



Skilling for the Future

Skill Gap Assessment & Action Plan for Tamil Nadu

District Skill Development Plan for Salem

October 2019



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Published by
TNSDC, Chennai

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Acknowledgement

We extend our thanks to district officials of Salem, youth, employers, industrial associations and training service providers who participated in focus group discussions and surveys, for their support in conducting research and drafting this report.

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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.	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.	IT-ITES	Information Technology and Information Technology Enabled Services
14.	LFPR	Labour Force Participation Rate
15.	Manuf.	Manufacturing
16.	MIS	Management Information System
17.	MSME	Micro, Small and Medium Industries
18.	NCVT	National Council for Vocational Training
19.	NEET	Not in Education, Employment, or Training
20.	NIC	National Industrial Classification (2008)
21.	NSDA	National Skill Development Agency
22.	NSDC	National Skill Development Corporation
23.	NSQF	National Skills Qualification Framework
24.	NULM	National Urban Livelihood Mission
25.	PMKVY	Pradhan Mantri Kaushal Vikas Yojana
26.	PSU	Public Sector Undertaking
27.	Pub. Admin.	Public Administration
28.	QP-NOS	Qualification Pack – National Occupational Standards
29.	SIDCO	Tamil Nadu Small Industries Development Corporation Limited
30.	SIPCOT	State Industries Promotion Corporation of Tamil Nadu
31.	SIR	Special Investment Region
32.	SSC	Sector Skill Council
33.	TANSIDCO	Tamil Nadu Small Industries Development Corporation Limited
34.	TIDCO	Tamil Nadu Industrial Development Corporation
35.	TN-GIM	Tamil Nadu Global Investors Meet
36.	TNSDC	Tamil Nadu Skill Development Corporation
37.	TNSRLM	Tamil Nadu State Rural Livelihood Mission
38.	Tr. & Tou.	Trade and Tourism Sectors
39.	WPR	Worker Population Ratio

1. 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 2023¹.

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 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: Ayodhiyapattinam, Mecheri, Idappadi, Sankari, Athur and Salem.






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

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.
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. In all, more than twenty five focus group discussions and nearly twenty individual consultations have been conducted across the state.

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: Key findings of the study are presented hereunder:

 Demographic Analysis	<ul style="list-style-type: none"> Salem ranks 5th in terms of highest population in Tamil Nadu. The decadal growth rate of the population in the district was 15% between 2001 and 2011. Over half of the district population (51%) reside in urban areas. By 2026, about 36% of population is expected to fall in the age group of 35-59 years, indicating an aging population in the district. The median age is also expected to increase to 36 years in 2026 from 29 years in 2011.
 Economic Analysis	<ul style="list-style-type: none"> Salem ranks sixteenth in per capita GDDP across the state. Between 2011-12 and 2016-17, the GDDP grew by 4%. The economy of the district is dominated by the service sector, which accounts for about 49% of the GVA in 2016-17. The overall contribution of the service sector to GVA has increased by 6 percentage points between 2011-12 and 2016-17 at a CAGR of 6%. Agriculture sector led by livestock production has seen a huge growth with a CAGR of 14% between 2011-12 and 2016-17. The industrial sector, which accounted for 43% of the GVA in 2011-12 accounts for only 28% in 2016-17. One of the major reasons for the decline has been the decline in textile industry fuelled by the falling demand for spun cloth in the international market. The food processing industry also witnessed a decline due to falling crop yield which majorly supported the industry here. Salem is home to various traditional sectors and successfully operating clusters in various industries like steel products, sago processing, pottery and woodcarving. Salem is also expected to see large-scale investments from government and private players mainly in food processing and construction to the tune of ₹ 419 crores. The Salem Smart City project is the major driver for investment in construction projects.
 Labour Market Analysis	<ul style="list-style-type: none"> The overall labour force participation rate is 64% and worker population ratio is 63% - higher at the district level than at state. About 48% of workers in the district are casual labourers and 31% are self-employed. The overall unemployment rate is at 2% but the youth (15-29 years) unemployment rate is much higher at 7%. About 25% of the workforce are involved in agriculture and allied activities, another 25% in manufacturing and 17% each in construction and trade related activities.
 Education & Skill Development	<ul style="list-style-type: none"> The Gross Enrolment Ratio at the Primary level is 106 and at the Upper Primary level is 101 –higher than the state averages. The dropout rates is also lower – 0.9% at the primary level and 1.9% at the upper primary level. Most courses are in the sectors of textile and apparel, IT-ITES, beauty and wellness, retail and electronics.
Findings from Primary Survey	
 	<ul style="list-style-type: none"> Among the respondents, about 50% of them were female and about 71% were from rural areas. Only over half of the respondents (54%) are currently engaged in some economic activity

Youth Profile and Aspirations	<ul style="list-style-type: none"> About 46% of currently working female respondents reported that they receive an income of ₹ 5,000-10,000 per month. Among males, 33% received an income between ₹ 10,000-15,000 per month and 20% receive between ₹ 15,000-20,000 per month. About 77% of NEET category respondents wish to work and over 93% are actively seeking work. The youth in the district mostly prefer to be employed in the public sector (36%) The main factors determining the aspiration of the youth are job security (54%), salary (46%) and social status (41%). The youth reported years of work experience (32%), basics and soft skills (18%) and certifications of technical skill (18%) as key factors for enhancing their employability skills The most important source for the job related information was through friends, peers (69%), internet, and online job portals (28%). BFSI is the most preferred sector among youth – 19% preferred to be employed in BFSI sector jobs. Other preferred sectors to work in are textiles, auto and auto components, electronics and IT/ITES. Of the overall respondents, 61% are willing to attend skill-training programmes to attain the desired employment. Among them, about 49% are interested in undergoing full-time vocational training courses
 Employer & Other Key Stakeholder Perspectives	<p>Quantitative Survey</p> <ul style="list-style-type: none"> Employee reference is the major mode of recruitment (80%). Employers also use local community (24%) and media advertisements (20%) for recruiting labourers. The most common challenge faced by employers was candidates' disinterest and attitude (78%), followed by high local wages (54%) and requirement of physical work on the shop floor in the job (17%). The employers had a majority of male employees – on an average, the enterprises employed 74% males Skilled workers dominated the share of workforce (44%) followed by unskilled workers (32%) and semi-skilled workers (16%). The major causes of attrition cited by employers were lower wages (74%), availability of better jobs (71%) and candidate disinterest (39%). Over 41% of the employers feel there is high growth prospects in the industries. About 28% note that the level of technology adoption in the future will be high and 28% have plans to introduce automation. Employers feel there is a need for IT skills among workers (26%). Other skills deemed important by employers are upgraded domain skills (19%) and communication skills (13%). <p>Qualitative Inputs</p> <ul style="list-style-type: none"> Employers feel that the workforce is not fully aware of skill training programmes. There is also not much interest to continue a job after skilling. Youth respondents prefer pursuing jobs within their hometown. Candidates prefer to work in the informal sector and do not desire jobs that involves working in the shop floor. Women are mostly involved in the textile spinning and garment manufacturing industry.
 Incremental Demand	<ul style="list-style-type: none"> In the next 6 years, Salem will see a labour demand for about 1.13 lakh workers. Major sectors that drive the demand are manufacturing, construction, agriculture and allied activities. The major demand is from the growing food processing industry. A skill gap of about 41,000 workers will be seen in the next six years.

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

Revision of ITI syllabus as per the technology change in industry: Industry prefers candidates with MIG welding skills, whereas ITIs teach only TIG welding skills. There is a need for overall revision and updating of the syllabus in ITIs for all trades.

Apprenticeship programme to promote traditional sectors: In order to promote niche industries like the woodcarving in Thammampatty, an apprenticeship programme can be promoted in collaboration with the Tamil Nadu Handicraft Development Corporation.

Revision of Agriculture skill training norms: Farmers who wish undergo skill upgradation training have to travel from their villages to one designated facility/location, on a daily-basis throughout the duration of the course. Alternatively, groups of farmers can be identified, and skill training can be offered at their respective villages and be structured conveniently to enable lesser economic loss and full participation from the target candidates. **Mandatory field visits** would help farmers to understand different agricultural practices suited to different soil and land types.

Development of QP/NOS for Sago Processing: Sago processing is a method of extracting the starch from tuber crops. Since there are no specific QP/NOS that cover sago processing, this can be developed and course can be offered in this job role under the food processing sector.

Counselling sessions as part of skill training: There is a need for improved counselling services as part of skill training. Weekly counselling sessions can be conducted as part of the training. Alumni can be invited to give talks on the employment scenario and success stories of hardworking candidates needs to be documented and showcased by every skill training provider.

2. District Profile

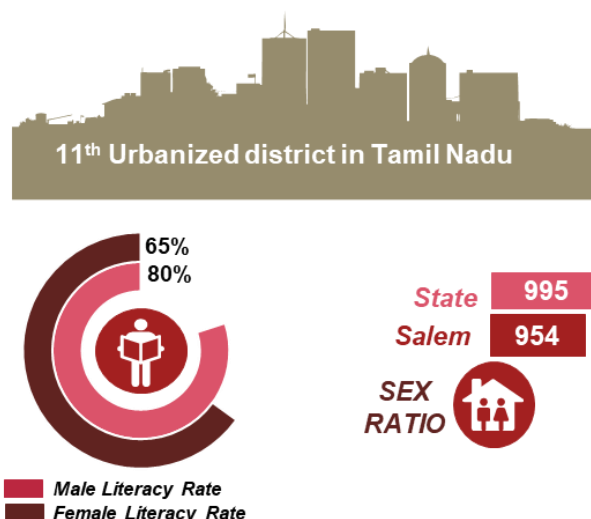
As a district, Salem has its significance in various aspects such as Mango Cultivation, Silver Ornaments, Textiles, Sago industries and Steel production. Salem ranks 5th in terms of population size in Tamil Nadu. The district is home to the famous Mettur Dam located on the Cauvery River, a major source of water supply in the state.

2.1. Demographic Profile

Table 1: Key Demographic Indicators – Salem vs Tamil Nadu³

SN	Indicator	Salem	Tamil Nadu
1	Total population	3,482,056	72,147,030
2	Female Population	1,700,485	36,009,055
3	Population Density per sq.km (2011)	954	555
4	Urbanization	51%	48%
5	SC population (as % of total population)	17%	20%
6	ST population (as % of total population)	3%	1%
7	Differently abled population (as % of total population)	1%	2%
8	Population in age group 15-34 years (as % of total population)	34%	35%
9	SC population aged 15-34 years (as % of SC population)	36%	37%
10	ST population aged 15-34 years (as % of ST population)	35%	35%
11	Literacy rate	73%	80%

Snapshot of Salem's Demography

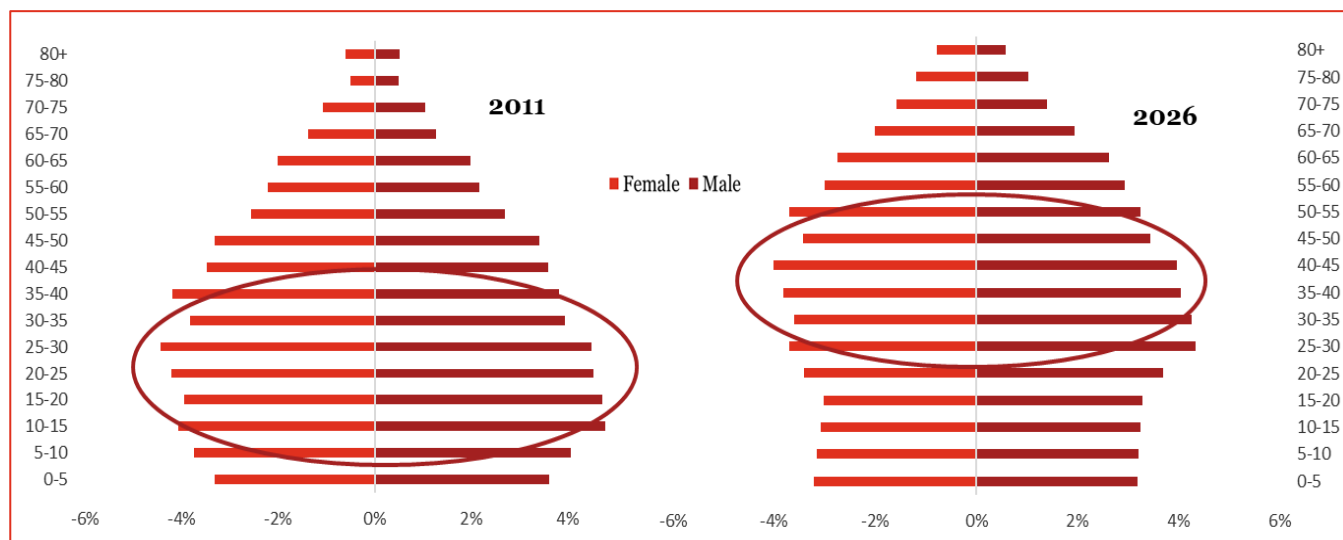


Key Highlights from the analysis of Census Data:

³ Census 2011 & 2011

- **Population Growth and Urbanization:** The decadal growth rate of the population in the district was 15% between 2001 and 2011. Over half of the district population (51%) reside in urban areas.
- **Literacy:** The district has a literacy rate of 73% - 7 percentage points lower than the state average. There is a disparity between the literacy rates of males and females as well – female literacy rate is at 65% while the male literacy rate was 80%.
- **Youth Demography:** 34% of the population was between 15-34 years in 2011 with a Median age of 29 years. By 2026, about 36% of population is expected to fall in the age group of 35-59 years, indicating an aging population in the district. The median age is also expected to increase to 36 years by 2026.

