SKILL DEVELOPMENT POLICY FOR KARNATAKA

Department of Skill Development, Entrepreneurship and Livelihood
Government of Karnataka

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1. Introduction
Hon’ble Chief Minister, Sri Siddaramaiah, while presenting the budget for 2016-17, has rightly pointed out that “youth are the light of hope of our future. In this modern age, it is our duty to help the youth, with growing ambition, moulding their life in an independent manner. In this changed era, not only that of employment opportunities have increased but even the structure of employment has changed. It is essential that youth should be equipped with necessary skill and capabilities to enable them in availing the employment opportunities”.

The government of Karnataka has set up the Department of Skill Development, Entrepreneurship and Livelihood to enable the youth to acquire necessary skills for employment and livelihood promotion. The new Department aims to: i) provide skills among youth in mission mode for new and better employment; and, ii) converge all skill related programmes/schemes under one department for better coordination. This Department undertakes the functions of planning, regulation, standardisation, promotion, implementation and monitoring of all skill development initiatives in the state.

Karnataka government has been taking up a number of initiatives to provide skills and vocational education to youth as well as those seeking livelihoods without any appreciable skills. There is however a need to formulate a coherent and comprehensive policy on skill development for the state. It is in this context that the policy on Skill Development in Karnataka is prepared.

2. Skill policy context in Karnataka
India is poised to experience a demographic dividend for the next 25 years, due to an increase in the proportion of young and working age group to the total population. Such a rise in the youth population is a window of opportunity as it reduces the ratio of dependents to total workers leading to higher rates of savings, investment and growth. This change in the age structure, if properly utilized, will result in demographic dividend, which provides immense growth opportunities to the nation. The provision of marketable skills among youth is still a challenge to reap opportunities of the demographic dividend.

India, over the period of time, has become knowledge based economy with a large number of capable and educated people residing in the country. Despite the policy focus on skill development from 11th Five-Year plan onwards, India still faces the dual challenges of paucity of highly trained and skilled workforce as well as non-employability of large sections of youth who are educated but lacking job market skills. The data provided by the National Sample Survey Organisation (NSSO) show high skill gap. Only 2.4% of the total workforce in India has undergone formal skill training and another 8.6% reported to have received non-formal vocational training. This indicates that only a few youth will be entering into the labour force with any kind of formal vocational training and education. The National policy for Skill Development and Entrepreneurship is formulated to provide adequate and qualitative skills to the workforce. For ensuring the success of the nation’s policy at the state level, Karnataka government has formulated this policy on Skill Development.

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1 Karnataka government has in the past prepared “State Policy on Skill Development” in 2008.
Karnataka
Karnataka is a leading state in the establishment of knowledge based industries such as Information Technology, biotechnology and engineering, and also in the exports of electronics, computer software and so on. The Gross State Domestic Product (GSDP) in Karnataka grew at the rate of 6.2% in 2015-16 and reached Rs. 780 thousand crores at constant prices. The per capita state income in 2015-16 was estimated at Rs. 145,799. Nearly two-thirds (64%) of GSDP came from the services sector, followed by 24% from the industry and 12% from agriculture. However, as per 2011 census, 49% of the workers (26% cultivators and 23% agricultural labourers) are engaged in agriculture, thus indicating low income for those depending on agriculture and the need for skill provision to gain employment in the industry and services.

Demographic dividend in Karnataka
With 55% of the population in the working age group of 20 to 59 years (Figure 1), Karnataka has an opportunity of achieving faster economic growth through favourable demographic dividend, provided that appropriate skills are imparted to the population in general and youth in particular. Skilled persons will then be able to find employment in the state as well as outside (including other countries) where there is demand for skilled workers.

Figure 1: Population pyramid of Karnataka in 2011

Source: Computed from Census 2011

Size of labour force in Karnataka
According to the Economic Survey of Karnataka, 2.44 crore persons out of 6.11 crore population have registered themselves as workers (Annex 1). Agriculture and allied sectors account for nearly 56% of the total workers in the state, while the rest are in the non-agricultural sector. Key sub-sectors of non-agricultural sector are manufacturing and mining (11%), shops, establishments and trade (9%) and construction (7%). Services, by and large, account for the remaining 17%.

Three-fourths of 2.44 crore workers in Karnataka are estimated to be in the unorganised sector. Most of the workers in manufacturing & mining and information technology & biotechnology are in the organised sector, while agricultural labourers and workers in the sub-
sectors of non-manufacturing such as shops, establishments & trade, construction, real estate & business activities and hotels & restaurants are in the unorganised sector.

**Size and labour force participation among Youth (16-35 years) in Karnataka**

The focus of this policy document is on youth who are in the age group of 16 to 35 years\(^2\). It is estimated that 2.12 crore persons are in this age group. Population pyramid of youth in Karnataka is provided in Annex 2.

Over 45% of 2.12 crores youth population is not in the labour force (Figure 2). **Skill provision is therefore urgently needed to promote employment among youth and bring them into the labour force.**

![Figure 2: Labour force participation among youth (16 to 35 years) in Karnataka](image)

Source: Estimated from the 68th Round of NSSO survey on `Employment and Unemployment Situation in India, 2011-12`

About 52% of youth population is male, while the rest are female. Among youth male, over 76% are in the labour force; but, the corresponding proportion among youth female is only 31%, thus indicating huge difference between youth male and female in the labour force participation (Figure 2). **The policy on the provision of skills should be therefore gender sensitive and give priority to youth female in skill provision and promotion of employment among them.**

About 54% of the youth in the age group of 16-35 years belong to Other Backward Castes (OBC), 23% to general category, 17% to Scheduled Caste (SC) and 6% to Scheduled Tribe (ST). The labour force participation was low among youth from general castes and higher among those belonging to SC and ST categories.

**Occupational distribution of youth (16 to 35 years) in Karnataka**

There are significant differences in the occupational distribution of youth by gender and social groups. Over 53% of youth female are attending to domestic work in their households (unpaid work) as against to only 0.1% of youth male (Table 1). **Policy focus should be on provision of employable skills among young women, especially those involved in unpaid work, and enabling them to take up employment.** The participation of youth female in the self and salaried employment is low as compared to youth male. In addition, their participation in

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\(^2\) Figures and tables pertaining to youth (16-35 years) in this policy paper are estimated by Dr. Indrajit Bairagya, ISEC, Bangalore, specifically for the Department of Skill Development, Entrepreneurship and Livelihood.
educational institutions is comparatively low. The policy should strive to make institutions providing vocational education and skills sensitive to the needs of youth female.

About 3% of the total youth are not in the labour force because of unemployment and physical disability. The policy should focus on the provision of appropriate skills to the physically challenged so that they are empowered to take up employment.

The occupational distribution of youth by social groups shows that a significant proportion of youth from SC and ST categories, especially from rural areas, are employed as wage labourers. On the other hand, comparatively, a larger proportion of youth from general and OBC categories are engaged in salaried employment and attending educational institutions. Such a social disparity needs to be addressed by the government by focusing specifically on these groups.

### Table 1: Occupational Distribution (%) of youth (16 to 35 years) in Karnataka

<table>
<thead>
<tr>
<th>In labour force</th>
<th>Not in labour force</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karnataka</td>
<td>22.03</td>
<td>14.84</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>30.98</td>
<td>20.69</td>
</tr>
<tr>
<td>Female</td>
<td>12.39</td>
<td>8.53</td>
</tr>
<tr>
<td>Social groups</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST</td>
<td>29.09</td>
<td>7.32</td>
</tr>
<tr>
<td>SC</td>
<td>11.74</td>
<td>11.52</td>
</tr>
<tr>
<td>OBC</td>
<td>24.34</td>
<td>15.00</td>
</tr>
<tr>
<td>General</td>
<td>22.42</td>
<td>18.96</td>
</tr>
<tr>
<td>Location</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>25.36</td>
<td>9.46</td>
</tr>
<tr>
<td>Urban</td>
<td>16.91</td>
<td>23.14</td>
</tr>
</tbody>
</table>

Source: Estimated from the 68th Round of NSSO survey on Employment and Unemployment Situation in India, 2011-12

**Formal and informal employment among youth in Karnataka**

Nearly three-fourths of the youth in Karnataka are employed in the informal sector which is characterized by insecure employment, low wages, indecent working conditions and inadequate access to social security benefits. The employment of youth female in the informal sector employment is marginally higher than that among youth male (Figure 3).
Formal sector employment is relatively high among workers belonging to general category. On the other hand, informal sector employment is high among those belonging ST and SC categories (Figure 4). The thrust of the skill development policy should be more on unorganised workers especially among those belonging to SC and ST categories and youth female to address social and gender disparities in the access to decent work.

Educational levels among youth (16 to 35 years) in Karnataka
The distribution of youth by educational level shows that illiterate and those completing primary and middle education account for 54%, and those completing secondary and higher secondary education for 29% (Figure 5). The proportion of youth completing diploma and graduation & above is 17%.
Formal and informal sector employment by general education among youth in Karnataka

Formal sector employment increases along with general education of youth (Figure 6). Up to the level of higher secondary education, the proportion of youth taking up informal employment was substantially higher than those taking up formal employment.

