



# Skilling for the Future

Skill Gap Assessment & Action Plan for Tamil Nadu

# District Skill Development Plan for Dindigul

November 2019



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# List of Abbreviations

S.No	Abbreviation	Expansion
1.	ASER	Annual Status of Education Report
2.	ASI	Annual Survey of Industries
3.	BFSI	Banking, Financial Services and Insurance Sector
4.	BPL	Below Poverty Line
5.	BSNL	Bharat Sanchar Nigam Limited
6.	BSNL - RGM TTC	BSNL-Rajiv Gandhi Memorial Technical Training Center
7.	CIFT	Central Institute for Footwear Technology
8.	CIPET	Central Institute for Plastic Engineering and Technology
9.	COE	Centre of Excellence
10.	DDU-SKY	Deen Dhayal Upadhyaya Grameen Kaushalya Yojana
11.	DES	Directorate of Economics and Statistics
12.	DIC	District Industries Center
13.	DISE	District Information System For Education
14.	GDDP	Gross District Domestic Product
15.	GoTN	Government of Tamil Nadu
16.	GSDP	Gross State Domestic Product
17.	GVA / GSVA	Gross Value Added / Gross State Value Added
18.	HCSSC	Handicrafts and Carpet Sector Skill Council
19.	ISDS	Integrated Skill Development Scheme for Textiles
20.	ITI	Industrial Training Institute
21.	IT-ITES	Information Technology and Information Technology Enabled Services
22.	LFPR	Labour Force Participation Rate
23.	Manuf.	Manufacturing
24.	NAPS	National Apprenticeship Promotion Scheme
25.	NASSCOM	National Association of Software and Services Companies
26.	NEET	Not in Education, Employment, or Training
27.	NIC	National Industrial Classification
28.	NSDC	National Skill Development Corporation
29.	NSQF	National Skills Qualification Framework
30.	NULM	National Urban Livelihood Mission
31.	PMKVY	Pradhan Mantri Kaushal Vikas Yojana
32.	PSU	Public Sector Undertaking
33.	Pub. Admin.	Public Administration
34.	QP-NOS	Qualification Pack – National Occupational Standards
35.	SIDCO	Small Industries Development Corporations
36.	SIPCOT	State Industries Promotion Corporation of Tamil Nadu
37.	SIPPO	Small Industries Product Promotion Organization
38.	SSC	Sector Skill Council
39.	TANSIDCO	Tamil Nadu Small Industries
40.	TASMA	Tamil Nadu Spinning Mills Association
41.	TIDCO	Tamil Nadu Industrial Development Corporation
42.	TN-GIM	Tamil Nadu Global Investors Meet
43.	TNSDC	Tamil Nadu Skill Development Corporation
44.	TNSRLM	Tamil Nadu State Rural Livelihood Mission
45.	Tr. & Tou.	Trade and Tourism Sectors

# Executive Summary

**Background:** The Vision 2023 of Tamil Nadu envisages shaping its future by empowering the youth in the state, through imparting market relevant skill training; to become responsible and participating citizens who drive a new era of development, growth, and productivity. Tamil Nadu has formulated a State Youth Policy, which aims at reinforcing and accomplishing the broader objectives of 'Vision Tamil Nadu 2023'. The policy focuses on upgrading the human capital of the state by building on the intellectual and creative potential of youth in various fields, thereby transforming Tamil Nadu into the innovation hub and knowledge capital of India. It also aims at enabling Tamil Nadu to collaborate with other States in the country and the rest of the world on multiple dimensions: increasing the flow of workforce and goods/services, enhancing the levels of exchange of ideas and culture, and facilitating the movement of people to and from Tamil Nadu for opportunities. To attain this objective the State envisages training and skilling of 20 million persons by 2023<sup>1</sup>.

Tamil Nadu currently has the highest Gross Enrolment Ratio in Higher Education (48.6)<sup>2</sup>, among all the states in India. The state faces a mandate of developing and maintaining high quality human resources to deal with the evolving economy, and ensuring social justice in the form of decent employment for its educated populace. Thus, it is essential to carefully analyse the industry demand, investment patterns, youth aspirations and re-align policy/programmatic initiatives in that direction. Thus, taking youth aspiration and industry growth potential is critical to be able to avoid labour demand-supply mismatch, and support overall development of the State.

**Context for Present Study:** In 2012, The National Skill Development Corporation commissioned a skill gap study for Tamil Nadu. The study covered 12 Districts, based on which an extrapolation was done for the remaining districts. The study adopted a mix of secondary and primary research and relied largely on focus group discussions with various stakeholder groups such as youth, employers, industry associations, government officials, and skill training providers. Skill gaps were estimated for a period of 10 years, up to FY 2022. Given the rapid change in the state's social and economic context, there was a need for a fresh assessment of the state's skill ecosystem. There is also a need to understand the needs of the youth from diverse geographical backgrounds across the state, especially reaching out to economically backward regions. It is expected that a contemporary estimation, using both quantitative and qualitative analysis would reveal more relevant insights and findings related to the demographic profile, socio-economic characteristics of the youth, emerging sectors and job roles, and the skill-sets in demand.

**The Present Study:** The Tamil Nadu Skill Development Corporation (TNSDC) has, through a competitive procurement process, engaged PricewaterhouseCoopers Private Limited (PwC) to carry out "Skill Gap Assessment and Action Plan" for the state. This is the first time such a comprehensive State-wide skill gap study taking into consideration block-level information from each district has been conducted in Tamil Nadu. The study aims at identifying sources for self and wage employment in all 32 districts, estimating the sector-wise current and future labour demand (over the next six years) by industry, and assessing the overall labour supply and estimating the existing and emerging skill gaps.

The Skill Gap study offers insights into: (i) which skills are required to support the State's economic growth, while also catering to the career aspirations of the youth; and (ii) how to design appropriate interventions that will enable active collaboration between various stakeholders for the common good. Workforce demand-projection for the upcoming years, disaggregated as skilled and semi-skilled workforce requirement has been estimated at the district level.

**Methodology for Study:** Mixed-method research design was adopted encompassing a blend of quantitative and qualitative data collection techniques, and desk research on secondary data sources. Structured into two phases, the first phase of the study comprised a comprehensive desk review of the state's demography, economy, labour market, educational and skill development profile. The second phase of the study comprised the following:

1. **Youth aspiration survey:** a quantitative survey covering 360 youth across the following groups – engaged in economic activity (self-employed, wage-employed, entrepreneurs), students in formal education, vocational and skill training institutions (Polytechnics, ITI), and those who fall under the Not in Education, Employment or Training (NEET) category. Six blocks in the district were covered: Dindigul, Vattalkundu, Nilakottai, Shanarpatti, Oddanchatram and Vedasandur.
2. **Quantitative employer survey:** covering 45 employers with adequate representation from Large, Medium, Small and Micro Industries across the key sectors defining the district economy.



<sup>1</sup> Tamil Nadu Skill Development Corporation [<https://www.tnskill.tn.gov.in/index.php/link/abouttnsdc>]

<sup>2</sup> All India Survey on Higher Education 2017-18

3. **Focus- Group Discussions (FGD's) and stakeholder consultations** across a wide group of stakeholders including, representatives from Industrial units (with additional focus on MSME sector), district-level Industry Associations across priority sectors, officials from various government departments, representatives from various higher education institutions, and training service providers.

Estimation of labour demand and supply were undertaken based on the analysis of data sourced from the Census of India, the Department of Economics and Statistics of Government of Tamil Nadu, the Reserve Bank of India, the National Sample Survey Organisation and the Bureau of Labour and Employment under the Ministry of Labour and Employment, Government of India. Estimates were further refined based on the data pertaining to the proposed investments (pragmatically rationalised and considered), and the anticipated developments within key sectors; in addition, due consideration is given to the emerging sectors and job roles. The sectors and job roles in demand have been organized into training projects, which are informed by the demand estimations, and validated through quantitative survey findings and qualitative consultations. Budgetary requirements for the training projects have been estimated based on the cost categories as defined within the recent Common Cost Norms published by the Ministry of Skill Development and Entrepreneurship, Government of India.

**Key Findings of the study:** The key findings are presented below:

 <p><b>Demographic Analysis</b></p>	<ul style="list-style-type: none"> <li>At 29 years, the median age of Dindigul is same as that of the state average. It is estimated to increase further to 35 years by 2026 indicating a much older population.</li> <li>The district needs to invest in skill development immediately to reap benefits of the demographic dividend.</li> </ul>
 <p><b>Economic Analysis</b></p>	<ul style="list-style-type: none"> <li>Dindigul is one of the industrialised districts and contributes to 2.6% of the state GDP.</li> <li>The economy of Dindigul grew at a CAGR of 4% between 2011-12 and 2016-17.</li> <li>Crop cultivation has been adversely affected by inconsistent weather conditions.</li> <li>Industrial sector grew at 10% between 2011-12 and 2016-17. Manufacturing and Construction account for 97% of the industrial sector output.</li> <li>The key industries include spinning, weaving and finishing of textiles, manufacture of vegetable oils, paper and grain mill products and starches, as per Annual Survey of Industries.</li> <li>Services sector contributes to 45% of the GVA. The sector grew at a CAGR of 4% between 2011-12 and 2016-17.</li> </ul>
 <p><b>Labour Market Analysis</b></p>	<ul style="list-style-type: none"> <li>The district has a higher labour force participation and workers participation ratio than the state average owing to the larger share of working age population. Similar pattern is noticed among youth.</li> <li>Half of the labour force is in primary sector (Agriculture &amp; allied) followed by transportation, trade and repair services.</li> </ul>
 <p><b>Education &amp; Skill Development</b></p>	<ul style="list-style-type: none"> <li>Only 2.8% of the district population have undergone any kind of vocational training.</li> <li>Apprenticeship scheme is largely being driven by the Public sector institutions, which do not convert into long term employment prospects for the individuals.</li> </ul>
<p><b>Findings from Primary Survey</b></p>	
 <p><b>Youth Profile and Aspirations</b></p>	<ul style="list-style-type: none"> <li>25% of the respondents who had completed a Diploma and 10% of the graduates were engaged in unskilled work.</li> <li>97% of the Not in Education Employment or Training (NEET) category respondents wished to work at some point in the future.</li> <li>Over 23% of the youth aspire for employment in the Public Sector.</li> <li>Salary (wages) / Income, Job Security and safety were key determinants of selection of work.</li> <li>Low financial strength and lack of jobs within the neighbourhood of their residence are identified as major challenges in pursuing desired careers.</li> <li>Relevant work experience, soft skills, and relevant education qualification were reported to be the key factors that determine employability and employment.</li> <li>Female respondents aspired for retail, health services, BFSI and food processing, while males aspired for healthcare services, retail, handloom, and handicrafts and auto and auto components.</li> <li>There is a requirement for further strengthening the availability of labour market and counselling services.</li> </ul>
<p><b>Quantitative Survey</b></p>	



### Employer & Other Key Stake holder Perspective



### Incremental Demand

- High local wages, candidates' disinterest and attitude are the major challenges faced by the employers in the recruitment and retention of workforce.
- On an average, 19% of the workers were unskilled while the rest were largely divided into semi-skilled (17%) and skilled (59%).
- The prevailing competition on wages is a major driver of attrition. Workers leave their jobs even at a marginal increase in monetary benefits, even at the expense of losing other benefits like Employee State Insurance (ESI) and Provident Fund.
- 67% of the respondents were looking to adopt low levels of technology. The industries see a greater role for upskilled / re-skilled labour who can adopt to newer and efficient techniques.

#### Qualitative Inputs

- Manufacturing industries perceive that the youth have preference for service sector jobs in IT/ITES, BFSI, and Logistics.
- Key challenges in recruiting from vocational programs was the skills mismatch of the youth and their lack of experience in working environment through internships and apprenticeships.
- The youth expect enabling working conditions with better amenities, sanitation and transport facilities.
- Communication skills, Soft Skills, Interpersonal Skills and attitude was a major challenge for workers in the services sector.
- Industries are willing to partner with the Govt. in Skill Development and vocational initiatives and it is important to develop apprenticeship and industry-linked short term skill development programs.

- Nearly One lakh incremental skilled and semi-skilled workforce demand are expected to be in demand over the next 6 years.
- Key sub-sectors driving the demand are Manufacturing, Construction, Education & Health, repair of computers and other household goods, communication, Real Estate & Business Services, financial and insurance activities.

**Recommendations:** Based on qualitative, quantitative and secondary information findings and inferences, the following recommendations are made for due consideration:

- **Student Counselling and industry collaborations:** Job and career opportunities are adequately available within the local industries and within the service sector. With the Department of Labour and Employment implementing comprehensive counselling intervention among the job-seekers, prospective employers will need to actively collaborate with the Department and with the TNSDC to help provision of pragmatic counselling to the job-seeking youth and the students on market realities of job-availability, working environment, wages/ salaries offered, prospects of building a career, etc., and to guide the youth into relevant education and skilling interventions. The following can be undertaken on a collaborative mode:
  - Organizing seminars/melas for students and job-seeking youth on jobs and careers.
  - Counselling sessions for students on further education and skilling prospects linked to their aspirational careers.
  - Local industries and service sector employers offering internships/ apprenticeships to students of different career streams.
  - Industry attachment to faculties and trainers to upskill themselves on a progressive capacity building intervention.
- **Unified job portal for placements:** A Unified job portal for geographically-maintained skill registry, job postings and dynamic interaction/ engagement between prospective employers and labour force at all levels of skill across sectors can be developed. Such a portal would enable both employers and candidates to minimize time and effort in finding suitable vacancies and profiles.
- **Promotion of skill development in Service sector:** Trade and tourism, hospitality, retail and logistics can absorb local youth in significant numbers, and provide jobs suited to the needs of youth. Skill development programs can focus on such sectors, based on consultations with local players and training service providers.
- **Promotion of traditional village and household industries:** Weaving of handloom saris can be a viable household business if marketing and technical support are given to cooperatives and independent artisans.



# 1. District Profile

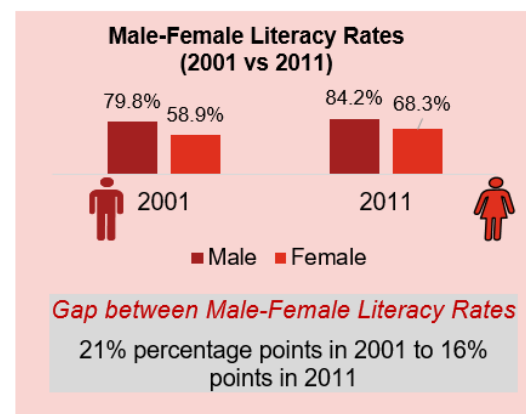
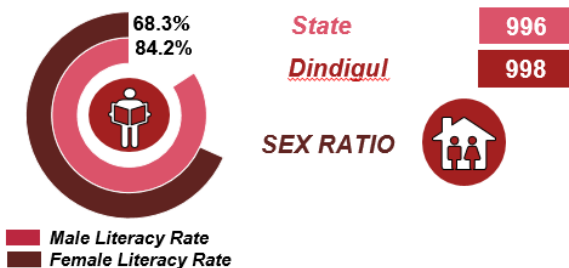
Dindigul is located in the southern part of Tamil Nadu and is emerging as major economic center in the recent years. The district came into existence in the year 1985 after being carved out from Madurai district. The district is known for safety lock makers, leather tanneries, textile spinning and agricultural trading.