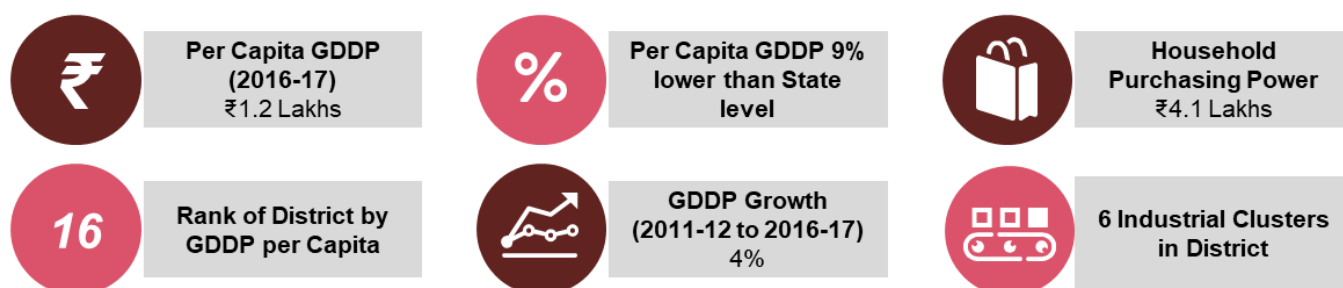
Figure 1 Age-wise Population Pyramid of Salem (2011 vs 2026)⁴



2.2. Economic Profile

Salem is known for the iron and steel industry and agriculture sector. As seen in Figure 2, Salem ranks sixteenth in per capita GDDP across the state. Between 2011-12 and 2016-17, the GDDP grew by 4%.

Figure 2 Key Economic Indicators of Salem District



2.2.1. Sector wise Analysis⁵

Figure 3 Sectoral Snapshot of GVA 2016-17

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

⁵ Directorate of Economics and Statistics, Tamil Nadu

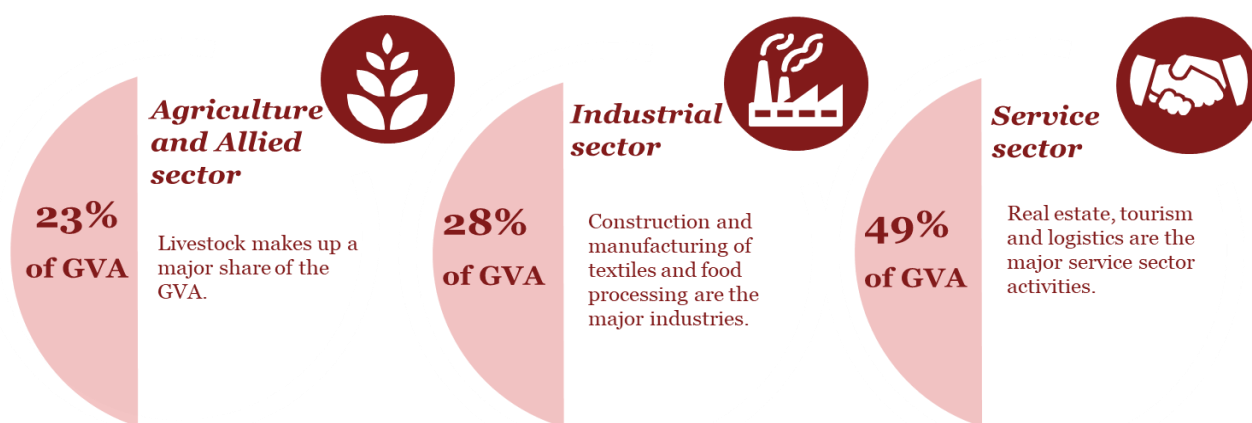
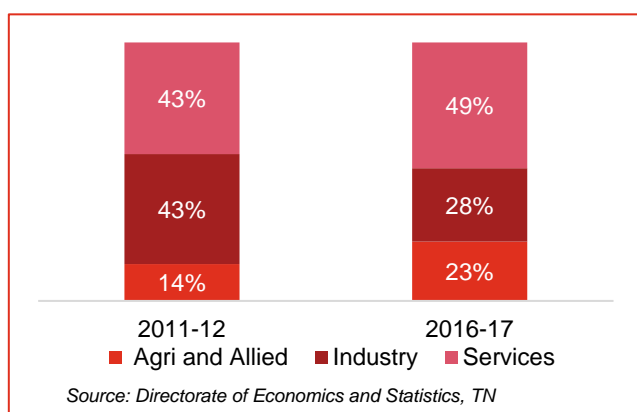


Figure 4 Sectoral Share of GVA (2011-12 & 2016-17)



The economy of the district is dominated by the service sector, which accounted for about 49% of the GVA in 2016-17. The overall contribution of the service sector to GVA has increased by 6 percentage points between 2011-12 and 2016-17 at a CAGR of 6%.

Agriculture sector led by livestock production has seen a huge growth with a CAGR of 14% between 2011-12 and 2016-17.

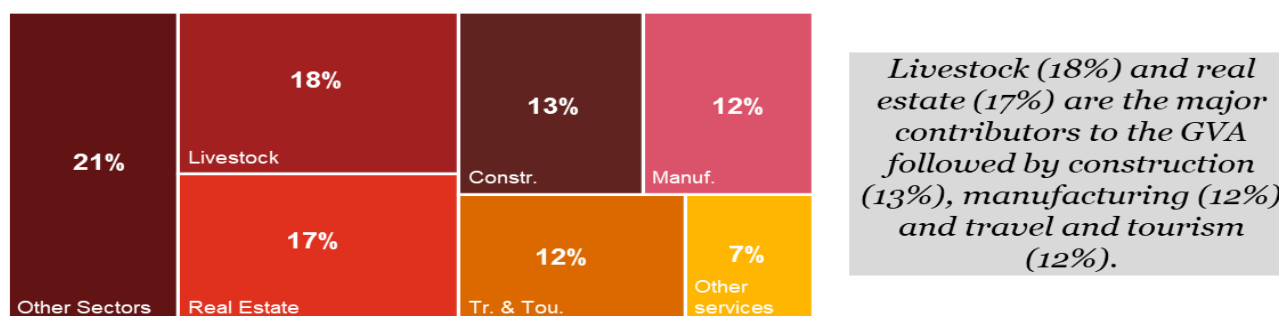
The industrial sector, which accounted for 43% of the GVA in 2011-12 accounts for only 28% in 2016-17.

The industry grew at negative -5% CAGR during the period of 2011-12 and 2016-17. The proposal for the Coimbatore-Tiruppur-Salem Industrial Corridor spurred a line of investments and promoted industrial growth, which can be seen in the positive growth rate since 2015-16.

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

Sector	2012-13	2013-14	2014-15	2015-16	2016-17	CAGR
Agri & Allied	-9%	23%	21%	21%	17%	14%
Industry	-18%	-4%	-8%	6%	2%	-5%
Services	6%	8%	8%	3%	5%	6%

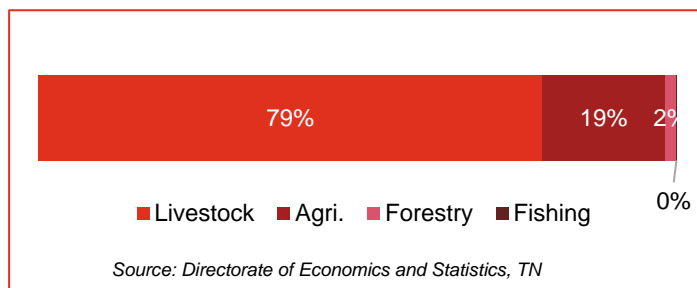
Figure 5 Share of GVA by Industry of Origin (2016-17)



Agriculture and Allied Sector

Figure 6 shows the share of the different components in the agriculture and allied sector GVA of 2016-17. Livestock accounts for 79% of the district GVA. Salem is also home to the specific breed of Mecheri sheep. The Tamil Nadu Veterinary University runs the Mecheri Sheep Research Station (MSRS) in Mecheri for the promotion and development of sheep rearing. Dairy and poultry farming are also carried out in a large scale across the district.

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

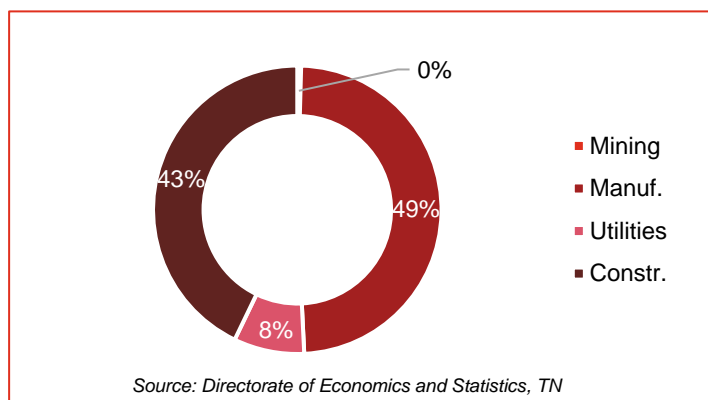


The major crops grown are paddy, sugarcane and plantation crops in areas with good irrigation facilities. Dry crops like ragi, Varagu, maize and Samai are also cultivated extensively. This district is known for the special mango varieties such as Bangalora, Gundu, Malgovala, Nadusalai and Neelam⁶. Tubers (tapioca) are also grown in the district and processed for their starch in the sago processing industries. The hilly areas in the district including Yercaud are famous for coffee, pepper and fruit cultivation.

Industrial Sector

Manufacturing makes up 49% of the industrial sector GVA and construction contributes to 43%. Though not a significant contributor to GVA, some mining activities are carried out in Salem for minerals such as Bauxite, Limestone, Quartz, Feldspar and Granite. The CAGR of manufacturing sector has been decreasing (-11%) between 2011-12 and 2016-17.

Figure 7 Industrial Sector GVA (2016-17)



The construction industry witnessed a CAGR of 3% from 2011-12 to 2016-17. However, since Salem is part of the Smart Cities project of the Government of India, several infrastructure projects have been declared in the city. This would boost the construction sector growth in the coming years.

Prominent large scale industries in the District include the Salem Steel Plant (a unit of SAIL), JSW Steels, Madras Aluminium Company, SAGOSERVE, India Cements, etc.

Key Clusters and Traditional Industries		
Sago & Starch	Coir	Lorry Body Building
Readymade garments	Power Loom	Steel Products
Handloom	Silver Anklets	Wood Carving

Table 3 Profile of Manufacturing Sector from ASI

Industry	No. of Units	Gross Value Added (share in total GVA)	No. of Employees	Share of Employment	Average workers per unit
Spinning, weaving and finishing of textiles	274	60,692	16,508	41%	60
Manufacture of grain mill products, starches and starch products	345	38,086	2,424	6%	7
Manufacture of basic iron and steel	25	30,453	3,270	8%	131

⁶ Salem District Statistical Handbook, 2015-16

Industry	No. of Units	Gross Value Added (share in total GVA)	No. of Employees	Share of Employment	Average workers per unit
Manufacture of basic chemicals, fertilizer and nitrogen compounds, plastics and synthetic rubber in primary forms	22	30,103	1,238	3%	56
Manufacture of non-metallic mineral products n.e.c.	63	19,381	2,999	8%	48
Repair of fabricated metal products, machinery and equipment	13	16,741	573	1%	44
Maintenance and repair of motor vehicles	59	10,230	1,454	4%	25
Manufacture of vegetable and animal oils and fats	25	9,394	151	0.4%	6
Manufacture of other food products	37	7,675	1,057	3%	29
Support activities to agriculture and post-harvest crop activities	34	6,177	1,214	3%	36
Manufacture of other textiles	46	4,891	1,193	3%	26
Printing and service activities related to printing	9	4,508	602	2%	67
Manufacture of electronic components	7	4,466	951	2%	136
Manufacture of wearing apparel, except fur apparel	23	3,506	774	2%	34

Source: Annual Survey of Industries 2014-15

According to the ASI 2014-15, most of the industries belong to the textile spinning, food grains processing and iron and steel sector. Manufacture of chemicals and mineral products is also a major industry due to the mining activities being carried out here. About 41% of the industrial workforce is employed in spinning, weaving and finishing of textiles.