The general education up to higher secondary level does not significantly contribute to youth getting employed in the formal sector. Two pertinent policies in this context are:

- **Threshold for formal employment is vocational or technical education & beyond. This implies that there is need to introduce vocational skills from the ninth standard (in collaboration with the Department of Education) as this will ensure that dropouts before the completion of secondary education will have some skill or the other for getting employment.**
- **Changes in the curricula of higher secondary education in favour of vocational skills to improve employment prospects in the formal sector.**

Figure 6: Formal and informal employment by general education among youth (16 to 35 years) in Karnataka
This pattern (i.e., general education up to higher secondary level not having significant impact on formal sector employment) does not differ across the gender as well as social groups. However, the formal sector employment among youth female completing graduation and post-graduation is significantly higher as compared their male counterparts (Figure 7).

**Figure 7: Formal sector employment among youth (16-35 years) in Karnataka by gender and educational categories**

![Figure 7](image)

Source: Estimated from the 68th Round of NSSO survey on 'Employment and Unemployment Situation in India, 2011-12

**Skill levels among youth**

Given that the prospects of formal employment improve when a young person has technical education, the question of the extent to which vocational skills are provided to youth in Karnataka becomes important. The NSSO data for the year 2011-12 shows that only 7% of the workers in Karnataka received skills. About 3% of them received formal skills, while 4.5% received informal training.

The possession of skills is better among all the youth belonging to 16 to 35 years. In all, 9.4% of them possess skills (Figure 8). Skilling is better among youth male and those belonging to general and OBC categories as compared to youth female and those belonging to ST and SC categories.

**Figure 8: Proportion of youth (16-35 years) receiving formal and non-formal vocational training by gender and social groups**

![Figure 8](image)

Source: Estimated from the 68th Round of NSSO survey on 'Employment and Unemployment Situation in India, 2011-12
The possession of skills is even better among youth (16-35 years) who are in the labour force, with 13.2% of them having formal and non-formal vocational training (Figure 9). Percentage of youth female receiving vocational training is significantly lower than youth male. Similarly, the proportion of youth receiving vocational training is low among those belonging to ST and SC castes as compared to other cases. The proportion of youth receiving vocational training is close to 17% in the case of those belong to the general category!

This suggests that policy interventions aimed at skill provision are to be introduced for the youth especially youth female, and those belonging to SC/ST categories.

**Figure 9: Proportion of youth (16-35 years) (in labour force) receiving formal and non-formal vocational training by gender and social groups.**

![Proportion of youth receiving vocational training](image)

Source: Estimated from the 68th Round of NSSO survey on ‘Employment and Unemployment Situation in India, 2011-12

**Demand and supply of skilled workforce by 2022**

The National Skill Development Corporation (NSDC) estimated that the incremental demand for the workforce in Karnataka during the period 2012 to 2022 is 84.76 lakhs (Annex 3); of them, 27% are minimally skilled, 43% are semi-skilled, 25% are skilled and 5% are highly skilled.

NSDC estimates show that there is mismatch between the demand and supply of skilled workforce in Karnataka in the case of skilled and highly skilled (Figure 10). If efforts to provide skills are not taken up in the next few years (i.e., by 2022), there will be shortage of 7.12 lakh skilled persons and 3.88 lakh highly skilled people in the state during the period 2012-22. There will be excess supply of minimally skilled people during this period. This suggests that there is need to follow the aggressive strategy of larger coverage in the next six years.

The data provided by the Karnataka Knowledge Commission shows that the three sectors that provide most of the employment to the skilled workforce are: i) Tourism; ii) Information technology, biotechnology and environmental sciences; and, iii) construction (Annex 4).
Figure 10: Incremental demand and supply of skilled human resources in Karnataka (2012-22)

<table>
<thead>
<tr>
<th></th>
<th>Minimally skilled</th>
<th>Semi-skilled</th>
<th>Skilled</th>
<th>Highly skilled</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demand</strong></td>
<td>22.84</td>
<td>36.03</td>
<td>21.47</td>
<td>4.42</td>
</tr>
<tr>
<td><strong>Supply</strong></td>
<td>34.60</td>
<td>32.18</td>
<td>14.35</td>
<td>0.54</td>
</tr>
</tbody>
</table>

Source: District-wise Skill gap study for the state of Karnataka

Column 5 in Annex 5 shows that the five sectors that will employ about 75% of the skilled workers are: a) IT&ITES; b) health care services; c) education and skill development, d) building, construction industry and real estate, and e) tourism, travel, hospitality and trade. For highly skilled workforce, these five sectors become important as well. **This means that the skill policy needs to give priority to these sectors in the provision of skills.**

**Sectors and districts of skill demand**

Column 2 in Annex 5 shows that six top sectors where most of the employment is projected to take place in Karnataka during 2012-22 are: i) agriculture and allied; ii) IT & ITES; iii) Building, construction industry and real estate; iv) Tourism, travel, hospitality and trade; v) Transportation, logistics, warehousing and packaging; and vi) Health care services. These six sectors together are projected to absorb over 83% of the incremental employment in the state during the period 2012-22.

Of these six sectors, only agriculture & allied sectors, and tourism, travel, hospitality and trade will absorb workers in most of the districts in Karnataka. On the other hand, sectors such as i) IT & ITES, ii) Building, construction industry and real estate; iii) Transportation, logistics, warehousing and packaging; and iv) Health care services will absorb workers primarily in three to five districts in the state. **The skill policy needs to, therefore, assign high priority to agriculture & allied sectors and tourism, travel, hospitality and trade in the provision of skills for regional development.**

**Institutional infrastructure for skill provision in Karnataka**

Educational infrastructure in Karnataka is impressive. The number of students enrolling into secondary and higher secondary education is 8.87 lakhs and 5.17 lakh, respectively (Table 4). The gap between enrolment capacity and actual enrolment is not significant in the courses at the graduation level. However, the gap is considerable in the case of BE/B.Tech/ B. Architecture courses. The same is the case with medical courses. On the other hand, the gap between the actual capacity and enrolment is almost completely absent in the graduation courses in Arts, Sciences and Commerce. **Noteworthy aspect is the small number of agricultural graduates produced in the state although the agricultural and allied sectors are projected to be major ones in the employment generation, and that this needs to be addressed.**
The enrolment capacity for formal professional education in Karnataka is 215,667 persons. The actual enrolment is, however, only 160,901. The percentage of actual enrolment to capacity is about 75%. Polytechnics and vocational education offered by ITIs form the major component of formal professional education. In Karnataka, there are 1,777 public and private ITIs (258 government, 196 aided and 1323 private), and these institutions can provide skill training to 106,000 youth. However, the percentage of actual enrolment to total capacity is low at 68.9% (Annex 6). There are around 290 Polytechnics in the state, having enrolment capacity of 75,000; the percentage of actual enrolment to the capacity is 80%. It is, therefore, imperative to completely utilise the existing capacity in ITIs and Polytechnics to reduce the skill gap in the state.

Recognizing that training imparted in ITIs alone is not sufficient for acquisition of skills and that it needs to be supplemented by training in the actual workplace, the Department of Employment and Training (DTE) implements the Apprenticeship Training Scheme. Currently over 4,232 establishments in the state have been covered under this scheme and over 39,610 seats [revised now upwards to 43,000] have located for trade apprentices out of which 24,992 seats have been utilised. In Karnataka, under Modular Employability Scheme, about 800 Vocational Training Providers are active in implementing 500 courses under 68 various sectors. About two lakh persons have been trained since 2012 in the State.

There is, thus, shortage in the institutional infrastructure providing skill training for the sectors of agriculture & allied, Building, construction and real estate, Tourism, travel, hospitality and trade, Transportation, logistics, warehousing and packaging, and health care services that are projected to employ bulk of the workers in the coming years. Institutional infrastructure for vocational education in construction, tourism, travel, hospitality, transportation and health care services need to be improved in the coming years.

3. Target segments

The policy on skill development in Karnataka will primarily focus on youth in the age group of 16 to 35 years. The focus on this group is justified on the grounds that this group consists of adolescents interested in obtaining vocational education and skills, youth entering into the job market without skills and those who are already in the workforce. This group is in need of skilling, re-skilling and up-skilling. However, those who are in the age group of more than 35 years are not excluded from the purview of this policy.

The target group of youth in the age group of 16-35 years will consist of:

- Students completing secondary or higher secondary education and interested in the acquisition of skills in the technical or non-technical trades through ITIs, Polytechnics and other formal institutions.

- Drop outs from the school without completing secondary education, who are interested in acquiring skills in the technical or non-technical trades through informal institutions.

- Unorganised workers interested in acquiring new skills, re-skilling or up-skilling through formal or informal institutions depending on educational qualification.

- Organised workers interested in re-skilling and up-skilling for new or better employment.
Estimated number of target group
With the help of Census and NSSO data, the number of young persons (16 to 35 years) who require skills in Karnataka is projected for the period 2016 to 2030 is projected for Karnataka. These estimates are of two types: first, those persons who are in need of skills in 2016 (called as stock), and second, fresh entrants for skill training during the period 2017 to 2030 (called as flow). Figures on these two estimates are presented below.