## 1.1. Demographic Profile

Table 1: Key Demographic Indicators– Dindigul vs Tamil Nadu<sup>3</sup>

SN	Indicator	Dindigul	Tamil Nadu
1	Total population	2,159,775	72,147,030
2	Female Population	1,078,837	36,009,055
3	Population Density per sq.km (2011)	358	555
4	Urbanization	37.4%	48.4%
5	SC population (as % of total population)	20.9%	20.0%
6	ST population (as % of total population)	0.4%	1.1%
7	Differently abled population (as % of total population)	1.5%	1.6%
8	Population in age group 15-34 years (as % of total population)	33.9%	34.8%
9	SC population aged 15-34 years (as % of SC population)	36.1%	36.6%
10	ST population aged 15-34 years (as % of ST population)	35.3%	35.0%
11	Literacy rate	76.3%	80.3%

## Snapshot of Dindigul's Demography



### Key Highlights from the analysis of Census Data:

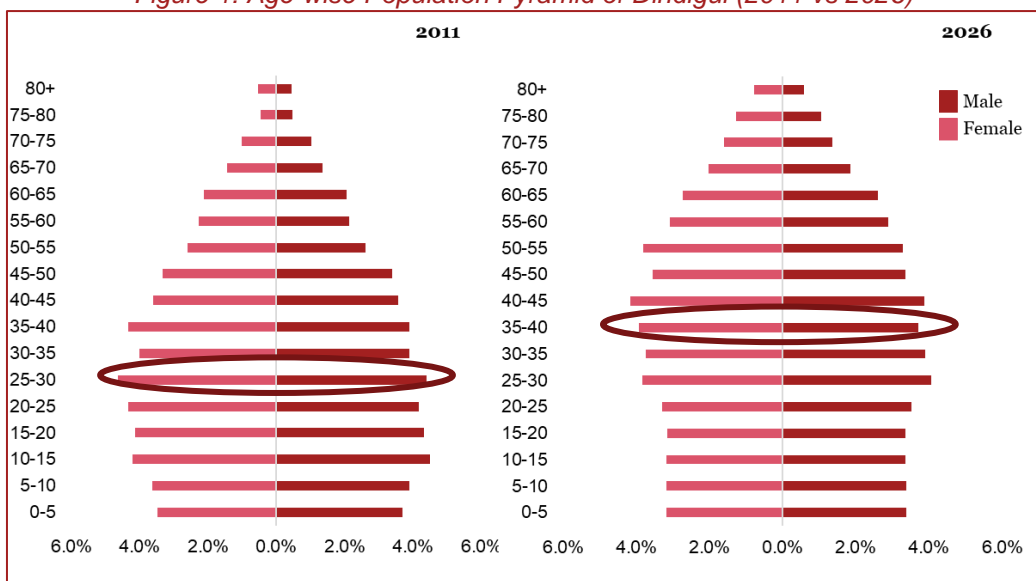
- Population Growth and Urbanization:** The Decadal growth rate of the population in the district was 12.3% between 2001 and 2011, compared to 15.6% at state level. The share of urban population has grown by 20% while the rural population has grown at a lower rate of 8% between 2001 and 2011. An increasing urban population and migration to urban areas from rural areas are the principal reasons.
- Literacy:** The district had a female literacy rate of 68.3% while the male literacy rate of 84.2%. These are lower than the corresponding literacy rates at the state level. The literacy rates among males increased by 4 percentage points, while among females it increased by 9 percentage points, reducing the gap between them

<sup>3</sup> Census 2011 & 2011

from a 21 percentage points in 2001 to 16 percentage points in 2011. The reducing gap between the male and female literacy rates indicates an improved level of female participation in education and higher education attainment among females in the district.

- **Youth Demography:** 35.6% of the population was between 15-34 years, in 2011, and the median age, 29 years. This is at par with the median age of the state and indicates a relatively older population in the district. The population is set to get much older with median age in 2026 expected to be around 35 years.

Figure 1: Age-wise Population Pyramid of Dindigul (2011 vs 2026)<sup>4</sup>

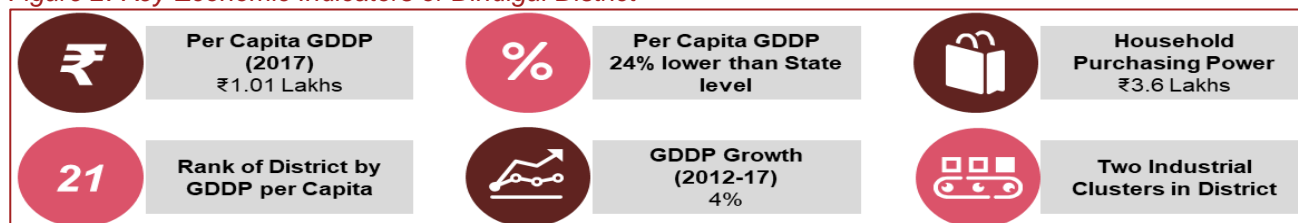


**Dindigul is expected to have ageing population by 2026 and hence it is imperative to reap the potential of youth immediately by enhancing their skills and making it more responsive to the industry demand. It also has proximity to other industrialized districts such as Coimbatore, Madurai and Tiruppur. It is an educationally well-developed district with two reputed universities established within its boundaries.**

## 1.2. Economic Profile

Dindigul is one of the industrialized districts of the state and contributes to 2.6% of the State's GDP<sup>5</sup>. The district has a flourishing leather tanning industry, handlooms and horticulture production contributing to the economy as well<sup>6</sup>. The district has a per-capita GDDP which is lower than the State level<sup>7</sup>.

Figure 2: Key Economic Indicators of Dindigul District



Source: Directorate of Economics and Statistics, TN

<sup>4</sup> Age wise Population projected for 2026 based on age group wise life expectancy, birth and death rates

<sup>5</sup> D0ES, GoTN

<sup>6</sup> District Industries Profile, DC-MSME, 2015-16

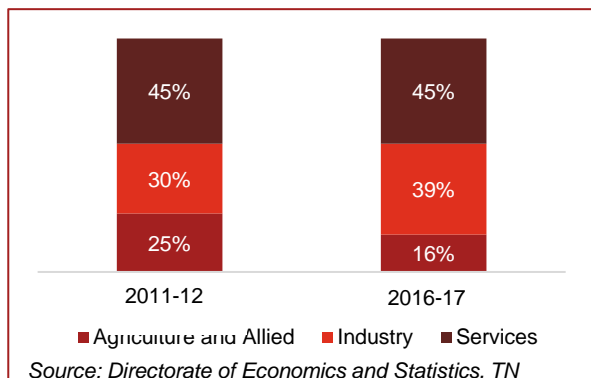
<sup>7</sup> Household disposable income as computed under districtmetrics.com

<sup>8</sup> Household Purchasing Power is calculated from the total purchasing power (disposable income after savings/ investments) of the district, divided by the projected number of households (savings/ investment data calculated from RBI database on savings). Data downloaded from districtmetrics.in, and calculated based on data from Reserve Bank of India, NSSO and Census of India, 2011. A strong correlation exists between the Per Capita GDP, the Banking Sector indicators (adjusted to population) and the consumption expenditure (disposable income) reported under NSSO at the national and state level. This relationship was further verified with data over several years. The state level purchasing power is then further broken down to the district level based on the district level banking data (savings and deposits) and the district level consumption estimates of the NSSO.



### 1.2.1. Sector wise Analysis

Figure 3: Sectoral Share of GVA (2011-12 & 2016-17)



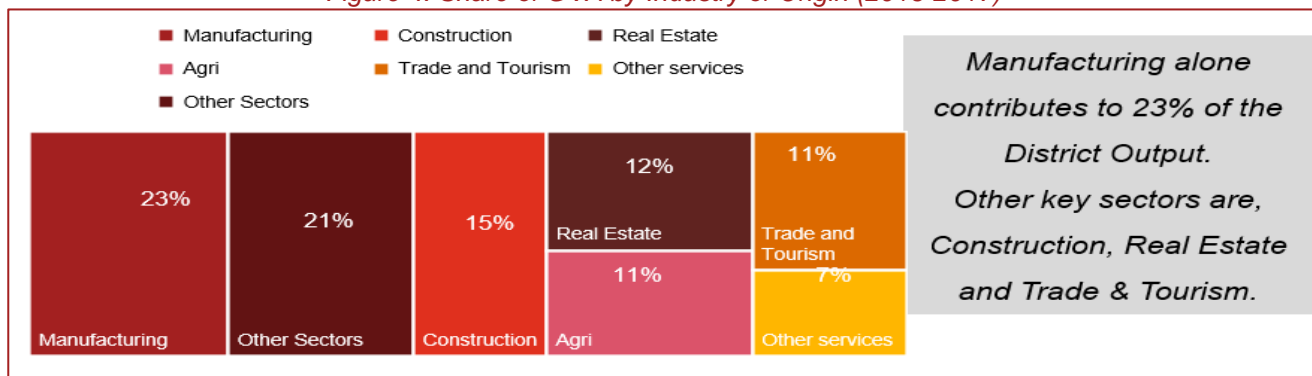
The economy of the district is dominated by the service (45%) sector followed by Industrial sector (30%), and these two sectors together contributed 75% to the district output in 2016-17. The district economy has grown at a compounded annual growth rate of 4% largely driven by the industry growth, which grew at the rate of 10% per annum during the same time period. The share of the agriculture sector in the district output decreased by nine percentage points over the same period. At sub-sector level, Manufacturing, Real Estate, Trade & Tourism, Construction & logistics Services are the major contributors to the district's economy.

Table 2: Sector wise- Annual Growth Rate in Dindigul

Sector	2012-13	2013-14	2014-15	2015-16	2016-17	CAGR
Agri & Allied	0%	-16%	17%	-7%	-12%	-4%
Industry	12%	10%	3%	19%	5%	10%
Services	4%	6%	6%	0%	4%	4%

Source: Directorate of Economics and Statistics, TN

Figure 4: Share of GVA by Industry of Origin (2016-2017)



Source: Directorate of Economics and Statistics, TN

### Agriculture and Allied Sector

The agriculture and allied sector contributes less than one-fourth to the district's economic output, and has registered a 4% decline in its contribution to the District economy between 2011-12 and 2016-17. Livestock (30%) is an important contributor within the agriculture and allied sector. Major crops include: Paddy, cholam, maize, cumbu, cotton, tobacco, groundnut, pulses and oilseeds.

Figure 5: GVA of Agri and Allied Sectors (2016-17)



Source: Directorate of Economics and Statistics, TN

## Industrial Sector

Recent growth in the manufacturing sector (10% between 2011-12 and 2016-17) has enabled growth in the industrial sector. The sector is dominated by Manufacturing and Construction sectors - they account for almost 97% of the output. Metal processing, non-metallic mineral products, beverages and auto components are some of the other key Industries in the district.

Figure 6: Industrial Sector GVA (2016-17)

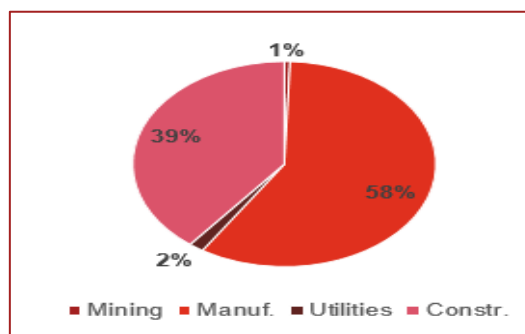


Table 3: Key Clusters and Traditional Industries

Leather and leather Tanneries, Dindigul	Lock Industry/ Iron scraps, Dindigul	Coir and Coir Products, Battalagundu Pattiveeranpathy Dindigul and Natham
Sungudi Sarees Chinnalapatty	Brass Metal Products Nilakottai, Dindigul	Cotton Spinning, Power looms Dindigul, Palani, Vedasandur and Vadamadurai, Nilakottai
Paper & Paper products Swaminathapuram, Dindigul, Thopampatty and Vilampatty	Rice Mills Sithayankottai, Dindigul and Palani	Eucalyptus oil & Essential oil Kodaikanal, Thandigudi and Dindigul, Nilakottai
Food Industry Dindigul, Palani, Battalagundu	Panchamirutham & Veputhi (thiruniru) Palani	

Source: DC-MSME District Profile

Table 4: Profile of Manufacturing Sector from ASI (2014-15)

Sector	No. of Units	No. of Employee	Gross Value Added (share in total GVA)	Share of Total Employment	Average Workers per unit
Spinning, weaving and finishing of textiles	203	29,483	55.9%	84%	145
Manufacture of non-metallic mineral products	34	1,282	14.6%	4%	38
Manufacture of vegetable and animal oils and fats	3	692	4.7%	2%	231
Manufacture of paper and paper products	57	2,811	3.1%	8%	49
Manufacture of grain mill products, starches and starch products	102	859	3.0%	2%	8
Total	399	35,127	81.1%	100%	88

Source: Annual Survey of Industries 2014-15

According to the ASI 2014-15, as shown in table 4, five industries contributed to 81% of the total Industrial Gross Value Added (GVA). Spinning, weaving and finishing of textiles, non-metallic mineral products, vegetable and animals oils and fats, paper and paper products were the key industries in terms of employment generation. As of 2015-16, there were 38 large scale industries of which 16 were Yarn Units, contributing significantly to the overall industrial sector. It can be seen that spinning, weaving and finishing of textiles is a major contributor to the total GVA from industries and account for 84% of the total employment as recorded in the survey.

## Services Sector

The sector grew at average of 4% p.a. between 2011-12 and 2016-17 but the growth was not consistent. The growth was 6% in 2014-15 but no growth was recorded in 2015-16 and again grew at 4% in 2016-17. The share of the sector has remained the same at 45% between 2011-12 and 2016-17. Real Estate has more than one-fourth share in the GVA and Trade and tourism is the second largest contributor (24%). Major tourist attractions in the district include are Kodaikannal, Palani, Peranai and Sirumalai.

Figure 7: GVA of Services Sector (2016-17)



Source: Directorate of Economics and Statistics, TN

## Traditional Sector

### Handloom Saris of Nagal Nagar and Chinnalapatti

Nagal Nagar, a neighborhood in Dindigul town, and Chinnalapatti a town equidistant to Dindigul and Madurai are known for their weaving communities. The former has a sizeable Saurashtra weaving community, who specialize in tie-and-dye kora silk saris, organic cotton and Benaras cotton saris. Weavers in Chinnalapatti specialize in cotton saris with zari work, and tie-and-dye saris which represent the 'Sungudi' style, which is also seen in weaving communities in Madurai. Qualitative consultations revealed that there are 3,120 looms operated by as many weaving families. Designs follow block-printing and circular patterns. Until a few decades ago, natural dyes were used for printing. Due to competition from textile mills. Artificial dyes have become more popular and are considered more cost-effective.

Figure 8: Finished Handloom Sari



As seen in the various handloom traditions in the country, the weavers in Dindigul District face problems: competition from textile mills or mill saris, declining demand for traditional cotton fabrics and designs, and unwillingness of the next generation to take up weaving as a livelihood. Qualitative consultations with Nagal Nagar weavers revealed that cooperative societies play a large part in keeping the sector alive, and provide incomes to middle-aged weavers who are unable to shift to a different sector of work. In order to make around ₹ 300 a day, all members of a family work on a single loom to produce a sari in 2-3 days.

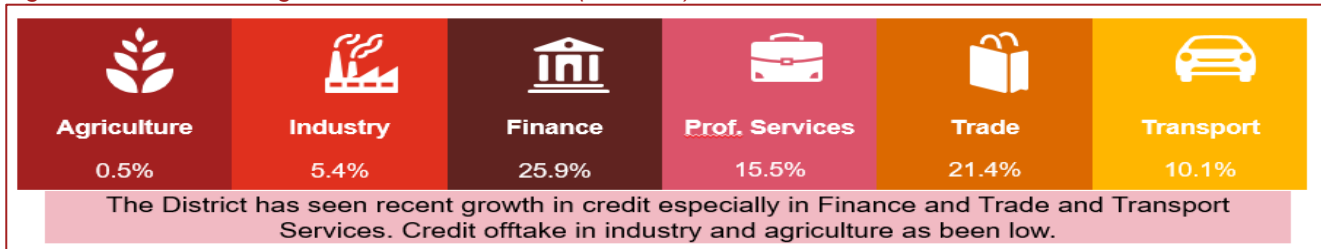
Cooperative societies face their own set of challenges: identifying lucrative markets, inability to upgrade the handlooms to more efficient models, and constraints in ensuring higher incomes to keep up with the needs of the weavers. Suggestions related to reviving/ maintaining the sector included: technological upgradation to solar powered pedal looms, e-commerce solutions which focus on state government cooperative societies, and wage subsidies to weavers.

Figure 9: Handloom Operation in Nagal Nagar



## 1.2.2. Investments and key economic drivers

Figure 10: Sector-wise growth of Credit off Take (2013-16) – RBI



According to the data collected from the RBI, the District has seen recent growth in credit especially industry, finance, professional services, trade and transport. Data from the Capital Expenditure database of Centre for Monitoring Indian Economy shows that key investments and sectors include:

- Mega Food Park in Dindigul proposed by the Government of Tamil Nadu, to promote processed food with government subsidy. The park is aimed at serving garment manufacturers around Manapparai town<sup>9</sup>.
- National Highways Authority of India has proposed two four lane highway project for the district in NH83 – one between Dindigul and Oddanchatram with an investment of ₹ 7,800 crores<sup>10</sup> and another between Oddanchatram and Madathukulam) with an investment of ₹ 6,100 crores for the district.

