations are not easily identifiable, the number of occupations is much larger than those in the organized sector, and there are major differences in the characteristics of the trainees and training itself, and where training methodologies used in the organized sector do not necessarily work there. A great deal of work on developing standards that reflect the peculiar characteristics of the unorganized sector needs requires being undertaken.

8.3.6 The SSCs have been making standards on the one hand and also testing and certifying based on the same standards, on the other. This amounts to validating your own product yourself. Such a process raises the question of credibility of the whole process. The Committee, therefore, recommends that the ‘standards-making’ and ‘testing & certification’ be kept at arm’s-length, and assigned to separate bodies. NCSs to be developed by NSDA/SSCs, training to be done by Vocational training institutions and assessments by the proposed National Board for Assessment and Certification.

8.3.7 It has been observed by the Committee that level descriptors are not always understood by the various stakeholders in the spirit they are written. Competencies are acquired in a given level descriptor on five outcomes - process, professional knowledge, professional skills, core skills and
responsibility. Credit is given to a learner on the acquisition of a competency qualification. Hence designing a credit system on the basis of level descriptors is a complex job and normally done by the National Qualification Authority. Though the NSQF has been allocated to NSDA, it has not been able to develop a credit system so far. The Committee, therefore, recommends that NSDA should be designated as National Skills Qualification Authority. But this cannot be done by the present NSDA which is manned by short-term consultants. It is a complex, critical and continuous task that needs the expertise of multidisciplinary professionals from education, vocational education and training, technical education, higher education, etc. After designating NSDA as NSQA, it should be fully manned by above experts who should develop credit system, credit transfer, bridge courses, etc. to fulfill the purpose of creating NSQF. Everybody understands certificates, diplomas, degree, etc. and therefore, we should start with them, convert the courses as per level descriptors, assign credits and establish comparability with existing titles. It should also start a massive campaign to make all stakeholders aware of the nuances so that they accept NSQF over a period in the right manner. In this effort, MSDE and Ministry of HRD must work together. Skilling India can happen only when the two Ministries work hand-in-hand.

8.3.8 We have already recommended setting up of a National Board for Assessment and Certification. This is the single most important step to ensure quality and credibility of the whole VET system.
Chapter 9

Financing of Skills

9.1 Status of financing Skills in India

9.1.1 Demand aligned skills financing forms the pivot for realizing the demographic dividend. We have noted earlier in this report that the VET system in India has evolved as a government-financed and supply-driven system. A supply-driven system is characterized by the governments taking decisions about who is to provide VET, where it will be provided, and how it is to be provided. Such a system relies mainly on government financing of pre-employment training. Industry or employers have a very limited role in financing or actually running the system. As a result, industry often complains that a) not enough trainees are emerging from the government-financed and government-managed VET system; b) the quality of training in government-financed institutions is so poor that the trainees are either not employable or have to be retrained by employers; and c) skills which are provided do not match the specific skills needs. Employers in India for the last several decades have had all three types of complaints about the Indian VET system. Clearly, there is time for a change. The current model of the system is not serving the needs of employers, youth (as they don’t get jobs) or the goals of government (which wants to skill youth, provide them opportunities of decent livelihood and meet exact skill needs of employers).

9.1.2 The existing model emerged at a time when a state-led model of industrialization prevailed, with public sector firms and the railways generating jobs. This stage of India’s development was over by the 1980s, but the VET ecosystem has barely evolved. Government jobs have not been growing in any sector for the last quarter of a century except in the health and education sectors. Meanwhile, the private sector has grown in share of total investment and total turnover in the economy. The private employers are the biggest beneficiaries of the VET system, but their direct contribution to training is minimal.

9.1.3 Alternative models of financing also exist around the world, which have proven to be more successful in avoiding all three problem areas identified above: too few trained relative to need (quantity); quality (poor quality training, with low levels of competence, and little practical industry experience); and skills mismatch (irrelevant skills inappropriate to the industry requirements). The alternative model has two characteristics: one, it is demand-driven (i.e.
driven by employers) and two, it is mainly industry-financed and managed. The government funding does not fall in any way in this model. However, since private employers and not the government are the main users of trained personnel, it is only natural that industry makes a financial contribution to training, that goes beyond the limited number of companies in India that currently provide enterprise based training (EBT).

9.2 India’s present model of financing VET

9.2.1 In India, general tax revenues are used to fund public and private training providers (VTPs). This is reflected in skill and training budgets of 17 Union Ministries and the Ministry of Skill Development and Entrepreneurship, and all the State Governments. Another variant of financing skill development from general tax revenues is the provision of tax deduction (of 150%) of the expenses incurred on Skill Development programmes by the enterprises.

9.2.2 The government funds all pre-employment training in India for every pillar of the VET ecosystem. The MHRD funds vocationalization of education in the secondary school system. The Directorate General of Training under MSDE funds the ITIs (public ones), and is supposed to regulate the private ITIs. The 16 other Ministries of the Government of India fund their own training programmes. The NSDC under MSDE funds the VTPs that have been incubated by NSDC and also meets training costs through PMKVY.

9.2.3 The second form of financing is “in-firm training financing”, which is confined to merely 16% of all Indian firms (in 2009), and that too only the very large ones (contrast that to 85% of Chinese firms that conduct in-house training). The World Bank reports that the share of firms that conduct training has risen to 36% in 2014. But even the smaller of large firms, and certainly the medium and small enterprises, don’t conduct much in-house training. Hence, while this is the best way to address skill needs, the financing for it is meagre and needs more impetus. Moreover, another problem with this form of EBT does not provide any training aligned to the National Skills Qualification Framework. This is a problem, as we have repeatedly argued in this report for the need to ensure that all VET in India must be imparted in accordance with common NSQF standards.