Existing Industrial Estates

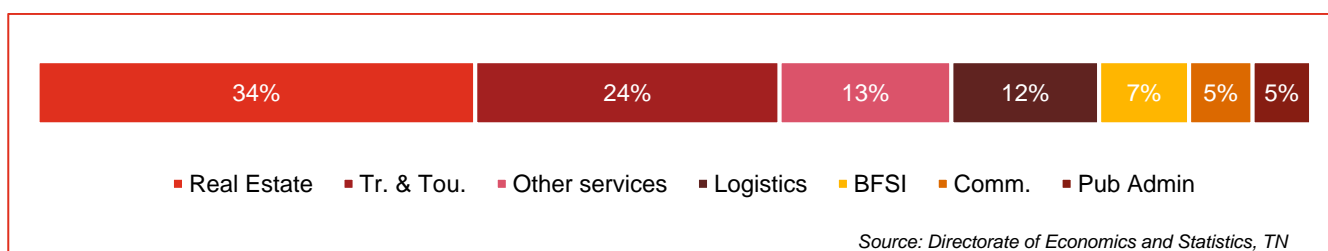
- Govt Industrial Estate, Salem, Mettur
- SIDCO, Karuppur, Veerapandi, Konamrampatti, Sooramangalam
- CFC, Sago starch cluster
- CFC, Powerloom cluster
- CFC, Steel product cluster

Services Sector

Real estate (34%), travel and tourism (24%) are major contributors to service sector GVA. Real estate saw a 10% CAGR from 2011-12 to 2016-17.

Travel and tourism grew at a CAGR of 5%. Yercaud, a hill station in the Servarayan Hills is a major tourist destination. The Muttal village surrounded by picturesque hills, lakes and waterfalls and the Mettur Dam are other main tourist attractions in the district.

Figure 8 GVA of Services Sector (2016-17)



Clusters and Traditional sector analysis

Salem is home to various traditional sectors and successfully operating clusters in various industries like steel products, sago processing, pottery and wood carving.

Thammampatti Wood Carving:

A group of artisans in Thammampatti have been practicing the art of intricate wood carving as a traditional occupation. Several artisans from this area have won state and national level awards for their craft. The artisans trace their history to beyond the colonial times when their ancestors worked in the service of local emperors.

Figure 9 Thammampatty Woodcarving Artisans



- **Employment:** About 50 families in Thammampatti are involved in this. Though mostly the men are the artisans, women in the household are involved in related work helping the men with the craft.
- **Major products:** Statues, frames, temple altars, pillars and other custom requests received as per the client's requirements.
- **Marketing:** The artisans usually obtain orders from across the country and from abroad. However, over the past decade, such orders have reduced. They also market their products through the Tamil Nadu Handicraft Development Corporation, Poompuhar.
- **Challenges:**
 - The younger generation have completely moved out of the craft as the income is not sufficient.
 - A Common Facility Centre (CFC) has been established in Thammampatty under the Cluster Development Programme (CDP) programme but without proper consulting with the artisans. The tools and machinery provided as part of this are outdated ones and are not used in the current process. The CFC has been dysfunctional since its inception.
- **Future Scope and Recommendations:**
 - In collaboration with the Tamil Nadu Handicraft Development Corporation, interested candidates can be placed as apprentices under each of the artisans. Since the craft requires continuous honing for about 2-3 years before a new entrant learns it, this method is the only way of keeping the craft alive and supporting the artisans. The associated artisans and apprentices can be provided a monthly stipend for this.
 - The Thammampatty artisans have applied for a GI tag for their work but have not been able to secure it. The TN government should speed up this process and resubmit it for the GI tag.

Salem Steel Cluster:

The Salem Steel cluster was established in 2017 with 40 members and has been successfully operating since then. Since the industry requires various high end machineries like CNC, hydraulic press, laser beam cutter, etc., the cluster was formed under the Cluster Development Programme of MSME by sourcing these machines and making it available to all the members. Non-members can also use the machinery by paying the established fees.

Figure 10 Steel Cluster Services Salem



- **Members:** About 40 small-scale units operating in the industry are a part of this cluster.
- **Major products:** Steel grills, pipes and other items as required by different clients.
- **Market and Growth:** The cluster is able to obtain local orders for about ₹ 10 lakhs per month. Given the increasing demand, recently the plant started operating in two shifts.
- **Workforce:** Workers are sourced from the Government ITI, Salem. ITI students are also sent to the cluster for periods of 6 months as internships to gain practical experience.
- **Future Scope and Recommendations:**
 - The industry has good scope. The cluster currently focuses largely on local orders.
 - Increased capacity or more clusters in steel can improve the industry and supply for orders from outside the district as well.

Pottery⁷:

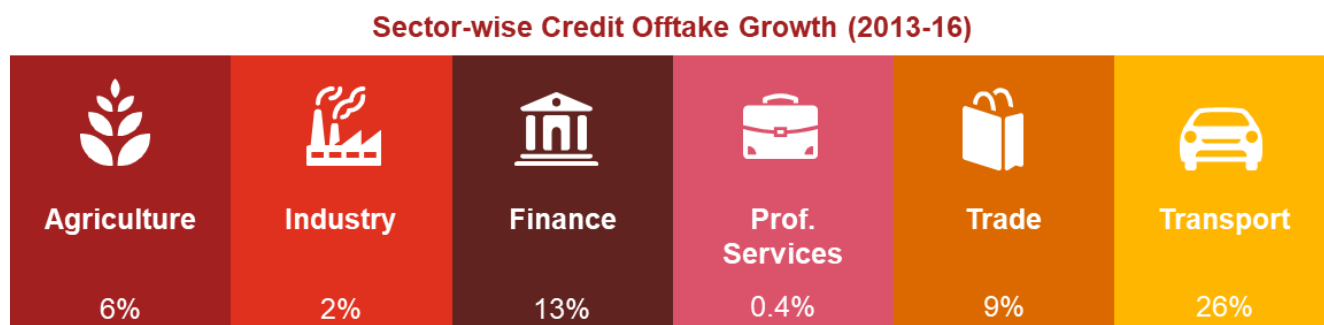
Pottery is one of the traditional industries carried out in Salem. The artisans have been constantly reinventing their products to suit the changing market scenario. From initially focusing only on pots and vessels for cooking, the artisans now produce all kitchen and household items from clay.

- **Employment:** 520 families in Salem are engaged in pottery.
- **Major products:** Water jugs, water bottles, tumblers, pots for plants, cooking utensils, lamps, cookers, plates, etc.
- **Marketing:** The Salem Kulaalar Sangam usually participates in exhibitions and other events across the city, marketing their products. Other than this, individual artisans have their own shops to market their products.
- **Challenges:**
 - Difficulty of clay availability during the dry season is a major challenge.
 - Lack of a reliable market for the products
- **Future Scope and Recommendations:**
 - The artisans can be encouraged to form a cluster in order to market their produce better and improve the quality of the products made.

⁷ Consultation with GM, District Industries Center and various Textile associations in Tiruppur

2.2.2. Investments and key economic drivers

Figure 11 Sector-specific growth of Credit off Take (2013-16) – RBI



The district has witnessed a growth in credit across most sectors but especially in finance, trade, and transport.

According to the data collected from the RBI, the trade sector has seen the highest credit growth at 16%. Salem is also expected to see large-scale investments mainly in food processing and construction. The following table gives the list of large scale investments planned in Salem.

Table 4 Large-scale Investments in Salem⁸

Investor	Project Name	Project Cost (in ₹ crore)	Industry
Fern Estates Pvt. Ltd.	Yercaud Resort Project	NA	Hotels & restaurants
Government Of Tamil Nadu	Salem Mega Food Park Project	NA	Processed foods
Idappadi Municipality	Idappadi Multi Storeyed Shopping Complex Project	2.9	Commercial complexes
National Highways Authority Of India	Salem-Chengapalli Road Widening Project	NA	Road transport infrastructure services
Petroleum & Natural Gas Regulatory Board	Salem (TN) CGD Network Project (9th Round)	NA	Natural gas trading & distribution
Salem Smart City Ltd.	Re-Development of Old Bus Stand in Salem Project	92.1	Road transport services
Salem Smart City Ltd.	Salem 24x7 Water Supply Project	132.20	Storage & distribution
Salem Smart City Ltd.	Salem Solid Waste Management Facility Project	12.2	Other miscellaneous services
Salem Smart City Ltd.	Salem Underground Drainage Project	80	Storage & distribution
Tamil Nadu Co-operative Milk Producers' Federation Ltd.	Salem Dairy Plant Expansion Project	NA	Dairy products
Tamil Nadu Co-operative Milk Producers' Federation Ltd.	Salem Dairy Whitener Manufacturing Plant Project	100.00	Dairy products
Tamil Nadu Water Supply & Drainage Board	Edappadi-Konganapuram-Magudanchavadi Comprehensive Drinking Water Extension Project	NA	Storage & distribution

⁸ CAPEX data

2.3. Labour Market Profile⁹

The overall labour force participation rate is 64% and worker population ratio is 63% - higher at the district level than at state. About 48% of workers in the district are casual labourers and 31% are self-employed. The overall unemployment rate is at 2% but the youth (15-29 years) unemployment rate is much higher at 7%.

Figure 12 Key Labour Market Indicators¹⁰

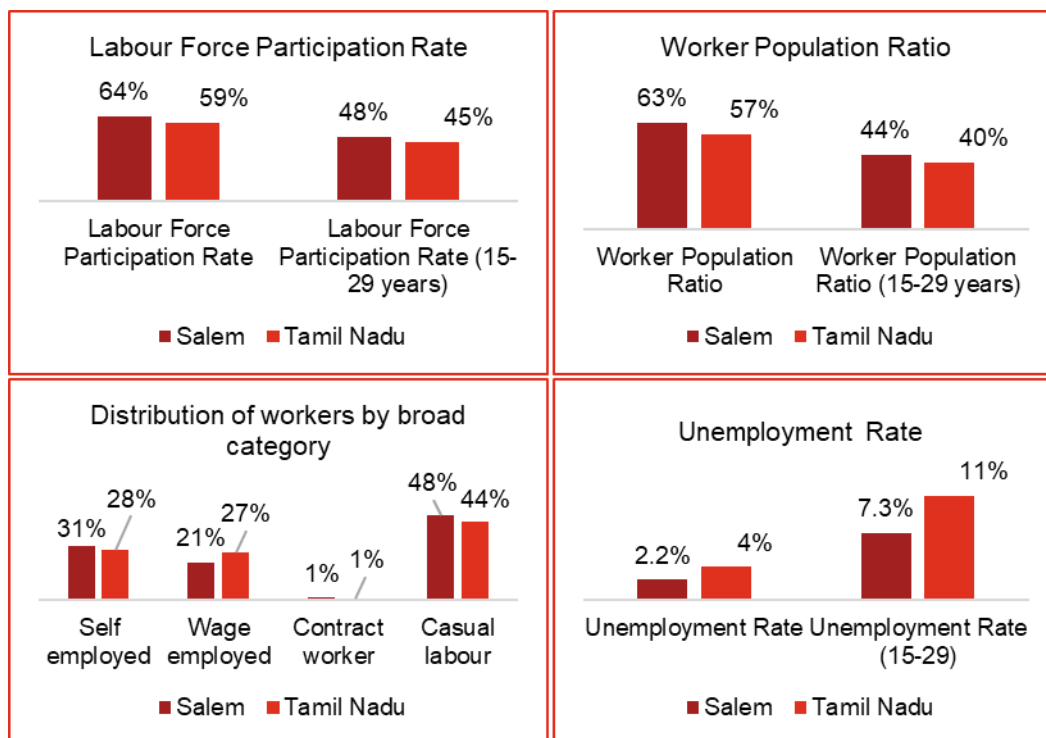
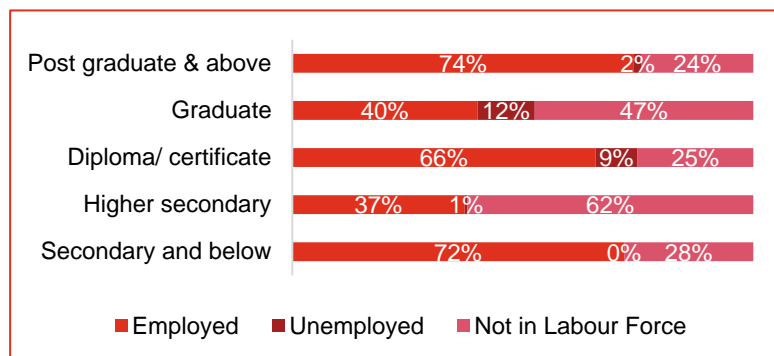


