Skilling for the Future

Skill Gap Assessment & Action Plan for Tamil Nadu

District Skill Development Plan for Tiruppur

November 2019

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List of Abbreviations

S.No	Abbreviation	Expanded Form
1.	ASER	Annual Status of Education Report
2.	ASI	Annual Survey of Industries
3.	BFSI	Banking Financial Services and Insurance Sector
4.	DDU-GKY	Deen Dayal Upadhyaya Grameen Kaushalya Yojana
5.	DES	Directorate of Economics and Statistics
6.	DIC	District Industries Centre
7.	DISE	District Information System for Education
8.	GDDP	Gross District Domestic Product
9.	DIC	District Industries Centre
10.	GVA	Gross Value Added
11.	GSVA	Gross State Value Add
12.	ITI	Industrial Training Institute
13.	FICSI	Food Industry Capacity and Skill Initiative
14.	IT-ITES	Information Technology and Information Technology Enabled Services
15.	LFPR	Labour Force Participation Rate
16.	Manuf.	Manufacturing
17.	MIS	Management Information System
18.	MSME	Micro, Small and Medium Industries
19.	NCVT	National Council for Vocational Training
20.	NEET	Not in Education, Employment, or Training
21.	NIC	National Industrial Classification (2008)
22.	NSDA	National Skill Development Agency
23.	NSDC	National Skill Development Corporation
24.	NSQF	National Skills Qualification Framework
25.	NULM	National Urban Livelihood Mission
26.	PMKVY	Pradhan Mantri Kaushal Vikas Yojana
27.	PSU	Public Sector Undertaking
28.	Pub. Admin.	Public Administration
29.	QP-NOS	Qualification Pack National Occupational Standards
30.	SIDCO	Tamil Nadu Small Industries Development Corporation Limited
31.	SIPCOT	State Industries Promotion Corporation of Tamil Nadu
32.	SIR	Special Investment Region
33.	SSC	Sector Skill Council
34.	TANSIDCO	Tamil Nadu Small Industries Development Corporation Limited
35.	TIDCO	Tamil Nadu Industrial Development Corporation
36.	TN-GIM	Tamil Nadu Global Investors Meet
37.	TNSDC	Tamil Nadu Skill Development Corporation
38.	TNSRLM	Tamil Nadu State Rural Livelihood Mission
39.	Tr. & Tou.	Trade and Tourism Sectors
40.	WPR	Worker Population Ratio
41.	ZLD	Zero Liquid Discharge

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 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[1].

Tamil Nadu currently has the highest Gross Enrolment Ratio in Higher Education (48.6)[2], 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

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 retained the services of PricewaterhouseCoopers Private Limited (PwC) to carry out

The study aims at identifying sources for self and wage employment in all 32 districts, estimating the sector-wise current and future labour demand (in the next six years) by industry, and assessing overall the 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 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 next six years (i.e. up to FY 2025), disaggregated as skilled and semi-skilled workforce requirement has been estimated at the district level.

Methodology for Study: Mixed-method research design is 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 compre bour 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 - employed (self-employed, wage-employed, employed in formal and informal sectors), students in formal education (higher secondary schools and colleges), 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: Tiruppur, Palladam, Kundadam, Kangayam, Udumalaipettai and Pongalur.
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.

[1] Tamil Nadu Skill Development Corporation [https://www.tnskill.tn.gov.in/index.php/link/abouttnsdc]
[2] All India Survey on Higher Education 2017-18

3. across a wide group of stakeholders including, 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 analysis of data from credible sources such as, the Census of India, State and District Income from the Department of Economics and Statistics of Government of Tamil Nadu, data from the Reserve Bank of India and Reports from the National Sample Survey and the Bureau of Labour and Employment. Estimates were further refined based on data on investments, and developments in key sectors, including due consideration to 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, quantitative survey findings and qualitative consultations. Budgets have been estimated based on the cost categories as defined in the Common Cost Norms released by the Ministry of Skill Development and Entrepreneurship, Government of India[3].

Key Findings: Key findings of the study are presented hereunder:

Demographic Analysis	• Tiruppur, the knitwear capital of India, is witnessing a growing demography and economy. The major concern for the district is that the median age is set to increase to 36 years by 2026 indicating an ageing population. • The district witnessed a population growth rate of 29% from 2001 to 2011, which could further increase due to the inward migration of people in search of jobs.
Economic Analysis	• The dis [3]. • The per capita GDDP of Tiruppur is 7% higher than that of Tamil Nadu. Despite witnessing several shocks to the economy, the GDDP grew by 5% between 2011-12 and 2016-17. • The economy of the district is dominated by the service and Industrial sectors, which together -17. • The well-developed textile industry has plans for increasing investments in the district to the tune of INR 440 crores. • With respect to traditional industries, Tiruppur houses a utensil making cluster in Anupparpalayam and a set of ghee and dairy product manufacturers in Uthukuli.
Labour Market Analysis	• The overall labourforce participation and worker population ratio are marginally higher at the district level than at state. About 39% of workers in the district are wage employed, higher in proportion than at state level. • Manufacturing employs 42% of the labour force, followed by construction, which accounts for 20%. • The widespread poultry farming activities in Tiruppur contribute majorly to the agriculture and allied sector employment, which accounts for 18%.
Education & Skill Development	• The Gross Enrolment Ratio at both Primary and Upper Primary are higher than the state averages. • The dropout rates are marginal at 0.9% at the primary level but is quite high at 2.1% at the upper primary level. • Tiruppur has 8 ITIs of which two are government run. The major trades in the ITIs include machinist, mechanic, fitter, electrician and sewing.
Findings from Primary Survey	
Youth Profile and Aspirations	• The youth in the district are not interested in being employed in the growing textile sector. The major reason is the low wages. • Most youth (51%) in the 30- up their own enterprise. • There is very low level of awareness about government-run skill training programmes. Only 4% of the surveyed youth were aware of skill training programs. • However, 34% were interested in attending such trainings in the future. • Computer, fashion, beautician, LMV operation, tailoring, software and mechanical jobs are the sectors in which they are willing to undergo training.
Employer & Other Key Stakeholder Perspectives	**Quantitative Survey** • The most common challenge faced by employers was candidate disinterest and attitude (82%), followed by work hours (20%) and high local wages (18%). • Most employers prefer minimally skilled workers who can be trained on the course of the job. • However, since most labourers learn the skill on the job after joining as unskilled workers, there is a huge potential for upskilling that can have a considerable impact on efficiency. • It is also estimated that the productivity can be increased by 26% with enough upskilling. **Qualitative Inputs** • Youth placed in companies after undergoing training have a high attrition rate most of them do not stay in the job for beyond a month. • Local youth do not prefer shop-floor roles, and prefer white-collar jobs

[3] Common Cost Norms [http://www.minorityaffairs.gov.in/sites/default/files/common%20norms.pdf]
[3] District Industries Profile, DC-MSME, 2015-16

	• Women employed in the textile industry do not have a good scope for vertical mobility. The skill level of most of the migrant workers is very low or unskilled. They learn the skill on the job • The predominant textile industry does not lend itself to easy automation it is highly labour intensive • The labour shortage is forcing industries that have the capacity to move some of their operations • 65% of the current workforce in textile and apparel industry are women. • Day Care facilities where children can be taken care of will help addressing women attrition.
Incremental Demand	• There has been shortage of labour at Tiruppur, which has made textile units to rely on migrant labourers from North India. Some textile units are also shifting their operations to Southern Tamil Nadu due to this. • In the next six years, it is estimated that the textile and allied sector alone would require a workforce of over two lakh persons.

Recommendations: Based on qualitative, quantitative and secondary information findings and inferences, the following recommendations have been identified for consideration:

Creating Awareness on Skilling: The textile industry, which is the major generator of jobs in Tiruppur is one of the least desired sectors to work in for the youth. To make the youth recognise the lucrative employment opportunities, better awareness sessions need to be conducted in schools, ITIs, polytechnics and colleges.

Multi-State Common Migration Support Centre: To provide support and adequate skill training for the migrant workforce from other states, a common support centre can be established

Training Hub for Apparel Sector Technicians: Tiruppur has potential to become an Industry-led Training Hub for Apparel Sector Technicians. With the next generation industries being established in the neighbouring districts, all apparel sector related training can be hosted in Tiruppur.

Sustaining traditional industries: The traditional industries in Tiruppur suffer majorly because most of the artisans are not trained in marketing their products. Training can be given in digital marketing, export and finance so that the artisans are also aware of how to market their products.

Development of a Quality Labour Force: A study conducted by TEA found that post upskilling, the productivity of the workforce increased by 26%. By engaging in up-skilling, it will lead to cost savings and increase in productivity. This must be a major feature of the trainings provided in the district.

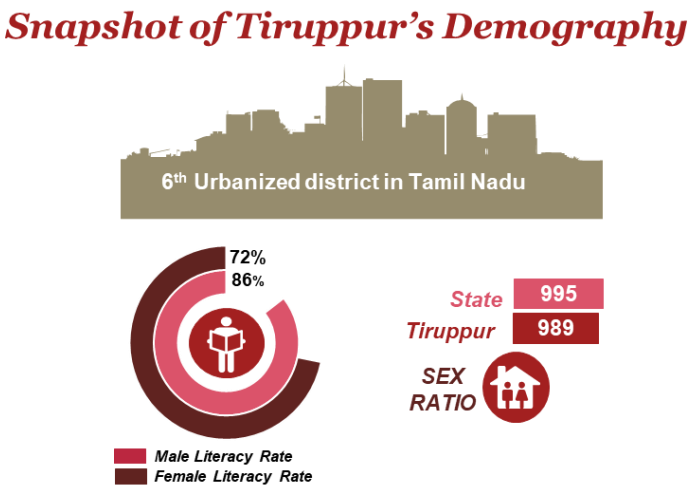
1. District Profile

Created in 2009, the district of Tiruppur was carved out of the districts of Coimbatore and Erode. The city of knitwear capital of India. A majorly agrarian economy in the 1900s started transforming into a textile-oriented economy when farmers in the region started small enterprises in cotton ginning and spinning. This helped the area further expand into other textile-based industries like bleaching, dyeing, knitwear and hosiery. The Noyyal River, a tributary of the Kaveri River, runs through the district and has played a major role in supporting the largescale knitting and dyeing units set up in the area.

1.1. Demographic Profile

Table 1: Key Demographic Indicators– Tiruppur vs Tamil Nadu[5]

SN	Indicator	Tiruppur	Tamil Nadu
1	Total population	24,79,052	72,147,030
2	Female Population	12,32,893	36,009,055
3	Population Density per sq.km (2011)	478	555
4	Urbanization	61%	48%
5	SC population (as % of total population)	16%	20%
6	ST population (as % of total population)	0.2%	1%
7	Differently abled population (as % of total population)	1.4%	2%
8	Population in age group 15-34 years (as % of total population)	35%	35%
9	SC population aged 15-34 years (as % of SC population)	35%	37%
10	ST population aged 15-34 years (as % of ST population)	40%	35%
11	Literacy rate	79%	80%



Key Highlights from the analysis of Census Data:

- **Population Growth and Urbanization:** The Decadal growth rate **of the population in the district** was **29%** between 2001 & 2011, compared to **16%** at state level. The share of urban population in the district

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is 61% much higher than the state average of 48%. The major reason for the high population growth rate is the inwa

1.2.1. Sector wise Analysis[9]

Figure 3 Sectoral Snapshot of GVA 2016-17

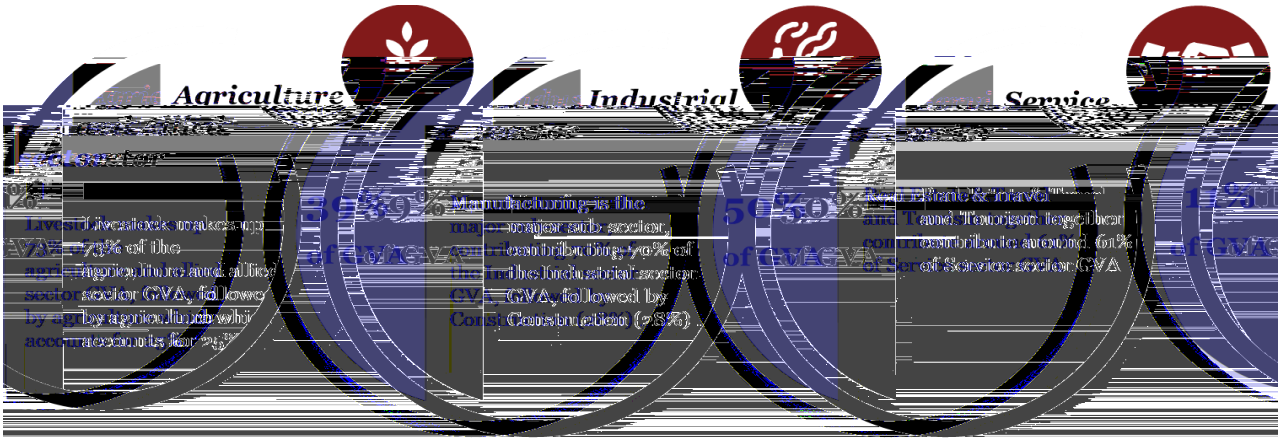
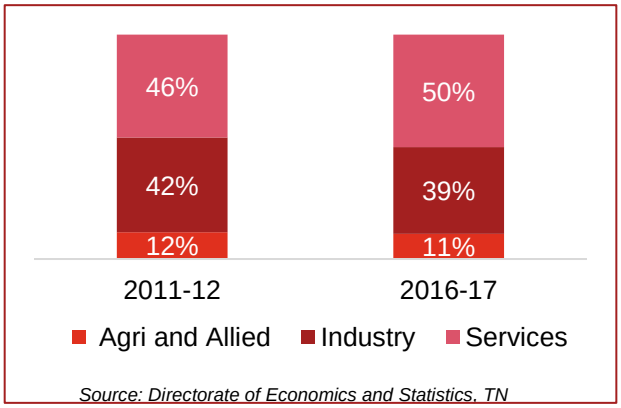