9.2.4 A third form of financing that has increasingly been argued for in India is Corporate Social Responsibility (CSR). The policy for CSR in India is governed by Section 135 of the Companies Act, 2013, which is applicable to only companies with an annual turnover of Rs 1000 crore or more. The Act encourages companies to spend at least 2% of their average net profit in the previous 3 years on CSR. However, the provision in the Act is ‘indicative’, not mandatory. There is nothing that will ensure companies undertake such activities; furthermore, it does not ensure
that the national standards laid down in the National Skills Qualification Framework will be used. The current non usage of NSQF courses in skill development through CSR(Appendix XXXVI) reflects that either the QPs are not as per employment needs or industry does not know about it or our mechanisms for financing NSQF courses through CSR is inadequate. Additionally, putting skill development in the category of CSR activity assumes that skill development is not directly profitable or beneficial to the company in its core business. Since many large companies are already undertaking skill development activities, as the company requires skilled manpower that no one else can provide. Putting skill development into the category of CSR may enable such companies to transfer the costs of normal skill development activities the firm was running in any case prior to the Companies Act, 2013 being passed, and pass them now as CSR activities, substituting for other equally worthwhile activities eligible for CSR under the new 2% requirement. Besides, if CSR is mandatory for companies with an annual turnover of Rs 1000 crore, that means, it is not applicable to medium-sized companies, let alone smaller ones, entrenching the current position if medium enterprises are not conducting training. Finally, since skill development is an activity that will be undertaken by the company for meeting its own requirements for skilled people, the training, hence may be overly specialized, and may leave the trainee not particularly employable if he was to move jobs. In sum, while CSR could be used as a means of enhancing financing for skill development, the Government of India has to be careful that it does not end up subsidizing activities by the firm that it might have undertaken in any case, and is meant to exclusively serve the purposes of the firm, rather than a public good.

9.3 Need for Relook at the Financing Model

9.3.1 We have noted above that only 36% of Indian firms were conducting in-house enterprise based training. Contrast that to 85% in China, 52% in Russia, 51% in Brazil, and 51% in Mexico. The important question as to why firms in India (and many developing countries) prefer not to provide in-firm training can be best understood theoretically as a ‘moral hazard’ problem combined with a ‘free-rider’ problem. For instance, firm A bears the cost of setting up the infrastructure needed to provide training, as well as hires professional staff to provide the training, while firms B, C and D do not. Therefore, firm A runs the risk of losing its trained staff to its competitors. Firm A faces, in other words, a moral hazard since the free labour market is such that other firms will free-ride upon its investment. As a result, no firms are willing to make the investment in in-firm training. Moral hazard becomes a generalized problem of all firms.

9.3.2 Since skilled persons are a public good (and non-excludable, in the sense of being usable and useful to all firms on payment), the government has historically provided them. Hence they
are practically free to the private sector, which bears little or no cost. A typical example is the
system of Indian Institutes of Technology and Indian Institutes of Management, where the best
young brains in the country are trained at considerable public expense, and they have been
employed at large Indian private firms or foreign firms at very high salaries (not just by Indian
standards). The latter, however, have had to contribute precious little towards their
training/education. Well trained/educated managers and engineers are, however, a scarce
commodity and the economy needs them in much larger numbers than are currently available.
Individual firms, foreign or Indian, operating in India have not been enthusiastic, or willing to
pay for creating the physical and human resource infrastructure to skill the people required to
enable a growing emerging market economy to sustain its growth, lest they lose such trained
staff to competitors. This is a supply side problem that has to be resolved.

9.3.3 There is another issue which is peculiar to India. When the Government funds the training,
the involvement of employers is peripheral. They neither share their requirement of skills with
the Government, nor participate in setting training standards, in-plant training, assessment or
placement. It has been observed that when the employers contribute to training, their intensity of
involvement increases many fold in all aspects of training.

9.3.4 There is, however, an additional problem which exists on the demand side. There needs to
be effective demand from youth for training. If there is such a serious shortage of skilled
personnel, why are the young people not coming forward in larger numbers to acquire the skills?
We suggest that there are two sets of constraints preventing what apparently would seem to be a
rational act on the part of youngsters. One, is information asymmetry and the other, is the
problem of the ‘ability to pay’.

9.3.5 Young people who can be trained are not aware of the sectors and skills that are in short
supply, since there is no publicly accessible labor market information system (employment
exchanges run by the Ministry of Labour and Employment are a poor substitute), nor is there a
publicly available skill gap analysis by sector for each state, let alone by district. In other words,
there is a problem of information asymmetry. Employers, industry or services, are looking for
skilled people to employ but can’t find them. Youth looking for jobs who can afford to pay for
pre-service vocational training do not know which skills are in demand, and therefore can’t find
jobs.

9.3.6 A further demand problem arises from the fact that young people turning 15 often do not
possess the ability to pay for the training. Even if training itself is free in government institutions
(though not in private ones), there are living costs to be met during training if undertaken away
from home. Potential trainees face two kinds of costs if they decide to acquire vocational skills pre-service. First is the financial cost of the training itself, including living expenses. The second is the opportunity cost of not being in a job. The reason most such young people left school after (or even before) completing elementary school (class 1-8) is that they were not sure any further general, academic education would improve their employability, specially for a formal sector job. The dual burden of the financial and opportunity cost of pre-service vocational training is a serious barrier against entry of youth into VET. Hence they don’t wish to join vocational education in senior secondary school or pre-employment vocational training that may be on offer from the public or private sector. It is precisely on account of the moral hazard problem on the supply side, and the information asymmetry plus inability to pay on the demand side that both skill supply and demand for training is as low as it is in India. Both these problems could be addressed simultaneously if financing was available through a dedicated training fund in India.

9.3.7 The National Skill Development Policy adopted a demand driven sectoral approach to skill development and envisaged participation of employers in a key role in articulating and meeting skill demand. The NSDC was created as a ‘market maker’ to catalyze private investment. However, the financing of skills has still remained centralized from the government through public provision. This constitutes the main reason for sustaining the current supply driven system, in complete contrast to our stated objectives.

9.3.8 The NSQF envisaged a common standard for skill development across the country, consistent with a demand driven skill development. However, employer adoption of NSQF has been limited. Funding for ‘NSQF only’ courses is envisaged in the NSQF notification, and hence what needs to be established is a mechanism for ensuring its adoption and relevance through employer ownership, by way of aligned financing.