**Real estate, Trade and Tourism, agri-business, and handloom are sectors with potential for growth. There is scope for promotion of religious tourism in the district.**

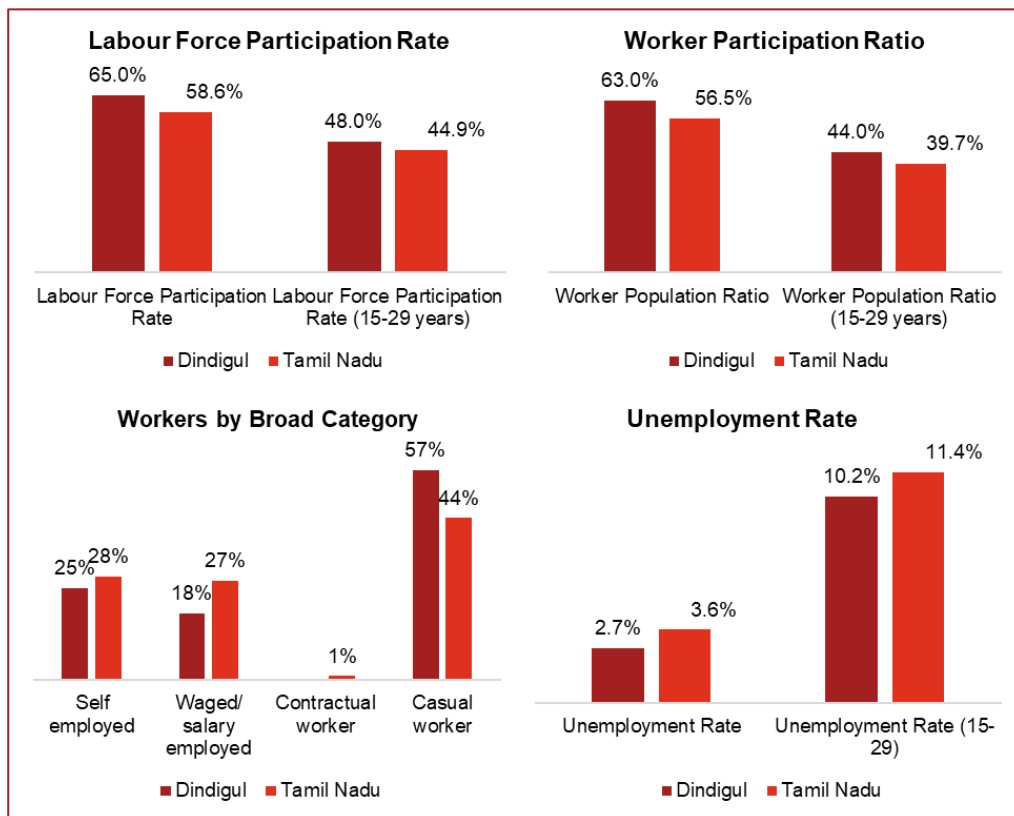
<sup>9</sup> [<https://in.fashionnetwork.com/news/Mini-textile-park-to-be-set-up-in-Tamil-Nadu-s-Manapparai.937167.html#.XK7QzpgvPIU>]

<sup>10</sup> Capital Expenditure Database, Centre for Monitoring Indian Economy

### 1.3. Labor Market Profile

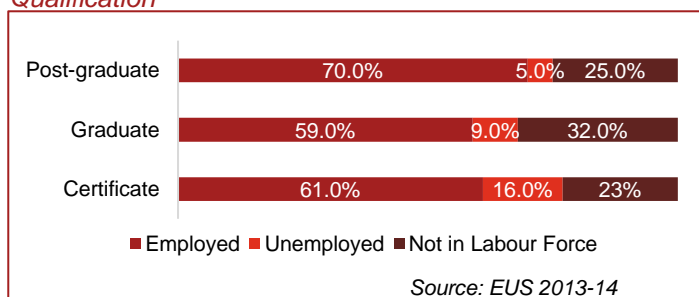
The District's overall labour force participation and workforce/worker participation ratio are higher than the corresponding state figures, and for the youth population (15-29 years) too. More than half of the workers in the district seem to be engaged as 'casual labour', higher in proportion than at the state level. Youth unemployment is at 10.2%, slightly lower than the state average.

Figure 11: Key Labour Market Indicators<sup>11</sup>



Source: Employment and Unemployment Survey District Estimates, 2013-14

Figure 12: Distribution of working status by Educational Qualification



The education-level classification of the sample reveals that among diploma/certificate holders, the unemployment share is higher at 16%, while those with graduate qualifications have a significantly lower share of unemployed (9%). This requires further investigation.

Table 5: LFPR and Unemployment Rate by Sex & Location

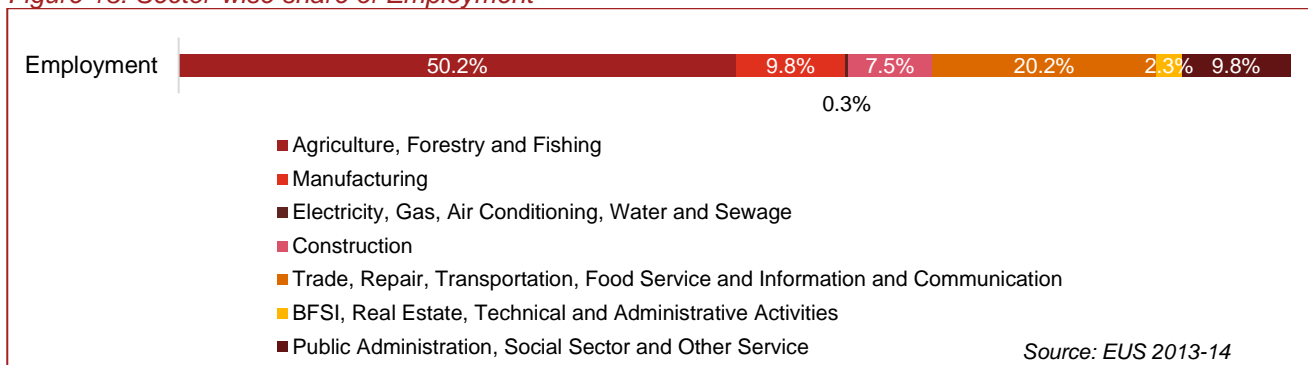
Sex	LFPR		Unemployment Rate	
	Rural	Urban	Rural	Urban
Male	82.4%	82.1%	2.2%	3%
Female	56.5%	34.1%	0.9%	8.4%
Total	69.4%	57.8%	1.7%	4.6%

Disaggregation by area and sex, it is found that females have rural labour force participation rate lower than their urban counterpart. The urban unemployment rate for females is 7 percentage points higher than the rural counterpart. Such a gap is not seen in the figures for males, indicating that

urban women face a lack of employment opportunities.

<sup>11</sup> District Level Estimates, EUS, 2013-14, Labour Bureau

Figure 13: Sector-wise share of Employment



Around 50% of the labour force is in the agriculture and allied sector, followed by 20% in transportation, trade and repair services. Around 10% are engaged in manufacturing, and 9% in public administration.

**Half of the workforce in the district is engaged in agriculture and allied sector. Given that the agriculture and allied sectors suffers from low productivity, there is a need of providing market relevant skill development training to workforce engaged in agriculture sector and ensuring a smooth transition from agriculture to other high productivity sectors.**

## 1.4. Education and Skill Development Profile

### 1.4.1. Education Profile

Dindigul has two reputed universities – Mother Teresa Women’s University at Kodaikanal and Gandhigram Rural University at Gandhigram. The district also has number of engineering colleges, arts and science colleges, polytechnics and ITIs. Such institutions get students from across the country, and from other countries as well. Indicators related to education are presented below:

The Gross Enrolment Ratio<sup>12</sup> at both Primary and Upper Primary are much higher than the state averages. The ratio indicates that the number of students in the district outstrip the expected population in the age cohort by a significant margin. The dropout rates at the primary level is negligible while it is 2.4% at the upper primary level.

Arts and science colleges are dominant in the district, and female enrolment in higher education institutions higher than the male counterpart, except in engineering and polytechnic colleges.

Figure 14: GER and Dropout Rates - DISE

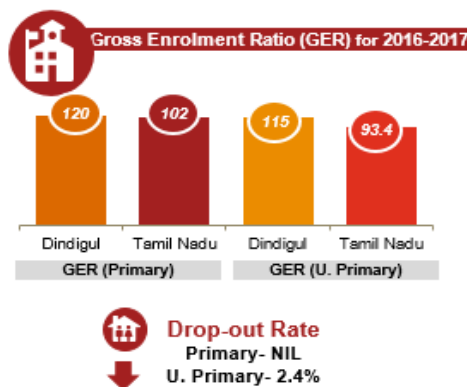


Table 6: Institutions of Higher Education in Dindigul District<sup>13</sup>

Type of Institution	Number of institutions
University	2
Engineering Colleges	12
Catering and Hotel Management	6
Nursing Colleges	3
B.Ed. Colleges	20
Polytechnic Colleges	11
General Arts and Science Colleges	21
Industrial Training Institutes	2

Source: District Statistical Profile (2016-17), NCVT - MIS

<sup>12</sup> Total enrolment in elementary education, regardless of age, expressed as a percentage of the official age-group of the population which corresponds to the elementary education in a given school year. The GER shows the general level of participation per stage of school education.

<sup>13</sup> District Statistical Handbook, Govt. of Tamil Nadu

### 1.4.2. Vocational Education and Skill Development Profile

The skill training infrastructure of the district includes skill training centers implementing schemes like TNSDC, Pradhan Mantri Kaushal Vikas Yojana (PMKVY) and Deen Dayal Upadhyay Grameen Kaushal Yojana (DDU-GKY). Under the PMKVY scheme, one training institute offered courses on self-employed tailor. The below table presents an overview of the short-term skill development centres in the district.

Table 7: Vocational Training under Short Term Skill Development Programs

Scheme	Sector	Job Role	No. of Training Centres	Capacity/ Trained
Pradhan Mantri Kaushal Vikas Yojana	Apparel	Sewing Machine Operator	2	150
		Self Employed Tailor	2	180
	Beauty and Wellness	Beauty Therapist	1	60
	Electronics and Hardware	Field Technician - Computing and Peripherals	1	60
	IT-ITeS	Junior Software Developer	1	120
	Tourism & Hospitality	Front Office Associate	1	60
Tamil Nadu Skill Development Programs	Apparel	Hand Embroider	1	60
	Automotive	Welding Technician Level 3	1	20
	Fabrication	Arc and Gas Welder	1	80
	Garment Making	Tailor (Basic Sewing Operator)	3	360
	Gems and Jewellery	Jewellery in organized Retail Management	1	61
	Healthcare	General Duty Assistant	2	340
		Medical Laboratory Technician	1	40
		Front line health Worker	1	40
	Hospitality	Food & beverages Service	1	90
		Housekeeper	1	70
		Cook (general)	1	90
	IT/ ITeS	Computer operator	1	210
	Tourism & Hospitality	Food & Beverage Service Steward	1	20
		Multi cuisine Cook	1	25
		Housekeeping Attendant (Manual Cleaning)	1	25
Housekeeping Supervisor		1	25	
Deen-Dayal Upadhyay Grameen Kaushal Yojana	IT/ITES			
	Apparel - Fashion Design Technology			
	Beauty and Wellness			
	Capital Goods			
	Tourism and Hospitality			
	Security			
	Food Processing and Preservation	-	10	1,809
	Apparel Made-ups & Home Furnishing			
	Electronic			
	Automotive			
	Electrical			
	Logistics/Supply Change Management			
	Retail			

Source: Data collected from Tamil Nadu Skill Development Corporation, TNSRLM

The long-term skill development programs are predominantly offered through Industrial Training Institutes, which offer one and two year programs in various sectors and trades. The below table presents the courses offered through ITI, and the number of such institutes offering each trade/ training for job role.

Table 8: Vocational Training under Long Term Skill Development Programs (ITI)

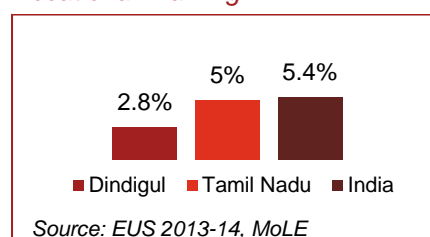
Sector	Trade	Number of Centres	Intake
Automobiles and Auto Components	Driver cum Mechanic	1	21
	Mechanic (Motor Vehicle)	7	336
Capital Goods	Instrument Mechanic	1	52
	Welder	2	531
Construction	Electrician	12	672
Electronics & Hardware	Wireman	4	210

Sector	Trade	Number of Centres	Intake
	Mechanic (Refrigeration and Air-Conditioning)	2	104
Handicrafts and Carpets	Turner	2	96
Infrastructure Equipment	Mechanic Diesel	11	483
Iron and Steel	Machinist	1	64
IT/ ITeS	Computer Operator and Programming Assistant	2	104
	Desk Top Publishing Operator	2	104
	Information Communication Technology, system maintenance	1	52
Leather	Footwear Maker	1	21
	Leather Goods Maker	1	21
Mining	Fitter	10	630
Plumbing	Plumber	1	52
Textile and Apparel	Fashion Design & Technology	1	42
	Spinning Technician	1	42
	Sewing Technology	2	84
	Surface Ornamentation Techniques (Embroidery)	1	42

Source: National Council for Vocational Training – MIS

With respect to population aged 15 and above who have undergone vocational training, around 2.8% in Dindigul had undergone the same, while around 5% had undergone vocational training in the state. The All-India level is higher than both district and state level figures<sup>14</sup>.

Figure 15: Population Undergone Vocational Training



**The district is known for the Gandhigram Rural College which emerges as a major institution focusing on rural development and livelihoods. The technical education infrastructure caters to students from surrounding districts.**

<sup>14</sup> Employment and Unemployment Survey, 2013-14, Ministry of Labour and Employment

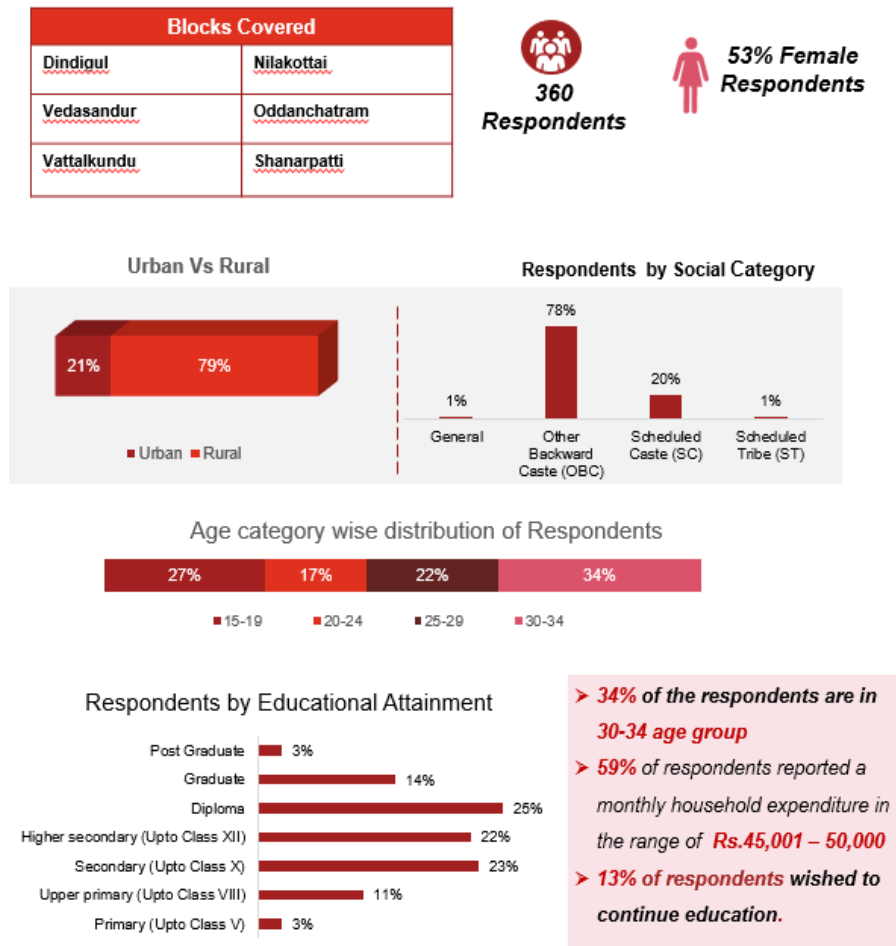


# 2. Youth Perspective

## 2.1. Profile of Respondent Youth

The structured household survey tool was administered with the 360 youth (young men and women in the age group of 15-34 years) selected from six blocks. The below figure presents the respondent profile.