Figure 4 Sectoral Share of GVA (2011-12 & 2016-17)



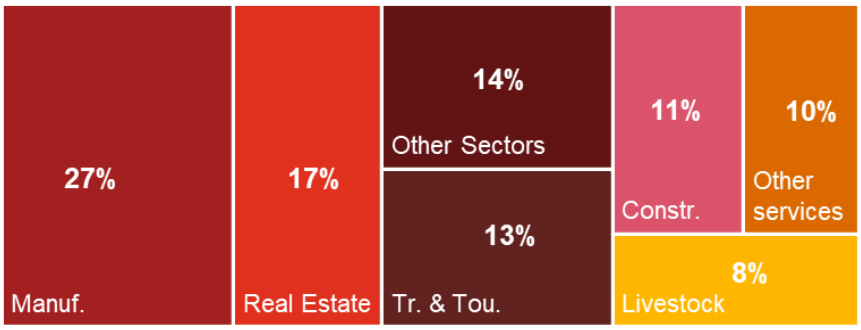
Source: Directorate of Economics and Statistics, TN

The economy of the district is dominated by the service and Industrial sector, which together accounted for about 89% of the district output in 2016-17. The district has grown at a compounded annual growth rate of 5%. The service sector has been growing at a much higher rate compared to the others from 2011-12 to 2016-17 services recorded a CAGR of 7% whereas agriculture and industry had a CAGR of just 3%.

Table 2: Sector wise- Annual Growth Rate in Tiruppur (Directorate of Economics and Statistics, TN)

Sector	2012-13	2013-14	2014-15	2015-16	2016-17	CAGR
Agri & Allied	-17%	21%	9%	5%	2%	3%
Industry	-2%	2%	-4%	12%	7%	3%
Services	7%	9%	6%	5%	6%	7%

Figure 5 Share of GVA by Industry of Origin (2016-17)



Though the share of manufacturing sector has decreased from 30% in 2011-12 to 27% in 2016-17, it still is a major contributor to the economy. Real Estate has also seen a steady growth.

[8] Directorate of Economics and Statistics, Tamil Nadu

Figure 6 GVA of Agriculture and Allied Sectors (2016-17)

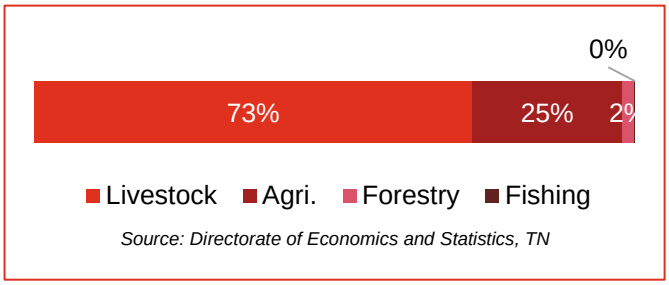
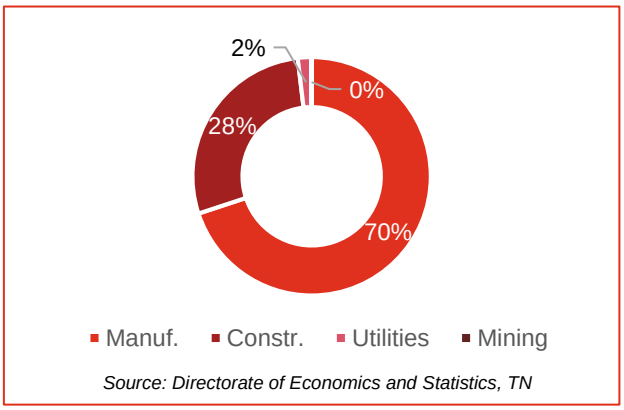


Figure 6 shows the share of the different components in the agriculture and allied sector GVA of 2016-17. The share of the agriculture and allied sector in the district GVA is 12% and the sector has seen a steady growth across the years. Livestock accounts for a

farms. The Tamil Nadu Veterinary University Training and Research Centre is located in Tiruppur. The centre conducts regular animal health camps and attends to disease outbreaks. This has also been a major impetus to the livestock rearing activities in the district. Tiruppur is also home to the famous Uthukuli dairy products. The butter prepared here is supposed to be of very high quality due to the best cattle reared here. The major crops grown in the district are millets, which account for about 44% of the cultivable area, pulses, oilseeds and coconut.

Figure 7 Industrial Sector GVA (2016-17)



Manufacturing makes up 70% of the industrial sector GVA. The textiles industry that is entrenched in the district is a single major contributor. Despite facing a negative growth rate from 2012-13 to 2014-15, the manufacturing sector has picked up considerably and recorded a 13% CAGR from 2015-16 onwards. Construction, which contributes 28% to the industry GVA has been stagnant and has not witnessed a considerable growth.

.

Key Clusters and Traditional Industries

Knitwear, Tiruppur	Power looms, Tiruppur	Printing, Tiruppur
Stone sculptures, Poondi	Utensils, Anupparpalayam	Dairy products, Uthukuli

Table 3 Profile of Manufacturing Sector from ASI

Industry	No. of Units	No. of Employees	Gross Value Added (share in total GVA)	Share of Employment	Average workers per unit
Manufacture of wearing apparel	2,491	1,80,856	35%	56%	73
Manufacture of textiles	2,669	1,08,917	48%	34%	41
Manufacture of food products	2,601	6,514	1%	2%	3
Manufacture of rubber and plastics products	42	944	0.1%	0.3%	22
Manufacture of machinery and equipment n.e.c.	50	5,987	2%	2%	120
Manufacture of basic metals	38	1,800	1%	1%	47
Manufacture of chemicals and chemical products	13	1,261	0.5%	0.4%	97

Industry	No. of Units	No. of Employees	Gross Value Added (share in total GVA)	Share of Employment	Average workers per unit
Manufacture of motor vehicles, trailers and semi-trailers	3	2,120	8%	1%	707

Source: Annual Survey of Industries 2014-15

According to the ASI 2014-15, manufacture of textiles and wearing apparel have the maximum number of factories and together they accounted for ab9 841 m

Figure 9 Anupparpalayam Cooperative Paathiram Society and a shop managed by the artisans

Employment: About 8,000 artisans have been traditionally involved in this industry.
Major products: Pooja items, aluminium utensils, brass and copper plates, containers, cooking utensils, pots, catering utensils, lamps, etc.
Marketing: Most artisans also have a shopfront where they sell their utensils
Demand: Compared to a decade ago, the workers feel the demand for utensils has been reducing. Though initially the artisans made copper, brass and silver utensils, they have moved to ever-silver items in keeping with the changing demand.
Challenges:

- The younger generation is disinterested to take up the craft. Most workers are in their early to late 50s.
- Machinery used is old and there is a need to explore and adopt new methods
- Decreasing demands over the past decade has also meant lesser profits

Future Scope and Recommendations:

- A common facilities center (CFC) can be established under the Anupparpalayam Co-operative Pathiram Society.
- Skill training for artisans in marketing, especially digital marketing.
- Formalisation and Certification of traditional skills to enable further promotion and market identity.

Micro and Small Textile Industries[10]:

Despite the large textile industries, the district also has a huge number of micro and small-scale industries. These include handloom, dyeing, knitting and printing units.

Employment: 21,000 employed in micro industries and about 4,000 in small-scale industries.
Major activities: Handloom, printing, dyeing, tailoring and knitting
Marketing: These units usually supply to other large-scale exporters or traders in the district.
Challenges:

- Labour shortage of about 40%. The textile industry requires about 3 lakh skilled labourers in the next two years.
- An attrition rate of about 25-30%.
- Large-scale units branching out their operations, especially to South Tamil Nadu in search of cheap and readily available labour.
- GST: Most small scale and micro industries faced a huge challenge with the implementation of the GST Act. They have been unaware of its several provisions and did not have a good grasp of the necessary actions to be undertaken and hence saw a major slump in business because of it.

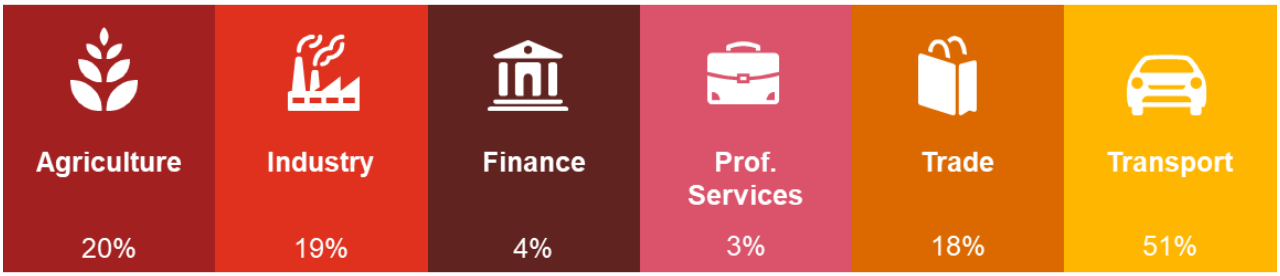
Future Scope and Recommendations:

[10] Consultation with GM, District Industries Center and various Textile associations in Tiruppur

Upskilling of the current workforce can bring about an average improvement in time taken by 24.5%[11].
Skilling migrant labourers who currently make up a large chunk of the labourforce.
Training in GST for micro and small scale entrepreneurs.

1.2.2. Investments and key economic drivers

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



The district has witnessed a growth in credit across sectors but especially in transport, agriculture, industry and trade

According to the data collected from the RBI, the transport sector has seen the highest credit growth at 51%. The manufacturing industry and trade have also seen a significant growth.

Other key investments and sectors include:

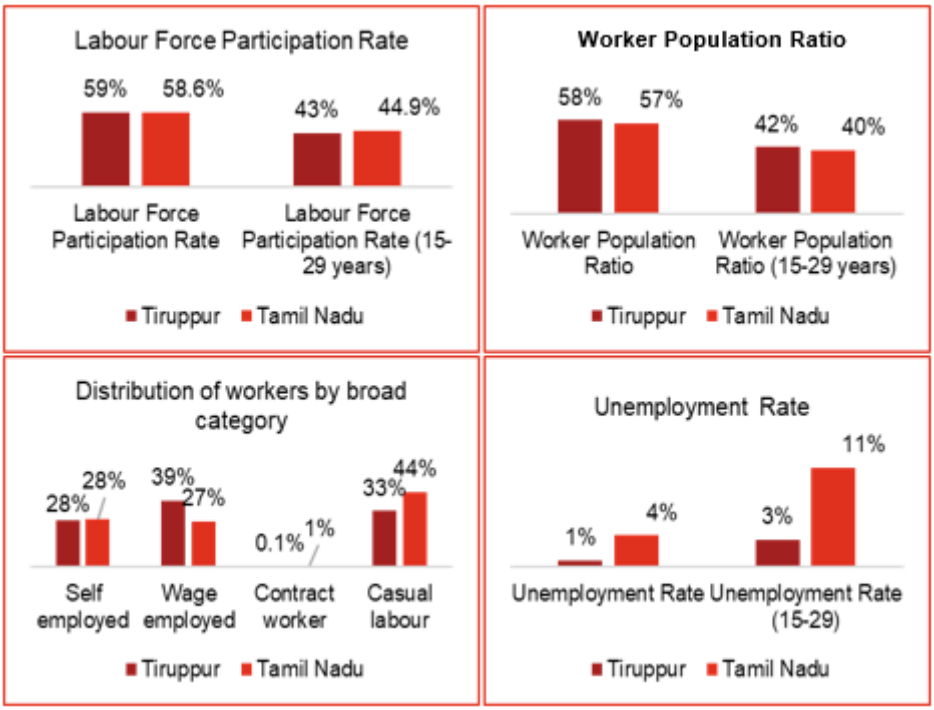
- Petroleum Tiruppur (TN) CGD Network Project (9th Round)
- Tiru Tiruppur Bio-CNG Bottling Plant Project
- Investments in textile and apparel industry in Kangeyam and Tiruppur with potential of generating employment for up to 4,000 persons
- The Melur-Karaikudi Four Lane Highway Project as part of the Thanjavur-Madurai Greenfield Project at the cost of INR 76.75 crore nectivity.
- Kannappan Alloy & Steel Co. Pvt. Ltd. is expanding its steel unit in the district at a cost of INR 1 crore.