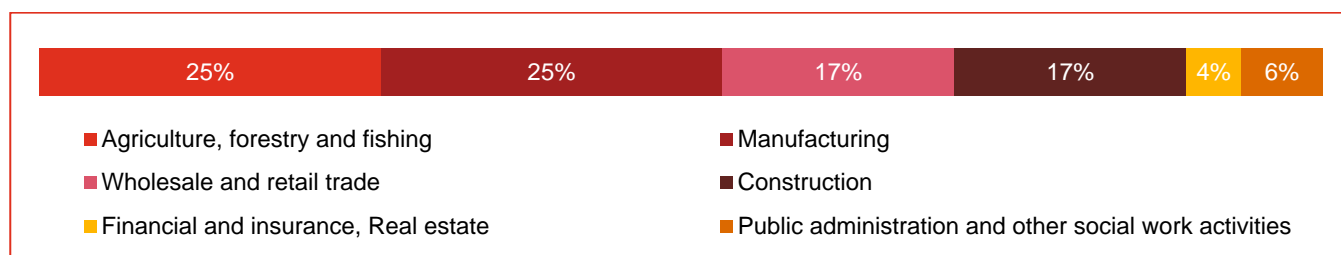
Figure 13 Distribution of Working status by Qualification: District Level Estimates



The education-level classification of the district population reveals that a significant working age population is not in the labour force. Among graduates, 33% are not in the labour force and 11% are unemployed.

About 25% of the workforce is engaged in agriculture and allied activities, another 25% in manufacturing and 17% each in construction and trade related activities.

Figure 14 Sector-wise share of Employment



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

⁹ Analysis in this section are based on the District Level Estimates, EUS, 2013-14, Labour Bureau

¹⁰ District Level Estimates, EUS, 2013-14, Labour Bureau

2.4. Education and Skill Development Profile

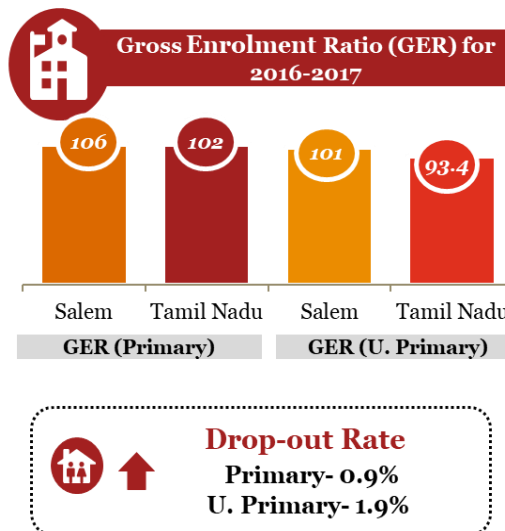
2.4.1. Education Profile

With respect to school education, Salem performs better than the state average in student enrolment. The Gross Enrolment Ratio at the Primary level is 106 and at the Upper Primary level is 101 – higher than the state averages. The dropout rate is also lower – 0.9% at the primary level and 1.9% at the upper primary level.

Salem has two universities – the government run Periyar University and the private run Vinayaka Missions University. There are 16 ITIs. There are also 9 polytechnics and 34 colleges of higher education.

Type of Education Institute	No. of Institutions	Enrolment
Arts and Science Colleges	20	33,770
Pharmacy	3	1,095
Engineering	11	23,071
Polytechnics	9	10,080
ITIs	16	789

Figure 15 GER and Drop-out Rates - DISE



2.4.2. Vocational Education and Skill Development 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 Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) courses. Most courses are in the sectors of textile and apparel, IT-ITES, beauty and wellness, retail and electronics. The table below gives the detailed list of courses provided under the different schemes.

Table 5 Vocational Training under Short Term Skill Development Programs¹¹

Scheme	Sector	Job Role	No. of Training Centres
Pradhan Mantri Kaushal Vikas Yojana	Healthcare	General Duty Assistant	1
	Apparel	Export Assistant	1
	Media and Entertainment	Makeup Artist	2
		Hairdresser	1
	Retail	Retail Sales Associate	1
DDU-GKY	Electronics	CCTV Installation Technician	1
	IT-ITES	Engineer Trainee	1
TNSDC	IT ITES Others	Animation and Multimedia	2
		Electrician Domestic	1
	Construction Mes	Mason	1
		Plumber	1
	Garment Making	Tailor (Basic Sewing Operator)	3
		Hand Embroider	2
		Surface Ornamentation Techniques	1
	Fashion Design	fashion design technology	1
		Apparel Ornamentalist Grade I	1
	Agriculture	Landscaping and Floriculture	1
	Renewable Energy	Solar electric System Installer & Service Provider	1
	Production and Manufacturing	CNC Turning	1
	Information and Communication Technology	DTP and Print Publishing Assistant	1
		Web Designing and Publishing Assistant	1
		Animation and Multimedia Assistant	1

¹¹ 2017-2018 training year report.

	Security	Security Guard(General)	1
	Retail Mes	Retail Operations	1
		Sales Person (Retail)	1
	Beauty Culture & Hair Dressing	Integrated Course in Hair, Skin and Make Up	1
		Beauty Therapist	1
		Hair Stylist	1
	Fabrication	Arc and Gas Welder	1
	Medical and Nursing	Bedside Assistant	1
	Soft Skills	Spoken English and Communication Skill	1
	Electronics	Wireman Control Panel	1
	Apparel	Sewing Machine Operator	1
	Instrumentation Automation Surveillance and Communication	Industrial Automation Specialist	1
	IT/ITEs	CRM Domestic Non Voice	1
		CRM Domestic Voice	1

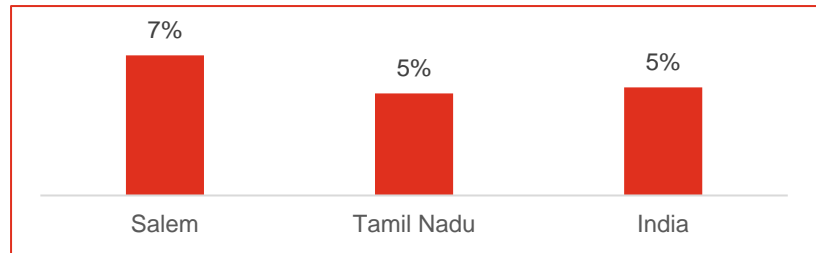
The long-term skill development programs are predominantly offered through the Industrial Training Institutes, which offer one and two year programs across various sectors and trades. Table 6 below presents the courses offered through ITI, and the number of such institutes offering each trade/ training for job role.

Table 6 Vocational Training under Long Term Skill Development Programs (ITI)

Sector	Trade Name	ITI Count	No. of Seats
Automobiles and Auto Components	215-Mechanic (Motor Vehicle)	13	672
Capital Goods	217-Draughtsman (Civil)	2	104
	037-Instrument Mechanic	1	52
	022-Plastic Processing Operator	1	42
	213-Sheet Metal Worker	2	63
	212-Welder	4	252
Construction	231-Electrician	15	903
	011-Industrial Painter	1	26
	211-Mason (Building Constructor)	1	26
	059-Painter General	1	42
Electronics & Hardware	232-Wireman	4	315
	218-Mechanic (Refrigeration and Air-Conditioning)	2	104
	051-Mechanic Industrial Electronics	1	52
Handicrafts & Carpets	221-Turner	3	304
Healthcare	112-Health Sanitary Inspector	1	78
	114-Hospital House Keeping	1	52
Infrastructure Equipment	219-Electronics Mechanic	1	52
Iron and Steel	222-Machinist	2	240
	223-Machinist (Grinder)	1	48
IT/ITeS	242-Computer Operator and Programming Assistant	2	104
	220-Information Communication Technology System Maintenance	1	52
Management and Entrepreneurship & Professional	259-Stenographer & Secretarial Assistant (English)	1	52
Mining	227-Fitter	14	1050
Plumbing	209-Plumber	1	52
Textile and Apparel	248-Dress Making	1	42
Tourism and Hospitality	253-Food Production (General)	1	52
	254-Front Office Assistant	1	52

Figure 16 Proportion Undergone Vocational training 2015-16, MoLE¹²

About 7% of the population aged 15 years and above have undergone any sort of vocational training in the district. The proportion of the population exposed to the vocational education is higher than the state and national average.



¹² Employment and Unemployment Survey 2015-16, Ministry of Labour and Employment

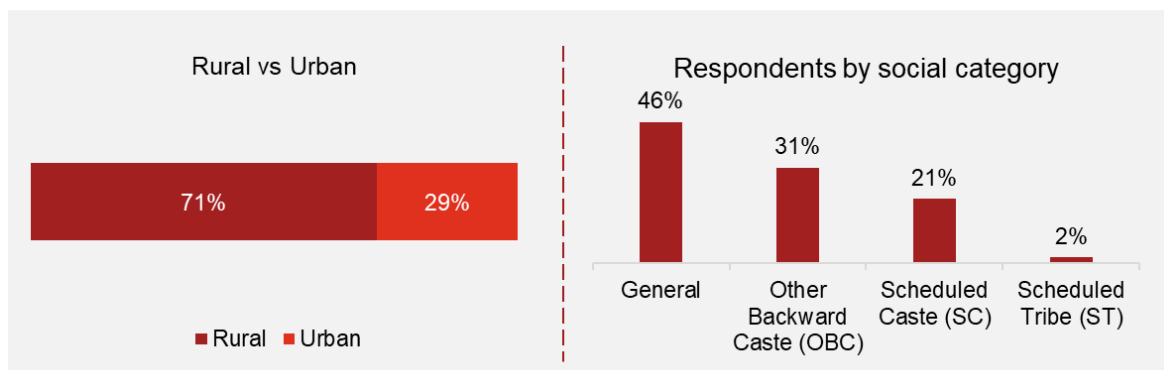
3. Youth Perspective

In order to understand the youth perspective on employment and skilling, a survey was administered across the district. The detailed survey captures the current status of the respondent, their economic and educational background, their preference in employment and skill training.

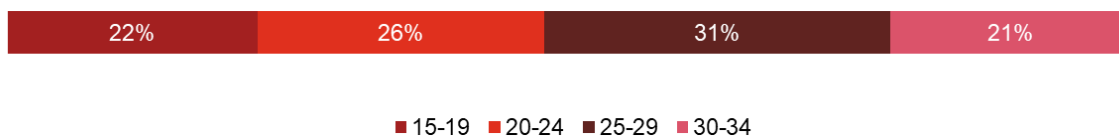
3.1. Profile of Respondent Youth

A total of 360 youth in the age group of 15-34 years were covered through a structured survey questionnaire. The survey covered a sample of six blocks out of the 20 blocks in the district – Ayodhiyapattinam, Mecheri, Idappadi, Sankari, Athur and Salem. About 50% of the overall respondents were female and about 71% were from rural areas. The survey has tried to achieve a balanced representation of various socioeconomic and demographic characteristics of the population.