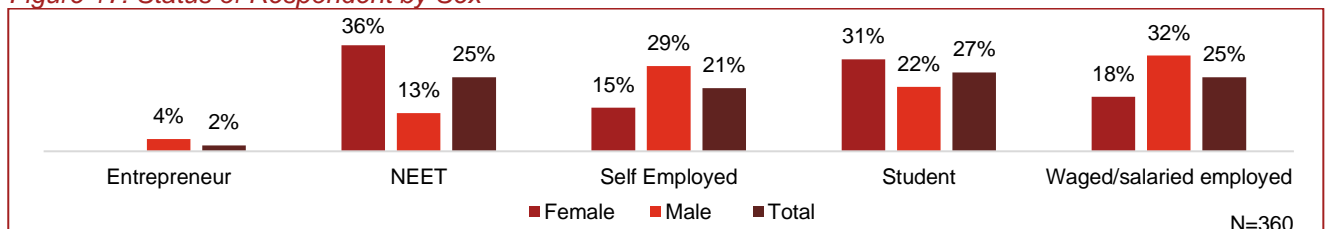
Figure 16: Respondent Profile of Youth Aspiration Survey



## 2.2. Youths' Educational and Economic Engagement Status

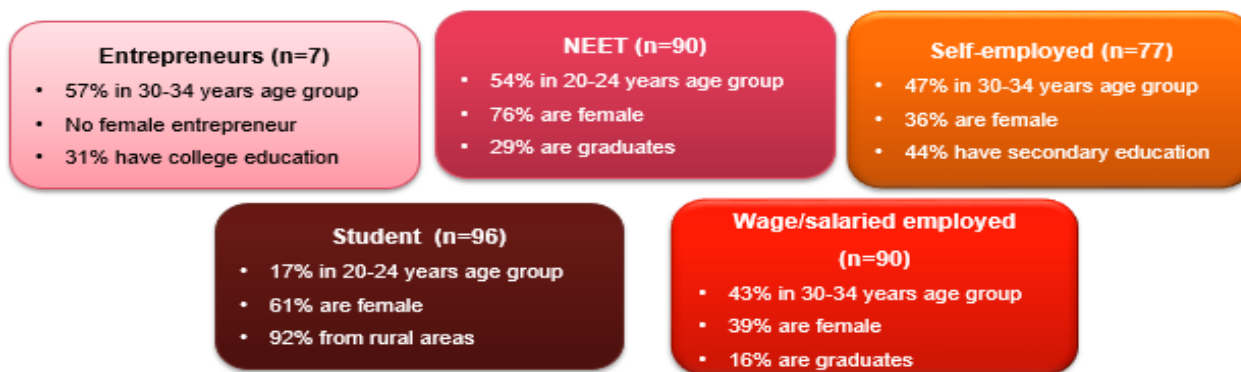
The figure below illustrates the gender wise classification (current status) of the respondents interviewed during the household survey. More than two-third of female respondents were falling in NEET (36%) category and only 18% were in wage employment. However, around one third were students among female respondents. Around one-third of male respondents fell in wage employment and self employment categories respectively. Overall, 33% of female respondents and 65% of male respondents were engaged in economic activity.

Figure 17: Status of Respondent by Sex



The below graphic presents the key findings based on the status of respondents.

Figure 18: Findings based on Respondent Status



### 2.3. Economic Engagement of Youth

Slightly less than half of the respondents (48%) were currently engaged in work, and 68% had previously worked and were currently not working. Around 70% of the respondents who have ever worked stated that their work was related to their training. Around 54% of the respondents had a monthly income between ₹5001-10,000. 70% of female respondents had earned a monthly income of ₹5,001-10,000 compared to 41% male respondents.

Figure 19: Distribution of Respondents across Monthly Income Category across Sex

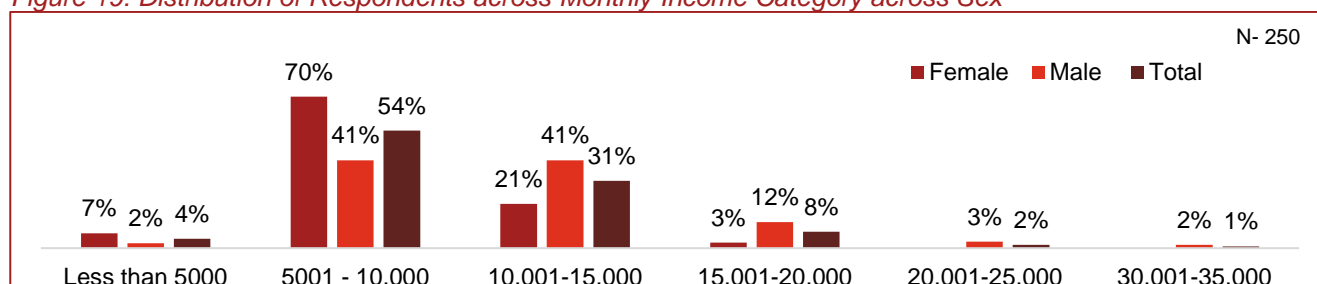


Table 9: Education Qualification of Respondents and Employment Type

Type of Employment	Below Upper primary	Secondary (Upto Class X)	Higher secondary (Upto Class XII)	Diploma	Graduate	Post Graduate and above	Total
Unskilled worker	64%	40%	48%	25%	10%	0	98
Salaried Employment (teacher, government official, etc.)	0	5%	3%	25%	46%	89%	37
Skilled worker (tailor, mason, electrician, plumber etc.)	11%	8%	15%	15%	13%	0	28
Petty Business/Trade/Manufacturing	22%	43%	32%	35%	28%	0	80
Major Business/Trade/Manufacturing	4%	5%	2%	0	0	11%	8
Others	4%	0	3%	0	10%	0	8
Number of respondents	45	75	62	20	39	9	250

48% of respondents with higher secondary education and 25% with diploma education were engaged in the unskilled work.

### 2.4. Youth under NEET Category

One-fourth of the respondents were in NEET category. Within this category, 58% were in 20-29 years age group and 76% were female. Around 30% reported being in NEET category for the previous 2-3 years. Almost 97% the respondents stated that they wished to work, and out of these, more than 75% stated that they had been searching for a job. The below table presents the frequency of respondents by duration in NEET category.

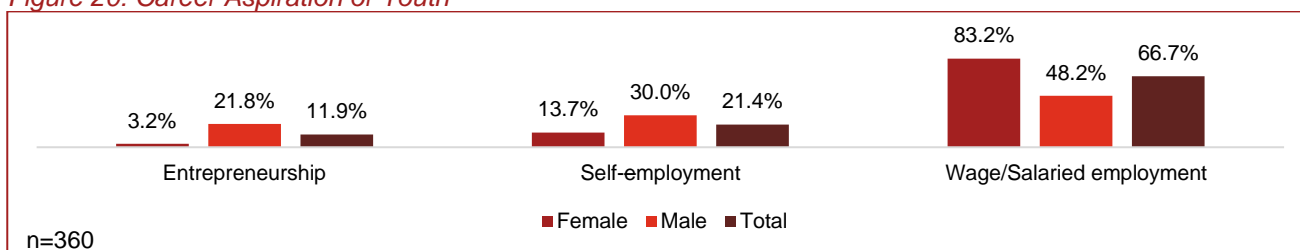
Table 10: NEET Category Respondents

Duration in NEET Category			
	Female	Male	Total
Less than 6 months	0	5%	1%
6 months- 1 year	1%	32%	9%
1- 2 years	13%	32%	18%
2- 3 years	31%	27%	30%
3-4 years	29%	0	22%
4-5 years	15%	0%	11%
More than 5 years	10%	5%	9%

## 2.5. Youth Career Aspirations

Youth aspirations for type of employment seems to skew towards waged/ salaried employment, with both male and female respondents showing this pattern.

Figure 20: Career Aspiration of Youth



The main factors determining the aspiration of the youth are salary (wages)/ income (94%), job security (90%) and safety and security (42%). Less than one-fourth (21%) of the youth (those not in NEET or student category) feel they are largely prepared for requirements for a job, and around 28% of the respondents felt they are unprepared for jobs. The reason commonly cited for feeling prepared is “adequately Skilled with understanding of Job” (40%) and “adequate academic qualification” (38%). Around 23% felt that they had “Adequate work experience in the area of Job”. Around 65% of respondents felt that job opportunities were very inadequate. Findings related to factors, preparedness for ideal job and perception of availability of jobs are presented below.

Table 11: Career Aspiration - Factors, Preparedness and Availability of Jobs

Factor Determining Aspiration (n=360)*	Responses	Perception of Preparedness for Job (165)	Responses
Salary (wages) / Income	94%	Not Prepared	28%
Job Security	90%	Largely Prepared	21%
Safety / Security	42%	Completely Prepared	19%
Closeness to Residence	19%	Moderately Prepared	19%
Retirement Plans	14%	Somewhat prepared	10%
Social Status	7%	<b>Availability of Jobs (n=360) Responses</b>	
Flexible work arrangements (location, schedule)	5%	Very inadequate	65%
Opportunities for promotion and career development	4%	Somewhat inadequate	20%
Employer provided benefits and perks	2%	Neither adequate nor inadequate	5%
Gender suitable role	1%	Very adequate	4%
Traditionally Acquired Skills / Family Business	1%	Don't Know	1%

\*For multiple-choice questions, the responses add up to more than 100%

Among the challenges which the youth see in pursuing their aspired careers, lack of financial strength (25%), lack of jobs locally (22%) and lack of guidance/ information on appropriate jobs (15%) were the most cited challenges. One-third of the respondents cited they had no challenges in finding jobs. The responses are presented below:

*Table 12: Career Aspiration – Challenges in pursuing desired career*

Challenges (n=360)	Responses*	Challenges (n=360)	Responses*
No Challenge	39%	Lack of Soft Skills	2%
Low financial strength	25%	Lack of sufficient education qualification	2%
Lack of jobs locally	22%	Lack of family support / social acceptance of girls being engaged in economic activity	1%
Lack of guidance / information on appropriate job available for skill levels	15%	Others	1%
Unsafe working environment	6%	Lack of work experience	1%

\*For multiple-choice questions, the responses add up to more than 100%

The key factors determining their employability, according to the respondents were educational attainment and years of work experience. The responses are presented below:

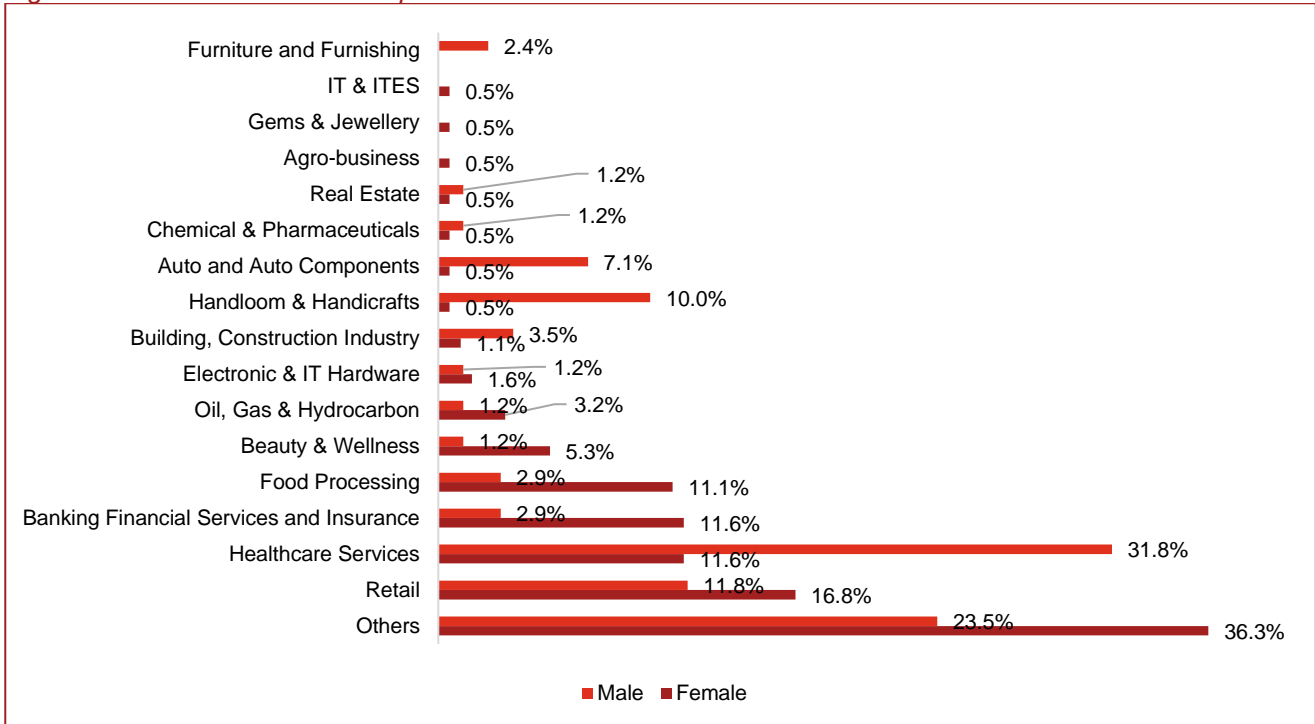
*Table 13: Key Requirements to enhance employability and steps to achieve aspirations*

Key Requirements to enhance employability (n=360)			
Requirements	Responses	Requirements	Responses
Education attainment (level of education)	62%	Basics and soft skills	8%
Years of Work Experience	13%	References	6%
Performance in Interviews	11%	Others	1%
Key Skills Required for desired job (n=360)*			
Clear communication	89%	Attention to detail	5%
Creativity, originality and initiative	31%	Time management	4%
Analytical thinking	29%	Coordination Skills	3%
Team work	23%	Others	3%
Leadership	8%	Critical thinking and analysis	2%
Active listening	5%	Complex problem-solving	2%
New Steps to achieve aspirations (n=360)*			
Apprenticeship / Gathering Work Experience	89%	Vocational/ Skill Training	4%
Already Achieved	21%	Others	1%
Continuing Education	13%		

\*For multiple-choice questions, the responses add up to more than 100%

The Healthcare services is the most popular and aspired sector among the respondents with 20% youth preferring it, followed by retail (14%). Other Sectors (29%) which a significant share of youth prefer, include food processing, building and construction, and electronics and IT Hardware. Around 27% of respondents indicated willingness to undergo training for desired job. The gender-wise responses reveal the following: female respondents cited retail, health services, BFSI and food processing. Male respondents cited healthcare services, retail, handloom, and handicrafts and auto and auto components.

Figure 21: Sector-wise Career Aspirations



Majority of the respondents across categories have expectations of monthly income in the range of ₹ 5,000-10,000. It can be seen from figure 20 that 13% of self-employed have income expectations in the range of ₹ 10,000-15,000 per month, which may be the driving factor for being an self-employed.