[11] Based on the study conducted by NIFT-TEA, Tiruppur

1.3. Labour Market Profile[12]

The overall labour force participation and worker population ratio are marginally higher at the district level than at state. About 39% of workers in the district are wage employed, higher in proportion than at state level. The unemployment rates are also much below the state numbers.

Figure 11 Key Labour Market Indicators[13]



The education-level classification of the district population reveals that a significant population is not in the labour force. Among graduates and diploma holders, 52% and 63% are not in the labour force respectively. The youth survey conducted in the district also shows that about 26% of the overall respondents are in neither in employment, nor in education nor in any training.

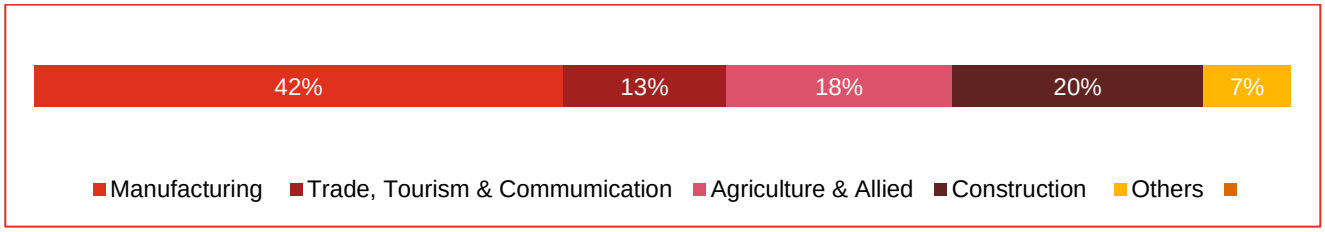
Table 4: LFPR and Unemployment Rate by gender & Location

Sex	LFPR	Unemployment Rate

Disaggregation by area and sex, it is found that females have a rural labour force participation rate 5 percentage points higher than their urban counterparts. Given the constant demand for labour in the district, the unemployment numbers are very low.

[12] Analysis in this section are based on the District Level Estimates, EUS, 2013-14, Labour Bureau
[13] District Level Estimates, EUS, 2013-14, Labour Bureau

Figure 13 Sector-wise share of Employment



Source: District Level Estimates, EUS, 2013-14, Labour Bureau

Manufacturing employs 42% of the labour force, followed by construction, which accounts for 20%. The widespread poultry farming activities in Tiruppur contribute majorly to the agriculture and allied sector employment, which accounts for 18%.

The shortage of labour in Tiruppur has made textile units to rely on migrant labourers from North India. Companies have agents who gather the required workforce and bring them to the district. Migration support centers and skilling for migrant workers is an area that needs immediate focus.

1.4. Education and Skill Development Profile

1.4.1. Education Profile

The close proximity of the district to Coimbatore which has a good concentration of schools and colleges has naturally helped in improving the education scenario of Tiruppur.

The Gross Enrolment Ratio at both Primary and Upper Primary are higher than the state averages. The dropout rates are marginal at 0.9% at the primary level but is quite high at 2.1% at the upper primary level.

Tiruppur has 8 ITIs of which two are government run. The major trades in the ITIs include machinist, mechanic, fitter, electrician and sewing.

Figure 14 GER and Drop-out Rates - DISE

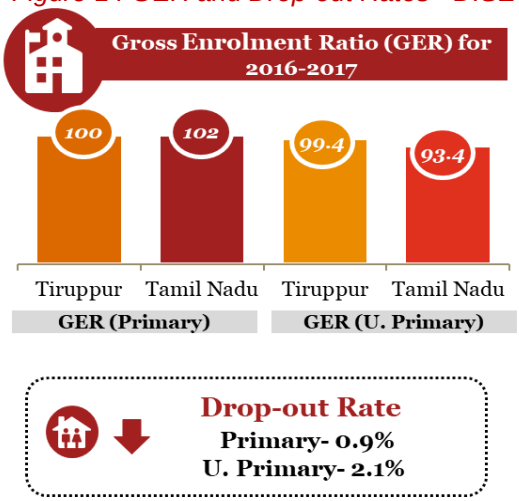


Table 5 Institutions of Higher Education in Tiruppur District[14]

S.No	Institution Type	No of Institutions	No. of Students
1.	Engineering Colleges	8	10,306
2.	General Arts & Science Colleges	16	19,450
3.	Polytechnics	7	5,639
4.	Other	21	2,671

1.4.2. Vocational Education Profile

The skill training infrastructure of the district include skill training centres implementing schemes like TNSDC, Pradhan Mantri Kaushal Vikas Yojana (PMKVY) and Deen Dayal Upadhyay Grameen Kaushal Yojana (DDU-GKY).

Under the PMKVY scheme, four training institutes offered courses on sewing machine operator and self-employed tailor. Apparel is the most prominent sector under PMKVY.

Table 6 Vocational Training under Short Term Skill Development Programs[15]

Scheme	Sector	Job Role	No. of Training Centres	Actual Intake

[13] C rs bs Rs s rs b kG mcann nus-neS l kM ct
[14] 1 06,1 07 s mmf d don s-

Pradhan Mantri Kaushal Vikas Yojana	Apparel	Sewing Machine Operator	2	120
		Inline checker	1	20
	Electronic and Hardware	Field Technician - Other Home Appliances	1	60
	Tourism & Hospitality	Front Office Associate	1	15
	Logistics	Warehouse Picker	1	20
	Media and Entertainment	Makeup Artist	1	60
	Retail	Retail Sales Associate	1	30
Tamil Nadu Skill Development Programs	Apparel	Tailor	5	240
		Industrial sewing machine operator	2	60
		Hand Embroiderer	1	160
	IT/ITeS	Computer	1	120
	Gems and Jewellery	Jewellery Designer	1	210
	Beauty and Wellness	Beautician	1	30
	Fashion Design	Merchandising		40
	Nursing	Bedside Assistant	1	90
	Electrical	Electrical Technician	1	60

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 NIFT-TEA College of Knitwear Fashion situated in TEKIC offers various diploma and graduate degree programmes in textile, fashion, garments and management. It has also established itself as one of the foremost institutes in the country for fashion and apparel manufacturing. With more than 400 factories situated in the area, it also offer students extensive opportunities for internships. The courses offered by NIFT-TEA are as follows:

- B.Sc. Apparel Fashion Designing
- B.Sc. Costume Design & Fashion
- B.Sc. Garment Designing & Production
- B.Sc. Fashion Apparel Management
- B.Sc. Apparel Manufacturing & Merchandising
- B.Sc. Computer Science
- B.Com.
- B.Com. Computer Application
- B.B.A. Business Administration
- M.Sc. Apparel Fashion Designing
- MBA. Apparel Business (under CCII)
- PG Diploma in Apparel Merchandising & Management

Table 7 presents the courses offered through ITI, and the number of such institutes offering each trade/ training for job role. **There is a clear need for more institutes to offer textile industry related courses.**

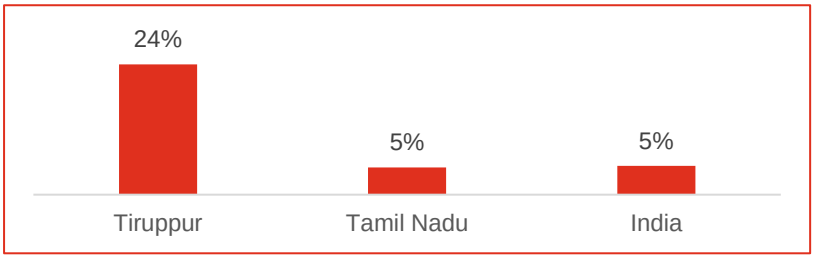
Table 7 Vocational Training under Long Term Skill Development Programs (ITI)

Scheme	Job Role	No. of Training Centres
Industrial Training Institutes **(Craftsmen Training Scheme)**	Foundryman	5
	Machinist	2
	Mechanic (Tractor)	1
	Turner	3
	Wireman	4
	Fitter	8
	Computer Operator And Programming Assistant	1
	Cutting and Sewing	1
	Electrician	5
	Electronics Mechanic	1
	Computer Aided Embroidery and Needle Work	1

Scheme	Job Role	No. of Training Centres
	Mechanic (Diesel)	4
	Mechanic (Motor Vehicle)	3
	Wireman	4

Figure 15 Proportion Undergone Vocational training 2015-16, MoLE[16]

With respect to vocational training in the district, 244 persons out of every 1,000 persons in the district had received training on some skills, when compared to 51 in the state as per Employment and unemployment survey 2015-16. This is much higher than the state and the country average.



[16] Employment and Unemployment Survey 2015-16, Ministry of Labour and Employment

2. Youth Perspective

The study covered youth, employers, industrial associations and other key stakeholders to understand the demand and supply side perspectives of skill ecosystem in the district. The information was collected through both quantitative and qualitative surveys. While structured quantitative tools were used for quantitative survey, qualitative tools such as In-Depth interviews and focus group discussions and case studies were adopted for qualitative survey.

2.1. Profile of Respondent Youth

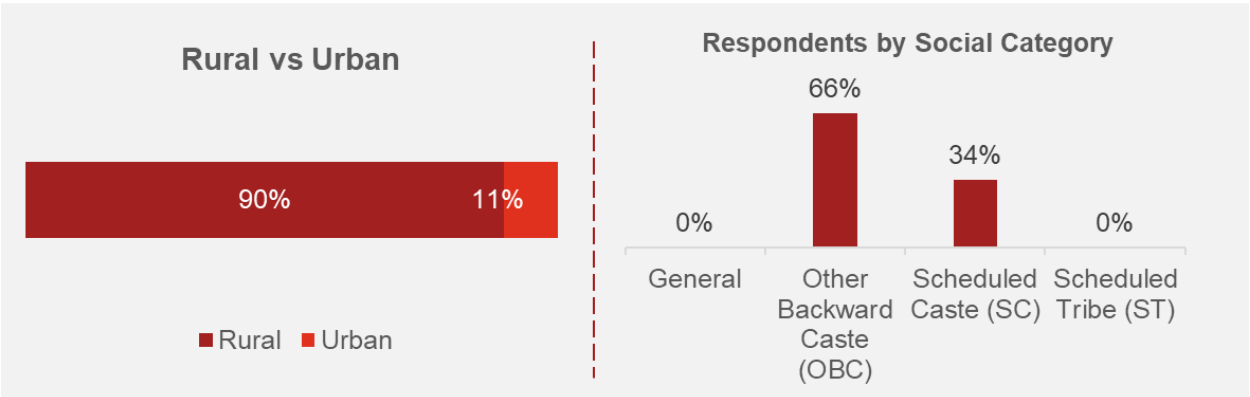
A total of 360 youth in the age group of 15-34 years were covered through a structured household survey tool. This covered a sample of six blocks out of the overall 30 blocks in the district Tiruppur, Palladam, Kundadam, Pongalur, Kangayam and Udumalaipettai. 31% of the overall respondents were female and about 90% were from rural areas. The survey has tried to achieve a balanced representation of various socioeconomic and demographic characteristics of the population.

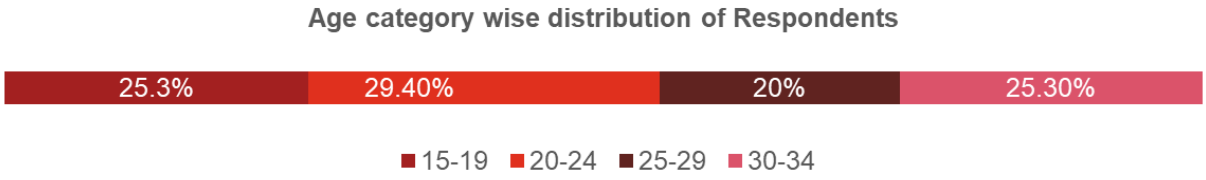
Figure 16 Respondent Profile of Youth Aspiration Survey

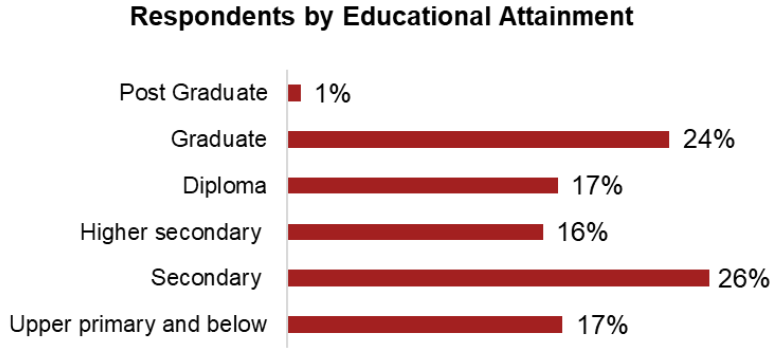
Blocks covered	
Tiruppur	Palladam
Kundadam	Pongalur
Kangayam	Udumalaipettai