9.3.9 The Sector Skill Councils by their very definition are ‘employer led bodies’ as reiterated in their role description in National Skill Development Policy, 2009 and 2015. However, SSCs have all been incubated with government funding from NSDC, with negligible contribution by employers. Moreover, peripheral employer involvement and ownership by industry is reflected in a) poor placement percentages and b) QPs not often used even though they are supposed to have been prepared with their ‘involvement’. However, it is well known that in most cases, QPs

7On top of all these problems, there is the additional issue of the quality of VET available, and hence their concern whether they will actually be more employable if they decide to cross these barriers and enter VET. This fear arises from the societal concern that VET is not of the quality that industry perceives and makes youth more employable.
have been written by consultants, who may or may not have had sectoral domain knowledge, who were paid for with government funds. Voluntary financial commitment from employers has not worked out on the scale needed and the goals of the Sector Skill Councils have been misaligned due to their complete focus on self-sustainability, rather than meeting their core objectives. It has become clear in this process that putting employers in the driving seat in SSC can only happen by employer-incentivized participation in the financing of the system.

9.3.10 India’s demographic dividend will peak by 2030s, with the additions to the labour force increasing between now and 2030, and then falling thereafter. However, our financing, largely hitherto dependent on government and more recently multilateral financing (especially from the ADB and the World Bank), will not be adequate for our goals. While the 500 million to be skilled goal was without basis, even the 400 million goal of the NSDP 2015 is far too large and unnecessarily too. Nevertheless, other estimates of 200 million to be trained between 2012 and 2022 (based as it is on NSS survey data) are still extremely ambitious. India’s current VET ecosystem in the best-case scenario is still training 6-7 million per annum only, nowhere close to the requirement. More worringly, a lot of the 7-8 million youngsters who are entering the labour force since 2012 are trained on extremely short term courses, hence the 7 million number currently being trained as of 2015 cannot really be taken seriously (Appendix XXX). Better quality training to large number of new entrants is required, as the number of new entrants will increase beyond 7-8 million per annum to about 10 million by 2020 and even further to 12 million per annum by 2025, as more young people get educated. Given the growing education level of these youth, they will not join agriculture, but look for non-agricultural work.

9.3.11 In addition, there will be those leaving agriculture looking for work; over 2004-5 to 2011-12 as many as 5 million per annum on average left agriculture, and similar numbers will continue to leave agriculture for the next 15 years or so, all looking for non-agricultural work. All these older leavers will need to be trained; otherwise the quality of the workforce cannot improve. But the kind of training to be imparted to them will be different than for those young with education who are fresh entrants into the labour. Finally, there are the already unemployed (2% of the labour force, according to NSS 2011-12), who will need jobs and hence may need better training than they currently have. In other words, the skilling challenge is huge, and will only grow. Hence, the need for more funds and a new financing model for India for skilling has acquired paramount importance today; a re-examination of the financing model of government-alone financing for the skill ecosystem is in urgent need for a revamp.
9.3.12 The past government-only funding model has lost its relevance for two reasons. First, the numbers being trained currently are not being skilled to levels of quality and relevance to industry needs on the scale required. We have expanded the numbers being trained to 7 million from a mere 2-3 million per annum at the beginning of the 11th Five Year Plan, without adequate concern for quality or relevance. This cannot continue any longer. If it does continue, there is clear risk that 10 years from now, we may still have a workforce that is very poorly skilled, even though some of them have some skills. Second, the numbers to be skilled should expand, because of the growth in the expected labour force looking for non-agricultural jobs. Much more funds are needed for the growing numbers to be skilled, and the government alone cannot meet these costs. The government has other commitments, especially financial requirements to improve the quality of both school as well as tertiary education, which has experienced massification, with a precipitate decline in quality of learning. Building a skill ecosystem to train poorly educated youth is like building a house upon sandy foundation.

9.3.13 Strategic financing over the next few years is, therefore, required if we wish to ensure that our demographic opportunity is not wasted. The current skill system is underfinanced, the number of people we need to train is huge and there is a need to upscale efforts. Adequate financing is a key challenge and remains a bottleneck in our expansion efforts.

9.3.14 However, there is a limit to the extent of general tax revenues that can be mobilized for skill development, given the need to keep the fiscal deficit under control on the one hand, and the multiple very important drafts on resources from health, education and infrastructure investments, which must remain the responsibility of the state. The private sector cannot be expected to provide either public health or school education, and even for infrastructure the private sector enters only when there are major state funded projects.

9.3.15 Financing of skills across 18 Ministries, and unifying the fragmented training system to create a truly one nation, one standard and one VET system needs resources beyond public provisioning. While government finance will be necessary, it will not alone be sufficient or desirable because of the nature of inbuilt incentives. An objective formula for provision along with a diversified contribution from sectoral employers would ensure the demand side of employment comes with the right allocation of financial resources. The common pooling of funds is also a key strategy to ensure unification of the skills efforts across the country.

9.3.16 Globally, the main source of financing for Skill Development has been the private sector as evident by the fact that 86% of the total cost of VET in Germany is met by the private sector,
with only the remaining 16% coming from the Government. Germany has built up one of the most successful VET systems in the world. Germany is only among the majority of countries of the world; we single it out only because it is a manufacturing superpower, and has been in that position for decades. Industry contribution of such an overwhelming magnitude is only logical since they are the direct beneficiaries of such skill development, even though the state may play a facilitating role. The private sector needs to step up to the task, given its own requirements.

9.3.17 From the above discussion, it is clear that while government has larger national goals in skill financing, unilateral financing only by the government does not meet the sectoral employer skill needs. For all these reasons above, operationalizing a National Training Fund with employer participation with a meaningful economic rationale is required at the earliest.