Figure 22: Monthly Income Expectations

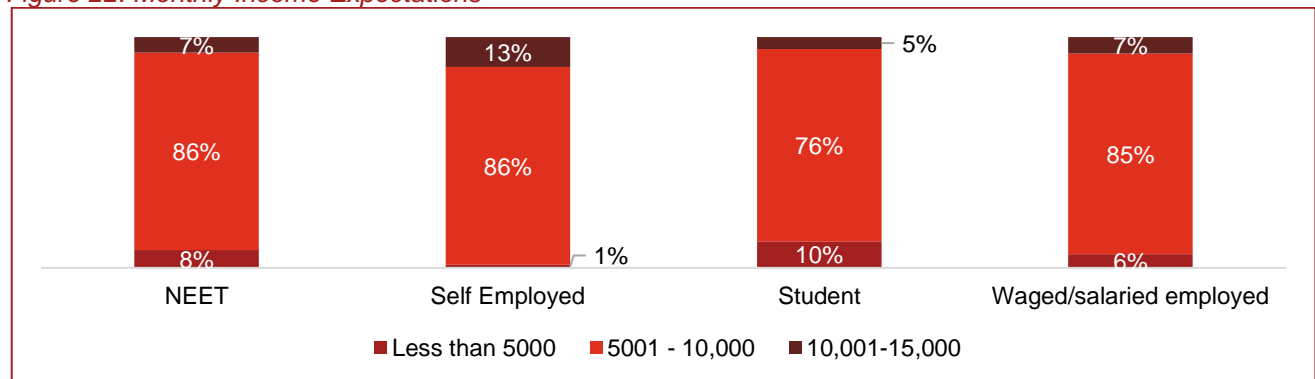
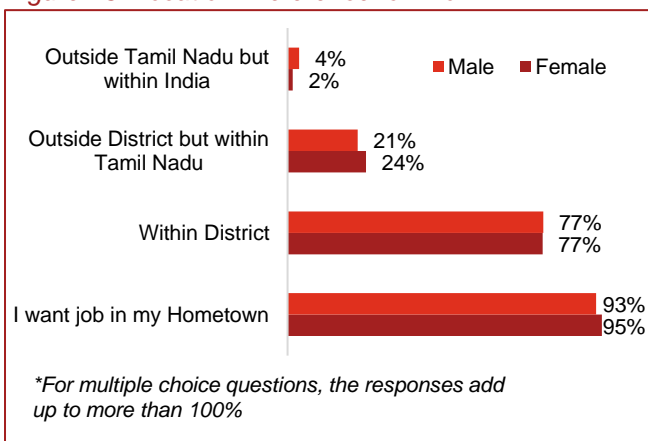


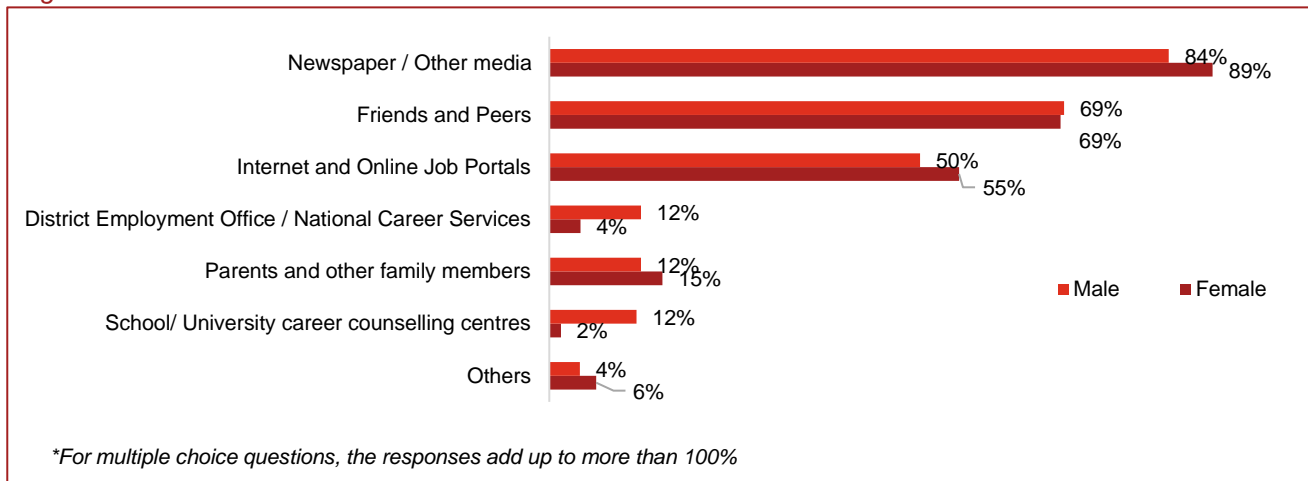
Figure 23: Location Preference for Work\*



Majority of the respondents preferred a job within their hometown. Three-fourth of the total respondents were willing to migrate within the district for work. Around 3.4% were willing to migrate to other states.

The most common source of job-related information cited by the respondents is 'Newspaper/other media (84%)' followed by 'friends and peers' (69%), followed by 'internet and job portals' (50%). Only 8% stated that they get job-related information from the District Employment Office/ National Career Services. The gender-disaggregated findings are presented below:

Figure 24: Sources for Job Information\*



Around 28% of female respondents and 36% of male respondents stated that counselling services were somewhere inadequate. Only around 6% of both male and female respondents stated that they were very adequate. In terms of their expectations from counselling services, more than half of the total respondents wanted placement services. Around one-fifth of the total respondents wanted advice on how to look for jobs and information on relevant vacancies respectively.

Figure 25: Accessibility to Counselling Services

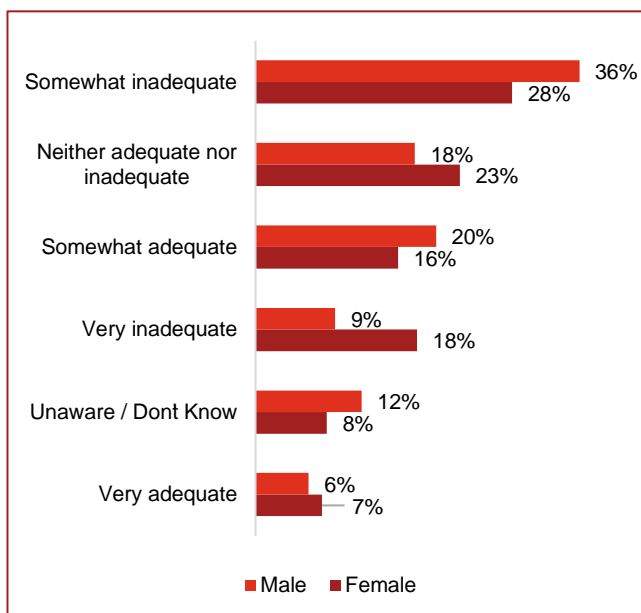
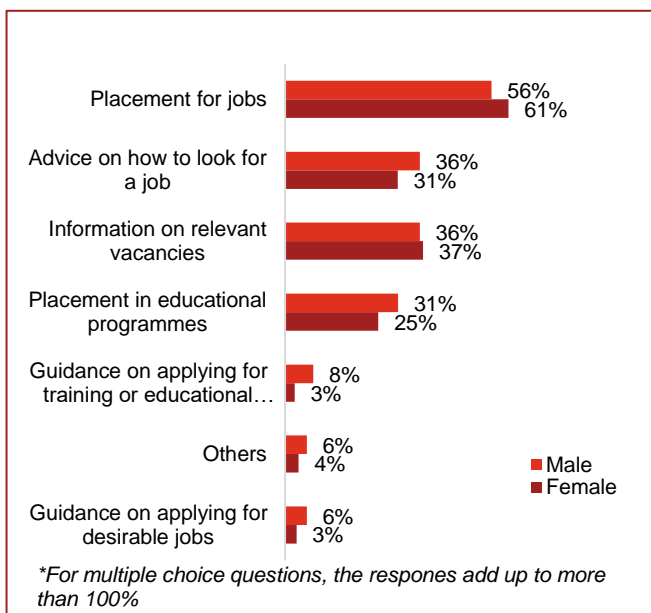


Figure 26: Preferences for Counselling Services\*



## 2.6. Skill Training Preferences of Youth

95% of the respondents stated that they were not aware of government-run training programs. 73% of the respondents were not interested to take up any training to get jobs as they feel it is not going to add any additional value. Thus, it is important for government to intervene and increase awareness of training programmes among youth. There is a need for counselling students as most of the respondents didn't show willingness to undertake skill training programmes.

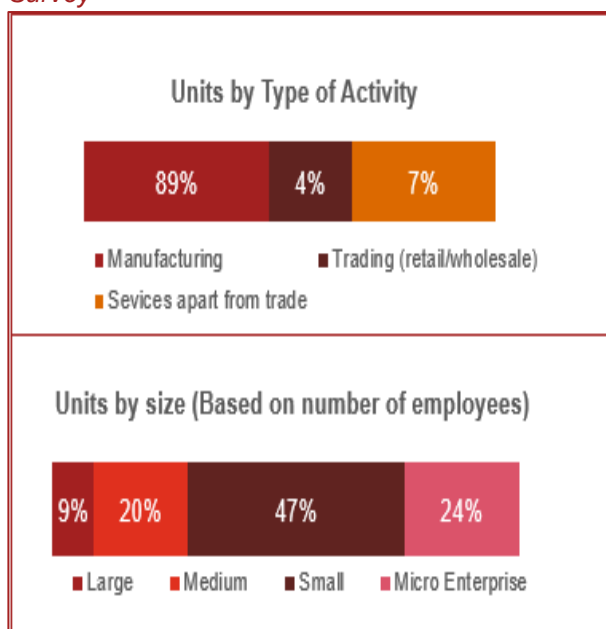
**Responses indicate that Healthcare services, retail, BFSI, auto and auto component and food processing are sectors in which youth aspire to work in. However, youth have also reported preferences for placement services and advice on how to look for job vacancies.**

# 3. Employers' and Other Stakeholders' Perspectives

## 3.1. Quantitative Employer Survey

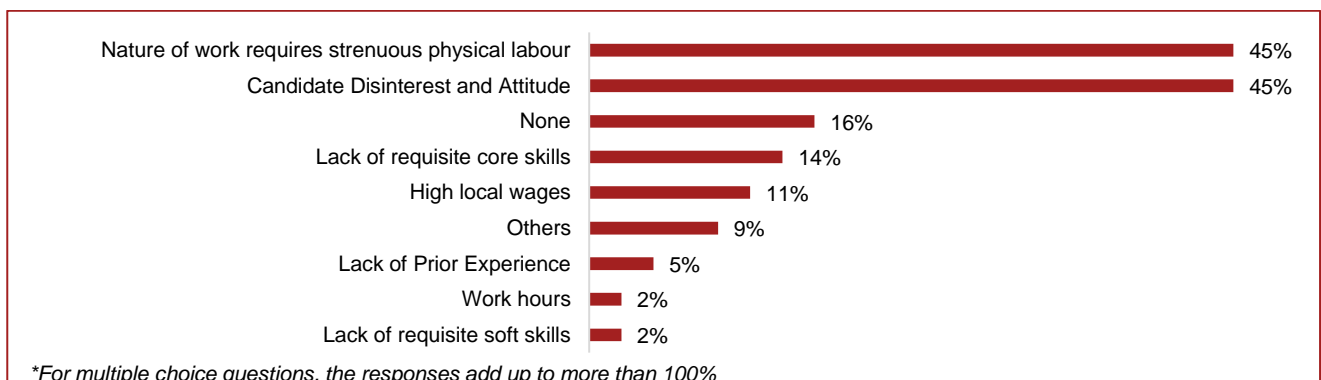
The quantitative employer survey covered 45 employers in various sectors. A focus group discussion was also conducted with industry representatives, associations, etc. to shed light on aspects such as demand, perception of skill level of local workforce, and challenges faced by industries. Around 89% of the employers were from the manufacturing sector. 67% of the employers were from medium and small enterprises and around one-fourth from small micro-enterprises. The profile of respondents is presented below:

Figure 27: Profile of Respondents - Employer Survey



Sub-sector	Number of Units
Agro-business	3
Building Construction Painting Industry	2
Chemical & Pharmaceuticals	2
Food Processing	4
Furniture and Furnishings	1
Healthcare Services	1
Iron, Steel and Other Metals	12
Logistics	1
Other Manufacturing	1
Textile and Apparel	4
Tourism Travel and Hospitality	1
Warehousing and Packaging	1
Machinery Equipment	9
Rubber	1
Paper and Paper Products	2

Figure 28: Respondents by Challenges in Recruitment\*



On average, the units had 22% of female employees in their workforce. Common methods of recruitment widely found were employee referrals (91%) and local community (60%). Major challenges with respect to recruitment were candidates' less preference to strenuous physical labor (45%) and candidates' disinterest and attitude (45%), while other minor challenges were lack of requisite core skills, high local wages and lack of prior experience.

With respect to organization of the workforce by skill level, 59% of workers on an average in the units were skilled, 19% were unskilled, 17% semi-skilled and only 5% at supervisory level. On average, 36% of workers were contractual. Around 7% of workers were from outside the state (and 2% from outside the district). Questions on attrition yielded the following findings: annual attrition rates for male was 5% and none for female workers. Causes for attrition included better job opportunities (58%), strenuous jobs (42%) and low wages (28%).

Figure 29: Respondents by Skill Level of Workers



With respect to growth prospects and adoption of technology, the following findings emerged: only 13% of respondents felt that growth prospects were high, and 9% indicated interest in high technology adoption.

Table 14: Growth Prospects and prospective adoption of technology

Growth Prospects of Industry	%	Level of Technology adoption	%
High	13%	High	9%
Medium	54%	Medium	21%
Low	28%	Low	67%

Questions on perception of future demand for workers yielded the following findings: 44% of respondents expressed medium to high demand for skilled workers, on the other hand, 60% of the respondents expressed low demand for minimally skilled workers. The below table presents the demand for each type of labour.

Table 15: Demand for workers by Skill Level

	Demand for Workforce in next 5 years		
	Minimally Skilled	Skilled	Supervisory
High Demand	7%	17%	-
Medium Demand	5%	27%	8%
Low Demand	60%	44%	48%
None	28%	12%	44%

There is a need for enhancing the awareness level of respondents on various skill development programs so that it can be promoted among the youth appropriately.

**Responses indicate that there is medium/high demand for skilled labour perceived in the next five years. There are few spinning mills and a leather tannery cluster which require labours and who can be trained by the industries themselves.**

### 3.2. Focus Group Discussion with Industry Representatives

A focus group discussion was conducted with sixteen stakeholders from various organizations in sectors such as boiler manufacturing, auto components, agro-processing, and food processing. In-depth Interviews with other stakeholders were conducted, with the discussion points summarized below:

Table 16: Focus Group Discussion - Key Points

S No	Topic	Findings
1.	Awareness of government skill training programs	<ul style="list-style-type: none"> <li>Low level of awareness was recorded with regard long-term skill development programs (ITI and Polytechnic) as well as short-term skill development programs</li> </ul>
2.	Quality of ITI/ Polytechnics/ Engineering colleges in the district	<ul style="list-style-type: none"> <li>The Government ITI and Institute of Tool Engineering colleges in Dindigul are considered to be institutions of repute and market alignment.</li> <li>Private ITI and Polytechnic colleges are more commercial and the quality of practical application of skills is not adequate.</li> <li>There is scope for providing training that are industry and market-driven and in collaboration with local industries.</li> </ul>
3.	Candidate Attitudes/ Abilities	<ul style="list-style-type: none"> <li>Attitude of youth towards employment were not satisfactory and also their soft-skills needs further improvement.</li> </ul>



S No	Topic	Findings
		<ul style="list-style-type: none"> <li>Fresh recruits in auto components had the requisite skills, but it is not the same with respect to other sectors like spinning and iron and steel industry.</li> </ul>
4.	Migrant workers	<ul style="list-style-type: none"> <li>Migrant workers have opportunity in textile industry only. Migrant workers are largely from Chhattisgarh and Jharkhand.</li> <li>Migrant workers are not as skilled, and have high attrition rates, but are willing to work for lesser pay (contractual roles).</li> </ul>
5.	Womens' employment	<ul style="list-style-type: none"> <li>Women have more scope for employment in Tea and Cardamom estates as it is closer to Theni and Kerala.</li> <li>Though the wages paid are less compared to other states, it is still higher when compared to local earnings.</li> </ul>

### 3.3. Other Stakeholders' Perspectives

**Representatives from Industry Associations and Major Employers:** Consultations with industry representatives from Tamil Nadu Spinning Mills Association (TASMA) revealed that there are skilled jobs available in the textile and spinning mills. Such jobs include ring-frame operators, coners, tenters and doffers. The industry has higher proportion of female workforce, and has potential to absorb more. TASMA is also undertaking skill development activities through tie-ups with central programs such as the PMKVY and Integrated Skill Development Scheme for Textiles (ISDS) with placement assurance. However, the following challenges affect the industry: high rates of attrition among local and migrant workers, early marriage among women, and low levels of automation. Profit margins are not high enough for units to afford automation or upgraded machinery. The consultations revealed that giving SSC certification to trainees might stem attrition rates, due to the perception of quality associated with the training.

Consultations with the Dindigul District Micro and Small Enterprises Association revealed that there is demand for skilled workers in the job roles of CNC operator, fitter, electrician and welder in various units at the SIDCO industrial estate, where the association members have their units. The employers train fresh ITI/ Polytechnic graduates for six months to inculcate the required skills, but these workers leave afterwards in search of higher salaries. Night shifts are also a problem: workers in general prefer the general shift (9 AM to 6 PM). Women quit after marriage. Local institutions do not approach MSMEs for apprenticeships or placement, and the starting salaries in such units are usually ₹ 6,000, which is lower than the apprenticeship stipend that ITI graduates get. In general, vocational curricula do not address market demands.