360 Respondents

31% Female Respondents





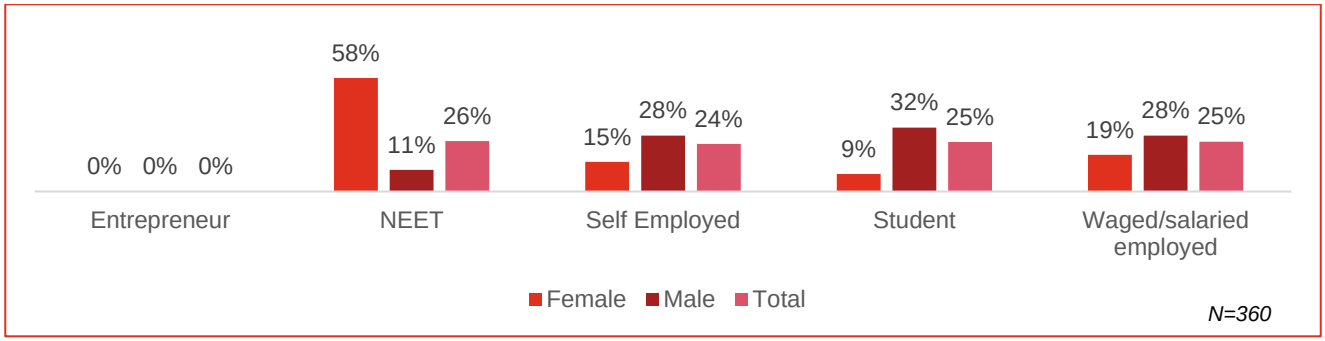


- ***42% respondents were from the BPL (below poverty line) category***
- ***34%** of respondents reported a monthly household expenditure of **not more than Rs. 10,000***

2.2. Youths' Educational and Economic Engagement Status

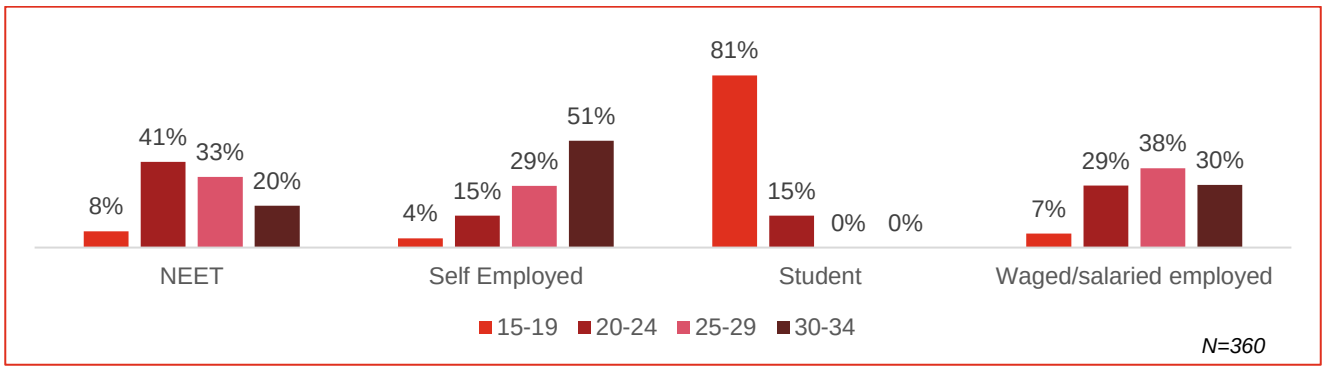
The figure below illustrates the gender wise classification (current status) of the respondents interviwed during the household survey. The female respondents were predominantly part of the NEET category (58%) and 19% were in a wage/salaried employment. Among the male respondents, 32% identified as students.

Figure 17 Current Status of Respondent by gender



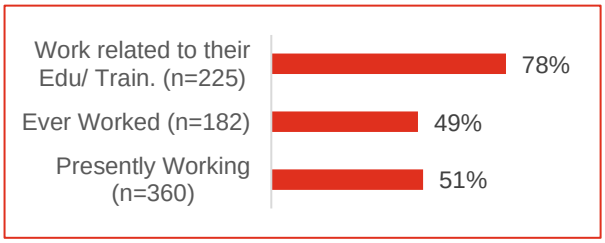
Going by the age of the respondents, over half the respondents between 30-34 years of age have opted for self-employment. This is in keeping with the qualitative findings, which show that most of the entrants into the labour force try to gain experience in order to set up their own business units. This trend has especially been seen across the textile-based MSME units in the district.

Figure 18 Current Status of Respondent by Age Category



2.3. Economic Engagement of Youth

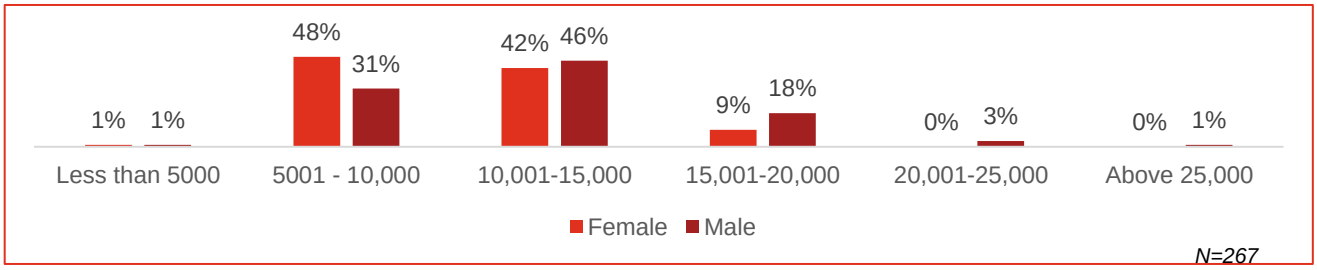
Figure 19 Employment details of Respondents



51% of the total respondents (n=360) are currently engaged in economic activities.

Out of the respondents who are not presently working (n=191), only 5.8% of these respondents have ever been engaged in economic activities. 93.9% of the respondents (n=180) who had ever engaged in an economic activity and currently working reported that they were employed in a field related to their education/ training.

Figure 20 Distribution of Respondents across Monthly Income Category across gender



As seen in Figure 20, 48% of female respondents reported that they receive an income of INR 5,000-10,000 per month. The textile industry in Tiruppur is estimated to have a workforce consisting of 65% of women. Most of them are employed as tailors and earn piece rate wages or are self-employed. As they gain experience and operate faster, their wages increase. However, as can be seen from the graph above and as observed on the field, there is a hindrance to vertical mobility for women in the textile sector the possibility of earning above INR 15,000 per month is quite difficult. However, only about 13% of the overall respondents were dissatisfied with their jobs (n=267).

Majority of the respondents who have attained secondary level of education and above are employed as skilled workers (mostly as tailors). The graph below gives the employment category of respondents according to their educational qualification.

Table 8 Education Qualification of Respondents and Employment Type

	Upper Primary and Below	Secondary	Higher secondary	Diploma	Graduate	Post Graduate
Farm Activities	-	1%	-	-	-	-
Livestock	-	31%	46%	6%	0%	-
Unskilled work (MGNREGA, construction labour, mining, brick kiln, household, etc.)	33%	-	-	18%	34%	100%
Skilled worker (tailor, mason, electrician, plumber etc.)	-	47%	29%	53%	42%	-
Petty Business/Trade/ Manufacturing	47%	21%	27%	24%	22%	-
Major Business/Trade/ Manufacturing	-	-	-	-	2%	-
Number of respondents	60	83	56	17	50	3

2.4. Youth under NEET Category

26% of the total respondents were neither in employment, nor in education nor in any training.

Over 56% of the NEET category respondents were females. Majority of the NEET respondents (41%) were between the age group of 20-24 years while 33% were between 25-29 years. About 37% of the NEET respondents reported to have completed their Diploma course and 30% had completed their graduation. Though the district has very low unemployment, there seems to be a higher number of educated candidates who are in the NEET category.

A majority of respondents (52%) in the NEET category said that the presence of only low paid jobs has been the reason for their status. *Table 9* shows the profile of NEET category respondents based on their profile and their desire to enter the workforce. Though 83% of NEET category respondents wish to work, only 51% of females in the category are actively seeking for employment. About 35% were searching for a job for the previous 6 months.

Table 9 NEET Category Respondents

Duration in NEET Category (n=92)	Female	Male	Total
Less than 6 months	5%	63%	22%
6 months- 1 year	14%	15%	14%
1- 2 years	43%	4%	32%
2- 3 years	17%	15%	16%
3 - 4 years	9%	0%	7%
4 - 5 years	6%	4%	5%
More than 5 years	6%	0%	4%

Wish to Work (n=92)	Female	Male	Total
Yes	78%	93%	83%
Total	51	25	76

Actively Seeking Work (n=92)	Female	Male	Total
Yes	51%	92%	64%
Total	51	25	76

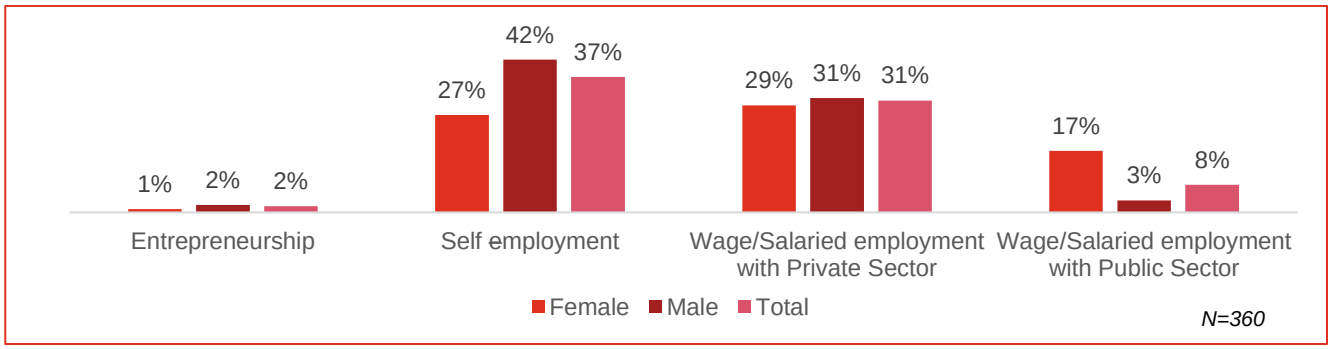
2.5. Vocational Training

Only 4.4% of respondents are aware of government run skill development programmes and only one respondent out of 360 has undergone such training. However, as seen earlier, 24% of the workforce has undergone some form of vocational training in the district. This shows that the awareness about government run programmes is low.

2.6. Youth Career Aspiration

The youth in the district mostly prefer to be self-employed (37%). 31% prefer wage / salaried employment with the public sector. Both female and male respondents have shown similar interest in the pursuit of wage employment, while female respondents aspired for salaried employment in the public sector.

Figure 21 Career Aspiration of Youth



The main factors determining the aspiration of the youth are Salary (wages) / Income (89.2%), Social Status (45.6%) and Gender suitable role (35.3%). About 36% of the total respondents feel they are largely prepared for requirements for a job while only about one tenth of the respondents feel they are unprepared for jobs.

Table 10 Career Aspiration - Factors, Preparedness and Availability of Jobs

Factors Determining Aspiration* (n=360)	Responses
Salary (wages) / Income	89%
Job Security	13%
Social Status	46%
Safety / Security	4%
Opportunities for promotion and career development	2%
Closeness to Residence	19%
Traditionally Acquired Skills / Family Business	14%
Gender suitable role	35%
Employer provided benefits and perks	18%

Perception of Preparedness for Jobs (n=360)	Responses
Largely Prepared	36%
Moderately Prepared	38%
Somewhat prepared	16%
Not Prepared	11%

Availability of Job Opportunities (n=360)	Responses
Very adequate	4%
Somewhat adequate	63%
Neither adequate nor inadequate	5%
Inadequate	13%
Very inadequate	14%

Multiple response question

Almost 31% of respondents feel that an unsafe working environment has been the main hindrance to pursuing their desired job. 24% feel it is the lack of sufficient education qualification. 12% of the youth highlighted the lack of vocational skills as a challenge in pursuing their career aspiration.

Table 11 Career Aspiration – Challenges in pursuing desired career

Challenges (n=360)	Responses*	Challenges (n=360)	Responses*
Lack of sufficient education qualification	24%	Lack of work experience	2%

Challenges (n=360)	Responses*	Challenges (n=360)	Responses*
Unsafe working environment	31%	Low financial strength	21%
Lack of vocational skills	12%	Pressure related to getting married	21%
Lack of jobs locally	21%	No Challenge	17%

**Multiple response question, responses may add up to more than 100%*

As seen in Table 12, the key factors enhancing their employability, according to the respondents, were level of education attainment (27%), soft skills (33%) and relevant work experience (25%). Teamwork (73%), time management (53%) and coordination skill (17%) were identified as key skills specific to their aspired jobs. **While 38% respondents had already taken steps to meet these requirements, 44% respondents were looking for apprenticeships and 30% were looking to continue education**.