Stock
While estimating the stock, the following have been considered. First, all the persons in the labour force, who have not completed higher education (including technical education) are included because potentially they are all interested in the acquisition of skills for new or better employment. Second, since the above exclude those attending to the domestic work in their households (most of whom are women), all the persons attending to domestic work are included. Third, the policy seeks to give priority to the very young (16 to 25 years) among stock of youth; hence, only this group is included. Fourth, others include physically challenged. They are included to promote appropriate skills among physically challenged youth. In all, the total number of persons to be covered is 75 lakhs – stock (Annex 7).

Flow
In so far as the flow is concerned, the following two groups are included. First, it is estimated that 71 lakh persons will be fresh entrants into the labour force during the period 2017 to 2030 without any skills. This group includes dropouts before the completion of secondary education and those completing secondary and higher secondary education. This group excludes those having vocational education and those completing higher education including diploma/certificate course. Second group will consist of those attending to domestic work. Most of such persons will be women, going by the past trend. The second group, although not part of the labour force, is included as the policy seeks to make additional effort to encourage and motivate women to participate in the workforce. The total number of fresh entrants is estimated at 113 lakhs – flow (Annex 7).

The total number of youth to be trained during the period 2017 to 2030 is thus 188 lakhs – both stock and flow. Annual target of persons to be trained is 13.4 lakhs during this period. Further details on the target group are provided in Chart 1.

Year-wise estimates (2017 to 2030)
Year-wise estimates for the period 2017 to 2030 (Annex 7) are based on the following consideration. First, it is proposed to adopt an aggressive strategy of covering 50% of the stock in the next six years so that the policy will have beneficial impact on employment, income and poverty. Second, it is assumed that there will be an improvement in the number of persons completing secondary and higher secondary education. Third, it is also assumed that, with improved awareness and employment opportunities, the number of persons attending to domestic work is expected to come down. Because of the above, the annual target, which is 14.6 lakhs in 2017, gradually declines to 12.4 lakhs by 2030.

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3 Methodology for this is based on the same adopted by the National Policy for Skill Development and Entrepreneurship, 2015, to estimate the number of persons in the workforce requiring skills by 2022.
4. Aims and objectives of the skill policy

*Karnataka government aims to set up a framework that is inclusive as well as learner and labour market centric in its approach to impart skills.*

**Vision**
Internationally acceptable skilling for all to reap the maximum possible demographic dividend for rapid balanced sectoral growth and inclusive development with decent employment opportunities for all.

**Goal**
The goal of the skill development policy is to provide skills *incrementally* to 13.4 lakh persons (Annex 7) who include youth emerging from the formal education as well as those who yearn to achieve sustainable livelihood either through wage employment or self-employment options in a year.
**Mission**
Empower all individuals through improved skills, knowledge, nationally and internationally recognized qualifications to gain access to decent employment and ensure State’s competitiveness in the global market.

**Aims**
The aim of the policy on skill development in Karnataka is to:
- Design and implement skill development, entrepreneurship and livelihood activities on mission mode basis converging all the schemes and programmes concerned under skill development, entrepreneurship and livelihood department;
- achieve the economic and social integration of target groups by enabling them to acquire employment relevant skills;
- standardise curriculum in line with quality parameters and market demand, and improve certification norms for improving employability and free movement of the workforce;
- set cross sectoral and internationally acceptable standards of skilling with sound quality assurance and qualification framework;
- ensure speedy provision of qualitative skills to harness the demographic dividend and meet the industry needs;
- strengthen the quality as well as to ensure the long term sustainability of the skill development infrastructure – both in the government and private sector; and,
- To provide skills to strengthen livelihoods and promote entrepreneurship with increased emphasis on innovation, and providing adequate support and conducive environment to them.

**Objectives**
In order to achieve the above aims, the skill development policy of Karnataka government has formulated the following objectives.

1. To provide information to youth, entrepreneurs and workers in the unorganised sector on employable skills and institutions providing such skills, mobilise them for acquiring skills, and to undertake innovative measures to make skill acquisition aspirational for youth.
2. Make vocational training aspirational to both youth and employers so that youth perceive vocational training as career choice and employers, realising the productivity potential of skills, offer remunerative employment to skilled workers.
3. To standardise the curriculum in line with quality parameters and market demand, and to improve certification norms to promote quality, employability as well as facilitate free movement of workers.
4. To strengthen and enhance the capacity of training infrastructure and trainers at all levels to provide quality and relevant training.
5. To ensure equitable and easy access to skill training programmes to every needy person in the state.
6. To ensure vocational training to those completing school education, unorganised sector workers and lowly paid workers to enable them to improve their employability and access to growth opportunities by skilling, re-skilling and up-skilling.
7. To facilitate mobility between vocational and general education by alignment of degrees with National Skill Qualifying Framework.
8. To provide suitable skills for improving entrepreneurship and promoting livelihood security.

9. To provide an institutional base and set up Labour Market Information System (LMIS) which enables the potential workforce to articulate, represent and secure their interests for wage employment and self-employment options, and to use this information in the preparation of curriculum for skill training;

10. To achieve convergence of existing state and non-state initiatives, provide clarity of roles of all the stakeholders in the ecosystem, including the government so that they all can contribute to the achievement of goals relating to skill development for wage and self-employment based on their comparative advantage.

11. To achieve improved supply and quality of the workforce for industry, contributing to increased productivity.

12. To provide services on career guidance and placement, and facilitate overseas employment of skilled persons.

5. Policy Interventions for promoting skills among youth

Any marketable skill, acquired through formal or certified informal means, to perform a job or a certain task competently is considered as skill. Skills are both generic\(^4\) and domain\(^5\). The former are to be imparted as part of general education, while the latter will specifically be addressed by the policy. For skill development, the Department will undertake the functions of providing awareness on marketable skills and institutions providing such skills, monitoring the government and private vocational education courses and informal training programmes, standardising the curricula, improving certification norms, setting up of NSQF, providing placement services, improving overseas job opportunities and so on.

Entrepreneurship is defined as the capacity and willingness to develop, organize and manage a business venture along with any of its risks in order to make a profit. The most obvious example of entrepreneurship is the starting of a new business. The main function of the department is empowerment of entrepreneurs through skills. It needs to be noted that skills required for a person to become entrepreneur are different as compared to a person taking up paid job after obtaining skills. If a person is to become successful entrepreneur, she/he should be provided with support such as credit, expertise, infrastructure, skills and official environment conducive to the business. The department, however, focuses mainly on skills and to some extent linking entrepreneurs with banks and so on.

Livelihood, which is a means of making a living, encompasses people’s capabilities, assets, income and activities required to secure the necessities of life. A livelihood is sustainable when it enables people to cope with and recover from shocks and stresses (such as natural disasters and economic or social upheavals) and enhance their well-being and that of future generations without undermining the natural environment or resource base. The activities to be undertaken to promote livelihoods are, in addition to providing skills, organisation and mobilisation of youth into Self-Help Groups, initiating measures towards their financial inclusion, facilitating marketing linkages and so on.

Policy interventions aimed at improving the eco-system of skill development for the target group in Karnataka are discussed below.

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\(^4\) These are abilities that are necessary across all job sectors and essential for continued employment. They include soft skills, work ethics, etiquette, integrity and life skills.

\(^5\) These are job specific or vocational skills that are required for different job sectors.
5.1 Information, awareness and mobilisation

- Awareness on the role of skills in the nation building will be created among parents, teachers and other stakeholders in the society to develop pro-skilling environment in the state. Messages conveying that each job (small or big, formal or informal) is to be respected as it directly or indirectly contributes to national economy will be spread through newspapers, mass media and posters on buses and trains. Information Education and Communication strategy along with modules and tools in Kannada will be developed and transmitted from time to time for effective communication to public in general and youth in particular.

- Awareness programmes for parents will focus on choices available to their children in terms of sectors, modules and training providers with better career opportunities.

- **Information and awareness** on advantages of skills, returns to skill education, marketable skills in the technical and non-technical trades and institutions providing courses on such skills will be provided to students completing secondary and higher secondary education, school drop outs, unorganised workers.

- Appropriate programmes will be formulated so that the youth can articulate and represent their interests and will **aspire for vocational education**.

- The state government will create **web portal for youth** interested to go for skill training. Mobile technology will be used for better social networking, better engagement and collaboration with the prospective candidates.

- Institutional arrangement will be made for those in secondary and higher secondary schools to spend a couple of days in an innovative experience programmes on campuses of ITIs, Polytechnics, industries, specialised training facilities and others discovering the relevance of vocational education to themselves. This will focus on hands-on experience in manufacturing, office and service skills required in the real world.

- **Gram panchayats and urban local bodies** will provide information on skill opportunities as well as mobilise the youth through Self-Help Groups and other community based organisations. These local bodies will also identify and enrol youth interested in obtaining skills and facilitate the connection between the youth interested in obtaining skills and institutions providing employable skills. The existing database such as Socio-Economic Caste Census (SECC), 2014, will be utilised for identification and mobilisation of youth.

- Local bodies and civil society organisations will be involved to provide counselling and guidance to youth not only for creating aspirations and but also to reduce the attrition rates during the training. Skill missions at the grama panchayat, taluk and district levels will work as multipliers and facilitate counselling and guidance to the youth about various skilling programmes and opportunities.