Consultations with the Tamil Nadu Dairy Association revealed that skilled workers are required in laboratories and quality testing. For such roles, Microbiology and Biochemistry graduates are hired, and for machine operators position ITI/ Polytechnic graduates with Mechanical or Electrical degrees are hired. New workers are trained for 3 months to be job-ready. The association has around ten members in the district. GTN Arts College and Gandhigram have the Association's 6-month certification in dairy processing technology, in collaboration with the association. In addition, dairy processing companies have applied for empanelment under both PMKVY and DDU-GKY for dairy processing skill development courses with an aim of skilling 1,200 youths. A challenge foreseen with respect to skilled labour is post-training attrition due to shift system and low starting salaries.

The district also has a small coir-processing cluster with around 120 units, which predominantly utilizes migrant labour in unskilled roles. Local workers are used in supervisory roles, and need to have completed school education to qualify. Production is seasonal, and the units lose workers to the MNREGA program every year. The coir units are small and cannot afford to provide accommodation and food to migrants. Local workers tend to come from agrarian families, and see factory work as an off-season activity.

Service sector consultations included representatives from hospitals, IT companies, hotels and pharmaceutical distributors. The former revealed that hospitals only hires experienced workers. Currently, the technical roles are: Nursing, Auxiliary Nurse and Mid-wife (ANM), General Nurse and Mid-wife (GNM) and General Duty Assistant (GDA). Technical hires are trained for 6-10 months. Non-technical roles include receptionists, insurance management, pharmacy workers and administrative support roles. Non-technical roles require graduation and computer application skills. In pharmaceutical distribution, the employers are looking for salespersons, accountants and shop assistants, but do not find people who want to work long-term. The eligibility criteria to fill such roles are usually school graduates with ability to read and write English. However, Attitude and work ethics (stealing) are major concerns. There are about 50 such companies in the district, with their own outlets employing at least 300 such persons, but with high attrition. Starting salaries can be ₹ 7,500 to ₹ 8,000 per month.

Consultations at the District Employment Office's weekly job fair revealed that ten IT enabled services and software companies are functioning in the district, employing at least 15 people each. However, government support for smaller IT companies is non-existent, and ELCOT plots are too costly for the average IT company in the district. NASSCOM membership also in question, due to entry restriction based on turnover (detrimental to smaller companies, as the turnover has to be more than ₹ 50 Lakh). Starting salary is ₹ 15,000 per month for Bachelors' in Engineering (BE) and Masters' in Engineering (ME) graduates; and candidates have technical and soft skills, but lack work ethics and team work. Currently, Retention is low, and workers tend to go from company to company in the hope and prospects for marginally higher salaries. In the hospitality industry, school graduates work in F&B, housekeeping and catering, and are recruited through walk-in interviews. Post induction, recruits are trained for 3-6 months. BSc Tourism graduates work in administrative roles.

**Government Officials:** Employers come to the job fairs, but out of the several applicants who are recruited, only a handful continue in the same job for more than a year. Most applicants are 10th or 12th pass-outs. Youth tend to shift from job to job, and since there is huge demand for labour, employers work with the high attrition rate. Employers look for office staff, salespersons, and software developers. They also feel that offering placement along with SSC certification will lend legitimacy and appeal to the jobs.

Consultations with the Department of Handlooms and Textiles revealed that the district has 38 operational cooperatives/ producer collectives. The workers are aged 45 and above, and do not encourage their own children to continue the trade. There are 3,123 active handlooms, and although each loom can only be given to one person, since artisans work from home, they share it with spouses/ family to make 300 rupees a day. The most common products are tie-and-dye kora silk saris, organic cotton and Benaras cotton saris. Currently only two collectives produce silk saris.

Consultations in the Horticulture and Forest Crops Department revealed the following:

- Training programs have been initiated for the following courses:
  - a. Gardener – 60 seats (28 days)
  - b. Florist – 60 seats (28 days)
  - c. Drip Irrigation Technician – 600 seats (66 days)
- Irrigation technicians take up franchises of larger irrigation companies, and work with farmers, and currently number 10.
- Agriculture graduates also set up seedling nurseries and sell them to farmers. 10-15 such units exist in Ottanchathram.

**College/ ITI/ Training Institute representatives and Government Officials:** The representatives from government ITIs revealed that the textile industry has high intake of most trades – electrician, wireman, plumber, fitter, etc. Among students, fitter, wireman, instrument mechanic trades are in demand. The ITI tracks apprenticeships, but not permanent job offers, as graduates tend to keep shifting frequently. TVS, Bata, Royal Enfield etc., come for apprenticeships.

The Institute of Tool Engineering is a premier training institution in the district (established in 1963). It offers diploma courses in tool and die making. Major recruiters include TVS Sundaram Clayton, Hosur and Fine Components and Tools, Bangalore. Students are willing to migrate to major industrial hubs, and keep shifting between companies. They however stay in the same sector.

Training institutions in the service sectors offer courses in hospitality (Front Office Associate) and Healthcare (Auxiliary Nurse and Midwife, General Duty Assistant). Most students are female, and those from rural areas have better attendance and motivation to work outside the district. The courses are longer than six months, with OJT given in Coimbatore, Pollachi, Dindigul and Salem. The starting pay/ stipend for hospitality jobs is ₹ 5,000 per month, and for healthcare jobs ₹ 6,000-7,000 per month, with food and accommodation provided in both sectors.

**Textile, chemical processing, healthcare, pharmacies and hospitality sectors show high demand for skilled workforce. However, attrition in the manufacturing sectors, and disparity between salary aspirations and salaries offered by the market are concerns that need to be addressed.**

## 4. Skill Gap Analysis

### 4.1. Skill Gap Assessment - Incremental Demand<sup>15</sup> for Skilled & Semi Skilled Workforce

The district is witnessing a growing industrial sector. The sectors that show high demand for skilled and semi-skilled labour are: **manufacturing, construction, education, human health & social work activities, trade and repair services, agricultural and allied activities, along with other services**, show high levels of demand for both skilled and semi-skilled workers. The detailed methodology is presented in the Appendix (7.2).

Table 17: Sector wise Incremental Demand for Skilled and Semi-skilled Workers between 2019 and 2025

Sector	Incremental Demand for Skilled Workers			Incremental Demand for Semi-skilled Workers			Total Incremental Demand 2019-2025
	2019-21	2022-25	Total	2019-21	2022-25	Total	
Allied Activities	80	110	189	557	768	1,325	1,514
Mining and quarrying	54	79	133	90	132	221	354
Manufacturing	8,366	13,617	21,983	16,733	27,233	43,966	65,949
Construction	682	1,011	1,693	1,704	2,528	4,232	5,925
Trade & Repair Services	367	511	878	1,271	1,767	3,039	3,916
Hotels and restaurants	233	323	556	451	627	1,078	1,634
Transportation and storage;	102	137	239	244	330	574	813
Communication and services related to broadcasting	813	1,281	2,094	407	641	1,047	3,141
Financial and insurance activities	1,109	1,708	2,816	554	854	1,408	4,225
Real estate, ownership of dwelling and business services	181	265	447	453	663	1,116	1,563
Public Administration	33	44	77	26	35	62	139
Education; Human health & Social Work Activities	1,351	1,943	3,294	1,081	1,554	2,635	5,929
Arts, entertainment and recreation	392	562	954	314	450	763	1,718
Activities of membership organizations; Repair of computers and personal and household goods & Other personal service activities	1,314	1,885	3,199	1,051	1,508	2,559	5,759
Other Services	623	893	1,515	498	714	1,212	2,728
<b>Total Demand</b>	<b>15,699</b>	<b>24,369</b>	<b>40,068</b>	<b>25,434</b>	<b>39,804</b>	<b>65,238</b>	<b>1,05,306</b>
<b>Total Supply</b>	<b>5,148</b>	<b>6,864</b>	<b>12,012</b>	<b>10,292</b>	<b>13,723</b>	<b>24,015</b>	<b>36,027</b>
<b>Skill Gap</b>	<b>10,551</b>	<b>17,505</b>	<b>28,056</b>	<b>15,142</b>	<b>26,081</b>	<b>41,223</b>	<b>69,280</b>

<sup>15</sup> Incremental Demand Estimates the additional stock of workforce that are to be created given the expected Economic Conditions in the period of study. This may help in estimating requirement for fresh trainings.



# 5. District Skilling Action Plan and Recommendations

## 5.1. District Skilling Action Plan–Key Training Projects

Table 18: Summary of Training Projects

S No	Sector	Trades	Target (Persons)	Budget (₹)
1.	Textile and Apparel	<ul style="list-style-type: none"> <li>Fitter - Ring Spinning</li> <li>Fitter- Spinning Preparatory</li> <li>Fitter - Weaving preparatory</li> <li>Folding Machine Operator</li> <li>Fitter – Processing</li> <li>Fitter - Post Spinning</li> <li>Finishing Machine Operator (Zero-Zero/Compacting)</li> </ul>	8,000	₹11.88 Crores
2.	Tourism and Hospitality	<ul style="list-style-type: none"> <li>Billing Executive</li> <li>Chef-de-partie</li> <li>Assistant Catering Manager</li> <li>Assistant Facility Manager</li> <li>Pest Controller</li> <li>Counter Sale Executive</li> <li>Duty Manager</li> <li>Facility Store Keeper</li> <li>Front Office Associate</li> <li>Guest House Caretaker</li> <li>Guest Relations Manager</li> <li>Kitchen Helper</li> <li>Laundry Machine Operator</li> <li>Meeting, Conference and Event Planner</li> </ul>	6,000	₹10.69 Crores
3.	Healthcare	<ul style="list-style-type: none"> <li>General Duty Assistant</li> <li>Blood Bank Technician</li> <li>Cardiac Care Technician</li> <li>Diabetes Educator</li> <li>Emergency Medical Technician - Basic</li> <li>Medical Records &amp; health Information Technician</li> </ul>	8,000	₹27.6 Crores
4.	Domestic Appliance Services	<ul style="list-style-type: none"> <li>Helper Electrician</li> <li>Plumber (General)</li> <li>Solar Domestic Water Heater Technician</li> <li>Field Technician – AC</li> <li>Field Technician – Refrigerator</li> <li>Field Technician - Washing Machine</li> <li>Field Technician - Other Home Appliances</li> </ul>	2,000	₹3.54 Crores
5.	Food Processing	<ul style="list-style-type: none"> <li>Dairy Processing Equipment Operator</li> <li>Cold Storage Technician</li> <li>Food Products Packaging Technician</li> <li>Grain Mill Operator</li> <li>Supervisor: Meat and Poultry Processing</li> <li>Corn Starch Manufacturing Technician</li> <li>Multi Skill Technician (Food Processing)</li> </ul>	8,000	₹12.94 Crores

S No	Sector	Trades	Target (Persons)	Budget (₹)
		<ul style="list-style-type: none"> <li>Poultry feed, food safety and labelling supervisor</li> <li>Feed Technician</li> <li>Veterinary Field Assistant</li> <li>Veterinary Clinical Assistant</li> </ul>		
6.	IT/ ITeS	<ul style="list-style-type: none"> <li>Domestic Data Entry Operator</li> <li>Customer Care Executive (Call Centre)</li> <li>Associate - Desktop Publishing (DTP)</li> <li>Associate Operations Engineer</li> <li>Domestic Biometric data operator</li> <li>Hardware Engineer</li> </ul>	4,000	₹7.72 Crores
7.	Retail	<ul style="list-style-type: none"> <li>Cashier</li> <li>Retail Sales Associate</li> <li>Store Ops Assistant</li> <li>Seller Activation Executive</li> <li>Digital Cataloguer</li> <li>Retail Trainee Associate</li> </ul>	4,000	₹5.48 Crores
8.	Logistics	<ul style="list-style-type: none"> <li>Warehouse Packer</li> <li>Inventory Clerk</li> <li>Warehouse Supervisor</li> <li>Reach Truck Operator</li> <li>Receiving Assistant</li> <li>Warehouse Quality Checker</li> <li>Loading Supervisor</li> <li>Material Handling Equipment (MHE) Maintenance Technician</li> <li>Goods Packaging Machine Operator</li> <li>Cold Storage Technician</li> </ul>	2,000	₹3.23 Crores
9.	Construction	<ul style="list-style-type: none"> <li>Foreman – Electrical Works (Construction)</li> <li>Metal Inert Gas/Metal Active Gas/Gas Metal Arc Welder (MIG/MAG/GMAW)</li> <li>Mason Marble, Granite and Stone</li> <li>Foreman Wet Finishing and Flooring</li> <li>Bar Bender and Steel Fixer</li> <li>Assistant Electrician</li> </ul>	3,000	₹10.46 Crores
<b>Total Training Costs</b>			43,000	₹ 93.5 Crores

Note:

- The intended target groups are different from the eligibility criteria prescribed as part of the Qualification Pack. Target Group refers to the preferred set of youth who stakeholders have identified are most likely to benefit from the training. This could come from the Aspirations expressed in the Quantitative Survey, feedback from Industry and Govt. Stakeholders. For instance, though a training in handicrafts might require only 5th grade as an eligibility- criteria, the target group would be rural women in a cluster. TNSDC and the TSPs can continue to use the minimum criteria as mentioned in the Qualification Pack; however, qualifications that may constrain an interest-group may appropriately considered on a case-to-case basis (as approved by TNSDC).
- The QP NOS reference numbers and the training hours have been taken as per the latest QP NOS compilation (as on 17th October 2019). However, in the same compilation, some job roles do not have training hours mentioned. **In such cases, we have taken the average training hours for the sector and NSQF level within the sector and applied those as notional hours.** We have also used insights from field consultations to arrive at training hour estimates which we believe are reasonably accurate.
- An attempt was made to map each proposed job role with a QP NOS reference number. **In the cases where accurate mapping has not been possible, we have mapped the job role with the nearest QP NOS reference number.** In

cases where we have proposed new job roles, we have indicated that a QP NOS reference is to be designed for the same.

4. The Cost of Training has been calculated using the following method: Each job role has training hours, training target (persons), and a cost category. The cost category has been determined by the National Skills Qualification Framework (NSQF) with respect to the level of capital expenditure and operational expenditure for imparting the course aligned to that specific job role. Therefore, each cost category corresponds to a particular cost norm calculated per trainee per hour. The calculations have been done as per the Government order (H-22011/2/2014-SDE-III) issued by MSDE on 4th January 2019. The categories are defined as follows:

- INR 42.40 for Category-I
- INR 36.30 for Category -II
- INR 30.30 for Category-III

The Cost of training in the project shelves represents the calculation of: (training target × training hours × per hour cost) + (training target × number of days of training × INR 100).

Where:

Number of days of training = training hours / 8

Transportation costs per trainee per day = INR 100

To the figures arising from the above formula, the training and assessment costs (INR 1,000 per trainee × training target for the whole project) has also been added. The total training cost for each project arrived through such a process has been added to the summary table above.