9.4 International Experience of Skill Financing

9.4.1 Levies can provide a steady and protected source of funding for training, particularly in the context of unstable public budgets. In 62 countries of the world payroll training levies are the principal source of financing for training funds and have been part of their system for many decades (for example in Brazil since 1942). Early training funds (e.g. Brazil) tended to be single purpose aimed at financing pre-employment training. Others focused on expanding the volume of in-service training within the enterprises. There are 17 countries in Latin America (including Brazil), 17 countries in Sub-Saharan Africa (including South Africa), 14 in Europe, 7 in Middle East and North Africa, and 7 in Asia that have such funds. The details of all have been provided in Appendix XXXVIII.

9.4.2 From the above discussion, it is clear that one of the key strategies to address the moral hazard/free rider/poaching problem in skill development, to ensure right resource allocation and create a holistic financing system is right financing. There is overwhelming evidence from 62 countries in the world that have some form of industry incentivized reimbursable contribution, that it has helped to a large extent to solve the moral hazard/free rider problem.

9.5 Reimbursable Industry Contribution (RIC)

9.5.1 As many as 62 countries of the world have adopted an option that seems to have served them well. This is in the form of a reimbursable industry contribution on a company that goes into an earmarked fund, meant exclusively for VET purposes. Firms can be reimbursed the costs of training from such a fund depending on the training done. They can do in-firm training or purchase training from accredited vocational training partners across the country.
9.5.2 The systematic use of industry financing by such a large number of countries with good skill development systems is encouraging. There is no reason why our country should not utilize this; hence the Committee recommends starting stakeholder consultations on the subject with a proper framework in place. It is important to highlight that this is not a tax that will into the Consolidated Fund never to be seen again, over which employers have no control. Rather it is proposed as a “Reimbursable Industry Contribution” they make, which will be managed by them; in addition, the government’s financing system will remain in place and match it.

9.5.3 In our consultations with various stakeholders, it was revealed that the majority of employers in any sector does not know about the SSCs and their benefits. Of course, all efforts must be made to articulate the benefits of the SSCs to the employers. However, in a large country like India and with the short time frame available for the demographic dividend, the Committee recommends that it should be mandatory for all private and public enterprises to be a member of at least one sector Skill Council. This would be mandatory prerequisite for the RIC.

9.5.4 The National Policy for Skill Development and Entrepreneurship 2015 Para 6.13 states: “Industry should earmark at least 2% of its payroll (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”. The RIC is being proposed by the Committee in pursuance of this Para.

9.5.5 The RIC would be applicable to any registered large, medium and small private and public enterprise which employs 10 or more workers.

9.5.6 In our consultations, it was evident that the SSCs have not been able to capture the skill needs of the industry. It is hence recommended to mandate a very brief online submission of a ‘requirement of skills’ and ‘annual training plan’ agreed to by the employers with the SSCs, through consultation formally conducted by the SSC. This would be a part of the submissions to the SSC for reimbursement in the RIC framework.

9.5.7 Global evidence suggests that such RIC financing mechanisms work with private sector being able to manage the contribution. The Govt-control is seen as inefficient, bureaucratic, and the private sector does not find worthwhile the time and effort to access such funds for skill development. This is a very important concern. However, this concern can be addressed by the private sector being in complete control of the allocation of funds. For example, sectoral training funds (as in Brazil) enable industry to completely manage the funding, without government control. The huge advantage of the private sector managing the levy and the training is that there is better alignment of the skills with private sector needs. This has remained a major problem of
the skill ecosystem for the last half century. The SSCs will be the channels for grant management, mandatory grant, continuous learning grant, and the apprentice grant.

9.5.8 The RIC would provide an institutional framework for a steady revenue flow to the SSCs to focus on their strategic objectives. They would be freed from mobilizing resources from here and there. The rational separation of assessments from their work to a National Board of Assessment and Certification has also led to some anxiety among the SSCs as to how they would finance themselves in the future. The RIC would solve this problem in an efficient manner. The RIC is a hybrid model that incorporates best practices for industry involvement from across the world but adapted to Indian conditions.

9.5.9 The total RIC collected, will be passed on to the SSCs in proportion to the contribution of their members. It is proposed that 20% of the funds will be used for training for the unorganized sector. Such funds could particularly be used in MSME clusters to ensure that their skilled manpower needs are met. The remaining 80% of the funds collected will be used by SSCs for reimbursements to members as per training plan, for their SSC administration and for grant based funding for small registered enterprises in the organized sector. But this training should be for fresh entrants to the labour force, on project basis only. The amount should also be used for financial support to learners (to compensate for training leave for workers, lifelong learning opportunities, stipends after training to support apprenticeships, etc.).The use of funds must be targeted for industry and only for skills required by the industry; self-employment must not be funded by the RIC. Funds cannot be diverted to other sources but should be tied to the needs of firms. The RIC will ensure that, as opposed to current measurement of SSC performance against skewed simple enumeration of output against training targets, the SSCs are evaluated by real impact made: actual training plans received, total reimbursements made, numbers trained and counselled for placement, under the RIC.

9.5.10 There is considerable global evidence that suggests that similar models like RIC may be misused by large employers with already existing training capacities. Before implementation, there is a need for a baseline to recognize current level of training in the industries to ensure a baseline data is established for numbers currently being trained. RIC funds would be utilized for reimbursements for training over and above those currently being trained. The reimbursements would link to incremental improvement from the baseline and not on the absolute training capacity. This provides employers an incentive to augment existing capacities and ensures that we do not have deadweight training later on. So the levy will be on incremental improvement from current level.
9.5.11 One of the key purposes of the RIC is to ensure adequate financing for National Skills Qualification Framework courses. Companies would need to follow NSQF courses to claim reimbursements. As the current QP/NOSs are very narrow and do not meet the exact skill needs of the employers, the employers will be required to develop NCS on the basis of ISCO, contextualise them with their needs in close cooperation with the NSDA/SSCs.

9.5.12 The administration of the RIC should be simple. There would be no complicated rules and it will be designed to ensure there is no additional paper burden on the employers.

9.5.13 The measurement of the RIC would be based on nationally/internationally accepted database that is agreed to by all stakeholders and is reliable and transparent. The norms and standards used will be objective.