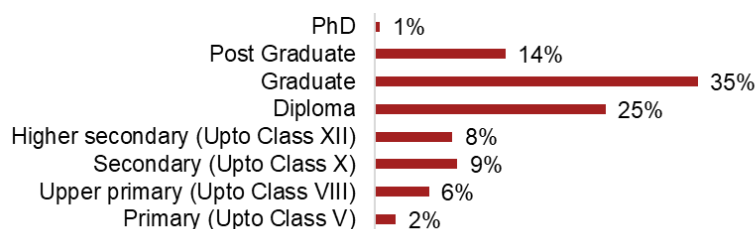
Figure 17 Respondent Profile of Youth Aspiration Survey



Age Group wise distribution of respondents



Respondents by educational attainment

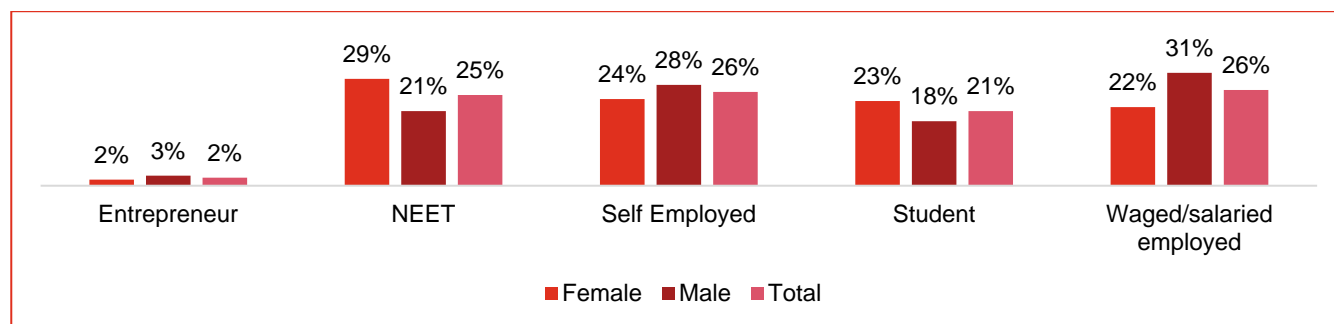


- **58% respondents were from the BPL (below poverty line) category**
- **43% of respondents reported a monthly household expenditure of not more than Rs. 10,000**

3.2. Youths' Educational and Economic Engagement Status

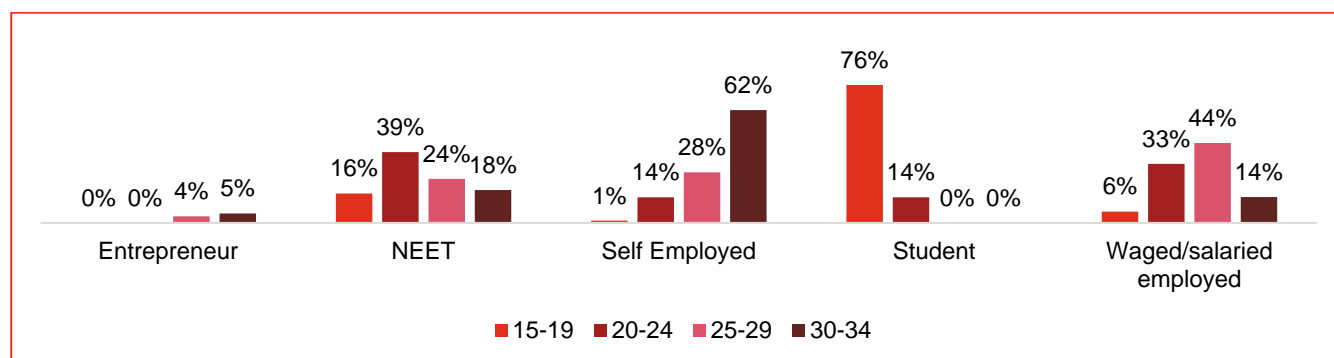
Figure 18 illustrates the gender wise classification (current status) of the respondents interviewed during the household survey. The sample had balanced representation of NEET, student, self-employed, and wage/salaried employed.

Figure 18 Current Status of Respondent by gender



Going by the age of the respondents, 62% of the respondents between 30-34 years of age are self-employed¹³.

Figure 19 Status of Respondent by Age Category

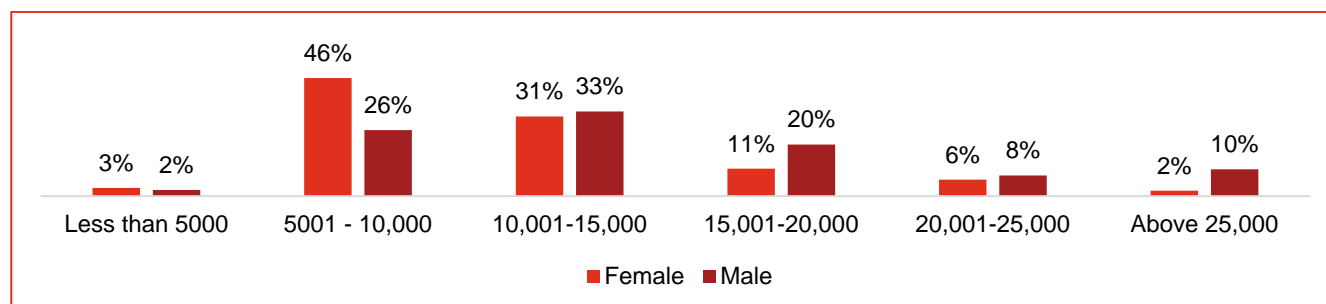


3.3. Economic Engagement of Youth

In our sample, about 54% of the respondents are currently engaged in some economic activity; and 89% of whom, are involved in a work related to their education/training.

As seen in Figure 20, 46% of the working female respondents reported that they receive an income of ₹ 5,000-10,000 per month. Among males, 33% received an income between ₹ 10,000-15,000 per month and 20% receive between ₹ 15,000-20,000 per month. There is a significant difference in the income received by men and women.

Figure 20 Distribution of Respondents across Monthly Income Category across gender



¹³ Traditionally self-employment includes both enterprises and engaging in a profession/trade on their own account. However, in this study it has emerged that the youth prefer to be independently engaged in a trade/profession than setting up an enterprise.

The table below gives the employment category of respondents according to their educational qualification. Respondents with a low level of education (primary and below) predominantly are engaged in petty business/trade/manufacturing.

*Table 7 Education Qualification of Respondents and Employment Type**

	Primary and below	Upper Primary	Secondary	Higher secondary	Diploma	Graduate	Post Graduate
Farm Activities	-	6%	7%	14%	10%	1%	-
Livestock	-	-	7%	-	3%	-	-
Unskilled worker	29%	18%	19%	23%	6%	4%	2%
Salaried Employment (teacher, government official, etc.)	-	-	-	9%	35%	51%	71%
Skilled worker (tailor, mason, electrician, plumber etc.)	14%	35%	37%	18%	26%	18%	12%
Petty Business/Trade/Manufacturing	57%	41%	30%	36%	23%	30%	17%
Major Business/Trade/Manufacturing	-	-	-	-	3%	-	-
Number of Respondents	7	17	27	22	31	73	41

*Multiple response question

3.4. Youth under NEET Category

25% of the total respondents were neither in education, nor in employment nor in any training.

About 29% of the total women respondents were in the NEET category. Table 8 shows the profile of NEET category respondents based on their duration in the category and their desire to enter the workforce. **About 77% of NEET category respondents wish to work and over 93% are actively seeking work.** About 19% of women have been part of the NEET category for more than 5 years.

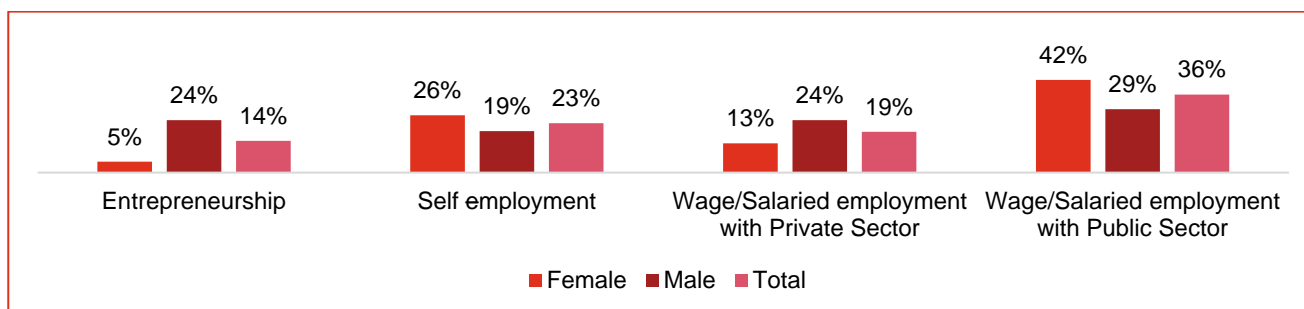
Table 8 NEET Category Respondents

Duration in NEET Category (n=90)				Wish to Work (n=90)			
	Female	Male	Total		Female	Male	Total
Less than 6 months	26%	16%	22%	Yes	72%	84%	77%
6 months- 1 year	13%	32%	21%	Total	38	31	69
1- 2 years	15%	16%	16%	Actively Seeking Work (n=69)			
2- 3 years	15%	22%	18%		Female	Male	Total
3 - 4 years	6%	5%	6%	Yes	89%	97%	93%
4 - 5 years	6%	5%	6%	Total	34	30	64
More than 5 years	19%	3%	12%				

3.5. Youth Career Aspiration

The youth in the district mostly prefer to be employed in the public sector (36%) followed by self-employed (23%). About 24% of male respondents prefer wage / salaried employment with the private sector as seen in the figure below.

Figure 21 Career Aspiration of Youth



The main factors determining the aspiration of the youth include job security (54%), salary (46%) and social status (41%). About 54% of the total respondents feel they are completely prepared for requirements for a job. About 35% respondents also feel that the availability of job opportunities in the district is very inadequate.

Table 9 Career Aspiration - Factors, Preparedness and Availability of Jobs

Factors Determining Aspiration* (n=360)	Responses	Perception of Preparedness for Jobs (n=176)	Responses
Salary (wages) / Income	46%	Completely Prepared	54%
Gender suitable role	10%	Moderately Prepared	9%
Social Status	41%	Somewhat prepared	5%
Traditionally Acquired Skills / Family Business	3%	Not Prepared	24%
Flexible work arrangements (location, schedule)	7%	No Answer/ Don't Know	8%
Job Security	54%	Availability of Job Opportunities (n=360)	
Opportunities for promotion and career development	16%	Neither adequate nor inadequate	5%
Closeness to Residence	12%	Somewhat adequate	9%
Emigration Prospects	1%	Somewhat inadequate	9%
Retirement Plans	11%	Very adequate	37%
Safety / Security	23%	Very inadequate	35%
Employer provided benefits and perks	6%	No Answer/ Don't Know	5%

*Multiple response question

Lack of work experience (32%) lack of guidance on appropriate job for skill levels (24%) and low financial strength (25%) are the major reasons given by respondents on the challenges in pursuing their desired career. About 19% also said that the pressure to get married was a reason in not being able to pursue their desired job.

Table 10 Career Aspiration – Challenges in pursuing desired career

Challenges (n=360)	Responses*	Challenges (n=360)	Responses*
Lack of family support / social acceptance of girls being engaged in economic activity	9%	Lack of jobs locally	20%
Pressure related to getting married	19%	Lack of Soft Skills	12%
Lack of guidance / information on appropriate job available for skill levels	24%	Low financial strength	25%

Challenges (n=360)	Responses*	Challenges (n=360)	Responses*
Lack of sufficient education qualification	15%	Inadequate infrastructure to access work-place	15%
Lack of technical / vocational skills	22%	Unsafe working environment	9%
Lack of work experience	32%	Others	0%

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

As seen in Table 11, years of work experience (32%), basics and soft skills (18%) and certifications of technical skill (18%) are cited as key factors for enhancing the employability skills.. Communication skills (51%), teamwork (51%) and time management (32%) are the main skills according to respondents for their desired job. As a next step to achieve their aspirations, respondents feel they need to gather work experience (72%) and attend skill training (28%).

Table 11 Key Requirements to enhance employability and steps to achieve aspirations

Key Requirements to enhance employability* (n=360)			
Requirements	Responses	Requirements	Responses
Basics and soft skills	18%	Performance in Interviews	3%
Certifications of Technical Skill	18%	References	6%
Education attainment (level of education)	6%	Relevant work experience in similar position or field	14%
Institution of Education / Skill Training	3%	Years of Work Experience	32%
Key Skills Required for desired job*			
Analytical thinking	9%	Creativity, originality and initiative	17%
Team work	51%	Coordination Skills	19%
Clear communication	51%	Attention to detail	4%
Complex problem-solving	11%	Time management	32%
Leadership	15%	Critical thinking and analysis	4%
Active listening	10%	Others	0%
New Steps to achieve aspirations*			
Steps	Responses	Steps	Responses
Vocational/ Skill Training	28%	Already Achieved	7%
Continuing Education	13%	Apprenticeship / Gathering Work Experience	72%

*Multiple response question

About 28% of respondents aspire to earn between ₹ 15,000-20,000 per month. The figure below gives the salary expectation across different categories of respondents. About 38% of entrepreneurs expected a salary between ₹ 30,000-40,000 per month whereas 50% of NEET category respondents expected a salary only between ₹ 10,000-20,0000 per month.