Table 19: Training Project 1

Name of the Project: Training in Textile and Apparel Sector							
Key Economic Drivers:							
<ul style="list-style-type: none"> <li>Textile is an important industry in the district</li> </ul>							
Key Partners: Tamil Nadu Spinning Industries Association, ITI, Polytechnic colleges							
Job Roles	NSQF Level	NSQF Code	Duration of Training (hours)	Cost Category	Target Group	Training Target	Cost of Training
Fitter - Ring Spinning	5	TSC/Q0402	300	1	10 <sup>th</sup> pass	500	₹0.83 Crores
Fitter- Spinning Preparatory	5	TSC/Q0401	400	1	5 <sup>th</sup> pass	1,000	₹2.2 Crores
Fitter - Weaving preparatory	5	TSC/Q2401	400	1	5 <sup>th</sup> pass	500	₹1.1 Crores
Folding Machine Operator	4	TSC/Q5601	300	1	10 <sup>th</sup> pass	1,000	₹1.65 Crores
Fitter – Processing	5	TSC/Q5701	400	1	5 <sup>th</sup> pass	1,000	₹2.2 Crores
Fitter - Post Spinning	5	TSC/Q0403	300	1	10 <sup>th</sup> pass	1,000	₹1.65 Crores
Finishing Machine Operator (Zero-Zero/Compacting)	4	TSC/Q5403	300	1	10 <sup>th</sup> pass	1,000	₹1.65 Crores
Total Training Cost						8,000	₹11.27 Crores
Total Assessment and Certification cost (₹ 1,000 per candidate)							₹0.6 Crore
Total Cost							₹11.28 Crores
Key Considerations:							
<ul style="list-style-type: none"> <li>Adequate facilities must be provided if women are being trained – bathrooms, changing rooms</li> <li>Industry partners must be made part of the process, and given leadership of the training programs</li> <li>Training providers must be vetted based on instructor quality and infrastructure</li> </ul>							



Table 20: Training Project 2

Name of the Project: Training in Tourism and Hospitality Sector							
Key Economic Drivers:							
<ul style="list-style-type: none"> <li>The district has a growing hospitality sector due to tourism in places such as Kodaikanal, Palani and Sirumalai</li> </ul>							
Key Partners: Hotels and restaurants in the district, Department of Tourism							
Job Roles:	NSQF Level	NSQF Code	Duration of Training (hours)	Cost Category	Target Group	Training Target	Cost of Training
Billing Executive	4	THC/Q5801	290	2	College Graduates	500	₹0.71 Crores
Chef-de-partie	6	THC/Q0404	285	1	8 <sup>th</sup> pass	500	₹0.78 Crores
Assistant Catering Manager	6	THC/Q5901	475*	2	12 <sup>th</sup> pass	500	₹1.16 Crores
Assistant Facility Manager	7	THC/Q5707	435	2	Diploma in Electrical Engineering	500	₹1.06 Crores
Pest Controller	4	THC/Q5704	500*	2	8 <sup>th</sup> pass	500	₹1.22 Crores
Counter Sale Executive	4	THC/Q2903	240	2	12 <sup>th</sup> pass	500	₹0.59 Crores
Duty Manager	7	THC/Q0106	300*	2	12 <sup>th</sup> pass	500	₹0.73 Crores
Facility Store Keeper	4	THC/Q5602	300*	2	10 <sup>th</sup> pass	500	₹0.73 Crores
Front Office Associate	4	THC/Q0102	280	2	12 <sup>th</sup> pass	500	₹0.68 Crores
Guest House Caretaker	5	THC/Q0501	370	2	10 <sup>th</sup> pass	500	₹0.91 Crores
Guest Relations Manager	6	THC/Q0108	350*	2	12 <sup>th</sup> pass	300	₹0.51 Crores
Kitchen Helper	2	THC/Q3303	260	2	Primary Education	300	₹0.38 Crores
Laundry Machine Operator	4	THC/Q0205	240	2	5 <sup>th</sup> pass	300	₹0.35 Crores
Meeting, Conference and Event Planner	5	THC/Q4401	500	2	Diploma Education	100	₹0.24 Crores
Total Training Cost						6,000	₹10.08 Crores
Total Assessment and Certification cost (₹ 1,000 per candidate)							₹0.6 Crores
Total Cost							₹10.69 Crores

**Key Considerations:**

- Women and college graduates can be targeted
- Local employers can provide internships
- Language skills can also be imparted

\*Hours based on qualitative consultations

Table 21: Training Project 3

<b>Name of the Project: Training in Healthcare Sector</b>							
<b>Key Economic Drivers:</b>							
<ul style="list-style-type: none"> <li>• Dindigul is growing and urbanizing, and hence would require an expanded healthcare system</li> <li>• Healthcare sector has scope for young men and women, and career mobility as well</li> </ul>							
<b>Key Partners:</b> Hospitals, Nursing Colleges, Meenakshi Mission Hospital and Research Centre							
<b>Job Roles:</b>	<b>NSQF Level</b>	<b>NSQF Code</b>	<b>Duration of Training (hours)</b>	<b>Cost Category</b>	<b>Target Group</b>	<b>Training Target</b>	<b>Cost of Training</b>
General Duty Assistant	4	HSS/ Q5101	600	2	8 <sup>th</sup> pass, 10 <sup>th</sup> pass	1,500	₹4.39 Crores
Blood Bank Technician	4	HSS/ Q2801	1,000	1	12 <sup>th</sup> pass	1,500	₹8.24 Crores
Cardiac Care Technician	4	HSS/ Q0101	840	1	12 <sup>th</sup> pass	1,500	₹6.92 Crores
Diabetes Educator	4	HSS/ Q8701	360	2	12 <sup>th</sup> pass	1,500	₹2.64 Crores
Emergency Medical Technician - Basic	4	HSS/ Q2301	240	1	12 <sup>th</sup> pass	1,000	₹1.32 Crores
Medical Records & Health Information Technician	4	HSS/ Q5501	600	1	12 <sup>th</sup> pass	1,000	₹3.29 Crores
Total Training Cost						8,000	₹26.79 Crores
Total Assessment and Certification cost (₹ 1,000 per candidate)							₹0.8 Crores
Total Cost							₹27.6 Crores
<b>Key Considerations:</b>							
<ul style="list-style-type: none"> <li>• Residential training and part-time training modes should be explored to allow women of all backgrounds to attend</li> </ul>							

Table 22: Training Project 4

Name of the Project: Training in Domestic Appliance Services Sector							
<b>Key Economic Drivers:</b>							
<ul style="list-style-type: none"> <li>The city is growing and urbanizing, and hence would require servicepersons who can work in domestic appliance repair and maintenance (household incomes are also bound to increase with growth)</li> </ul>							
<b>Key Partners:</b> ITI/ Polytechnic							
Job Roles:	NSQF Level	NSQF Code	Duration of Training (hours)	Cost Category	Target Group	Training Target	Cost of Training
Helper Electrician	3	CON/Q0601	350	1	10 <sup>th</sup> pass	300	₹0.58 Crores
Plumber (General)	3	PSC/Q0104	410	1	10 <sup>th</sup> pass	400	₹0.9 Crores
Solar Domestic Water Heater Technician	4	SGJ/Q0601	200	1	8 <sup>th</sup> pass	300	₹0.33 Crores
Field Technician – AC	4	ELE/Q3102	300	2	8 <sup>th</sup> pass	400	₹0.59 Crores
Field Technician – Refrigerator	4	ELE/Q3103	300	2	8 <sup>th</sup> pass	200	₹0.29 Crores
Field Technician - Washing Machine	4	ELE/Q3106	300	2	8 <sup>th</sup> pass	200	₹0.29 Crores
Field Technician - Other Home Appliances	4	ELE/Q3104	360	2	8 <sup>th</sup> pass	200	₹0.35 Crores
Total Training Cost						2,000	₹3.34
Total Assessment and Certification cost (₹ 1,000 per candidate)							₹0.2 Crores
Total Cost							₹3.54 Crores
<b>Key Considerations:</b>							
<ul style="list-style-type: none"> <li>Adequate facilities must be provided if women are being trained – bathrooms, changing rooms</li> <li>Industry partners must be made part of the process</li> <li>Training providers must be vetted based on instructor quality and infrastructure</li> </ul>							

Table 23: Training Project 5

Name of the Project: Training in Food Processing Sector							
<b>Key Economic Drivers:</b>							
<ul style="list-style-type: none"> <li>Dairy and food processing is a key sub-sector, and the district also has centres for production of fruits and vegetables (Ottanchatram and Kodaikanal)</li> <li>Due to the livestock sub-sector, the district can also have meat processing units</li> </ul>							
<b>Key Partners:</b> ITI/ Polytechnic colleges, engineering and degree colleges, local industry players							
Job Roles:	NSQF Level	NSQF Code	Duration of Training (hours)	Cost Category	Target Group	Training Target	Cost of Training
Dairy Processing Equipment Operator	4	FIC/Q2002	240	1	10 <sup>th</sup> pass	1,000	₹1.32 Crores
Cold Storage Technician	4	FIC/Q7004	250	3	12 <sup>th</sup> pass/ diploma	1,000	₹1.08 Crores
Food Products Packaging Technician	5	FIC/Q7001	240	1	12 <sup>th</sup> pass	1,000	₹1.32 Crores
Grain Mill Operator	4	FIC/Q1003	240	1	8 <sup>th</sup> pass	1,000	₹1.32 Crores
Supervisor: Meat and Poultry Processing	5	FIC/Q3007	240	1	12 <sup>th</sup> pass	1,000	₹1.32 Crores
Corn Starch Manufacturing Technician	4	FIC/Q1007	240	1	10 <sup>th</sup> pass	1,000	₹1.32 Crores
Multi Skill Technician (Food Processing)	4	FIC/Q9007	600	1	8 <sup>th</sup> pass	1,000	₹3.29 Crores
Poultry feed, food safety and labelling supervisor	5	AGR/Q4305	240	2	12 <sup>th</sup> pass	1,000	₹1.17 Crores
Total Training Cost						8,000	₹12.13 Crores
Total Assessment and Certification cost (₹ 1,000 per candidate)							₹0.8 Crore
Total Cost							₹12.94 Crores
<b>Key Considerations:</b>							
<ul style="list-style-type: none"> <li>Women and college graduates can be targeted</li> <li>Organic and sustainable products can be promoted</li> </ul>							

Table 24: Training Project 6

Name of the Project: IT/ ITeS Sector							
<b>Key Economic Drivers:</b>							
<ul style="list-style-type: none"> <li>The IT/ITeS sector is a growing sector in the district due to the abundance of engineering graduates in the district and surrounding areas</li> </ul>							
<b>Key Partners:</b> Local Software firms							
Job Roles:	NSQF Level	NSQF Code	Duration of Training (hours)	Cost Category	Target Group	Training Target	Cost of Training
Domestic Data Entry Operator	4	SSC/Q2212	400	2	10 <sup>th</sup> pass	500	₹0.98 Crores
Customer Care Executive (Call Centre)	4	TEL/Q0100	200	2	10 <sup>th</sup> pass	500	₹0.49 Crores
Associate - Desktop Publishing (DTP)	7	SSC/Q2702	400	2	BE	500	₹0.98 Crores
Associate Operations Engineer	5	SSC/Q5101	400	2	12 <sup>th</sup> pass	500	₹0.98 Crores
Domestic Biometric data operator	4	SSC/Q2213	400	2	10 <sup>th</sup> pass	1,500	₹2.93 Crores
Junior Software Developer	4	SSC/Q0508	400	2	12 <sup>th</sup> pass	500	₹0.98 Crores
Total Training Cost						4,000	₹7.32 Crores
Total Assessment and Certification cost (₹ 1,000 per candidate)							₹0.4 Crores
Total Cost							₹7.72 Crores
<b>Key Considerations:</b>							
<ul style="list-style-type: none"> <li>Adequate facilities must be provided if women are being trained – bathrooms, changing rooms</li> <li>Industry partners must be made part of the process</li> <li>Training providers must be vetted based on instructor quality and infrastructure</li> </ul>							

Table 25: Training Project 7

Name of the Project: Training in Retail Sector							
<b>Key Economic Drivers:</b>							
<ul style="list-style-type: none"> <li>Urbanizing population will spur the growth of large retailers, and the retail sector can absorb youth in skilled and semi-skilled roles</li> </ul>							
<b>Key Partners:</b> Large retailers							
Job Roles:	NSQF Level	NSQF Code	Duration of Training (hours)	Cost Category	Target Group	Training Target	Cost of Training
Cashier	2	RAS/Q0102	200	2	College Graduate	500	₹0.49 Crores
Retail Sales Associate	4	RAS/Q0104	280	2	10 <sup>th</sup> pass	500	₹0.68 Crores
Store Ops Assistant	1	RAS/Q0101	200	2	10 <sup>th</sup> pass	500	₹0.49 Crores
Seller Activation Executive	4	RAS/Q0301	280	2	10 <sup>th</sup> pass	500	₹0.68 Crores
Digital Cataloguer	4	RAS/Q0302	280	2	12 <sup>th</sup> pass	500	₹0.68 Crores
Retail Trainee Associate	3	RAS/Q0103	280	2	10 <sup>th</sup> pass	1,500	₹2.05 Crores
Total Training Cost						4,000	₹5.08 Crores
Total Assessment and Certification cost (₹ 1,000 per candidate)							₹0.4 Crores
Total Cost							₹5.48 Crores
<b>Key Considerations:</b>							
<ul style="list-style-type: none"> <li>Women can be targeted – but adequate facilities must be provided</li> <li>On the job training can be provided by local retailers</li> </ul>							

Table 26: Training Project 8

Name of the Project: Training in Logistics Sector							
Key Economic Drivers:							
<ul style="list-style-type: none"> <li>Due to growing trade and manufacturing, logistics (transportation and warehousing) will grow as well</li> </ul>							
Key Partners: ITI, Polytechnic colleges, engineering and degree colleges							
Job Roles:	NSQF Level	NSQF Code	Duration of Training (hours)	Cost Category	Target Group	Training Target	Cost of Training
Warehouse Packer	3	LSC/Q2303	270	1	8 <sup>th</sup> pass	200	₹0.3 Crores
Inventory Clerk	3	LSC/Q2108	250	1	12 <sup>th</sup> pass	200	₹0.28 Crores
Warehouse Supervisor	5	LSC/Q2307	240	1	Diploma	200	₹0.26 Crores
Reach Truck Operator	4	LSC/Q2111	300	1	8 <sup>th</sup> pass	200	₹0.33 Crores
Receiving Assistant	3	LSC/Q2112	290	2	10 <sup>th</sup> pass	200	₹0.28 Crores
Warehouse Quality Checker	3	LSC/Q2313	300	3	10 <sup>th</sup> pass	200	₹0.26 Crores
Loading Supervisor	3	LSC/Q2314	270	2	10 <sup>th</sup> pass	200	₹0.26 Crores
Material Handling Equipment (MHE) Maintenance Technician	4	LSC/Q2315	280	1	10 <sup>th</sup> pass	300	₹0.46 Crores
Goods Packaging Machine Operator	4	LSC/Q2216	360	1	10 <sup>th</sup> pass	300	₹0.59 Crores
Total Training Cost						2,000	₹3.03 Crores
Total Assessment and Certification cost (₹ 1,000 per candidate)							₹0.2 Crores
Total Cost							₹3.23 Crores
Key Considerations:							
<ul style="list-style-type: none"> <li>Rural youth can be targeted</li> <li>Industry partners must be made part of the process</li> </ul>							

Table 27: Training Project 9

Name of the Project: Training in Construction Sector							
Key Economic Drivers:							
<ul style="list-style-type: none"> <li>Due to urbanization, economics growth and trade, construction sector will also grow</li> </ul>							
Key Partners: ITI, Polytechnic colleges, engineering colleges							
Job Roles:	NSQF Level	NSQF Code	Duration of Training (hours)	Cost Category	Target Group	Training Target	Cost of Training
Foreman – Electrical Works (Construction)	5	I/CON/Q0604	900	1	10 <sup>th</sup> pass	500	₹2.47 Crores
Metal Inert Gas/Metal Active Gas/Gas Metal Arc Welder (MIG/MAG/GMAW)	4	I/CSC/Q0209	600	1	10 <sup>th</sup> pass	500	₹1.65 Crores
Mason Marble, Granite and Stone	4	CON/Q0106	600	1	8 <sup>th</sup> pass	500	₹1.65 Crores
Foreman Wet Finishing and Flooring	5	CON/Q0109	800	1	10 <sup>th</sup> pass	500	₹2.2 Crores
Bar Bender and Steel Fixer	4	CON/Q0203	400	1	10 <sup>th</sup> pass	500	₹1.1 Crores
Assistant Electrician	3	CON/Q0602	400	1	10 <sup>th</sup> pass	500	₹1.1 Crores
Total Training Cost						3,000	₹10.16 Crores
Total Assessment and Certification cost (₹ 1,000 per candidate)							₹0.3 Crores
Total Cost							₹10.46 Crores
Key Considerations:							
<ul style="list-style-type: none"> <li>Dropout and rural youth can be targeted</li> <li>Sustainability can be a focus in training</li> </ul>							



## 5.2. Key Recommendations

- **Student Counselling and industry collaborations:** Youth aspirations for jobs in the different sectors do not match with the opportunity available in the industry or service sectors. Hence, the opportunities available in the local industries and service sectors should reach the youth to tune themselves with the openings and what qualification and skill requirements are expected out of them. The following can be undertaken:
  - Organizing seminars/melas for students in collaboration with the industry.
  - Counselling sessions to students to enable them to understand the market situation and job opportunities status with respect to their qualification/skill.
  - Local industries and service sector can train the youth by providing internships (short term) for better understanding of the job roles and responsibilities through tie-ups with appropriate institutes.
- **Unified job portal for placements:** Youth aspiration findings indicate that youth have a preference for placement services/ guidance with respect to applying for suitable jobs. Developing a **unified job portal** for job postings at all levels of skill across sectors can be developed. Such a portal would enable both employers and candidates to minimize time and effort in finding suitable vacancies and profiles.
- **Promotion of skill development in Service sector:** Private activity in the service sector can be nurtured to provide local employment to youth at a livable wage. Construction, trade and tourism, hospitality, retail and logistics can absorb local youth in significant numbers, and provide jobs suited to the needs of youth. Skill development programs can focus on such sectors, based on consultations with local players and training service providers.
- **Promotion of traditional village and household industries:** The Small Industries Product Promotion Organization (SIPPO) promotes traditional industries which have availed credit schemes under the Prime Minister's Employment Generation Program (PMEGP) of the Khadi and Village Industries Commission (KVIC). Consultations revealed that traditional artisans and home-based businesses face marketing challenges, which need to be overcome to ensure sustainability. Interventions can identify local partners for providing marketing and technical support to such beneficiaries, to ensure that traditional sectors such as sungudi and handloom saris are sustained. In addition, traditional industries can be formalized through appropriate skill assessment and certification process under the Recognition of Prior Learning modality. This can be done in collaboration with the Handicrafts and Carpet Sector Skill Council (HCSSC).