9.5.14 The RIC would be an online system that provides for levy calculation, collection and reimbursement. The entire system could be linked in due course to the LMIS, but this would be a long-term objective, given how nascent a stage the LMIS is currently at. The employers would get candidates trained by the skill ecosystem in real time for their needs.

9.5.15 There would be monitoring of training quality and content by the ombudsman/ national regulator and assessment and certification at the end of the training will be done by the proposed National Board of Assessment and Certification.

9.5.16 The RIC will benefit the large firms directly. But the small firms may not be able to claim reimbursement since they do not have the financial capacity to undertake EBT; hence it is important to ensure that small firms particularly from the unorganized sector who do not have cash flows for training are provided training vouchers, which they can redeem, from nationally approved training providers.

9.5.17 The estimates and setting RIC rate can be decided after a thorough estimate of national skill finance needs. A multidisciplinary expert group could be constituted by the Government to work out all details, implementation strategy and drafting of a law on the subject. However, the Committee recommends that the rate should be 2% of payroll bill of the firms.

9.6 Governance Structure for financing

9.6.1 NSDF will be the institutional repository of the fund. The fund will be used for the entire VET system across the country and be managed by sectoral employers by way of SSCs.

9.6.2 The SSCs will need to collect credible data from industry through mandated provisions and hence be able to estimate the demand gap for each skill. SSCs have not been able to meet this
objective of their terms of reference at all, as the Committee found in its consultations with the 40 SSCs.

9.6.3 With the alignment of SSC to public statistical data sources by NIC codes and with annual data on employment and unemployment being released by the NSSO in the coming year, the national skill ecosystem will be more data centric and closer to the realities than it currently is. The goal is that with the availability of employment and unemployment data annually the SSCs’ skilling targets should align to this data.

9.6.4 The government has a key role in being a provider of information about the impact and effectiveness of the RIC. Government funding will not drop by any means. Government funds from all relevant Ministries will need to be also deposited in the NSDF. That would mean that funds from MHRD for vocationalization of education and the other Ministries who conduct training will also be deposited in the NSDF. This would be beneficial, as it would enable planning on a national and sectoral basis, end fragmentation and duplication, and rationalize funding. This would ensure that a holistic mechanism would be put in place for financing skill development across the entire country. In this manner, the government role for social equity-based skills financing would be more effective, and its financial contribution can be more effectively used for disadvantaged groups, women, unorganized sector, SC, ST, and minorities.

9.7 Recommendation

It is clear from the above that given the current stage of our demographic dividend, more investment for skills that aligns with the sectoral demand is needed. While government has a key role, industries must be provided with the right mechanism for acting on their skill concerns. It is expected that the RIC would substantially increase the number of students trained by the industry dramatically by 2-3 times. Overwhelming global evidence for a structured method of industry contribution is seen to be dynamic and rewards action by the industry. It is hence recommended that a “Reimbursable Industry Contribution” along with matching grants from government is provided, to ensure skill development is adequately financed and owned by the employers and the Government and employers work together seamlessly to skill youth, provide them opportunities for decent livelihood, meet exact skill needs of employers and over a period of time make India a developed country and skills capital of the world.
Chapter 10
Summary of key Recommendations

10.0 We have given recommendations at the end of each chapter. However, we thought it better to summarize all the key recommendations at one place for ease of reference. At the end of each recommendation, reference to the original paragraph has been indicated in bracket. However, for clarity and better understanding of the context and issues, one will be required to read the whole Report.

10.1 Every developed country has got a very well defined National Vocational Education and Training System. However, in India we have not been able to put in place a sound National Vocational Education and Training System, which is aspirational and provides every youth an opportunity to opt for a career in vocational field. The first recommendation, therefore, is that the Government should create a sound National Vocational Education and Training System which provides for the following:-

i) Every child irrespective of his caste, creed, religion, gender, region or economic status should get 10 years of schooling so that the three Rs- Reading, Writing and Arithmetic make the basic foundation on which the higher vocational education and training system could be successfully built upon.

ii) At the secondary school level, the children should be sensitized about the dignity of labour, world of work and career options but vocational education and training should start only after 10 years of schooling, which is the case in most of the developed world.

iii) Each child should be given an option to go for vocational education and training as he is permitted to go to humanities, science, commerce, technical education or medical education streams.

iv) The government should promote setting up of required number of Vocational Education and Training Colleges (VETCs) where option should be available to a child to choose any of the sectors of his choice for training.

v) The VETCs should run vocational courses but along with, students should also be taught two academic subjects such as a language and another subject from humanities or science or commerce depending upon his future career growth options as is currently mandated for
vocational training graduates of ITIs after 10 years of schooling to get equivalence with 12th standard.

vi) The VETCs should run certificate, diploma, advanced diploma and degree level courses.

(Para 2.1.1)

10.2 The National Vocational Education and Training System can succeed only when Ministry of Skill Development and Entrepreneurship and the Ministry of HRD work closely together keeping in mind the national goal of making India the “Skills capital of the world”. The Ministry of HRD should conduct vocational education and training courses at 10+2 level and align the standards with the National Skills Qualification Framework. They should setup higher vocational education and training colleges and universities to ensure vertical mobility of VET stream pass outs with regular trainers/professors, well equipped state of the art classrooms, workshops, tools, equipments and machinery in close consultation with the industry. However, if they feel otherwise, MSDE should setup a National Vocational University, which should conduct research, train the trainers/professors for the higher vocational education and training system and become affiliating university for all VETCs.

(Para 2.1.1 and Para 2.1.4)

10.3 There are no uniform VET standards in the country and therefore, the skills imparted to the trainees are also not uniform. Most of the Ministries/Departments/Organizations/State Governments and vocational training institutions run short-term vocational training programmes of 150-300 hours, which do not make either youth employable or meet the skills needs of the industry. It has, therefore, been recommended to create a credible and dynamic national Labour Market Information System, National Occupational Standards, National Competency Standards, National Accreditation Standards, National Assessment Standards and National Certification Standards and align them with the International Standards Classification of Occupations, 2008. The present QPs/NOSs are very narrow and do not meet the skills needs of the industry and therefore, they should be reviewed and new National Competency Standards (NCS) developed by SSCs/NSDA/DGE in close cooperation with the industry on the basis of ISCO 2008.