- Appropriate steps will be initiated to involve industries in the assessment and provision of information on marketable skills on regular basis.

5.2 Aspirations among youth

- Vocational education is equated with blue-collar low status jobs. Consequently, status is given more importance as compared to income prospects that skill education provides. In addition, the structure of vocational education in India does not give an

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6 SECC has collected data pertaining to gender, age, educational qualification and occupation for each person in a household. This information can be utilized for the purposes of identification, mobilization and selection of youth for various skill programmes of the Department.
option to students to pursue general education possibilities at a future date. This lowers the likelihood of youth aspiring for vocational education.

- Youth also lack information on job opportunities available for specific types of training. Weak labour market links between vocational education providers and employers undermine the willingness of students to incur the resources for vocational education.

- High quality vocational education options will be made available to students. In addition, a premium in wages for skilled workers who have gone through formal vocational education courses will be institutionalized in collaboration with the industry. Minimum wages will be upwardly revised to make vocational education aspirational for the youth as well as the industry. Vocational education will be recast as a profession, with skills that need periodic upgrading and that command the respect as any professional.

- For any vocational course (one semester or above), an equivalence to general education will be notified.

- Pathways between vocational education and general higher education will be created. The state government will initiate necessary reforms in the education system at the middle and secondary school levels and in technical training in phased manner to achieve seamless integration of vocational education into the formal education system. Exposure to different skill streams to map the skills through aptitude tests and make choices will be introduced. The assessment and certification bodies will support the Boards of School Education to carry out reforms.

- Efforts to integrate skill education with general education will be made for making vocational education as continuous and lifelong learning, so that young people will aspire for vocational education and skill training programmes.

- Government will make efforts to bring skill training at par with general education system. Courses offered under skill development will have both theoretical and practical framework so that workers have complete knowledge. This will help them to seek the same promotional and pay packages as normal jobs offered in private and public sector.

- Initiatives will be taken up to introduce skilling as a subject at college and university levels by starting courses such as Bachelor of Vocational Studies to enable the students to have trans-disciplinary vertical mobility into those courses where the entry qualification is bachelor degree. Such a course, as decided by the UGC, will have multiple points of entry/exist and appropriate content of general education along with skills relating to a profession.

- Those youth who have gone to private schools, performed well academically and whose parents are relatively well educated are likely to assign low status to vocational education. Customised awareness campaigns directed at this group will be undertaken to address the negative perception associated with vocational education.

5.3 Standard curricula and courses
Karnataka Skill Development Authority will be set up to standardise the curricula and courses in line with market demand and quality parameters. If curricula are already available, these will be adapted or adjusted according to the market demand, and needs and preferences of trainees.
5.4 Policy interventions for skill training

5.4.1 Training infrastructure

- The quality of infrastructure within the existing ITIs, Polytechnics and other such institutions will be improved and the existing infrastructure will be put into good use for delivering training to large number of youth.
- The government will standardise and institutionalise private sector capacity by increasing the number and mix of skill training courses through means like public-private partnership, equity, grant and loan support from the Government of India. Private sector and CSR initiatives in skill training will also be encouraged.
- Industries will be encouraged to earmark funds for periodic skilling and up-skilling of personnel employed in the industry by utilising the space and infrastructure available in the government ITIs and polytechnics.
- Efforts will also be made to encourage industries to start training centres.
- Space available in community centres, schools, youth hostels, polytechnics or shop floors of industries will be utilised for practical training.
- Community Schools and e-learning platform will be created to address the issue of scaling up and capacity. Civil society organisations will be encouraged to set up community schools. In so far as e-learning platform is concerned, some proportion of curriculum of vocational education, mostly theory part, will be delivered through the internet.
- In order to reduce gender disparity, basic workshop subjects such as metal work, woodwork, technical drawing, and basic electricity will be made compulsory for both girls and boys.

5.4.2 Improving quality of training and capacity of teachers

- In line with the central government policy on the quality assurance framework, the state government will develop the quality criteria and align the same with the National policy at later point in time when it is finalised. The quality framework will set minimum standards and provide guidance for effective, valid, reliable, fair and transparent assessment in the context of NSQF. This would also facilitate certification and thereby improve status of skills training. Guidelines for accreditation of training providers based on training capabilities, infrastructure, and availability of trainers, ties with industry, etc., will be notified.
- To promote accountability among ITIs and assess their performance, ratings based on their outcome linked parameters will be applied.
- Industry will be encouraged to actively participate in designing curricula and standards for skill training courses, depute their industry members as faculty, make shop floor available for practical training and institutionalise paid apprenticeship. Workplace training will be promoted as part of overall skill curriculum aligned to NSQF and embedded in appropriate credit framework.
- For effective skill development, the link between demand for skills by employers and supply of quality skills is crucial. The government will provide incentives to those industries which are successful in establishing such a link.
- Preparing curriculum which is in sync with emerging market demands and aligned to latest NSQF. Qualification packs will be recommended by the sector mentor committees. The latest teaching aids will be promoted to disseminate quality training on a large scale. The curriculum will be revised once in every three years to accommodate the changes in the market, and in consultation with the industry.
• The policy visualises skilled and certified teachers so as to provide qualitative skills to students in Karnataka.
• A separate course for the teachers of vocational education, along the lines of B.Ed. will be started.
• Training and retraining program will be organised for the teachers of ITIs and Polytechnics so that they are updated on the current curriculum which have demand in labour market. A focused and restructured teachers training programme will cover certification, continuous skills up gradation, performance monitoring, rewards and recognition.
• Teachers will also be encouraged to spend sometime in the industry so that they are able to learn the technological advances made in the industry. ITIs and Polytechnics will be encouraged to appoint those working in the industry as part-time teachers and guest speakers from time to time.

5.4.3 Career guidance and Placement support Services
• Employment Exchange and Career Guidance Bureau will be set up for improving the employability of skilled youth.
• A strategy on career guidance and placement support services will be in place. A booklet on career opportunities will be periodically brought out to help skilled youth to obtain jobs.
• Industries will be encouraged to provide in-house training and made accountable for their placement.
• The focus will be on providing employable skills. Most of the jobs require knowledge of English language, basic IT and financial literacy. Effort will be made to prepare required module and integrate these courses along with life skills and soft skills to youth.
• The focus of the policy will be on placements since the most critical outcome of skill training is employment, wage or self-employment. Handholding, placement and post-placement support are critical. Employment tracking of individuals for at least one year post skill training will be made mandatory under all skill programmes.
• The Labour Management Information System will be set up to pool data from industries (both big and small) to assess the demand from time to time. With the help of these data, skilled workers will be placed accordingly.

5.4.4 Overseas employment
• Karnataka government will set up Overseas Employment Cell to tap the potential for overseas employment opportunities for skilled persons.
• In order to promote overseas employment, the government will make efforts to ensure that the curriculam of vocational education and content of skill training match international standards.
• Skilled workers interested in taking up overseas employment will be provided support in bridging the existing skills with those required, information on socio-economic conditions in the destination country, support to send their remittances to their families and so on.

5.4.5 Apprenticeship programme
• Apprenticeships will not only accelerate skill development but also help to tackle the problem of unemployability of youth. Apprenticeship programmes all over the world
have gained from increased productivity. Those completing an apprenticeship earned more than an average college graduate.

- Despite this, the apprenticeship programme in the state is still at the nascent stage (Annex 8) because the Apprenticeship Act of 1961 and amendments in 1973, 1986 and 1997 were prescriptive and did not work. This means that the employability of the skilled youth has declined as the industries could not employ youth having only bookish knowledge.
- Following amendments to the Act made in 2014, which create an enabling environment, the policy document visualises to make employers volunteers in the apprenticeship programmes and make customised programmes.
- Annually, 350,000 youth will be provided apprenticeship training.
- Efforts will be made to include more industries such as telecom, insurance, banking and finance, information technology, and civil aviation and retail trade.
- Industries having more than 40 workers will have to provide mandatory apprenticeship training to 2.5 to 10% of its staff.

5.4.6 Vocational training for school dropouts

- The vocational training will be organised through various private Skill Development Centers (SDC) or Vocational Training Providers (VTPs). The policy visualises that SDCs or VTPs will be promoted by: i) NGOs; ii) Private Engineering/ Polytechnic/ ITI colleges; iii) Corporate houses directly or through CSR; iv) Public Sector Undertakings; v) Religious trusts or organisations; and, vi) Private skill experts.
- The above may be helpful to boys as they may be more forthcoming in attending training by SDCs or VTPs. For girls, decentralised training arrangement will be made.
- The policy will promote training capacity by identifying at least one SDC or VTP in each of 176 taluks in Karnataka for imparting training in the identified trades.
- The policy visualises strong interface between DET and SDCs/VTPs wherein the former arranges to provide the necessary support to the latter in (i) making the standard curricula and courseware available to all at all the time, (ii) developing and using monitoring tools, (iii) arrange for capacity development of SDC/VTP trainers so as to improve the quality of delivery, and (iv) assessment of certification of the trainees.
- DET, GoK, will assess skills imparted and award certificates to those trained by SDCs or VTPs for their career advancements in line with NSQF equivalent certification.