Table 12 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)	27%	Years of Relevant Work Experience	25%
Soft skills	33%	Performance in interviews	3%
Certifications of Technical Skill	13%	Relevant work experience in similar position or field	1%
Key Skills Required for desired job*			
Clear communication	5%	Leadership	1%
Coordination Skills	17%	Creativity, originality and initiative	1%
Team work	73%	Complex problem-solving	8%
Time management	53%	Attention to detail	1%
Analytical thinking	9%		
New Steps to achieve aspirations*			
Steps	Responses	Steps	Responses
Already in Pursuit	38%	Apprenticeship / Gathering Work Experience	44%
Vocational/ Skill Training	7%	Continuing Education	30%

**Multiple response question*

Though the district has a huge demand for jobs in the textile sector, the career aspiration of the youth showed other sectors. Career aspiration and preference of sectors varied across the gender group. Women preferred food processing (47%), followed by healthcare services (12% and construction (10%). Among males, there was similarly a huge preference for working in the food processing industry (21%) and the auto and auto components industry (16%). **12% of men also indicated a preference for working in the handloom and handicrafts industries – traditional trades that they have been practicing**.

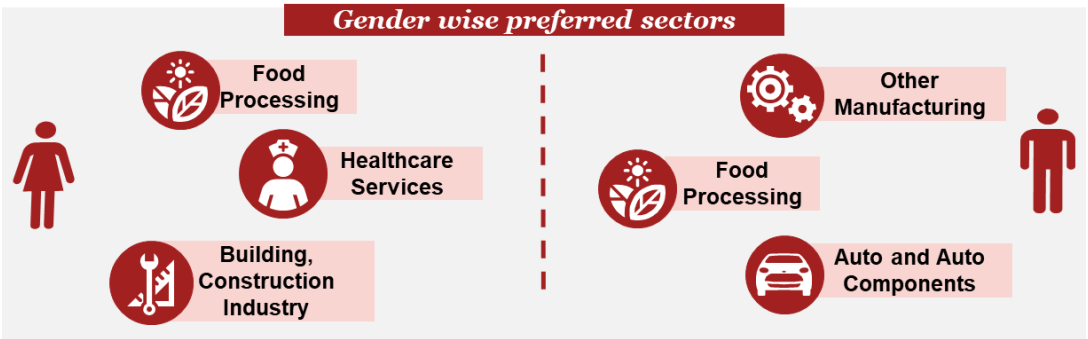
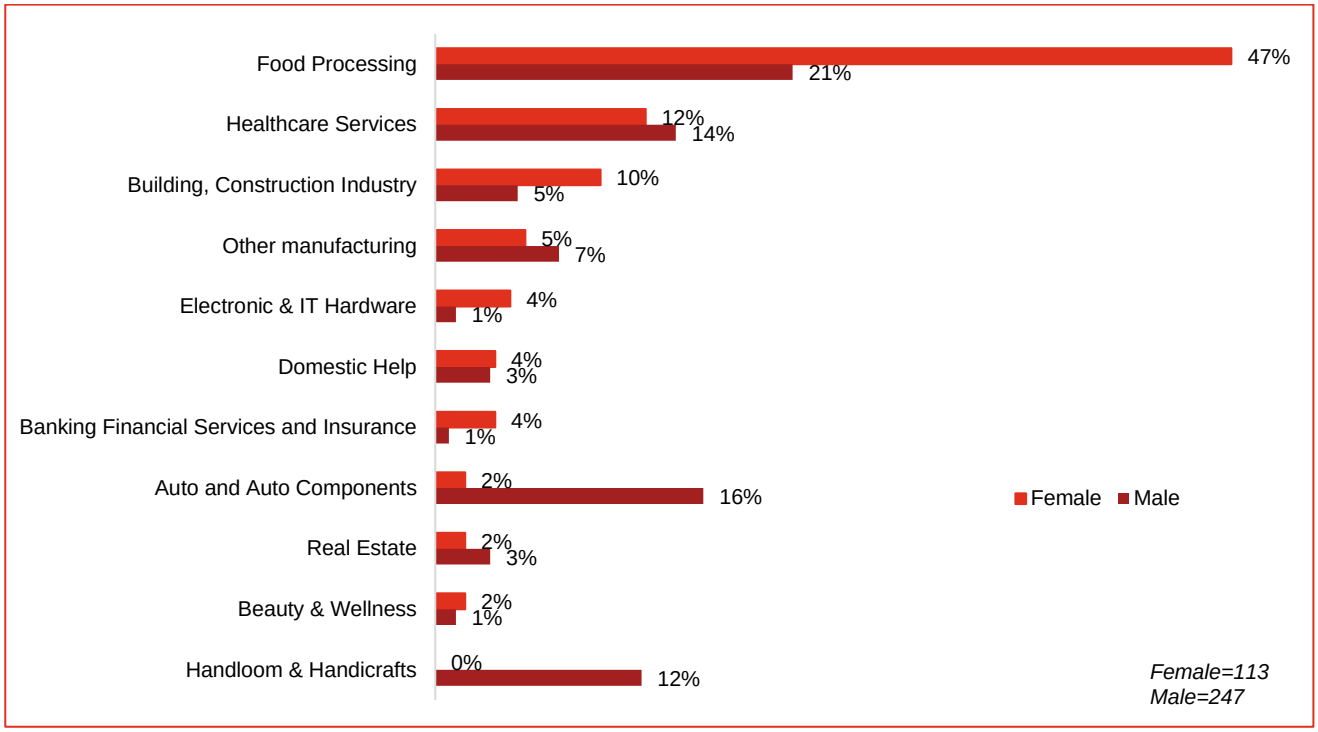


Figure 22 Sectors aspired by respondents



90% of the total respondents stated that they were not interested to take up any gig work.

The median wage expectation respondents have expectations of Male respondents aspired for higher salaries compared to their female counterparts. Half of the respondents in the NEET category aspired for a monthly salary ranging between INR 10,001 to 20,000.

Respondents currently in education system had higher income expectation, 4.4% aspired more than INR 40,000 monthly.

Compared to respondents in self-employment where 53% aspired for income above INR 10,000, more (65%) respondents in wage employment aspired for the same.

Figure 23 Aspired monthly salary of respondents by category

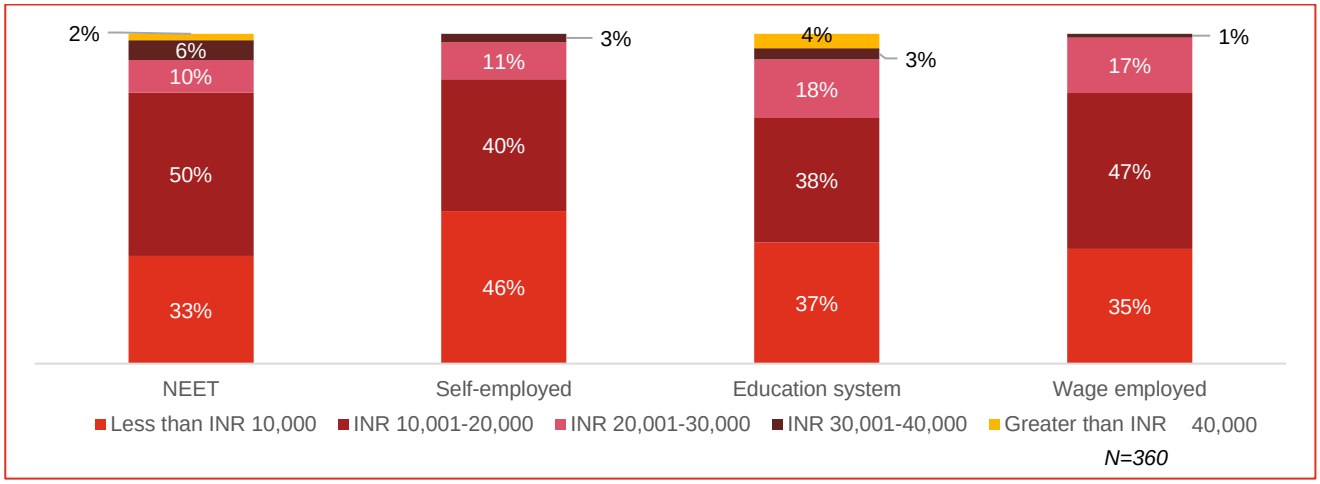
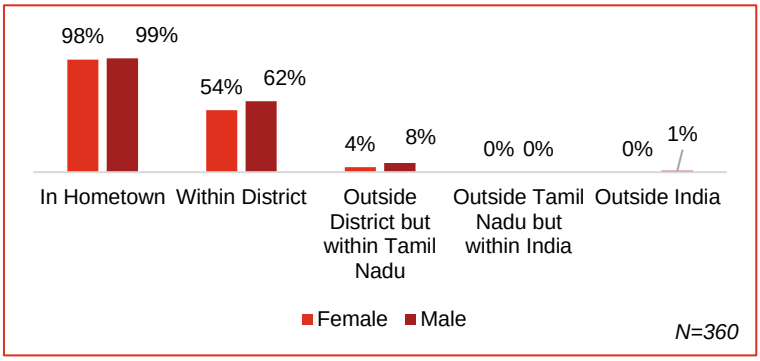
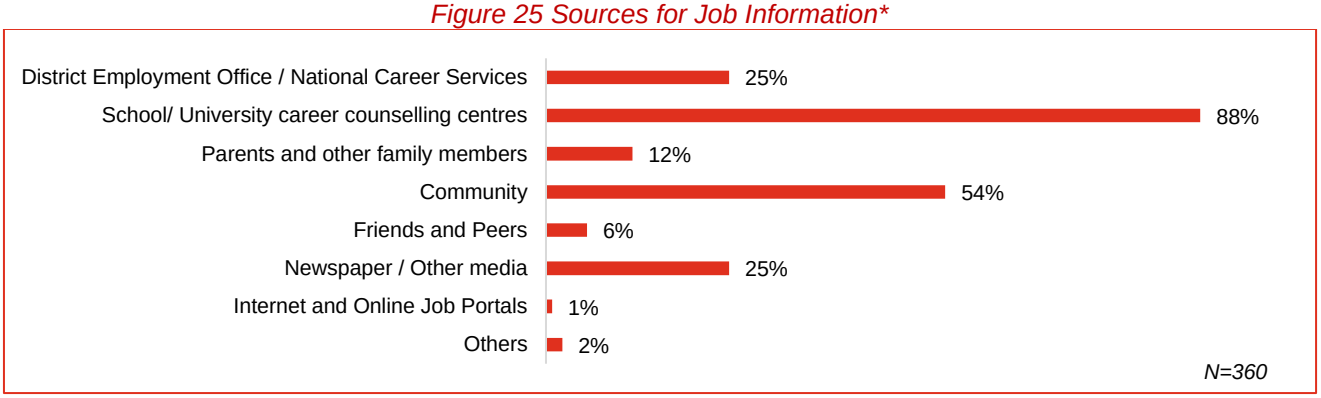


Figure 24 Preference for Work Location[17]



The respondents, both male and female were mostly unwilling to relocate for a job even outside the district but within Tamil Nadu. 99% of males and 98% of females said they would prefer to work in their own hometowns. Over half the respondents were willing to relocate within the district. With respect to jobs overseas, only 1% of men preferred it as opposed to none of the women.

*Figure 25 Sources for Job Information**

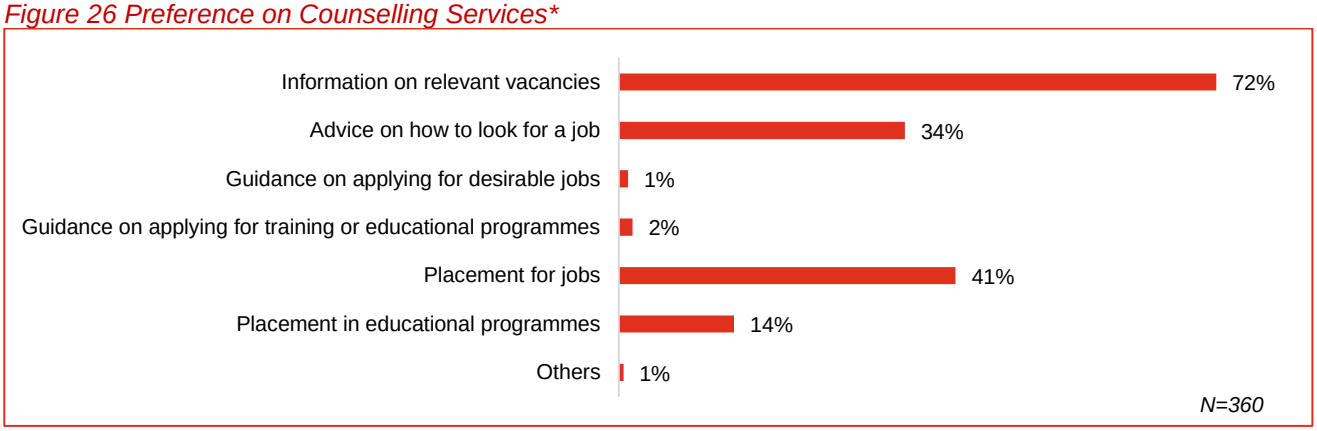


The most important source for the job related information was through the school/university career counselling centres (88%). The ITIs have a strong alumni network through which job opportunities are passed on. 54% of the respondents got to know about job opportunities through the local community.

60% of the respondents felt that the counselling services were adequate in meeting their requirements.

The key inputs requested by the respondents from career counselling services include information on relevant vacancies (72%), placement support (41%) and advice on how to look for a job (34%).