Figure 22 Aspired monthly salary of respondents

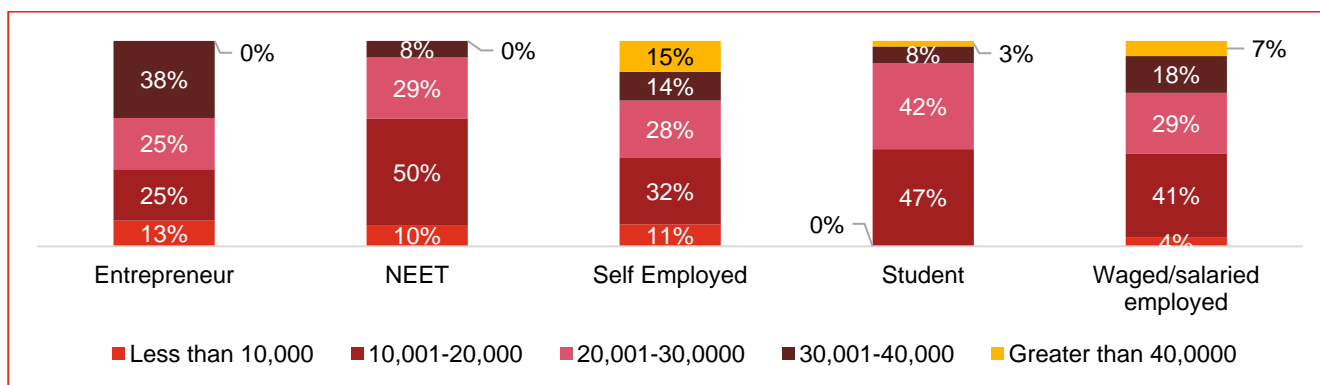
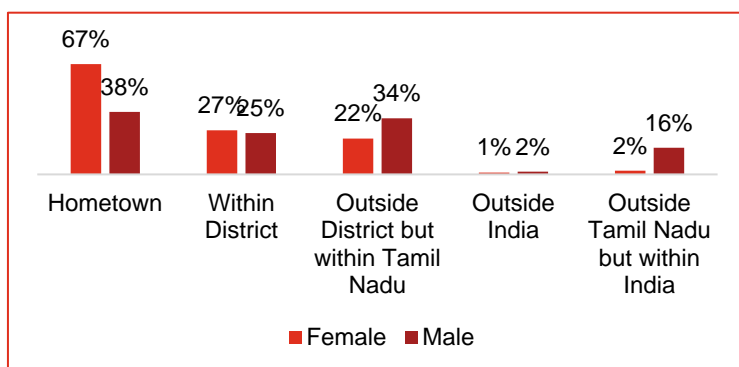


Figure 23 Preference for Work Location¹⁴

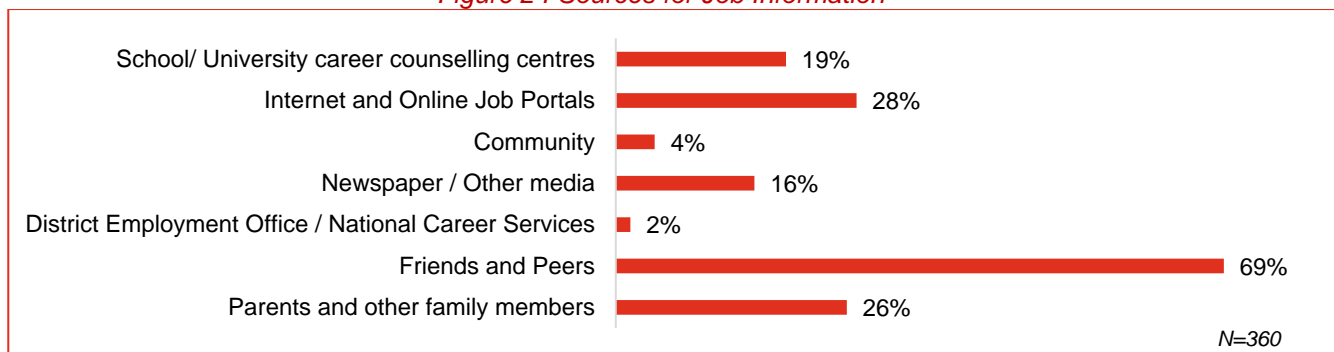


Location of the job seems to be a major determinant of youth's attitudes towards work. About 67% of female respondents and 38% of males wanted a job in their own hometown; 34% male respondents were willing to work outside the district but within Tamil Nadu and 16% males were also open to working outside the state.

The most important source for the job related information was through friends and peers (69%) and internet and online job portals. About 26% responded saying they relied on job related

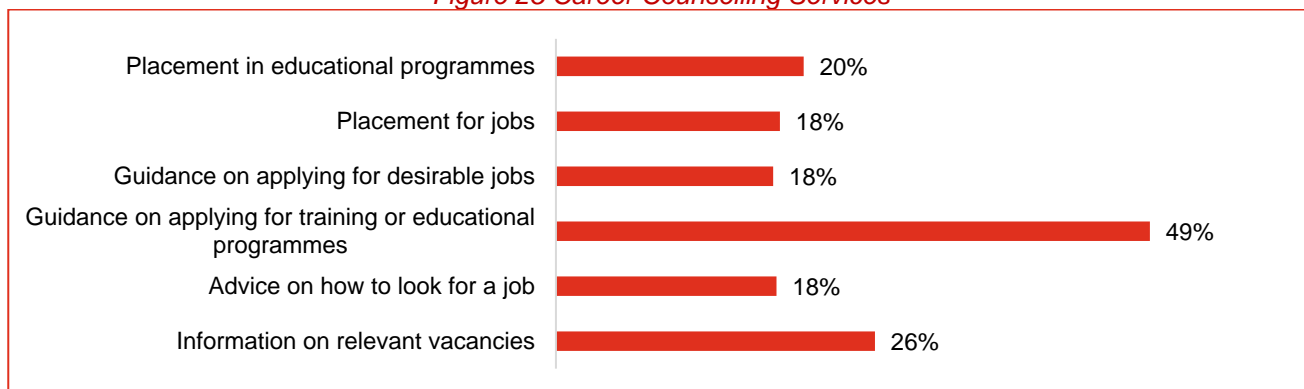
information provided by parents and other family members.

Figure 24 Sources for Job Information*



Most respondents (49%) want counselling services to provide guidance on applying for training or educational programmes and 26% want information on relevant vacancies.

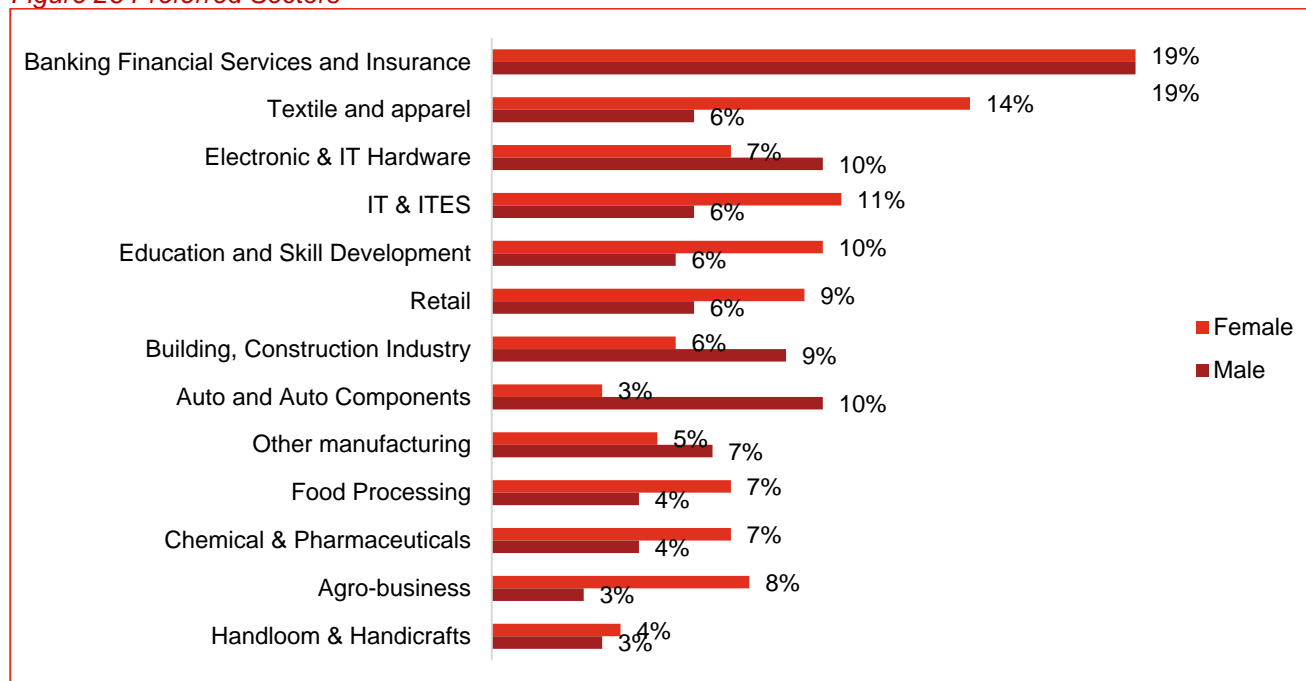
Figure 25 Career Counselling Services*



¹⁴ Multiple Response, Sum may exceed 100%

BFSI is the most preferred sector among youth – 19% preferred to be employed in BFSI sector jobs. Sectors preferred by women include textile (14%), IT and ITeS (11%) and education and skill development related work (10%). Among male respondents, the most preferred sectors were Electronics and Hardware (10%), auto components (10%) and building and construction (9%).

*Figure 26 Preferred Sectors**



*Multiple response question

3.6. Skill Training Preferences of Youth

Of the overall respondents, 61% are willing to attend skill training programmes to attain the desired employment. Among them, about 49% are interested in undergoing full-time training courses. However, most are interested only in short term certificate courses of less than 6 months duration (81%).

Figure 27 Duration of Skill Training type interested in

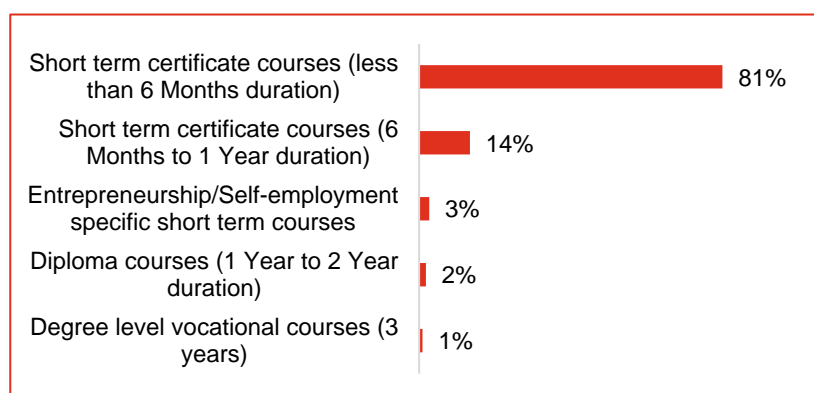
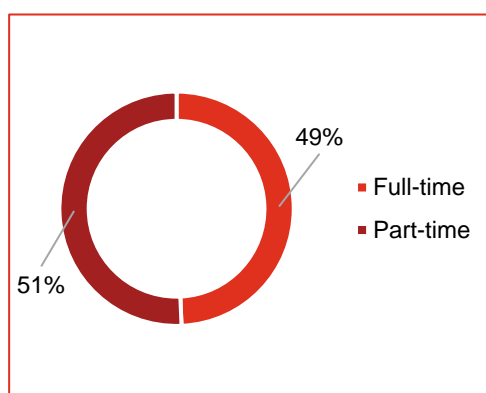


Figure 28 Skill Training type interested in



4. 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.

4.1. Employers' Perspective

The survey covered 45 Industries covering seventeen sectors. The sector wise coverage of industries is given in Table 12. Majority of industries were from the plastics, iron and steel, textile and apparel and mining sectors. Of the overall sample, 15% were micro industries, 59% were small-scale industries, 15% were medium industries and 11% were large-scale industries.