6. Entrepreneurship Development and Livelihood promotion policies

Policies to provide skills for entrepreneurship and livelihood require different focus and strategy, and hence, these are separately discussed below.

Skills for entrepreneurship development

Policies for successful entrepreneurship development among youth are below.

- Efforts will be made to identify potential and early stage entrepreneurs from among those attending formal skilling courses as well as others. In order to educate and equip them, entrepreneurship education curricula will be developed by learning from the available education content.
- The Department will provide entrepreneurship curriculum to aspiring entrepreneurs with the help of ICT. Tracking of those learning through web-based teaching of

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7 As per new NSQF guidelines, those who have dropped out from school and informally skilled can approach Sector Skill Councils (SSCs).
entrepreneurship training will be done to monitor and include those belonging to socially and economically marginalised groups. These groups will be prioritised in the provision of training inputs.

- Colleges and universities, both public and private, will be encouraged to start entrepreneurship courses.
- Web and mobile based platforms will be created for the students and budding entrepreneurs to connect with the ecosystem of entrepreneurship. Such a platform will be helpful not only to find opportunities for skill training but also for other services such as credit.
- Karnataka government will encourage the creation of new incubators and scaling up of the existing incubators through appropriate support.
- State-wide network of Entrepreneurship Hubs (E-Hubs) will be set up to provide guidance and extend support to entrepreneurs such as delivery of services as part of the state programme on entrepreneurship and other resources.
- The government will undertake steps to rationalise business procedures and regulations to improve ease of doing business. The Government will constitute a committee to arrive at the procedures and regulations.
- Access to institutional finance is key for the success of business. The government will initiate steps to ensure the flow of adequate and timely credit to budding entrepreneurs by strengthening coordination between entrepreneurs and banks/other financial institutions.

Livelihood promotion policies

- The identified vocational training programs can be organised by involving private vocational training providers, NGOs, religious and charitable organisations and by the industry through CSR initiatives. Mobile training services will also be used wherever it is necessary.
- Policies to increase in training capacity will be implemented by identifying adequate training providers to all the villages and localities in Karnataka for imparting training or re-skilling or up-skilling in the identified trades. The government also visualises the use of mobile training services and Learning Network approaches for improving the training capacity.
- The government will make the standard curricula and courseware and monitor the training providers. It will also assess the process of certification of the trainee.
- The government will adopt mobile training service approach because such an approach: i) makes vocational education and training available where the trainees work and live; ii) is suitable particularly for target groups in remote rural areas; iii) makes it possible to organise in terms of time and place so as to best suit the needs and constraints of the target group in the informal sector; iv) can offer both formal and non-formal and further training courses; and, v) benefits women, girls and other disadvantaged groups as they do not have to travel and incur transaction costs.
- LearnNet approach\(^8\) will be adopted, where it is required, as it empowers the disadvantaged people. In order to minimise barriers as a result of distance or social restrictions, it will be applied where people live and work such as worksite of construction workers.

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\(^8\) The Learning Networks Approach (LearnNet) is a solution led approach that seeks appropriate group learning solution to an existing problem or need. The objective of learning networks is to increase participant’s social and human capital. LearnNet is designed to offer everyone access to organised leaning.
• Government will introduce measures to impart \textit{green skills}\footnote{Green skills will contribute to resource efficient technologies and expansion in the use of renewable energy. The green jobs help to protect ecosystems by reducing energy, materials and water consumption through high efficiency strategies. Examples of green skills are a rural person practising sustainable farming, a plumber installing water-recycling systems.} for sustaining the livelihoods of workers in the unorganised sector so that they can work their way out of poverty and contribute to greener planet.

• The government will introduce the \textit{Recognition of Prior Learning (RPL)} for unorganised workers for strengthening and certifying their skill base. Checklists for various trades in consultation with industry will be prepared. The government will pre-assess competencies based on checklists and provide both theoretical and practical training sessions. The government will facilitate formal recognition of skills/competencies acquired through non-formal and informal channels among workers in the unorganised sector by institutionalising this and giving wide publicity. Policies to include women and those belonging to disadvantaged groups will be introduced.

• The efforts of training providers in the skill development initiatives will be recognised and mentorship support through NSDC to scale and create sustainable models for skill development for Green jobs (agriculture/allied, horticulture, renewable energy, recycling, eco-tourism etc.), Grey jobs (informal manufacturing and services), and local trades especially will be promoted.

\textbf{Cluster development}

• Many youth in Karnataka have been deriving livelihood in agriculture, livestock, small manufacturing including handicraft activities. However, they do not receive sustainable livelihood.

• In view of this, the government will take up vocational cluster for the development of agriculture, livestock, handicrafts and arts to secure the livelihoods of the poor. The vocational cluster will be a regional entity bringing together the public and private training providers active in such field to meet the skill needs of the cluster.

• The policy visualises the provision or upgradation of skills for the workers in such a cluster. The skill provision will focus on improving the productive capacity of the workers, modernisation of their activities, modernising the market, linking them with outside markets including overseas markets.

• Pilot projects will be initiated on the above for learning and scaling up.

7. Institutional framework

Organogram indicating the structure for Karnataka Skill Mission (KSM) is provided in Chart 2.

7.1 Governing Council

Karnataka Skill Mission will be governed by a council headed by the Chief Minister. The main functions of the \textit{Governing Council} are to: i) Provide overall guidance and policy direction; ii) Decide on Sub-Missions in high priority areas; iii) Review overall progress and development of Mission activities; iv) Oversee convergence of all skill development initiatives/ schemes across Ministries/ Departments with Mission objectives; and, v) Selection of beneficiaries and supervision under any of the Skill Development Programmes in the State.
run by any department. The Governing Council will be supported by Technical Advisory Group(s) consisting of individuals with expertise in the field to advice and handhold the setting up the new Skill Development, Entrepreneurship and Livelihood Department for the first two years.

7.2 Executive Committee

Executive Committee, functioning under the Governing Council, will: a) Act as empowered committee; b) Ensure implementation as per Governing Council decisions / directions; c) Set targets and approve annual Mission Plan; and d) Review overall progress of Mission activities on a quarterly basis.

7.3 Mission secretariat

The Additional Chief Secretary/ Principal Secretary/ Secretary, Skill Development, Entrepreneurship and Livelihood Department, will act as State Mission Chief and will be supported by a Secretariat and three Commissionerates/ Organizations. The functions of Mission Secretariat are to: i) Implement and Monitor Mission activities; ii) Coordinate implementation of Governing Council and Executive Committee decisions; iii) Coordinate State efforts and Submissions; and iv) Coordinate implementation of Skill programs.

7.4 Skill Policy Cell

Skill Policy Cell consisting of experts in the field will assist the Mission Secretariat and act as a think tank in taking policy decisions. With the help of various Technical Advisory Groups, the Cell will draft concept notes, terms of reference, agreements, memoranda, cabinet notes, policy briefs and other relevant documents to establish new institutions and functioning of the Mission.

7.5 Karnataka Skill Development Authority

Karnataka Skill Development Authority consisting of senior retired officers will deal with subjects like Standardization, Certification, Assessment, Curriculum Development, Training of Trainers, National Skill Qualification Framework, National Council for Vocational Training etc. Sectoral Skill Council, State Apprenticeship Council, etc. will be brought under this regulatory authority.

7.6 Commissioner for Industrial Training and Employment

The Commissioner for Industrial Training and Employment will administer and manage Industrial Training Institutes and other Skill Development Institutes. Skill Procurement Agency, Skill Bureau, Employment Exchange and Career Guidance Bureau and Overseas Employment Cell will come under this organization.

7.7 Commissioner for Entrepreneurship and Livelihood

Commissioner for Entrepreneurship and livelihood will be created by re-organising and shifting National Rural livelihood Mission and National Urban Livelihood Mission. CEDOK and RUDSETI will provide support in the Entrepreneurship Department. The functions of the Commissioner are Entrepreneurship Development, incubation centre, banking and finance interface, backward forward linkages, outreach and publication, livelihood development, collectivization and empowerment, informal sector skilling.
Chart 2: Organisational Structure

HON’BLE CHIEF MINISTER

Skill Mission Governing Council

Skill Mission General Body

Skill Mission Empowered Committee

Chief Secretary

Skill Mission Society Executive Committee

Skill Policy Cell

Additional Chief Secretary

Skill Development Entrepreneurship and Livelihood

Karnataka Skill Development Authority

Commissioner Employment & Training

Commissioner Entrepreneurship & Livelihood

NSQF & SCVT Board

Institute for Vocational Curriculum Training & Research (Devraj Urs Institute of Skill Research Curriculum and Training)

ITI

Sectoral Skill Council

State Apprentice-ship Council

Skill Procurement Agency

Overseas Employment Cell

Other Skill Development Institutions

GTTC

RUDSETI

NRLM

NULM

CEDOK

Other Skill Development Institutions

GTTC

Employment Exchange and Career Guidance Bureau

SHG: Backward forward Linkages.