(Para 2.1.2 and Para 8.3.1)

10.4 There are seventeen Ministries in addition to the Ministry of Skill Development & Entrepreneurship, which are doing skill development. However, nobody owns the National VET standards. It has been recommended that the MSDE should become the owner of all national
VET standards and be accountable for skilling of youth with the objective of meeting the exact skill needs of the industry and providing employment to youth.

(Para 2.1.3)

10.5 Nine Ministries which do not have any training infrastructure of their own may be asked to discontinue VET and transfer their budget and staff to MSDE. However, eight other Ministries which have got their own training infrastructure may continue with the condition that they will be required to align their course curricula with the National Standards to meet the skills needs of their sectoral industries. Their trainees should also be brought under the purview of National Assessment and Certification System to ensure best quality of training and uniform certificate. Many of these Ministries have not been allocated VET under the Allocation of Business Rules, 1961. If they want to continue with skill development, they should get the Allocation of Business Rules amended accordingly.

(Para 2.1.3)

10.6 Ministry of HRD have been allocated “Secondary Education and Vocational Guidance” under the Allocation of Business Rules, 1961. However, they have been doing vocationalization of secondary education and not vocational guidance. It is recommended that they should do vocational guidance at the secondary level and get vocational education and training allocated to them so that they could carry out VET courses at senior secondary and higher levels.

(Para 2.1.4)

10.7 In-plant Apprenticeship training should be made an integral part of the Vocational Education and Training System for all trainees, as is the case in Germany and many other countries.

(Para 2.1.5)

10.8 There should be close interface of the VET system with the industry. The SSCs must become the vibrant institutions of interface between the government, VET system and the youth. The employers must own, finance and drive them in order to discharge their responsibilities efficiently and effectively.

(Para 2.1.6)

10.9 The commitment of industry towards training happens only when they contribute and are closely involved. It has therefore, been recommended that a Reimbursable Industry Contribution
(RIC) of about 2% of their annual wage bill should be collected from all small, medium and large enterprises employing 10 or more persons. The employers themselves will manage this fund through SSCs. They can be reimbursed the cost of training incurred on meeting their skill needs depending upon their annual training plan and performance.

(Para 2.1.7)

10.10 In order to ramp up the training capacity of national VET system to about 10 million per annum, all existing diploma colleges and ITIs should be renamed as VETCs and their capacities should be enhanced to about an average of 500 trainees per annum running about 10 trades which include 3-4 engineering and 6-7 services sector trades along with two academic subjects. In addition, about 3600 new VETCs may be setup in government, government aided, private and public private partnership with the financial support of NSDC.

(Para 2.1.8)

10.11 In order to ensure best quality of training, the national VET standards should be aligned to international standards, the vocational training institutions should be accredited by independent professional bodies, a system of annual surveillance and oversight be introduced and assessment and certification done by an independent National Board of Assessment and Certification.

(Para 2.1.9)

10.12 Short term courses being run under various schemes at present are not able to meet the twin objectives of meeting the exact skills needs of the employers and provide decent opportunities of livelihood for youth at decent wages. It has been recommended that these short term courses should be discontinued and only long term competency based courses run to acquire National Competency Standard Certificate, which will only entitle a person to employment in the country or abroad and will be able to meet the exact skills needs of the industry.

(Para 2.1.10)

10.13 The soft skills and life skills are equally important for employment and therefore, communication skills, computer and digital literacy, quality management tools, occupational safety and health, English proficiency, entrepreneurial skills and basic financial literacy should form part of each curriculum.

(Para 2.1.11)
10.14 A sound framework for development of skills to meet the needs of the huge unorganized sector and large school dropouts should be evolved. It has been recommended that 50,000 Vocational Education and Training Schools (VETS) should be setup by the government, government aided, private sector, public private partnerships, local bodies and nongovernmental organizations in a manner that one VETS is available in a cluster of 10-12 villages. These schools maybe financially supported by NSDC.

(Para 2.1.12, Para 2.1.14, Para 5.1.6 and Para 8.3.5)

10.15 A sound framework for Recognition of Prior Learning should be evolved in which the informally acquired skills of a person will be assessed in terms of his level in the NSQF, gaps identified, training provided to meet those gaps and then assessed by the National Board to award NCSC so that he is fully trained and able to command higher wages.

(Para 2.1.13)

10.16 There is huge shortage of qualified trainers. In order to create a pool of qualified trainers, a framework for training of trainers should be evolved in which entry qualification, subjects to be taught, duration, pedagogy skills, etc. should be included. The existing institutions for training of trainers should run full capacity and more such institutions should be set up. They should also have at least 6 months industry experience and should be paid more than their counterparts in the industry so that industry experts are attracted towards training.

(Para 2.1.15)

10.17 The trainees should be provided counselling, guidance and employment services so that they can access job market successfully. In order to accomplish this, Directorate General of Employment (DGE), now under the Ministry of Labour and Employment, should be brought under MSDE. All employment exchanges in the country should be converted into state of the art counselling, guidance and employment facilitation centres armed with modern technological tools. The SSCs and DGE should work closely together to facilitate counselling, guidance and placement to skilled persons.

(Para 2.1.16)

10.18 We must also create institutional mechanism to visualize and prepare people with skills required for future jobs, which are expected to be largely technology driven and innovative. Apex High Tech Institute (AHI) has been recommended to be assigned this role of developing future skills and NSRD should closely work with AHI.
10.19 Many of the proposed steps will require legislative support in order to operationalize them. It has, therefore, been recommended that Apprentices Act, 1961 and the Employment Exchanges (Compulsory Notification of Vacancies) Act, 1959 should be repealed and a new Vocational Education and Training Act should be enacted.

10.20 The Sector Skills Councils provide the interface between employers, trade unions, governments and various components of vocational education and training system. Global experience shows that the concept of SSCs has been successful only where the involvement of the employers has been intense. It has, therefore, been recommended that the SSCs should be owned, funded and driven by the sectoral employers and not by industry associations.