# Appendix

## ***A.1 Methodology for Block Selection in Youth Aspiration Survey***

### ***Sampling Design for Youth Survey***

A total of 360 youth was surveyed in the district, which included youth in both self-employment and wage-employment, unemployed youth, youth on education system, and youth under NEET category to get a balanced representation of various socioeconomic and demographic characteristics of the population.

#### **1. Students from educational and training institutions:**

The list of General arts/science/commerce colleges, engineering colleges, polytechnic colleges and Industrial Training Institutions was obtained. A list of educational institutions was randomly sampled from the list. Of the selected institutions, a list of randomly selected students were interviewed.

#### **2. Household Level Survey:**

In the selected blocks, few villages and wards were randomly selected. After consultation with the head of the village/ward, a sample of households was selected.

#### **3. Self – Employed Youth:**

To cover Self–Employed Youth in the sample, a roster of beneficiaries from the Pradhan Mantri Employment Generation Programme (PMEGP) shall be randomly selected from the list which will be obtained from the concerned authority at the district level.

#### **4. Employed in the informal sector:**

The youth from unorganized sector were identified at the cluster-level after obtaining and examining the list of enterprises that are not registered and those workers were doing job-work type of activities.

### ***Selection of Block***

We conducted the survey in six blocks in Dindigul with the following stratification - two high performing, two moderate performing and two low performing industrial blocks. To ascertain and rank the blocks into the categories, a multi-faceted approach was undertaken which is outlined as follows. It is to be noted that the ranking of the blocks is on a relative basis that is, ranked with respect to the district and not on a generalized scale.

For categorizing the blocks into High, Medium and Low, we used four data points. We chose variables such as the Count of MSME Clusters, the Number of SIDCO Industrial Estates, the Number of SIPCOT Industrial Estates and finally the outstanding credit annual data from the Aggregate Deposit and Bank Credit of Scheduled Commercial Banks (SCBs) at Centre-Level.

Geographic Information System (GIS) was used to capture the Latitude and Longitude of the individual locations of the Centre (RBI Centre – Credit data), MSME Clusters, SIDCO and SIPCOT Industrial Estates. The same were mapped to the respective blocks by overlaying the locations onto the block map of Tamil Nadu. For enabling aggregation of data at block-level and mapping the location, the block-level map of Tamil Nadu was digitised using in-house GIS technologies.

#### **a. RBI's centre level banking data**

The RBI's quarterly release of centre level banking data reports the volume of credit and deposits, and the number of accounts and branches for every centre consisting more than at least three branches in for every centre across India. A centre, as per the definition of the RBI, is a self-governing revenue generating body such as a Municipal Corporation and Municipal Council. Given that banking data serves as a good indicator for the level of economic development in a block, these centres shall be mapped to their respective blocks and the aggregates of the centre level data for every block shall be considered to determine the level of industrial performance.

#### **b. DCMSME Reports**

The Development Commissionerate of Micro Small and Medium Enterprises reports the industrial performance at the district level on a yearly basis. The DCMSME reports the prominent industrial clusters in these districts. The same was collected and mapped to the respective blocks in order to identify blocks with high industrial performance.

#### **c. Cluster Observatory Data for Tamil Nadu**

The Cluster Observatory run by the Foundation of MSME Clusters (FMC), Ministry of SSI reports the prominent industrial, MSME, Handicraft, Handloom and Service clusters for all the states in India. The clusters reported for Tamil Nadu was used to identify the blocks with high industrial activity.

**d. List of SIDCO and SIPCOT estates in Tamil Nadu**

In addition to the same, the presence of an industrial estate and its years of operation serve as good indicators for the level of industrial activity of a block. Hence, the list of SIPCOT and SIDCO estates across Tamil Nadu was obtained and was mapped to their respective blocks. As for the individual scores for the variables such as the Count of MSME Clusters, 'Number of SIDCO Industrial Estates' and 'Number of SIPCOT Industrial Estates', the scores were awarded based on the aggregate number with each number carrying a score of 10, 10 and 100, respectively.

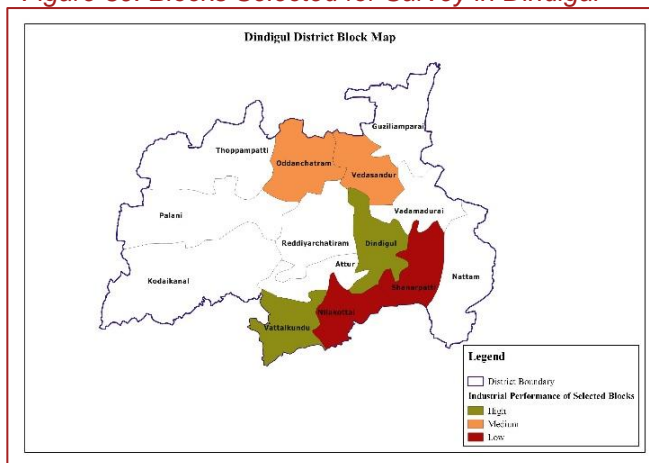
For 'credit data' variable, to accommodate regional differences, percentile calculation was employed at the district-level grouping. The final score of each block was arrived at by considering individual score weights. 25% weights was assigned to MSME and TANSIDCO clusters, 5% weights was assigned to SIPCOT industrial estate clusters and 45% weights was assigned to annual centre-level credit data post awarding of the scores. Based on the weights, the total score of each block was calculated. The total score was capped at 100.

The blocks were then categorized as High/Medium/Low, the total score was then converted into percentile values and was categorized into three groups – 0 to 33.33th percentile values for Low, 33.33 to 66.67 percentile value for Medium and 66.67 to 100 percentile values for High. The percentile values were calculated with respect to each district as the base, to accommodate for regional differences. These were triangulated using the Govt. of Tamil Nadu published list of backward blocks in each the district.

Following this, two blocks were randomly selected from each of the category, as per the mentioned classification. Based on this, the following blocks were selected in Dindigul.

- Low- Nilakottai, Shanarpatti
- Medium – Oddanchatram, Veda sandur
- High – Dindigul, Vattalkundu

*Figure 30: Blocks Selected for Survey in Dindigul*

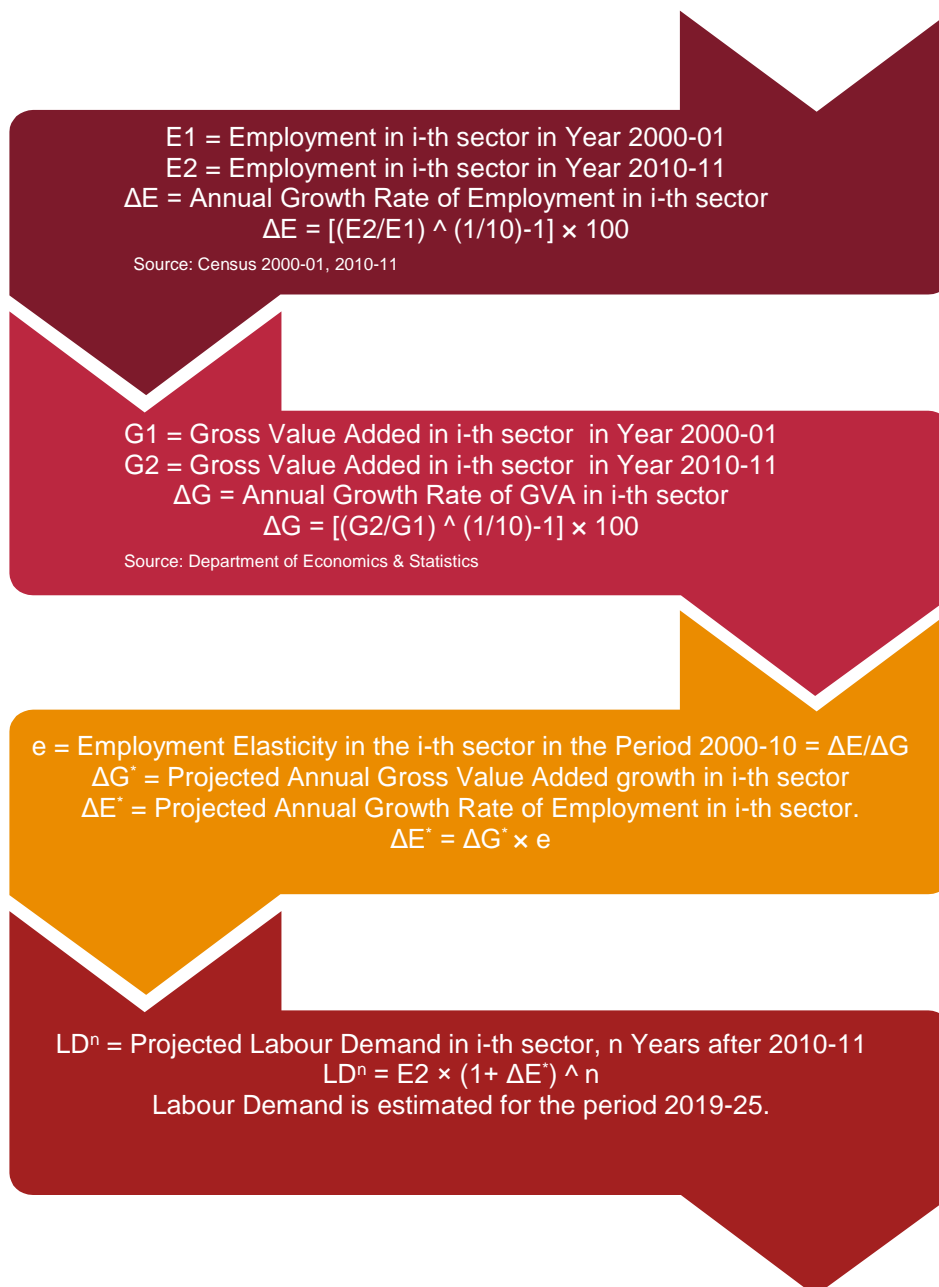


## A.2 Methodology for Present and Future Labour Demand – Supply and Gap Estimation

### Demand Estimation:

We adopted employment elasticity approach to forecast the labour demand. Employment elasticity is the measure of percentage change in employment associated with one percentage change in economic growth. The employment elasticity approach indicates the ability of an economy to generate employment opportunities. We estimated sector specific employment elasticity using historical data and assumed it to remain constant in the near future. If the estimated sector specific elasticities at district level varied significantly with national and state level estimates, we rationalized the estimated elasticities based on national and state level trends. Automation is another factor that is considered before arriving at the final labour demand estimates in different sectors. While some jobs may become obsolete with the technological advancement, new opportunities will arise for professionals who understand technology. Therefore, demand estimates were further revised based on employer consultation. The flowchart below explains the step involved:

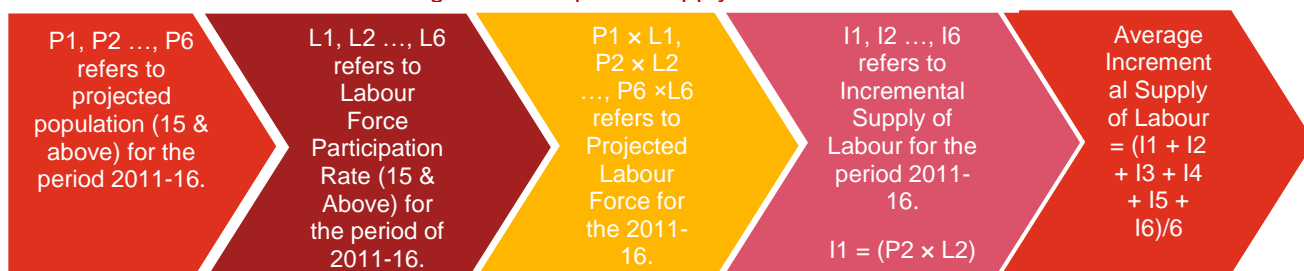
Figure 31: Steps for Demand Estimation



### Supply Estimation

We estimated the average incremental supply of labour for the period 2011-16 and assume it to remain constant for the period of 2019-25. Although the population (15 & above) is increasing, the labour force participation is decreasing in the state<sup>16</sup>. The labour force participation rate may continue to follow the decreasing trend, especially for the age category 15-29 years, primarily because of increasing economic well-being, high educational aspiration and higher salary expectations. The flowchart below explains the step involved in supply estimation:

Figure 32: Steps for Supply Estimation



<sup>16</sup> Report on Employment-Unemployment Survey, 2011-12, 2012-13, 2013-14, 2015-16 & 2017-18.

## A.3 List of Stakeholders

Table 28: List of Stakeholders

S No	Stakeholder	Category
1.	Manager, AD (Training) Office	Govt. Official
2.	District Employment Officer	Govt. Official
3.	Assistant Director, District Industries Centre	Govt. Official
4.	Assistant Director, Department of Handlooms and Textiles	Govt. Official
5.	DD, Horticulture, Horticulture and Forest Crops Department	Govt. Official
6.	Principal, Government Women's ITI	Training Service Provider
7.	Superintendent, Institute of Tool Engineering	Training Service Provider
8.	Coordinator, Prabhavathi Vocational Training Institute	Training Service Provider
9.	Secretary, Dindigul Pharmaceutical Distributors Association	Industry Association
10.	Director-Projects, Tamil Nadu Spinning Mills Association	Industry Association
11.	Proprietor/ President, DR Tech/ Dindigul District Micro and Small Enterprises Association	Industry Association
12.	President, Tamil Nadu Dairies Association	Industry Association
13.	Managing Director, Dindigul Coir Consortium Pvt Ltd	Industry Association
14.	Assistant Professor and Placement In-charge, GTN Arts College	Higher Education Institution
15.	MK Systems and Hosting Solutions	Industry
16.	Parson's Court	Industry
17.	Shifa Hospital and Fertility Centre	Industry
18.	Senthil Spinners(p) Ltd	Industry
19.	Chamundi Engineering Fabricators	Industry
20.	Mother Industries	Industry
21.	Sakthi Industries	Industry
22.	DD Machine Works	Industry
23.	Poovathal Polymers	Industry
24.	Sri Murugan and Company	Industry
25.	Madura Steel Industries	Industry
26.	Sarathi Industries	Industry
27.	Tiruchy Agro Industries	Industry
28.	Tranquil Nest	Industry
29.	R J Sekar Industries	Industry
30.	Sri Ram and Company	Industry
31.	Naga Ltd	Industry
32.	Kurunji Agro Product	Industry
33.	Packiam Botanicals	Industry

34.	Sri Velayudhaswamy Spinning Mills	Industry
35.	Savorit Ltd	Industry
36.	Eveready Spinning Mills Pvt Ltd	Industry
37.	Sivaraj Spinning Mills Private Ltd	Industry
38.	Sakthi Hatcheries	Industry
39.	Sakthi Packers Industry	Industry
40.	Meccanotecnica India Pvt Ltd	Industry
41.	Dharini Rubber	Industry
42.	Yuvaraj Tubes Pvt. Ltd.	Industry
43.	Dindigul Lock Society	Industry
44.	Yuvaraj tubes Pvt Ltd	Industry
45.	Chennimalai Aandavan Paper Cones	Industry
46.	Maagrita Exports Ltd.	Industry
47.	Balu Shed Fabrication	Industry
48.	Ilakkiya Engineering Works	Industry
49.	Interfit India Ltd.	Industry
50.	Barakath Roofing Contractors (Steel Fabrication)	Industry
51.	Sri Mungil Annai Lathe Works	Industry
52.	Viswapriya Engineering Company	Industry
53.	Sasi Machine Works	Industry
54.	Saravana Lathe Works	Industry
55.	Paravel Lathe Works	Industry
56.	Nalvetha Cast Steel	Industry
57.	Dindigul ANS Locks	Industry
58.	Bnazrum Agro Exports (P) Ltd.	Industry
59.	An Coir Industry	Industry
60.	Rolax Plast PVC Pipes	Industry
61.	J S Construction Products	Industry
62.	Sri Krishna Industry	Industry