District Skill Mission

Taluka Skill Mission

Gram Panchayath Skill Mission

Deputy Commissioner of the District as Implementing and enforcing Authority

Trainer’s Training Institution

Institute for Vocational Curriculum Training & Research (Devraj Urs Institute of Skill Research Curriculum and Training)

Commissioner Employment & Training

Commissioner Entrepreneurship & Livelihood

RUDSETI

Incubation Centres

SHG: Backward forward Linkages.
7.8 Karnataka Skill Qualification Frame Work and State Council for Vocational Training Board

Currently, the Department of Employment and Training conducts examination for ITI students undergoing Skill Training in its various Institutes. For ITIs, Trades/ Courses which are affiliated to NCVT, the exams are conducted under a semester scheme with the Schedule of examination, question papers being printed and issued by DGET, GoI. The Department provides all logistics support in terms of Examination centres, deployment of examination personnel and conduct of examination as per the schedule. Valuation of papers (objective type) is done by agencies appointed by DGET, GOI and practical examination marks papers are valued by Departmental Officers and the marks uploaded on the Examination Portal of Government of India. In case of ITIs affiliated and functioning under the State Board, the above is taken care entirely by the department.

In case of short term / Modular Skill Training courses taken up under the Modular Employable Scheme (MES) assessment is done by agencies empanelled by Government of India and NCVT certificates issued.

Separate NSQF and SCVT Examination Board will be set up for independent conduct of examinations in respect of all skill training undertaken in the state and for issue of necessary certification and it will be developed as International Level Institute. This board will also undertake capacity building on National Skill Qualification Framework and facilitate its compliances and implementation in the state. This board will also undertake affiliation of SCVT recognized institutions. In due course, it will become self reliant in its finances by charging a fee for SCVT affiliation, NSQF trainings and conduct of various examinations and certification courses.

7.9 State Skill Information Bureau

The State Skill Information Bureau will collect information on skill infrastructure available under public and private sectors to utilize them fully and avoid investment under infrastructure by the public sector. This bureau will forecast skills needed by collecting data through skill surveys and determining skill gaps. It will also develop methodology in collecting data and its processes in respect of all subjects related to demand and supply of skilled human resources.

The objectives of Integrated Statistical Information System are to:

- Establish Statistical Business Framework and Architecture, Statistical Infrastructure
- Suitably design, build and development system to collect, process, analyze and disseminate information
- Establishing an ICT environment that will drive and guide future department’s ICT Strategy in respect of above activities
- Establishing Business Intelligence, Analytics and Enterprise Data warehouse System
- Improve Statistical quality and operations
- Improve the management and development of human resources with changed environment
- Monitoring and Evaluation of the activities of the Department.
- Establishing web based online system for collection, processing, analyzing and disseminating data/ information.
• Establishment of hassle free online registration of government and private entities involved in education, skilling, placement under legal framework to be established (under State Business Register).
• Undertaking Gap Analysis – Skills available Vs Skills required as per the industrial requirement, Skill Development agencies Vs Capacity Vs Skill Development, etc.
• Forecasting skill and infrastructure requirement.

7.10 Monitoring Skill Development, Entrepreneurship and Livelihood activities
A unified system will be put in place for monitoring the Skill Development, Entrepreneurship and Livelihood Department activities. To avoid duplication and exclusion and inclusion errors, UID compliant system will be built. Selection of beneficiaries for all the skill development programmes of all the departments will be through the Gram / Ward Sabha. Web based monitoring system will be in place under Integrated Statistical Information System. The flow of information will be from grass roots level (Village level) to the State level and vice versa. System will be evolved to ensure every eligible aspirant in the state to provide at least one opportunity for skill development in the programme. Second round of training for any aspirant will be possible only after the first round of training for everyone else is completed. A concurrent evaluation system will be put in place to ensure every aspect of the skill development programmes are evaluated exhaustively.

7.11 Skill Research, Education and Training Institute
There is a need to establish a separate Skill Research, Education and Training Institute on the lines of DSERT in Education Department to undertake development of curriculum, pedagogy, books, training tools, teaching learning material and to do research in Vocational Education. This becomes particularly important given that hardly any department or institution in Government of Karnataka is undertaking any research or curriculum development for skill development. In the long term, these capacities are required for developing new curriculum and training modules based on the changing needs of the industries.

Devaraj Urs Institute of Skill Research, Curriculum and Training is established, for this purpose, under Public Private Partnership (PPP) mode to set up advanced centres in certain industries willing to partner for developing Centre of Excellence in their premises on any specialized sectoral skill. Resources of this institution will be augmented by Public Private Partnership and corporate social responsibility endowments.

7.12 Skill procurement agency
Skill procurement agency will be set up for procurement of goods and services required by the state in the skilling sphere. The agency will assess the skill infrastructure, training quality and expertise of private Vocational Training Providers (VTP) and select those meeting certain bench marks and have domain expertise and adequate infrastructure in Karnataka. The services of VTPs will be utilised for providing modular / short term skill training programmes.

7.13 Sub-state level skill missions
At sub-state level, there are three missions: District Skill Mission, Taluk Panchayat Skill Mission and Gram Panchayat Skill Mission. The structure and functions of these missions is discussed below.
The District Skill Mission will be constituted under the Chairpersonship of the Deputy Commissioners of Districts. The District level officers of concerned Departments and District lead Bank Managers will be members of the Mission. The Project Director DRDA / Deputy Secretary (Development), Zilla Panchayat of the concerned District will be the Member Secretary. The Functions of the District Skill Mission are: i) Planning, Monitoring, implementation of the Skill Development, Entrepreneurship and Livelihood activities; ii) Establishment of Backward-Forward linkages; and iii) Inter Departmental Coordination; and iv) Any other subject pertaining to Skill Development, Entrepreneurship and Livelihood Department assigned by the Karnataka Skill Mission.

The Taluk Panchayat Skill Mission will be constituted under the Chairpersonship of the Executive Officer, Taluk Panchayat of the Concerned Taluk. The Taluk level officers of concerned Departments will be members of the Mission. The Assistant Director, Taluk Panchayat of the concerned Taluk will be the Member Secretary. The Functions of the Taluk Panchayat Skill Mission are: a) Planning, Monitoring, implementation of the Skill Development, Entrepreneurship and Livelihood activities at Taluk level; b) Establishment of Backward-Forward linkages; iii) Inter Departmental Coordination; and iv) Any other subject pertaining to Skill Development, Entrepreneurship and Livelihood Department assigned by the Karnataka Skill Mission and District Skill Mission of the concerned District.

The Gram Panchayat Skill Mission will be constituted under the Chairpersonship of the Adhyaksha of the Gram Panchayat. The Village level/ Sub Taluk level officers of concerned Departments will be members of the Mission. The Panchayat Development Officer, Gram Panchayat of the concerned Gram Panchayat will be the Member Secretary. A District level officer will be nominated by the District Commissioner to facilitate the functioning of the Gram Panchayat Skill mission as per the guidance of the District Commissioner. The main Functions of the Gram Panchayat Skill Mission are: i) Planning, Monitoring, implementation of the Skill Development, Entrepreneurship and Livelihood activities at Village level; ii) Establishment of Backward-Forward linkages; iii) Inter Departmental Coordination; iv) Selection of beneficiary of various schemes and maintenance of unified database; and v) Any other subject pertaining to Skill Development, Entrepreneurship and Livelihood Department assigned by the Karnataka Skill Mission and District Skill Mission of the concerned District.

7.14 Selection of beneficiaries

The criteria of SECC following in the inclusion and exclusion of target group will be adopted to select the beneficiaries for schemes on skill development, entrepreneurship and livelihood. The criteria on inclusion are: Households without shelter, Destitute/ living on alms, Manual scavengers, Primitive tribal groups and Legally released bonded labourers. The criteria for exclusion include: i) Motorized two/three/four wheeler/ fishing boat; ii) Mechanized three/four wheeler agricultural equipment; iii) Kisan Credit Card with credit limit of Rs. 50,000 and above; iv) Household with any member as a Government employee; v) Households with non-agricultural enterprises registered with the Government; vi) Any member of the family earning more than Rs. 10,000 per month; vi) Paying income tax; vii) Paying professional tax; viii) Three or more rooms with all rooms having pucca walls and roof; ix) Own a refrigerator; x) Own Landline phone; xi) Own 2.5 acres or more of irrigated land with at least one irrigation equipment; xii) 5 acres or more of irrigated land for two or more crop seasons; and xiii) Owning at least 7.5 acres of land or more with at least one irrigation equipment.
7.15 Monitoring and Impact Evaluation
The department will undertake regular and rigorous monitoring and impact evaluation of initiatives of the government or other stakeholders such as industry, international agencies and so on for the purpose of scaling up of the best practices and introducing periodic corrective measures. Such a mechanism will aim to assure all the stakeholders of speed, transparency and growth, and will use ICT extensively. An exclusive monitoring unit will be set up to review the progress of various initiatives. This unit will be mandated to analyse the reports received from the field and provide feedback to all the stakeholders with suggestions for improvements. The impact of the policy will be assessed through a concurrent evaluation study. In addition, the government can also hire reputed research organisations to undertake the impact evaluation with the help of rigorous research methodology.

8. Funding
The policy visualises skill development for 188 lakh youth to enable them obtain decent employment, start entrepreneurship and secure their livelihood. Of 188 lakhs, formal professional education (through ITIs, Polytechnics etc.) will be provided to 32 lakhs. Short-term vocational education (through NRLM, NULM and so on) will be provided to 27 lakhs. Thus, 59 lakh youth will be trained during the period 2017 to 2030 by fully utilising the existing capacity created by the government (Annex 9).