10.21 In reviewing the existing QPs/NOSs and developing new National Competency Standards, SSCs/NSDA/DGE should involve professional institutes such as CSTARI, Kolkata, PSS CIVE, Bhopal and for content development NIMI, Chennai.

10.22 As NSDA has been mandated to anchor and operationalize NSQF, it should be assigned the role of National Skills Qualification Authority (NSQA) and CSTARI, NIMI and CIVE should be brought under its functional control.

10.23 The State Governments are conducting training through government and private ITIs and a large number of other training institutions. They always need the assistance and support of SSCs, but the State Governments feel handicapped since the SSCs are located either in Delhi, Mumbai, Chennai or Bangalore. The SSCs, therefore, should setup their offices in the States to take care of their skills needs, particularly, in agriculture, allied sector and MSME clusters.

10.24 The SSCs should be mandated to create a sectoral Labour Market Information System, create a database of employers in the sector, develop a web portal to collect data on their skills needs on real time basis, aggregate and share it with all concerned so that the training institutions
could align their efforts according to the employers’ needs. The SSCs should also maintain an inventory of skilled manpower to support the employers on real time basis.

(Para 5.1.8)

10.25 At present, the SSCs have a limited interface with the training providers except those conducting short term training programmes under PMKvy or DDU GKY or vocational schools under Rashtriya Madhyamik Shiksha Abhiyan or those organizations which are conducting short term training courses under QPs/NOSs developed by them. Their role is strategic and therefore, they should have close interface with ITIs, Polytechnics, schools, colleges, technical institutions, universities and other vocational training institutions and persuade them to incorporate national standards in their course curriculum so that the national VET system becomes aligned to the exact skills needs of employers and is demand responsive.

(Para 5.1.9)

10.26 Many cases of serious conflict of interest have come to notice which are quite disturbing. It has, therefore, been recommended that the government should review the role and functioning of NSDC comprehensively with reference to its Memorandum of Association and create a strong oversight mechanism to ensure that such conflicts of interests do not arise in future

(Para 5.1.10)

10.27 The NSDC had not followed any standard criteria for creation of SSCs which, not only increased the number of SSCs but also created overlapping jurisdictions. The Committee followed National Industrial Classification 2008 for the purpose of classification of all economic activities into 21 sectors based on their employment and GDP contributions in descending order and rationalized the 40 SSCs into 21. This classification is based on and is compatible with International Standard Industrial Classification (ISIC) which makes our SSCs internationally comparable. Accordingly, the domain area of each SSC has been rationalized on the basis of NIC/ISIC.

(Para 6.11)

10.28 In order to implement creation of new SSCs on the basis of NIC 2008, all the existing SSCs should be dissolved; new SSCs should be created under Section 25(now Section 8) of the Companies Act 2013; all funds of the old SSCs transferred to the new SSCs; Governing Council of the new SSC should have representation from all divisions/old constituent entities; the new SSCs should function like an organic whole giving importance to all constituent entities; all
sectoral industries should become members of SSC; the members of Governing Council should be democratically elected by all the members of the SSC; the members of the Governing Council should elect the Chairman in a democratic manner; the term of the Chairman and the members of the Governing Council should be for a period of three years; the CEO must be identified by an independent selection procedure and the person should be an outstanding professional having at least 20 years of experience of working in that particular industry; in order to provide professionalism Chief Operating Officers may represent the constituent entities; a representative of NSDA, a representative of the administrative Ministry concerned, representatives of two State Governments and representatives of two central trade unions should be represented on the SSC. The members of the SSCs should be employers and not the representatives of the industry associations. In order to discharge responsibilities of SSCs effectively, heads of standards and quality, industry interface and LMIS, government/VET interface, finance and unorganized sector should be appointed from amongst experts/professionals having at least 15 years of experience in their respective fields.

(Para 6.15)

10.29 NIC 2008 has been mapped with NCO 2015, which is compatible with ISCO Rev. 4. SSCs/NSDA now should develop their National Occupational Standards/NCS on the basis of NCO/ISCO and provide the best quality training to a person, so that he is not only competent to work in India but also elsewhere in the world. Current NCO 2015 is mapped correctly with ISCO Rev.4. up to four digits but the last four digits are on the basis of the current QP/NOS, which make it very narrow, and therefore, it has been suggested that ISCO should be used for preparing NCS. (Details are given in Vol III)

(Para 6.14)

10.30 A Central Advisory Board On Skill Development be created in which Ministers of all Central Ministries/Departments doing skill development, the Ministers of all the State Governments dealing with skill development and all heads of regulatory bodies dealing with different aspects of skill development be made members to effectively coordinate the efforts of skill development seamlessly across the country.

(Para 7.11.1.1)

10.31 DGE has been collecting labour market information for the last more than 50 years and it has domain expertise and infrastructure at the District, State, and Central levels, which should be leveraged to create a sound national Labour Market Information System. DGE under the
Ministry of Labour and Employment, therefore, should be brought under the MSDE and the name of the Ministry should be changed to Ministry of Skill Development and Employment. Entrepreneurship is primarily for self employment which is covered under ‘Employment’.

(Para 7.11.1.2)

10.32 The role of DGT in so far as it concerns policy formulation on vocational training, laying down norms and standards, development and revision of course curricula should be mainstreamed with that of NSDA. As NSDA does not have enough expertise to carry out this work at present, DGT may form the nucleus for this purpose and become an integral part of the national VET system.

(Para 7.11.2)

10.33 The NCVT has been the national assessment and certification body for the last 60 years and has domain expertise, manpower and brand image and, therefore, it should form the nucleus of the proposed National Board for Assessment and Certification.

(Para 7.11.3)

10.34 NSDA mainly performs the regulatory functions such as the implementation of NSQF, development of LMIS, approval of norms and standards and therefore, it should be renamed as National Skills Development Authority. The NSDA is presently poorly staffed with about a dozen and half short-term consultants. Befitting the new status of NSDA, an organizational structure should be created and professionals with experience of industry and academia be recruited on regular basis and provided vertical mobility.