Figure 29 Distribution of Industries by Size

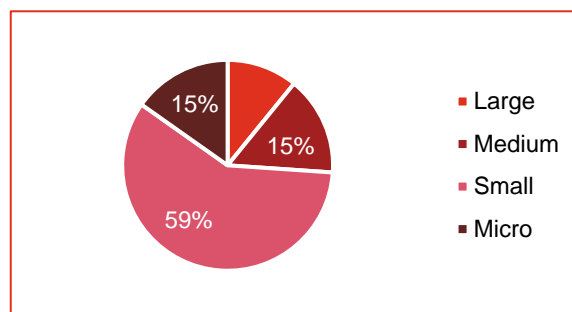


Table 12 Sector wise coverage of Industries in Employer Survey

S.No	Sector	No. of Industries Surveyed	S.No	Sector	No. of Industries Surveyed
1.	Agro-business	1	2.	Mining & Quarrying	3
3.	Auto and Auto Components	2	4.	Power	1
5.	Building Construction	1	6.	Renewable Energy & Green Jobs	1
7.	Painting Industry	4	8.	Textile and Apparel	3
9.	Chemical & Pharmaceuticals	2	10.	Tourism Travel and Hospitality	2
11.	Capital Goods	1	12.	Machinery Equipment	8
13.	Electronic and IT Hardware	4	14.	Plastics	3
15.	Food Processing	1	16.	Paper and Paper Products	1
17.	Gems and Jewellery	8			
	Iron, Steel and Other Metals				

As seen in Table 13, employee reference is the major mode of recruitment (80%). Employers also use local community (24%) and media advertisements (20%) for recruiting workers. The most common challenge faced by employers was candidates' disinterest and attitude (78%), followed by high local wages (54%) and requirement of physical labour in the job (17%).

Table 13 Modes and Challenges in Recruitment Process*

Key Modes of Recruitment (n=46)			Key Challenges faced in Recruitment (n=46)		
S.No	Particulars	%	S.No	Particulars	%
1.	Campus recruitment in arts/science/commerce colleges	2%	1.	Candidate Disinterest and Attitude	78%
2.	Campus recruitment in Engineering Colleges	7%	2.	High local wages	54%
3.	Campus recruitment in ITIs/Polytechnic	11%	3.	Lack of basic education requirement	2%
4.	People registered with Employment Exchange	7%	4.	Lack of requisite soft skills	4%
5.	Employee Reference/ Other Referrals	80%	5.	Lack of requisite core skills	11%
6.	Recruitment/ Manpower Agencies	7%	6.	Lack of Prior Experience	9%

7.	Local Community	24%	7.	Nature of work requires strenuous physical labour	17%
8.	Advertisements in Newspapers	20%	8.	Work hours	7%
9.	Social Networks	7%	9.	Resistance by family to allow them to work	2%
10.	Others	37%	10.	Attrition/Uncertainty due to marriage and children	4%
			11.	Attrition/Uncertainty due to involvement in Household chores	13%

*Multiple response question

Figure 31 Average distribution of workers by Sex

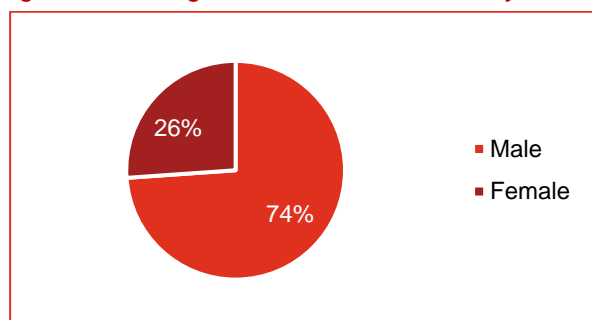
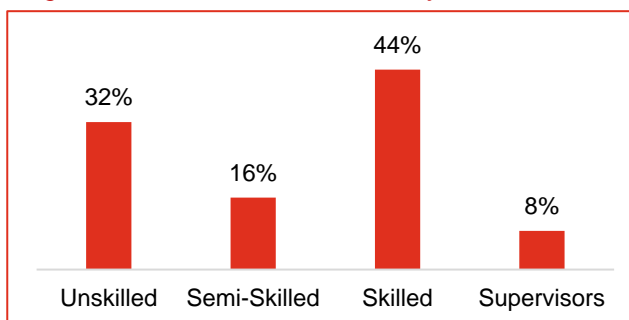


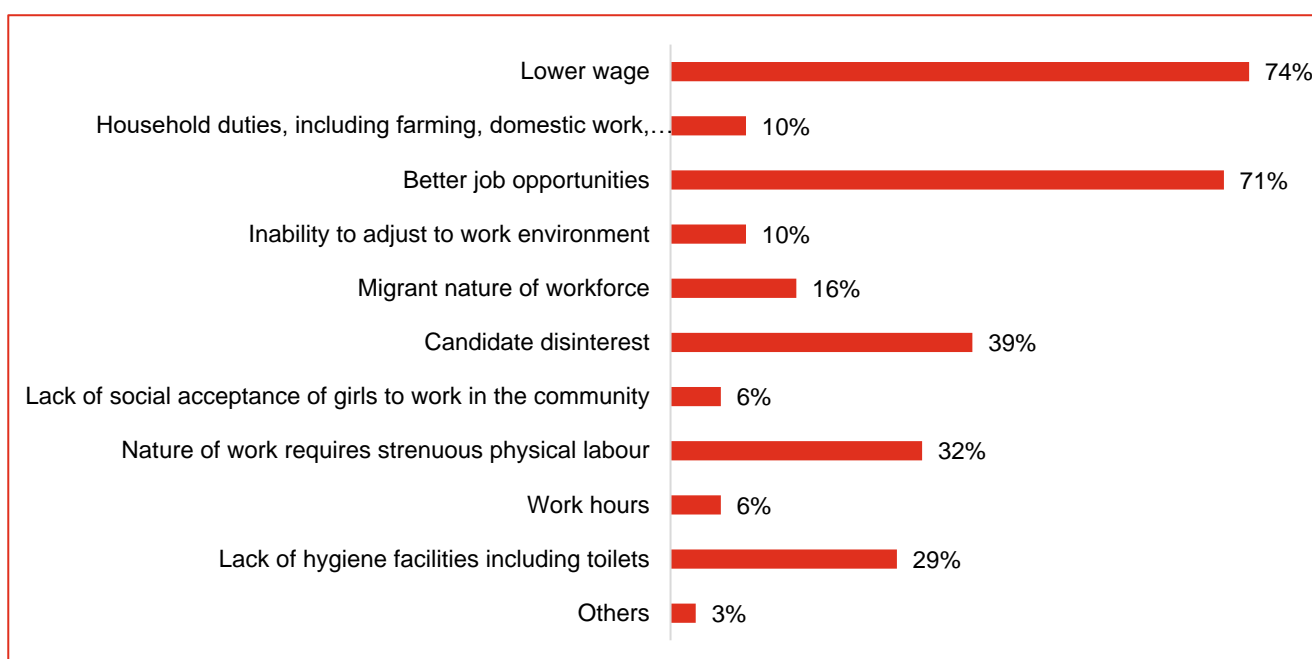
Figure 30 Distribution of workers by Skill Levels



The employers had a majority of male employees – on an average, the enterprises employed 74% males.

Skilled workers dominated the share of workforce (44%) followed by unskilled workers (32%) and semi-skilled workers (16%). The cotton milling and textile industry usually prefers women workers. This is seen in the high share of women employees. However, the general attitudes in the district have not been favourable towards women employment. The major causes of attrition cited by employers were lower wages (74%), availability of better jobs (71%) and candidate disinterest (39%).

Figure 32 Key causes of Attrition



Over 41% of the employers feel there is high growth prospects in the industries. About 28% note that the level of technology adoption in the future will be high and 28% have plans to introduce automation.

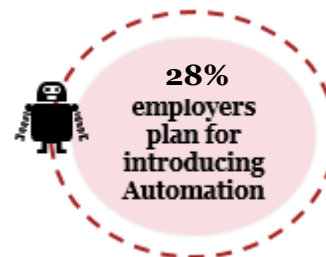
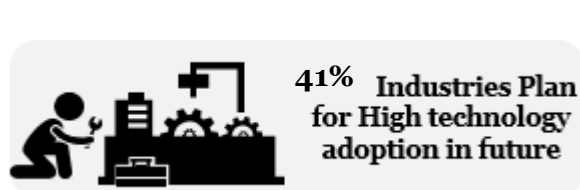


Table 14 Growth Prospects and prospective adoption of technology

Growth Prospects of Industry (n=46)	%	Level of Technology adoption (n=46)	%	Plans to adopt Technology (n=46)	%
High	41%	High	28%	Yes	28%
Medium	37%	Medium	22%	No	72%
Low	17%	Low	48%		
Can't Say	4%	Can't Say	2%		

As seen in the figure below, employers feel there is a need for IT skills among workers (26%). Other skills deemed important by employers are upgraded domain skills (19%) and communication skills (13%). About 30% of the employers said there would be a demand for skilled workers in the next five years. Majority employers (89%) felt there would be no demand for supervisory job roles. Upon joining, most employers provided upskilling training (43%) to employees to meet the technical needs.

Figure 33 Skills required for workers

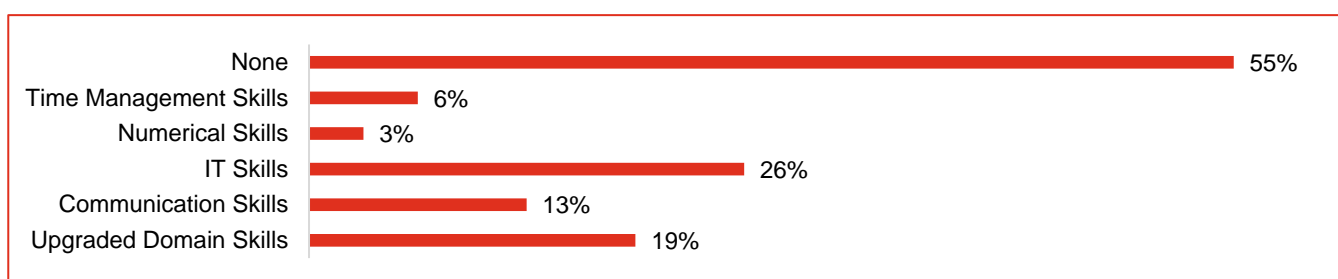


Table 15 Demand for workers by Skill Level and type of training provided to workers

Demand for Workforce in next 5 years				Type of Training Provided for Skilled Workers	
	Minimally Skilled	Skilled	Supervisory	Type of Training	%
High Demand	9%	13%	-	Domain Skills on recruitment	14%
Medium Demand	22%	17%	2%		
Low Demand	22%	15%	9%	Career Advancement	14%
None	41%	54%	89%	Up-skilling to meet technical needs	43%
Not Applicable	7%	-	-	Others	29%

4.2. 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.

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

Table 16: Qualitative findings in Salem

S No	Topic	Responses
1.	Awareness of government skill training programs/ jobs/ job melas	<ul style="list-style-type: none">The workforce is not fully aware of Government-sponsored skill training programmes. There is also not much interest to attend skilling.
2.	Education- schools, ITI/ Polytechnics/ Engineering colleges in the district	<ul style="list-style-type: none">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.
3.	Candidate Attitudes/ Abilities	<ul style="list-style-type: none">Candidates aspire for employment within their hometown for jobs.Candidates prefer to work in the informal sector and are not willing to pursue any job that involves working in the shop floor.
4.	Women Employment	<ul style="list-style-type: none">Women are mostly involved in the textile spinning and garment manufacturing industry.Employers do not prefer to engage women in the chemicals industry except in non-core roles like administration.There needs to be additional benefits for workers such as better working conditions, crèches for children, etc.
5.	Migrant workers	<ul style="list-style-type: none">Migrant workers are majorly employed in the unskilled jobs in textiles.
6.	Skill Gaps	<ul style="list-style-type: none">There is a need for skilled persons in food processing and textile sector.

5. Skill Gap Analysis

5.1. Skill Gap Assessment - Incremental Demand¹⁵ for Skilled & Semi Skilled Workforce

In the next 6 years, Salem will see a demand for about 1.13 lakh workers. Major sectors that drive the demand are manufacturing, construction, agriculture and allied activities.

Table 17 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	973	1,569	2,542	6,809	10,986	17,795	20,337
Mining and quarrying	824	1,245	2,069	1,374	2,075	3,449	5,518
Manufacturing	3,082	4,303	7,385	6,165	8,606	14,770	22,156
Electricity, gas, water supply and other utility services	283	418	700	565	835	1,401	2,101
Construction	1,507	2,250	3,756	3,767	5,624	9,391	13,147
Trade & Repair Services	770	1,081	1,850	2,664	3,741	6,405	8,255
Hotels and restaurants	350	491	840	677	951	1,628	2,469
Transportation and storage;	276	374	649	661	897	1,558	2,207
Communication and services related to broadcasting	1,946	3,081	5,027	973	1,541	2,514	7,541
Financial and insurance activities	1,998	3,085	5,083	999	1,542	2,542	7,625
Real estate, ownership of dwelling and business services	448	675	1,124	1,120	1,689	2,809	3,933
Public Administration	337	467	804	269	374	643	1,447
Education; Healthcare & Social Work Activities	963	1,326	2,289	770	1,061	1,831	4,121
Arts, entertainment and recreation	642	934	1,576	514	748	1,261	2,837
Other Services	2,177	3,105	5,282	1,741	2,484	4,225	9,507
Total Demand	16,574	24,404	40,978	29,068	43,153	72,221	1,13,199
Total Supply	11,476	15,302	26,778	19,428	25,904	45,332	72,110
Total Skill Gap	5,098	9,103	14,200	9,640	17,249	26,889	41,089

As seen in the table, the major demand is from the manufacturing industry – this is spearheaded by the food processing investments coming in. A skill gap of about 41,000 workers will be seen in the next six years. In order to ensure this growing economy is sustained, skill trainings have been proposed across these sectors.