In addition, apprentice training is expected to be provided to 17 lakh persons together with industries in the state.

The above implies that there is need to provide vocational education to 112 lakhs of youth. Keeping the estimates of NSDC on sector-wise incremental demand, it is estimated that 48 lakhs of youth will need long-term (i.e., six-month) skill training, while 64 lakhs will need short-run (i.e., three-month) skill training (Annexe 10). At the rate of Rs. 50,000 for long-run skill training per one person, the total fund required is Rs. 24,182 crores for the period 2017 to 2030. At the rate of Rs. 35,000 for short-run skill training per one person, the total fund required is Rs. 22,226 crores. Thus, the total fund required to provide the skill training (both short and long-run) is Rs. 46,407 crores. On an average, Rs. 3315 crores of funds per year are required to provide both short and long-run training.

The skill development policy recognises that the government is a major contributor to the funding on vocational education and skills, and will use funding available in the state and central government sponsored schemes. The international norm is to allocate 6% of GDP on general education, and 1-2% on vocational education and training given the immense importance that this education has on employability of the workforce. The government will allocate one percent of its GSDP (current prices) on vocational education and training which amounts to Rs. 7800 crores per year. This will be utilised for providing skill training to all including the youth and also meeting the expenditure on curricula development and quality, monitoring, administration and so on.

It will, however, initiate efforts to move away from subsidy driven to market driven policy. Towards this, it will explore the following.

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10 This figure excludes 32 lakh persons who are expected to obtain apprenticeship after they have completed formal professional vocational education through ITIs, Polytechnics.
• Efforts will be made to make employment in the manufacturing and services attractive by facilitating an increase in the minimum wages in the state as this will positively influence the payment of fees and attract private capital on investment on the creation of training infrastructure.
• The government will encourage the students to avail bank loans in line with the philosophy of ‘learn, earn and pay’ and facilitate the necessary enabling environment.
• The possibility of financing the vocational education by providing study loans, vouchers, training credits. It will also explore end user funding model or a basic fee paying model for funding training activities.
• In order to enable the poor and disadvantaged to obtain formal skills, the government will promote grant of scholarships and vouchers.
• The government will encourage ITIs and others to undertake activities such as conducting training programmes for private companies, renting out the space for skill development programmes and so on internal resource generation.
• The government will encourage the industry to spend their CSR funds on skill development.
• The government will explore the possibility of introducing levies for creating a special fund, from which resources are spent only for skill development activities.
• The policy will also explore the possibility of vocational training funds, which are an instrument for reforming initial and further education and training systems with the objective of making these more demand oriented and creating incentives for industries.
• Financial support from international (multi-lateral and bilateral) agencies for skill development initiatives will be explored.
• Multi-lateral and bilateral aid agencies will be approached to start pilot projects on innovative policies suggested.
Annex 1: Distribution of the total workforce in Karnataka by sectors

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Workforce in crores</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture &amp; Allied</td>
<td>1.36</td>
<td>55.7</td>
</tr>
<tr>
<td>Manufacturing &amp; Mining</td>
<td>0.27</td>
<td>11.1</td>
</tr>
<tr>
<td>Shops &amp; Establishments / Trade</td>
<td>0.22</td>
<td>9.0</td>
</tr>
<tr>
<td>Construction</td>
<td>0.17</td>
<td>7.0</td>
</tr>
<tr>
<td>Information Technology / Biotechnology</td>
<td>0.10</td>
<td>4.1</td>
</tr>
<tr>
<td>Real Estate, Renting &amp; Business Activities</td>
<td>0.06</td>
<td>2.5</td>
</tr>
<tr>
<td>Hotels &amp; Restaurants</td>
<td>0.05</td>
<td>2.0</td>
</tr>
<tr>
<td>Others</td>
<td>0.21</td>
<td>8.6</td>
</tr>
<tr>
<td>Total</td>
<td>2.44</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Karnataka Economic Survey, Department of Labour & Employment.

Annex 2: Population pyramid of youth (16 to 35 years) in Karnataka in 2011

Source: Computed from Census 2011
## Annex 3: Incremental demand in Karnataka, 2012 to 2022

<table>
<thead>
<tr>
<th>Sector</th>
<th>Minimally skilled</th>
<th>Semi-skilled</th>
<th>Skilled</th>
<th>Highly skilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture and allied</td>
<td>1,347,995</td>
<td>201,480</td>
<td>36,658</td>
<td>32,370</td>
</tr>
<tr>
<td>Auto and Auto component</td>
<td>5,830</td>
<td>37,893</td>
<td>11,660</td>
<td>2,915</td>
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<tr>
<td>BFSI</td>
<td>-</td>
<td>161,782</td>
<td>80,891</td>
<td>26,964</td>
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<tr>
<td>Building, Construction industry and Real Estate</td>
<td>409,450</td>
<td>682,417</td>
<td>204,725</td>
<td>68,242</td>
</tr>
<tr>
<td>Chemicals &amp; Pharmaceuticals</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,927</td>
</tr>
<tr>
<td>Construction Materials and Building Hardware</td>
<td>9,576</td>
<td>62,244</td>
<td>19,152</td>
<td>4,788</td>
</tr>
<tr>
<td>Education and Skill Development</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>341,190</td>
</tr>
<tr>
<td>Electronics and IT hardware</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>777</td>
</tr>
<tr>
<td>Food Processing</td>
<td>12,425</td>
<td>12,425</td>
<td>12,425</td>
<td>4,142</td>
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<tr>
<td>Furniture and Furnishings</td>
<td>8,850</td>
<td>8,850</td>
<td>3,319</td>
<td>1,106</td>
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<tr>
<td>Healthcare Services</td>
<td>61,998</td>
<td>433,983</td>
<td>123,995</td>
<td></td>
</tr>
<tr>
<td>IT &amp; ITES</td>
<td>-</td>
<td>715,469</td>
<td>643,922</td>
<td>71,547</td>
</tr>
<tr>
<td>Media and Entertainment</td>
<td>40,831</td>
<td>10,208</td>
<td>11,272</td>
<td>3,403</td>
</tr>
<tr>
<td>Organised Retail</td>
<td>234,536</td>
<td>164,175</td>
<td>35,180</td>
<td></td>
</tr>
<tr>
<td>Textile and Clothing</td>
<td>29,850</td>
<td>89,550</td>
<td>22,387</td>
<td>7,462</td>
</tr>
<tr>
<td>Transportation, Logistics, Warehousing and Packaging</td>
<td>371,027</td>
<td>127,940</td>
<td>127,940</td>
<td>12,794</td>
</tr>
<tr>
<td>Tourism, Travel, Hospitality &amp; Trade</td>
<td>271,237</td>
<td>135,619</td>
<td>27,124</td>
<td></td>
</tr>
<tr>
<td>Unorganised</td>
<td>18,026</td>
<td>18,026</td>
<td>1,803</td>
<td></td>
</tr>
<tr>
<td>Mining</td>
<td>-</td>
<td>7,514</td>
<td>1,252</td>
<td>1,252</td>
</tr>
<tr>
<td>Total</td>
<td>8,476,134</td>
<td>3,602,794</td>
<td>2,146,864</td>
<td>442,248</td>
</tr>
</tbody>
</table>

*Source: District wise skill gap study for the State of Karnataka.*

## Annex 4: Major employment sectors as per skill development by 2030

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Number</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tourism, (Until 10 to 15 working population)</td>
<td>50,00,000</td>
<td>30.12</td>
</tr>
<tr>
<td>Information Technology/ Biotechnology, Environmental Science</td>
<td>40,00,000</td>
<td>24.10</td>
</tr>
<tr>
<td>Construction</td>
<td>20,00,000</td>
<td>12.05</td>
</tr>
<tr>
<td>Human Resource exports</td>
<td>15,00,000</td>
<td>9.04</td>
</tr>
<tr>
<td>Education</td>
<td>10,00,000</td>
<td>6.02</td>
</tr>
<tr>
<td>High-Tech Industries (Small and Medium)</td>
<td>10,00,000</td>
<td>6.02</td>
</tr>
<tr>
<td>High-Tech Agriculture/ Gardening, Animal Husbandry and Food Processing</td>
<td>10,00,000</td>
<td>6.02</td>
</tr>
<tr>
<td>Health care</td>
<td>5,00,000</td>
<td>3.01</td>
</tr>
<tr>
<td>Banking, Finance, Insurance, etc.</td>
<td>3,00,000</td>
<td>1.81</td>
</tr>
<tr>
<td>Textiles</td>
<td>3,00,000</td>
<td>1.81</td>
</tr>
<tr>
<td>Total</td>
<td>166,00,000</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: Karnataka Knowledge Commission, Vision 2030.*
### Annex 5: Sectors and districts with concentration of incremental demand