(Para 7.11.4.1 and Para 7.11.4.3)

10.35 The NSDA is mainly a regulatory body. However, it has also been mandated to raise extra budgetary sources for skill development from various agencies such as international bodies, multilateral agencies and private sector. It compromises with their regulatory role and, therefore, it should be withdrawn from them.

(Para 7.6.3)

10.36 The governance structure of NSDF is flawed. Board of Trustees of NSDF consists of three members, viz. Secretary, Department of Economic Affairs; Secretary, Planning Commission and Chairman, NSDC. NSDF is required to oversee the work of NSDC. The governance structure of
NSDF compromises its supervisory role and, therefore, Chairman NSDC, should be excluded and instead Chairman of NSDA should be included as its member.

(Para 7.8)

10.37 The NSDC is a public private partnership with 51% equity of the private sector. It is essentially a private sector body and, therefore, not competent to undertake regulatory functions. It has not been able to discharge the responsibilities given to it for setting up SSCs. There have been lots of instances of serious conflict of interest and unethical practices. The work of setting up of SSCs, therefore, should be transferred to the regulator, NSDA and their Memorandum of Association amended accordingly.

(Para 7.11.5.1 (v))

10.38 According to its original mandate, NSDC should mobilise resources for skill development from industry, financial institutions, multilateral and bilateral external aid agencies, private equity providers and Ministries/Departments of Central Government and State Governments.

(Para 7.11.5.1 (i))

10.39 The resources so mobilized by the NSDC should be used to support private sector, setup large number of VETCs/VETSs to run long term competency based courses of certificate, diploma and degree level according to exact requirement of the industry.

(Para 7.11.5.1 (ii))

10.40 Most of the government ITIs have been modernized in the last 8-9 years but the private ITIs are still in bad shape. The NSDC should help modernize, expand and diversify the courses in these private ITIs so that they can meet the exact skill needs of the industry after being converted into VETCs.

(Para 7.11.5.1 (iii))

10.41 As NSDC is a funding company in the private sector in the nature of Non Banking Financial Company, it should function under the relevant regulations applicable to NBFCs.

(Para 7.11.5.1 (iv))

10.42 The NSDC is a private sector led body and does not come under any of the regulatory systems of the government. However, they are using almost 100% of government funds without
accountability. A strong oversight mechanism should be created for monitoring the outcomes as a result of the funds provided by the government.

(Para 7.11.5.1 (vi))

10.43 The NSQC is required to approve setting up of SSCs, norms and standards but it does not have adequate resources to discharge its functions effectively. NSQC, therefore, should be strengthened and industry domain experts should be included in it. There should be regular support of professional industry experts available in processing the proposals being put up for consideration of NSQC.

(Para 8.3.2)

10.44 The QPs/NOSs developed earlier were not user friendly and were overly complicated, geared with technicalities, interspersed with many abbreviations and jargons and with more than 25 pages in each QP. The proposed new NCS should be simple and easy to use not just by experts but also by other users and trainees as well.

(Para 8.3.3)

10.45 The QPs/NOSs being used in the schools under Vocationalization of Education scheme have not been approved by the NSQC. The objective of providing skills to students is to meet the skills needs of the employers and provide employment to youth and therefore, the Ministry of HRD should use the same national standards as approved by the NSQC.

(Para 8.3.4)

10.46 The SSCs have been making standards, on one hand and also testing and certifying based on the same standards, on the other. This amounts to validating your own product yourself. Such a process raises the question of credibility of the whole process. It has been recommended that the ‘standards making’ and ‘testing and certification’ be kept at arm’s-length and assigned to separate bodies. NCSs should be developed by NSDA/SSCs, training to be done by vocational training institutions and assessments by the proposed National Board for Assessment and Certification.

(Para 8.3.6)

10.47 The level descriptors given in the NSQF lack clarity and objectivity. It is necessary to make them amply clear so that a trainee and trainer can easily understand. Moreover, everybody understands certificates, diplomas, degrees, etc. and therefore, we should start with them, convert
the courses as per level descriptors, assign credits and establish comparability with the existing titles. NSQA has to play a big role in it for which it needs to be staffed with qualified and experienced experts.

(Para 8.3.7)

10.48 Para 7(ii) of NSQF notification dates 27 December 2013 says, that “However, it is not the case that every qualification will or should have all the characteristics set out in the level descriptors” should be deleted as it has potential for misuse.

(Para 8.2.6)

10.49 The implementation schedule of NSQF as prescribed at Para 14(iv) in notification dated 27 December 2013 will require modification as the review of present QP/NOSs, creation of new NCS and setting up & strengthening of NSQA will take some time.

(Para 8.2.7)

10.50 The credit and the credit transfer system has not been developed so far. It requires expertise of multi disciplinary professionals from education, vocational education and training, technical education, higher education, etc. After assigning the role of NSQA to NSDA, it should be manned by above experts who should develop credit system, credit transfer system, bridge courses, etc. to fulfil the purpose of creating NSQF.

(Para 8.3.7)

10.51 The NSQF is quite technical and even the so called professionals do not understand it properly and therefore, there should be a sensitization and communication campaign with the help of seminars, workshops, etc. to educate all concerned about the nuances of each aspect.

(Para 8.3.7)

10.52 At the current stage of our demographic dividend, more investment for skills that aligns with the sectoral demand is needed. Overwhelming global evidence for a structured method of industry contribution is seen to be dynamic and rewards actions by the industry. Accordingly, a Reimbursable Industry Contribution along with matching grants from the government is provided to ensure skill development is adequately financed and owned by the employers and the government. The government and the employers work together seamlessly to skill youth, provide them opportunities for decent livelihood, meet exact skill needs of employers and over a period of time make India a developed country and “Skills capital of the world”. A multidisciplinary
expert group may be constituted by the government to work out all details, implementation strategy and drafting a new law on the subject.

(Para 9.7 and 9.5.17)