*Figure 26 Preference on Counselling Services**



[06] Multiple Response, Sum may exceed 100%

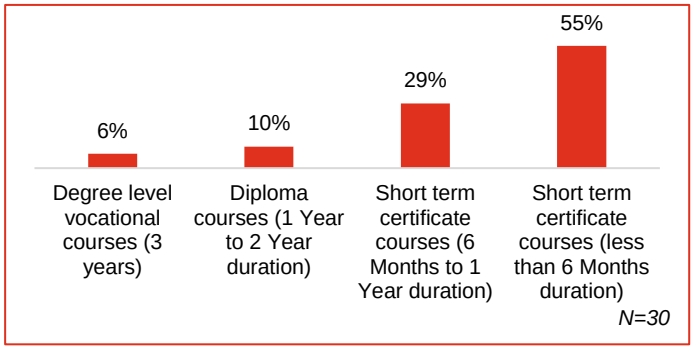
2.7. Skill Training Preferences of Youth

Only **4.4%** of respondents are aware of government skill training programmes

34% of respondents are interested in undergoing skill training

74% are not willing to spend any money on attending skill training

Only 4.4% of the total respondents had any awareness of Govt. run vocational programs. However, 34% of them were interested in undergoing skill training. Even though only 16.5% preferred a full-time training programme, 95% prefer a residential mode of training. Over half the respondents prefer short-term certificate courses that are 6 months or lesser.



Computer, fashion, beautician, LMV operation, tailoring, software and mechanical jobs are the sectors with high aspirations.

3. Employers' and Other Stakeholders' Perspective

The study covered employers, industrial associations and other key stakeholders to understand the demand side perspectives of skills. The information was collected through both quantitative survey and qualitative approaches including In-depth interviews and focus group discussions.

3.1. Employer Perspective

The study covered employers, industrial associations and other key stakeholders to understand the demand side perspectives of skills. The information was collected through both quantitative survey and qualitative approaches including In-depth interviews and focus group discussions.

The survey covered 45 Industries from nine sectors. The sector wise coverage of industries is given in Table 13. 36 of them were from the textile and apparel industry. Of the overall sample, there is a significant representation of all the different enterprise types 42% were medium scale enterprises, 38% were small industries and 11% were large-scale units.

Figure 29 Distribution of Industries by Size

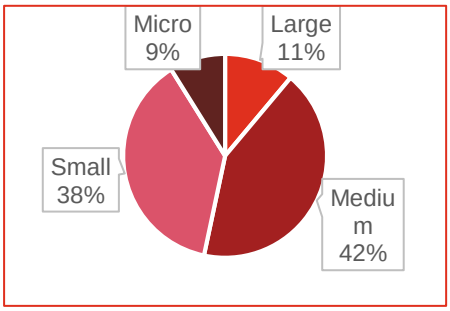


Table 13 Sector wise coverage of Industries in Employer Survey

S.No	Sector	Number of Industries Surveyed	S.No	Sector	Number of Industries Surveyed
1.	Textile and Apparel	36	2.	Agro-business	1
3.	Warehousing and Packaging	1	4.	Auto and Auto Components	1
5.	Other Manufacturing	3	6.	Chemical & Pharmaceuticals	1
7.	IT/ITeS	1	8.	Capital Goods	1

As seen in Table 14, employee reference is the major mode of recruitment (98%). Employers also use media advertisements and manpower agencies for recruiting labourers. Especially in the case of recruiting migrant labourers, most employers have labour contractors who source workers from other states.

The most common challenge faced by employers was candidate disinterest and attitude (82%), followed by work hours (20%) and high local wages (18%). During interviews with employers, it was observed that since most of them are exporters, the job hours differ based on the export demand. At times, in order to supply for bulk demands, the workers are required to work overtime which was cited as one of the major reasons for attrition.

*Table 14 Modes and Challenges in Recruitment Process**

Key Modes of Recruitment (n=45)			Key Challenges faced in Recruitment (n=45)		
S.No	Particulars	%	S.No	Particulars	%
1.	Employee Reference	98%	1.	Candidate Disinterest and Attitude	82%
2.	Local Community	9%	2.	High local wages	18%
3.	Advertisements in Media	18%	3.	Work hours	20%
4.	Manpower Agencies	11%	4.	Attrition/Uncertainty due to marriage and children	16%
5.	Campus recruitment in arts/science/commerce colleges	4%	5.	Lack of requisite core skills	9%
6.	Web portals	4%	6.	Attrition/Uncertainty due to involvement in Household chores	16%
7.	Social Networks	2%	7.	Nature of work requires strenuous physical labour	9%
8.	Campus recruitment in ITIs/Polytechnic	7%	8.	Lack of requisite soft skills	2%

Figure 31 Average distribution of workers by Sex

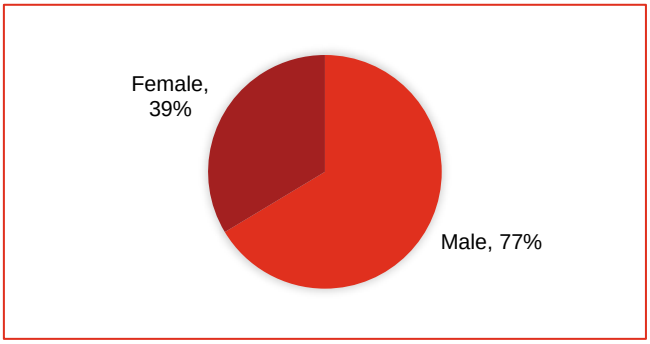
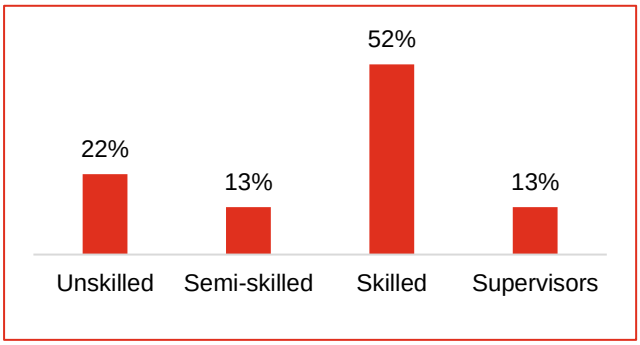


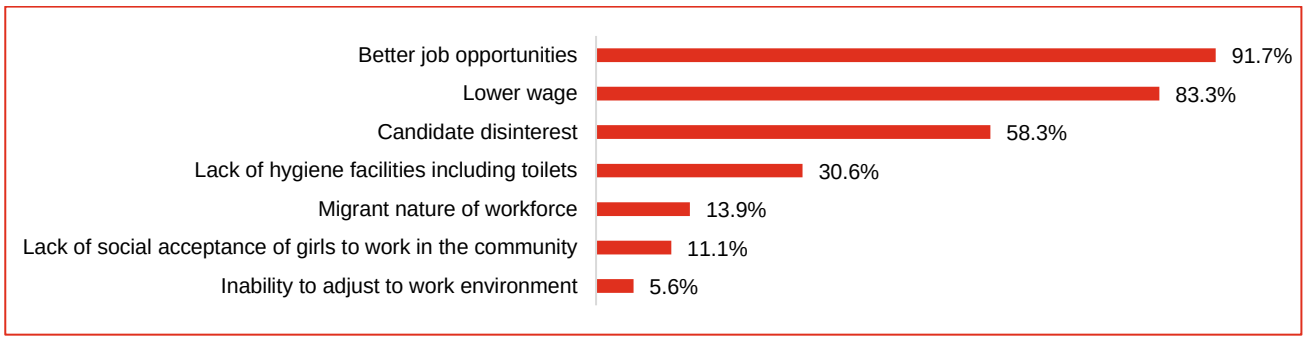
Figure 30 Distribution of workers by Skill Levels



The employers had a majority of male employees – on an average, the enterprises employed 77% males. 43% of the total employees came from other districts within Tamil Nadu, majorly the Southern districts.

The surveyed industries were largely dominated by the male workers as shown in . Skilled workers dominated the share of workforce (52%) followed closely by unskilled workers (22%). All the employers stated that they recruited employees from Eastern India. States of Bihar, West Bengal and Odisha were the key sources of migrant workers.

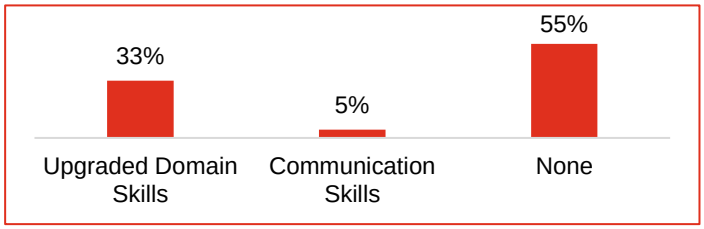
Figure 32 Key causes of Attrition



Better job opportunities, especially within the district, is seen as the major reason for attrition (92%).

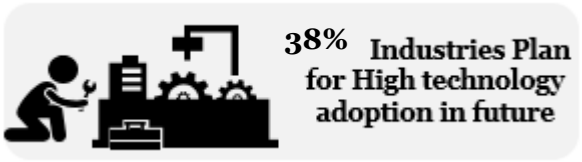
Given the large number of apparel units in Tiruppur, employees tend to keep a close watch for the firms that pay more. There is a regular attrition because of this factor. Also, as was observed in the youth survey, there seems to be a lack of steady upward mobility and increase in wages in the job because of which workers in their late 30s switch to self-employment.

Figure 33 Skill Requirement for Workers



The employers stated that domain skill upgradation of the workers needs the most focus. However, about 55% also feel that there is no need for any specific skilling as on the job learning opportunities are high.

Over 55% of the employers feel there is high growth prospects in the industries. About 38% note that the level of technology adoption in the future will be high. However, the majority of the textile manufacturing industry is labour-intensive. The scope for automation is limited to jobs like quality checking, packaging and logistics. Technology adoption would therefore not have an adverse impact on the job creation in the district.



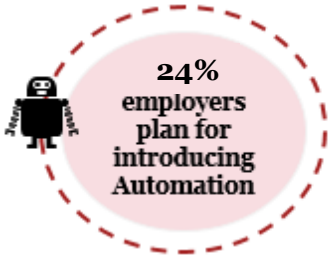


Table 15 Growth Prospects and prospective adoption of technology

Growth Prospects of Industry (n=45)	%	Level of Technology adoption (n=45)	%	Plans to adopt Technology (n=45)	%
High	55%	High	38%	Yes	24%
Medium	30%	Medium	23%		
Can't Stay	15%	Low	20%	No	76%
		Can't Say	20%		

The employers see a high demand for both minimally skilled and skilled workers while the demand for supervisors is only 2.4%. The textile industry in the district is labour intensive, which is the major reason for the preference of workers as opposed supervisors. All employers provide either domain related training or upskilling to their workers constantly.

Table 16 Demand for workers by Skill Level and type of training provided to workers

Demand for Workforce in next 5 years (n=45)				Type of Training Provided for Workers (n=45)	
	Minimally Skilled	Skilled	Supervisory	Type of Training	%
High Demand	27%	21%	2%	Domain skills on recruitment	50%
Medium Demand	39%	26%	2%		
Low Demand	5%	9%	14%	Up-skilling to meet technical needs	50%

Most employers prefer minimally skilled workers who can be trained on the course of the job. Since most labourers learn the skill on the job after joining as unskilled workers, there is a huge potential for industry-engaged skilling and upskilling that can have a considerable impact on efficiency.

3.2. Other Stakeholders' Perspective

The study included in-depth interviews of other stakeholders including the departments of Skill Development, Livelihood and Employment and Industrial development related activities, Industrial Associations, Vocational Education and Skill Development institutions among others. A focus group discussion was conducted with 20 stakeholders from various organizations in sectors such as ceramics, cotton, construction, petro products and auto components.