<table>
<thead>
<tr>
<th>Sector</th>
<th>Incremental employment 2012-22 (%)</th>
<th>Name of the district</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IT &amp; ITES</strong></td>
<td>1,430,938 16.88</td>
<td>1. Bangalore (R) 2. Bangalore (U) 3. Mysore</td>
</tr>
<tr>
<td><strong>Building, Construction industry and Real Estate</strong></td>
<td>1,364,835 16.10</td>
<td>1. Bangalore (R) 2. Bangalore (U) 3. DakshinaKannada</td>
</tr>
<tr>
<td><strong>Transportation, Logistics, Warehousing and Packaging</strong></td>
<td>639,702 7.55</td>
<td>1. Bangalore (R) 2. Bangalore (U) 3. DakshinaKannada</td>
</tr>
<tr>
<td><strong>Healthcare Services</strong></td>
<td>619,975 7.31</td>
<td>1. Bangalore (R) 2. Bangalore (U) 3. DakshinaKannada 4. Mysore</td>
</tr>
<tr>
<td><strong>Education and Skill Development</strong></td>
<td>379,100 4.47</td>
<td>1. Bangalore (R) 2. Bangalore (U) 3. DakshinaKannada 4. Dharward</td>
</tr>
<tr>
<td><strong>Organised Retail</strong></td>
<td>269,636 3.18</td>
<td>1. Bangalore (R) 2. Bangalore (U) 3. DakshinaKannada 4. Mysore</td>
</tr>
<tr>
<td><strong>Furniture and Furnishings</strong></td>
<td>22,125 0.26</td>
<td>1. Bangalore (R) 2. Bangalore (U)</td>
</tr>
<tr>
<td><strong>Electronics and IT hardware</strong></td>
<td>15,535 0.18</td>
<td>1. Bangalore (R) 2. Bangalore (U)</td>
</tr>
<tr>
<td><strong>Mining</strong></td>
<td>12,523 0.15</td>
<td>1. Bellary 2. Chamarajanagara 3. Gulbarga &amp; Yadgir 4. Tumkur</td>
</tr>
<tr>
<td><strong>Chemicals &amp; Pharmaceuticals</strong></td>
<td>9,634 0.11</td>
<td>1. Bangalore (R) 2. Bangalore (U) 3. Mysore</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>8,476,134 100.0</td>
<td></td>
</tr>
</tbody>
</table>
## Annex 6: Educational Infrastructure in Karnataka

<table>
<thead>
<tr>
<th></th>
<th>No. of institutions</th>
<th>Enrolment capacity</th>
<th>Enrolment</th>
<th>Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SCHOOL EDUCATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSLC</td>
<td>15,140</td>
<td>17,74,264</td>
<td>8,87,132</td>
<td>6,85,152</td>
</tr>
<tr>
<td><strong>JUNIOR COLLEGES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PUC</td>
<td>4,789</td>
<td>6,43,532</td>
<td>5,16,506</td>
<td>3,69,479</td>
</tr>
<tr>
<td><strong>DEGREE LEVEL COURSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BE/ B. Tech/ B. Architect</td>
<td>206</td>
<td>93,365</td>
<td>69,974</td>
<td>50,834</td>
</tr>
<tr>
<td>BA</td>
<td></td>
<td>1,38,893</td>
<td>1,38,893</td>
<td>77,284</td>
</tr>
<tr>
<td>B.Sc.</td>
<td></td>
<td>30,344</td>
<td>30,344</td>
<td>21,451</td>
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<tr>
<td>B.Com./ BBM</td>
<td></td>
<td>1,20,175</td>
<td>1,20,175</td>
<td>77,395</td>
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<tr>
<td>Agriculture/ Veterinary doctor/ Horticulture</td>
<td>29</td>
<td>2,921</td>
<td>2,680</td>
<td>2,231</td>
</tr>
<tr>
<td>MBBS/ Nursing/ Dental doctor/ AYUSH/ Pharma</td>
<td>512</td>
<td>32,551</td>
<td>24,063</td>
<td>16,670</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,479</td>
<td>4,18,249</td>
<td>3,86,129</td>
<td>2,45,865</td>
</tr>
<tr>
<td><strong>FORMAL PROFESSIONAL EDUCATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polytechnic</td>
<td>295</td>
<td>75,000</td>
<td>60,000</td>
<td>49,000</td>
</tr>
<tr>
<td>ITI</td>
<td>1777</td>
<td>1,06,000</td>
<td>73,000</td>
<td>59,000</td>
</tr>
<tr>
<td>D.Ed./D.Ped/Pre Primary Trg / Hindi Shikshak</td>
<td>78</td>
<td>16,986</td>
<td>16,986</td>
<td>7,404</td>
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<tr>
<td>Commerce / Arabic / Open School / Computer</td>
<td>140</td>
<td>19,957</td>
<td>19,957</td>
<td>11,861</td>
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<tr>
<td>Drama/Film Acting / Music</td>
<td>53</td>
<td>11,152</td>
<td>11,152</td>
<td>9,356</td>
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<tr>
<td>Drawing Grade</td>
<td>241</td>
<td>38,914</td>
<td>38,914</td>
<td>38,914</td>
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<tr>
<td>Nursing/ Health/ Pharma</td>
<td>783</td>
<td>13,886</td>
<td>10,548</td>
<td>7,027</td>
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<tr>
<td>Agriculture/ Horticulture</td>
<td>13</td>
<td>50</td>
<td>50</td>
<td>36</td>
</tr>
<tr>
<td>Leather/Plastic/ Others</td>
<td>2</td>
<td>2,065</td>
<td>1,947</td>
<td>418</td>
</tr>
<tr>
<td>GTTC</td>
<td>21</td>
<td>1,210</td>
<td>843</td>
<td>682</td>
</tr>
<tr>
<td>KGTTI (Karnataka German Technical training)</td>
<td>4</td>
<td>2,456</td>
<td>2,456</td>
<td>659</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,407</td>
<td>287,676</td>
<td>235,853</td>
<td>184,357</td>
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<tr>
<td><strong>SHORT TERM VOCATIONAL EDUCATION/ INFORMAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textiles</td>
<td>36</td>
<td>19,523</td>
<td>19,523</td>
<td>19,523</td>
</tr>
<tr>
<td>Technical education</td>
<td>91</td>
<td>40,000</td>
<td>15,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Karnataka Vocational Training and Skill Development Corporation (MES Centres)</td>
<td>213</td>
<td>25,000</td>
<td>16,000</td>
<td>16,000</td>
</tr>
<tr>
<td>National Rural Livelihood Mission (NRLM) (DDUGKY)</td>
<td>77</td>
<td>17,500</td>
<td>2,322</td>
<td>2,322</td>
</tr>
<tr>
<td>National Urban Livelihood Mission (NULM)</td>
<td>323</td>
<td>45,000</td>
<td>22,000</td>
<td>8,336</td>
</tr>
<tr>
<td>Women Development Corporation</td>
<td>6,590</td>
<td>3,833</td>
<td>3,833</td>
<td></td>
</tr>
<tr>
<td>Construction academy centre</td>
<td>12</td>
<td>30,000</td>
<td>3,000</td>
<td>3,000</td>
</tr>
<tr>
<td>Leather</td>
<td>1</td>
<td>564</td>
<td>564</td>
<td>564</td>
</tr>
<tr>
<td>Motor vehicle driving</td>
<td>176</td>
<td>401</td>
<td>401</td>
<td>401</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>929</td>
<td>184,578</td>
<td>82,643</td>
<td>68,979</td>
</tr>
</tbody>
</table>

Source: Department of Skill Development, Entrepreneurship and Livelihood, Karnataka Government.
Annex 7: Year-wise estimates of target groups (in Lakhs) for the period of 2017-2030

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock</td>
<td>6.30</td>
<td>6.30</td>
<td>6.30</td>
<td>6.30</td>
<td>6.30</td>
<td>4.65</td>
<td>4.65</td>
<td>4.65</td>
<td>4.65</td>
<td>4.65</td>
<td>4.65</td>
<td>4.65</td>
<td>4.65</td>
<td>4.65</td>
<td>75.00</td>
</tr>
<tr>
<td>Illiterate &amp;</td>
<td>3.36</td>
<td>3.32</td>
<td>3.29</td>
<td>3.26</td>
<td>3.19</td>
<td>3.16</td>
<td>3.13</td>
<td>3.10</td>
<td>3.07</td>
<td>3.04</td>
<td>3.01</td>
<td>2.98</td>
<td>2.95</td>
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<td>44.06</td>
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<td>below secondary</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary &amp;</td>
<td>1.81</td>
<td>1.83</td>
<td>1.85</td>
<td>1.87</td>
<td>1.91</td>
<td>1.93</td>
<td>1.95</td>
<td>1.97</td>
<td>1.98</td>
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<td>2.02</td>
<td>2.04</td>
<td>2.07</td>
<td>2.07</td>
<td>27.13</td>
</tr>
<tr>
<td>higher secondary</td>
<td></td>
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<td></td>
<td></td>
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Annex 8: Apprenticeship programme in Karnataka

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Source: Department of Skill Development, Entrepreneurship and Livelihood, Karnataka Government.
### Annex 9: Year-wise estimates of youth to be provided with formal professional education and short-term vocational education

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### Annex 10: Year-wise estimates on sector-wise requirement of short and long-run skill training

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### Annex 11: Estimated expenditure (Rs. Crores) on short and long-run skill training in Karnataka

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