The following were the key findings from the stakeholder consultations and FGD:

Table 17: Qualitative findings in Tiruppur

S No	Topic	Responses
1.	Awareness of government skill training programs/ jobs/ job melas	• The workforce is moderately aware of skill training programmes • Low level of awareness regarding job fairs that are being conducted locally
2.	Education- schools, ITI/ Polytechnics/ Engineering colleges in the district	• Most candidates in the district do not prefer a diploma or ITI education • The enrolment levels in ITIs is only three fourth the capacity. Low student attendance and dropouts has also been a major issue. • School curriculum needs to be revised and aligned with skill training
3.	Candidate Attitudes/ Abilities	• The ready availability of jobs even for low skilled or unskilled labourers in the district has been a main hindrance to attending skill training. • Youth placed in companies after undergoing training have a high attrition rate most of them do not stay in the job for beyond a month. • Local youth do not prefer shop-floor roles, and prefer white-collar jobs

S No	Topic	Responses
		• Women employed in the textile industry do not have a good scope for vertical mobility. Job pressure to work overtime and strict rules at the residential facilities workers are more willing to work on the shop floor, and have lower attrition rates provided by the employers are the major demotivating factor.
4.	Migrant workers	• It is estimated that over seven workforce. • Most of the migrant labourers are from the East Indian states. Employers seek the help of labour contractors to supply labour depending on their needs. • Migrant labourers are preferred as they work for lower pay and work night shifts. • The skill level of most of the migrant workers is very low or unskilled. They learn the skill on the job • However, there is high attrition among the migrant labourers too. They do not stay in the job for more than 1-2 years. • More cumbersome to recruit migrant labours. For compliances, they do not have proper documents to submit. Hence, they do not want to be part of mandatory compliances like PF & ESI.
5.	Technological Transformation/ Automation	• The predominant textile industry does not lend itself to easy automation it is highly labour intensive • Given that the district is one of the pioneers in the industry, firm owners are aware of new technological improvements
6.	Industrial Scenario	• The labour shortage is forcing industries that have the capacity to move some of their operations supply of labour • Dyeing unit is in dire situation due to labour issues; the average age of the employees is 35-40 years. Being an integral part of the textile cycle, this is leading to lower capacity utilisation among other trades.
7.	Labour Requirements	• The textile industry employs about 6 lakh people in Tiruppur • In the next two years, the workforce requirement in the textile and apparel industry will be 1-2 lakh. Being a labour-intensive industry, there is a continuous requirement for workforce across the value chain.
8.	Women Employment	• 65% of the current workforce in textile and apparel industry are women. • Women enrol for training sessions (textile skills) but do not continue to work in the companies placed due non-conducive work environment and long working hours. • Day Care facilities where children can be taken care of will help addressing women attrition.
9.	Skill Gaps	• The textile sector requires highly skilled tailors and sewing machine operators. The low level of skilling is adversely affecting the industry due to the time taken.

4. Skill Gap Analysis

4.1. Skill Gap Assessment - Incremental Demand[18] for Skilled & Semi Skilled Manpower

Driven by the Manufacturing district of Tiruppur will witness a total labour demand of ~2.2 lakh workers including skilled and semi-skilled. Construction, trade and transportation are other sectors that have a high demand.

1.72 lakh workers has been estimated. In order to supply the required labour force and benefit from the expanding economy, there is a need for targeted skill training in relevant sectors.

Table 18 Sector wise Incremental Demand for Skilled and Semi Semi-Skilled Workers between 2019 and 2025

Sectors	Incremental Demand for Skilled Workers			Incremental Demand for Semi Skilled Workers			Total Incremental Demand
	2019-21	2022-25	Total	2019-21	2022-25	Total	Total
Agriculture	-	-	-	-	-	-	-
Allied Activities	387	577	963	2,706	4,036	6,742	7,705
Manufacturing	20,759	31,765	52,524	41,518	63,531	1,05,048	1,57,573
Construction	1,008	1,524	2,532	2,520	3,810	6,330	8,863
Trade & Repair Services	529	745	1,275	1,832	2,580	4,412	5,687
Hotels and restaurants	274	386	660	531	747	1,278	1,938
Transportation and storage; Post and Telecommunications	317	439	756	761	1,055	1,815	2,572
Other Services	8,855	13,591	22,446	7,134	10,940	18,074	40,520
Total Demand	32,129	49,028	81,157	57,002	86,699	1,43,701	2,24,858
Total Supply	8,323	11,097	19,420	14,028	18,704	32,733	52,152
Total Skill Gap	23,807	37,931	61,737	42,974	67,995	1,10,968	1,72,705

[18] 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 Action Plan and Recommendations

5.1. Key Findings and Inferences

Some major findings from the study are as follows:

- **Women Workforce**: About 65% of the current workforce in textile and apparel industry are women. But it is also seen that the women employed in the textile industry do not have a good scope for vertical mobility. Job pressure to work overtime and strict rules at the residential facilities workers are more willing to work on the shop floor and have lower attrition rates provided by the employers are the major demotivating factor. Women enrol for training sessions (textile skills) but do not continue to work in the companies placed due non-conducive work environment and long working hours. Day Care facilities where children can be taken care of will help addressing women attrition.

- **Textile and Apparel Sector Labour Requirement:** In the next two years, the workforce requirement in the textile and apparel industry will be 1-2 lakh. Being a labour-intensive industry, there is a continuous requirement for workforce across the value chain. It is estimated that over seven lakh migrant labourers are a part of However, there is high attrition among the migrant labourers too. They do not stay in the job for more than 1-2 years.

5.2. District Action Plan

The district level training projects below suggests the potential areas for skill development interventions and job opportunities in the future. It identifies the potential job roles mapped with NSQF linked QPs and the potential of employment opportunities over the next three years with a focus on youth. The job roles have been shortlisted based on the analysis of findings from the skill gap analysis, secondary research, youth aspiration survey, enterprise survey, district level consultations and discussions with industry associations.

The below table presents the summary of training projects for Tiruppur:

Table 19 Summary of Trainings

S. No	Sector	Trades	Target (Persons)	Budget
1.	Textile and Apparel Sector	• Cutting Supervisor • Sewing Machine Operator • Fabric Checker • Merchandiser • Quality Checker	104,000	232.52 Crores
2.	Digital Marketing and Finance	• Marketing and Social Media manager • GST Accounts Assistant • Export Assistant	500	1.61 Crores
3.	Poultry farming	• Poultry shed designer • Chick grading technician • Broiler Poultry Farm Supervisor	350	0.63 Crores
4.	Logistics and Packaging	• Kitting and Labelling • Delivery Management Cell Agent • Packer • Quality Assessor	200	0.21 Crores
Total			105,050	234.96 Crores

Note:

1. 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).

2. 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.
3. 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.

The training projects are described below:

Table 20 Training Project 1: Textile Sector

Name of the Project: Training in Textile and Apparel sector							
Key Economic Drivers: **Investment:** The textile sector has seen investments to the tune of INR 440 crore, which would boost the industry and drive demand in the next few years. As per the stakeholder interviews of employers and industry associations, Tiruppur would require 1.5 lakh workers to sustain the textile industry from 2019 to 2025 There is also a need for reskilling existing workers in order to increase efficiency							
Key Partners: NIFT-TEA College of Knitwear Fashion, SITRA, ORMAS Migration Support centre							
Job Roles:	**NSQF Level**	**NSQF Code**	**Duration of Training (hours)**	**Cost Category**	**Target Group**	**Training Target (People)**	**Cost of Training (₹)**
Cutting Supervisor	5	AMH/Q0610	270	1	10th Pass, 12th Pass	1,000	1.48 Crores
Sewing Machine Operator	4	AMH/Q0301	270	1	10th Pass, 12th Pass	50,000	214.36 Crores
			120	1	Existing textile sector workforce	50,000	
Fabric Checker	4	TSC/Q2301	300	1	10th Pass, 12th Pass	1,000	1.65 Crores
Merchandiser	5	AMH/Q0901	540	1	Diploma/ Graduation	1,000	1.65 Crores
Quality Checker	4	TSC/Q0501	300	1	10th Pass, 12th Pass	1,000	2.97 Crores
					Total	1,04,000	222.12 Crores
					Total Assessment and Certification cost (1,000 per candidate)		10.4 crores
					Total Cost		232.52 Crores
Key Considerations: Curriculum upgradation and orientation with institute like SITRA with close implementation partnership with SIMA / TEA. The projects can be implemented through the largescale garment makers with the provision of the trained personnel being directly employed with the company after certification Upgradat Since sewing machine operator is an entry-level job role, migrant labourers can be trained in this as part of the Multi-state Common Migration Support Centre.							

Table 21 Training Project 2: Digital Marketing and Finance

Name of the Project: Training in Marketing and Export related trades							
Key Economic Drivers: The large number of MSME units and have potential for better marketing and financial management of their enterprises These skill training programs would also benefit the traditional sector artisans in the district							
Key Partners: BFSI, TTPK, TEA							
Job Roles:	**NSQF Level**	**NSQF Code**	**Duration of Training (hours)**	**Cost Category**	**Target Group**	**Training Target (People)**	**Cost of Training (₹)**
Marketing and Social Media manager	4	ASC/Q1110	500	2	Diploma/ Graduation	200	1.34 Crores
GST Accounts Assistant	4	BSC/Q0910	100	3	Diploma/ Graduation	200	0.17 Crores
Export Assistant	5	AMH/Q1601	270	2	Diploma/ Graduation	100	0.05 Crores
					Total	500	1.56 Crores
					Total Assessment and Certification cost (1,000 per candidate)		0.05 crores
					Total Cost		1.61 Crores
Key Considerations: Large-scale units that have similar operations can take the lead in helping the MSME units to understand and operate more easily.							

Table 22 Training Project 3: Poultry

Name of the Project: Training in Poultry							
Key Economic Drivers:							
Tiruppur it is the second highest district in terms of poultry population after Namakkal							
Key Partners: Tamil Nadu Veterinary University							
Job Roles:	**NSQF Level**	**NSQF Code**	**Duration of Training (hours)**	**Cost Category**	**Target Group**	**Training Target (People)**	**Cost of Training (₹)**
Poultry shed designer	6	AGR/Q4304	240	2	ITI/ Diploma/ Graduation	50	0.06 Crores
Chick grading technician	4	AGR/Q4403	200	2	10th Pass	50	0.05 Crores
Broiler Poultry Farm Supervisor	5	AGR/Q4301	150	2	10th Pass	100	0.07 Crores
					Total	200	0.18 Crores
					Total Assessment and Certification cost (1,000 per candidate)		0.02 Crores
					Total Cost		0.21 Crores
Key Considerations: The trainings can be combined with the activities carried out by Tamil Nadu veterinary university.							

Table 23 Training Project 4: Logistics and Packaging

Name of the Project: Training in Logistics and Packaging							
Key Economic Drivers:							
twear export[19]. Quality control, packaging and delivery management are important job roles in the export cycle that could help improve the export handling of the finished textile products.							
Key Partners: TTPK, TEA							
Job Roles:	**NSQF Level**	**NSQF Code**	**Duration of Training (hours)**	**Cost Category**	**Target Group**	**Training Target (People)**	**Cost of Training (₹)**
Kitting and Labelling	2	LSC/Q2304	230	3	10th Pass	100	0.1 Crores
Delivery Management Cell Agent	4	LSC/Q3032	360	1	Diploma	50	0.1 Crores
Packer	3	AMH/Q1407	180	1	8th Pass	100	0.1 Crores
Quality Assessor	5	AMH/Q1701	540	1	12th Pass	100	0.3 Crores
					Total	350	0.59 Crores
							0.04 Crores
					Total Cost		0.63 Crores
Key Considerations: Large-scale export-oriented units can provide inputs for the training. Since some of these job roles are on higher NSQF levels that require a graduate degree, NIFT-TEA can provide inputs on course design and implementation.							

[19] District Industries Profile, DC-MSME, 2015-16

5.3. Key Recommendations

Study findings reveal that Tiruppur might spearhead the demand for labour in the next five years with its textile industry projected to grow further. There is an emerging demand for skilled workforce in the district with several investments lined up within the district.

Recommendation on key interventions that needs to be taken up in order to foster the participation of youth in the economy are as follows:

Creating Awareness on Skilling and conducting counselling sessions:

The appetite for skill training is very low in the district among the local population as seen in the youth survey findings and stakeholder perspective. The textile industry, which is the major generator of jobs in Tiruppur is one of the least desired sectors to work in for the youth. This is a huge challenge that needs to be addressed by a multi-dimensional approach. In order to make the youth recognise the lucrative employment opportunities, better awareness sessions need to be conducted in schools, ITIs, polytechnics and colleges. Skill training can be introduced as part of the school syllabus.

Village level awareness drives and mobilization workshops should also be planned in order to make the youth more interested in skilling. Counselling sessions should be offered as part of these drives to make the youth realise the possibilities of employment.

Migrant Labourers:

1. **Multi-State Common Migration Support Centre**: In order to provide support and adequate skill training for the migrant workforce from other states, a common support centre can be established in Tamil Nadu. This can be hosted by the Government of Tamil Nadu but funded and supported by other states from where the migrant workers hail. ORMAS has already established a migration support centre in Tiruppur. However, a concerted effort of all the states involved would be more beneficial in providing adequate support facilities and counselling for migrants.
2. **Skill Training for Migrant Workers**: Most employers do not have any incentive to provide formal skill training to the migrant labourers who form a huge chunk of the labour force. In coordination with the skill development departments of the East Indian states, which supply most of the workforce, skilling programmes can be organized to ensure that the migrant labourers are also efficient workers and have a formal training instead of learning on the job. As proposed in the Tiruppur action plan, formal skilling can be provided in textile sector entry-level jobs for migrant workers.

Training Hub for Apparel Sector Technicians:

Tiruppur has potential to become an Industry-led Training Hub for Apparel Sector Technicians. With the next generation industries being established in the neighbouring districts, all apparel sector related training can be hosted in Tiruppur. Given the higher degree of attrition in the industry this could open-up more mobility and employment prospects for the individuals.

Sustaining traditional industries:

The traditional industries in Tiruppur suffer majorly because most of the artisans are not trained in marketing their products. As proposed in the action plan, training can be given in digital marketing, export and finance so that the artisans are also aware of how to market their products.

Upward mobility in the job:

Almost 90% of youth said that the income from employment determined their aspirations. Given that the textile sector pay is quite stagnant at the higher levels, the employers need to look for better opportunities for upward mobility for the workers and increase wages.

Government assistance:

A pressing need is felt by the entrepreneurs for the Knitwear Board to be headquartered in Tiruppur. This will incentivise research and development and promote other skilling programs in Tiruppur.

The Compliance audit, which the companies need to adhere to for exporting their goods often does not allow for employment of apprentices as per the Apprenticeship schemes and On-the-Job Training. The strict requirements with respect to minimum wage compliance becomes an issue.

Development of a Quality Labour Force:

TEA has worked on a case study focussed on upskilling. A sample of eight companies were chosen and their workers were provided training from an industrial-engineering perspective. The study found that post upskilling, the productivity of the workforce increased by 26%. By engaging in up-skilling, it will lead to cost savings and increase in productivity. This must be a major feature of the trainings provided in the district.

Appendix

A.1 Methodology for Block Selection in Youth Aspiration Survey

Sampling Design for Youth Survey

A total of 360 youth were 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.

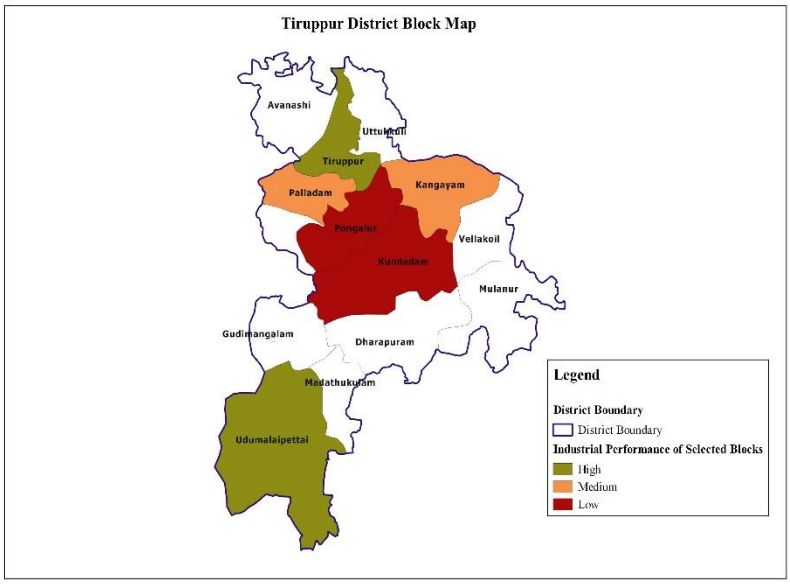
3. Self – Employed Youth:
To cover Self Employed Youth in the sample, a roster of beneficiaries from the Pradhan Mantri Employment Generation Programme (PMEGP) shall be randomly selected from the list which will be obtained from the concerned authority at the District level.

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 Blocks

The block selection methodology involved the identification of blocks by categorizing them into High development, Medium development and Low development. The adjacent picture shows the blocks in Tiruppur selected for the survey. The methodology is explained below:

Figure 34: Blocks Selected for Survey in Tiruppur



To categorize blocks, the following data points were used.

1. Count of MSME Clusters (based on DC-MSME Report)
2. Number of SIDCO Industrial Estates
3. Number of SIPCOT Industrial Estates
4. Credit Outstanding, 2017-18 at Centre-level (Annual Data published by the Reserve Bank of India)

The following weights were assigned post award of marks:

1. MSME Cluster 25%
2. SIDCO Cluster 25%
3. SIPCOT Industrial Estate 5%
4. Annual Centre-level Credit Data 45%

Based on the above weights, the total score of each block was calculated. The total score was capped at 100. To classify the block as High/Medium/Low, the total score was converted into percentile values and categorized into three groups 0-33.33th percentile values, 33.33 to 66.67 percentile value and 66.67 to 100 percentile values. The percentile values are calculated with respect to each district as the base.

Based on the percentile classification obtained, blocks were classified as follows:

- **0 to 33.33 percentile value: Low**
- **33.33 to 66.67 percentile value: Medium**
- **66.67 to 100 percentile values: High**

After deriving the above values for the blocks, **t**wo blocks are randomly selected from each category.

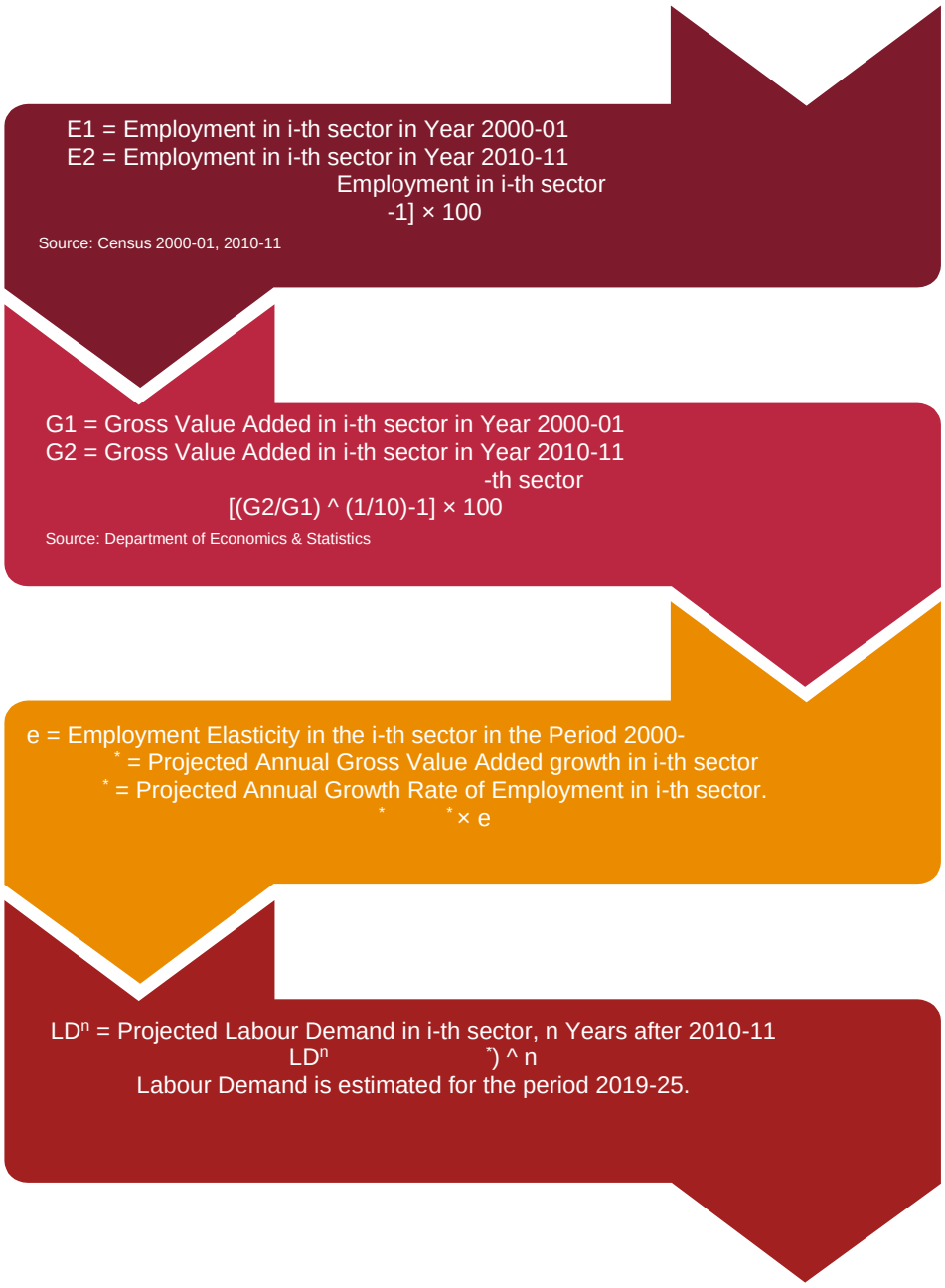
The blocks selected are:
High-Tiruppur, Udumalaipettai
Medium- Palladam, Kangayam
Low- Pongalur, Kundadam

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 and sector specific investments are other factors 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:

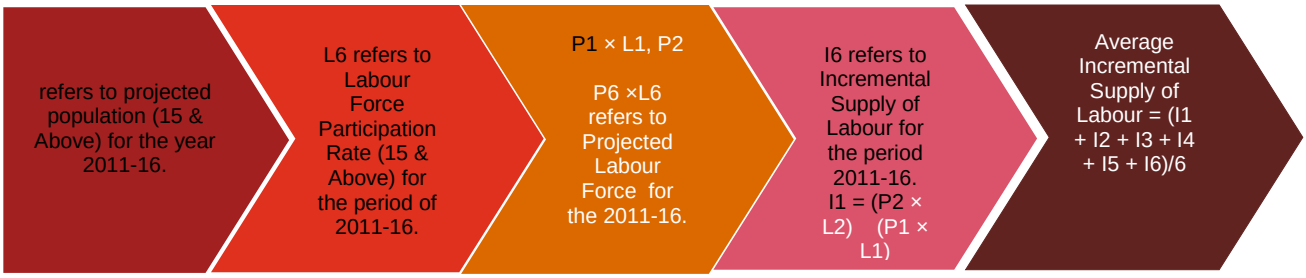
Figure 35: Steps in Demand Estimation



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[20]. 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 36: Steps in Supply Estimation



Workers are then segmented into 3 broad Skill groups based on the following criteria

1. **Unskilled**: Illiterate, Less than five years of schooling, 5-10 years of schooling & no Vocational training,
2. **Semi-Skilled**: 5-10 years of schooling & some Vocational training, Secondary/Higher Secondary passed & no Vocational training, Secondary/Higher Secondary passed & some Vocational training;
3. **Skilled**: Graduate & no Vocational training, Graduate & some Vocational training and Technical Graduates

[1] don s nmDl okn l dms,Tmdl okn l dms Rt ud 1 00,01 1 01,02 1 02,03 1 04,05 1 06,07-

A.3 List of Stakeholders

Table 24: List of Stakeholders

S.No	Stakeholder	Category
1.	District Industries Centre- General Manager	Govt. official
2.	District Assistant Director, District Skills Department	Govt. official
3.	District Employment Officer	Govt. official
4.	District Cooperatives Manager	Govt. official
5.	Tiruppur Chamber of Commerce and Industry	Industry Association
6.	Anupparpalayam Cooperative Pathiram Society	Industry Association
7.	Tiruppur Thozhil Padhugaapu Kuzhu	Industry Association
8.	Textile Committee, Tiruppur	Industry Association
9.	Tiruppur Export Knit Printers Association (TEKPA)	Industry Association
10.	Tiruppur Exporters Association (TEA)	Industry Association
11.	Eastman Apparel Exports	Industry
12.	Sector Skill Council Apparel	Industry
13.	CBC Fashion	Industry
14.	NIFT TEA	Industry
15.	Lucky Style Garments	Industry
16.	Sri Vishwesh Colours	Industry
17.	Hotel Mayberry	Industry
18.	Greenway Institute	Training Service Provider
19.	Tiruppur Smart Cluster	Training Service Provider
20.	Government ITI, Tiruppur	Training Service Provider
21.	Blessing Raising	Industry
22.	Body Glove Apperal India	Industry
23.	Bravo Garments	Industry
24.	Brindavan Knittings	Industry
25.	Chenniyappa Textiles	Industry
26.	Chinniappa Yarn Spinners Private Limited	Industry
27.	Conch Knits	Industry
28.	G.M.R Garments	Industry
29.	G.M.R Knits	Industry
30.	Gallop Clothing	Industry
31.	Gokul & Co	Industry
32.	J.R.K. Knits	Industry
33.	Katria Transport Company	Industry
34.	Knit Win Fashion	Industry
35.	Madura Coats Privare Limited	Industry
36.	New Max Clothing	Industry
37.	New Tech Printers	Industry
38.	Om Muruga Raising	Industry
39.	Paragan Inovations	Industry
40.	Punjab Hand Loom Fabrics	Industry
41.	Rcpl Logistics Private Limited	Industry
42.	Sakthi Tapes	Industry
43.	Shree Laatha Knits	Industry
44.	Sri Dharani Logistics	Industry
45.	Sri Sai Apperals	Industry
46.	Srinivasa Dyes	Industry
47.	Steps Stone Prints	Industry
48.	Super India Transport	Industry
49.	Poppys Knitwear Pvt Ltd.,	Industry
50.	Jairam Creations	Industry
51.	Loocust Incorp Apparel Export Pvt Ltd	Industry
52.	Sri Shashti Car Private Limited	Industry
53.	Icewear Creations Private Limited	Industry
54.	Anthony Garments	Industry
55.	Anitha Texcot	Industry
56.	Veerappan Ganesh Enterprises - I Matic	Industry

S.No	Stakeholder	Category
57.	Apex Coco And Solar Energy Limited	Industry
58.	Schuf Speciality Valves India Pvt Ltd	Industry
59.	Geeks Infosys	Industry
60.	Milton Knitting Mills	Industry
61.	Nova Garment Machinery Tools	Industry
62.	Subam Tex	Industry
63.	Aalaya Cotton Mills	Industry
64.	Sri Murugan Engineering Work	Industry
65.	Sri Karpagam Engineering	Industry