¹⁵ 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.

6. District Action Plan and Recommendations

6.1. 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 Salem:

Table 18 Summary of Trainings

S No	Sector	Trades	Target (Persons)	Budget (₹)
	Agriculture and allied	<ul style="list-style-type: none"> Mango grower Banana farmer Organic Grower Ripening Chamber Operator Paddy Cultivator Tuber Crop Cultivator Coconut Grower Micro irrigation technician Dairy Farmer Poultry feed, food safety and labelling supervisor Broiler Poultry Farm Worker 	6,000	₹9.64 Crores
1.	Soft Skills Training	<ul style="list-style-type: none"> Training for Soft Skills and in spoken English 	4,000	₹3.51 Crores
2.	Retail	<ul style="list-style-type: none"> Cashier Retail Sales Associate Store Ops Assistant Seller Activation Executive Digital Cataloguer Retail Trainee Associate 	2,500	₹3.28 Crores
3.	Fabrication	<ul style="list-style-type: none"> Fitter – Fabrication Assistant Manual Metal Arc Welder Assistant Oxy fuel gas cutter CNC Setter cum operator – Turning Draughtsman – Mechanical 	800	₹2.28 Crores
4.	Textile and Apparel	<ul style="list-style-type: none"> Industrial Sewing Machine Operator Power Loom Operator Packing Checker Knotting Machine Operator Automatic shuttle loom operator Compacting Machine Operator Fabric Mender 	6,000	₹7.59 Crores
5.	Healthcare	<ul style="list-style-type: none"> General Duty Assistant Blood Bank Technician Cardiac Care Technician Diabetes Educator 	2,000	₹3.63 Crores

		<ul style="list-style-type: none"> Emergency Medical Technician - Basic Medical Records & health Information Technician 		
6.	Domestic Appliance Services	<ul style="list-style-type: none"> Helper Electrician Plumber (General) Field Technician – AC Field Technician – Refrigerator Field Technician - Other Home Appliances 	2,500	₹5.42 Crores
7.	Food Processing	<ul style="list-style-type: none"> Fruit Ripening Technician Cold Storage Technician Multi Skill Technician (Food Processing) Fruit Pulp Processing Technician Packaging Technician Sago processor 	6,000	₹8.07 Crores
8.	Construction	<ul style="list-style-type: none"> Foreman – Electrical Works (Construction) Metal Inert Gas/Metal Active Gas/Gas Metal Arc Welder (MIG/MAG/GMAW) Mason Marble, Granite and Stone Foreman Wet Finishing and Flooring Bar Bender and Steel Fixer Assistant Electrician 	6,000	₹18.73 Crores
Total			35,800	₹62.12 Crore

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 to reflect the market requirements.
- 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.
- 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 ab

The training projects are described below:

Table 19 Training Project 1: Agriculture and allied

Name of the Project: Agriculture and allied sector training							
Key Economic Drivers:							
<ul style="list-style-type: none">Agricultural products directly support the food processing sector in Salem. The food processing sector is set to grow with a new mega food park.							
Key Partners: Dept. of Horticulture, Dept. of Agriculture							
Job Roles:	NSQF Level	NSQF Codes	Cost Category	Duration of Training	Target Group	Training Target (People)	Cost of Training (₹)
Mango grower	4	AGR/Q0302	2	200 hours	10th Class Pass, 12th Class Pass Upskilling for existing Farmers	500	₹0.49 Crores
Banana farmer	4	AGR/Q0301	2	200 hours		250	₹0.24 Crores
Organic Grower	4	AGR/Q1201	2	200 hours		500	₹0.49 Crores
Ripening Chamber Operator	4	AGR/Q7504	1	200 hours		500	₹0.55 Crores
Paddy Cultivator	4	AGR/Q0101	2	200 hours		250	₹0.24 Crores
Tuber Crop Cultivator	4	AGR/Q0403	2	200 hours		500	₹0.49 Crores
Micro irrigation technician	4	AGR/Q1002	1	200 hours		500	₹0.55 Crores
Dairy Farmer	4	AGR/Q4101	1	200 hours		1,000	₹1.1 Crores
Poultry feed, food safety and labelling supervisor	5	AGR/Q4305	2	200 hours		1,000	₹2.45 Crores
Broiler Poultry Farm Worker	3	AGR/Q4302	2	200 hours		1,000	₹2.45 Crores
Total Training Cost						6,000	₹ 9.04 Crores
Total Assessment and Certification cost (₹1,000 per candidate)							₹0.60 Crore
Total Cost							₹4.64 Crore
Key Considerations:							
<ul style="list-style-type: none">Precision and technology-supported farming should be the focus of these trainings							

Table 20 Training Project 2: Soft skill training

Name of the Project: Soft skill training							
Key Economic Drivers:							
<ul style="list-style-type: none"> There is a need for better language and communication skills to be developed This would be of help in the travel and tourism sector Better English language knowledge improves employment opportunities of youth 							
Job Roles:	NSQF Level	NSQF Codes	Cost Category	Duration of Training	Target Group	Training Target (People)	Cost of Training (₹)
Training for Soft Skills and in spoken English	4	₹3.1 Crores	3	180 hours	Graduates who have completed courses from Degree Colleges, Engineering Colleges	4,000	₹3.1 Crores
Total Training Cost						4,000	₹ 3.1 Crores
Total Assessment and Certification cost (₹1,000 per candidate)							₹0.40 Crore
Total Cost							₹3.5 Crore
Key Considerations:							
<ul style="list-style-type: none"> The training can be focused in urban areas. It can be offered along with trainings in the retail sector 							

Table 21 Training Project 3: Retail

Name of the Project: Retail sector training							
Key Economic Drivers:							
• There would be a need for retail sector jobs with the increasing urbanization in Salem							
Job Roles:	NSQF Level	NSQF Codes	Cost Category	Duration of Training	Target Group	Training Target (People)	Cost of Training (₹)
Cashier	2	RAS/Q0102	2	200 hours	10th Class Pass, 12th Class Pass	500	₹0.49 Crores
Retail Sales Associate	4	RAS/Q0104	2	140 hours		500	₹0.68 Crores
Store Ops Assistant	1	RAS/Q0101	2	140 hours		500	₹0.49 Crores
Seller Activation Executive	4	RAS/Q0301	2	320 hours		500	₹0.68 Crores
Retail Trainee Associate	3	RAS/Q0103	2	280 hours		500	₹0.68 Crores
Total Training Cost						2,500	₹3.02 Crores
Total Assessment and Certification cost (₹1,000 per candidate)							₹0.25 Crore
Total Cost							₹3.27 Crore

Table 22 Training Project 4: Fabrication

Name of the Project: Training in Fabrication							
Key Economic Drivers:							
<ul style="list-style-type: none">Salem has several small-scale units in steel fabrication.There is a constant need for skilled workers in this sector.							
Key Partners: Salem Steel Cluster, ITIs							
Job Roles:	NSQF Level	NSQF Code	Cost Category	Duration of Training	Target Group	Training Target (People)	Cost of Training (₹)
Fitter – Fabrication	3	CSC/ Q0303	1	500 hours	10th Class Pass	200	₹0.55 Crores
Assistant Manual Metal Arc Welder	4	CSC/ Q0204	1	500 hours		100	₹0.28 Crores
Assistant Oxy fuel gas cutter	3	CSC/ Q0203	1	300 hours		100	₹0.17 Crores
CNC Setter cum operator – Turning	4	CSC/ Q0120	1	600 hours		300	₹0.99 Crores
Draughtsman – Mechanical	3	CSC/ Q0402	1	400 hours		100	₹0.22 Crores
Total Training Cost						800	₹ 2.2 Crores
Total Assessment and Certification cost (₹1,000 per candidate)							₹0.08 Crores
Total Cost							₹2.28 Crores

Table 23 Training Project 5: Textile and Apparel

Name of the Project: Training in Textile and Apparel sector						
Key Economic Drivers:						
<ul style="list-style-type: none">There is a constant need for workers in the textiles sector.There is also a need for reskilling existing workers in order to increase efficiency						
Job Roles:	NSQF Level	NSQF Code	Duration of Training	Target Group	Training Target (People)	Cost of Training (₹)
Warper – Direct Warping Machine	4	TSC/Q2101	340 hours	10th Class Pass, 12 th Class Pass – Special focus on Women 10th Class	500	₹0.94 Crores
Sewing Machine Operator	4	AMH/Q0301	270 hours		1,000	₹1.48 Crores
			120 hours (upskilling)	Existing textile sector workforce	3,000	₹1.98 Crores
Packing Checker	4	TSC/Q0301	340 hours	10th Class Pass, 12 th Class Pass – Special focus on Women 10th Class	500	₹0.94 Crores
Fabric Checker	4	TSC/Q2301	340 hours		500	₹0.83 Crores
Quality Checker	4	TSC/Q0501	340 hours		500	₹0.83 Crores
Total Training Cost					6,000	₹ 6.98 Crores
Total Assessment and Certification cost (₹1,000 per candidate)						₹0.6 Crores
Total Cost						₹7.58 Crores

Table 24 Training Project 6: Healthcare

Name of the Project: Training in Healthcare Sector						
Key Economic Drivers:						
<ul style="list-style-type: none">Healthcare sector has scope for young men and women, and career mobility as well.With an aging population, there will be a greater demand for healthcare services in the future						
Key Partners: Hospitals, Nursing Colleges						
Job Roles:	NSQF Level	NSQF Code	Duration of Training (hours)	Target Group	Training Target	Cost of Training
General Duty Assistant	4	HSS/ Q5101	600	School Graduates – focus on women	400	₹0.59 Crores
Blood Bank Technician	4	HSS/ Q2801	1,000		200	₹0.53 Crores
Cardiac Care Technician	4	HSS/ Q0101	840		400	₹0.79 Crores
Diabetes Educator	4	HSS/ Q8701	360		200	₹0.47 Crores
Emergency Medical Technician - Basic	4	HSS/ Q2301	240		400	₹0.53 Crores
Medical Records & health Information Technician	4	HSS/ Q5501	900		400	₹0.53 Crores
Total Training Cost					2,000	₹3.42 Crores
Total Assessment and Certification cost (₹1,000 per candidate)						₹0.20 Crore
Total Cost						₹3.62 Crore
Key Considerations:						
<ul style="list-style-type: none">Residential training and part-time training modes should be explored to allow women of all backgrounds to attend						

Table 25 Training Project 7: Domestic Appliance Service

Name of the Project: Domestic Appliances (Electrical and Electronics)							
Key Economic Drivers:							
<ul style="list-style-type: none">With increased urbanization, there is a need for providing basic services in the hotels and tourist places in the job roles mentioned below.							
Job Roles:	NSQF Level	NSQF Codes	Cost Category	Duration of Training	Target Group	Training Target (People)	Cost of Training (₹)
Helper Electrician	2	CON/Q0601	1	350 hours	10th Class Pass, 12 th Class Pass	500	₹0.96 Crores
Plumber (General)	3	PSC/Q0104	1	410 hours		500	₹1.13 Crores
Field Technician – AC	4	ELE/Q3102	2	300 hours		500	₹0.73 Crores
Field Technician – Refrigerator	4	ELE/Q3103	2	480 hours		500	₹1.17 Crores
Field Technician - Other Home Appliances	4	ELE/Q3106	2	480 hours		500	₹1.17 Crores
Total Training Cost						2,500	₹ 5.16 Crores
Total Assessment and Certification cost (₹1,000 per candidate)							₹0.25 Crore
Total Cost							₹5.41 Crore

Table 26 Training Project 8: Food processing

Name of the Project: Training in Food Processing							
Key Economic Drivers:							
<ul style="list-style-type: none">Food processing is a major sector in the district, and has scope for growth due to increasing incomes, population growth and urbanization.A new food park is planned to be constructed in the district							
Key Partners: ITI/ Degree colleges, engineering colleges							
Job Roles:	NSQF Level	NSQF Code	Cost Category	Duration of Training (hours)	Target Group	Training Target	Cost of Training
Fruit Ripening Technician	4	FIC/Q2002	1	240 hours	School and College students	500	₹0.66 Crores
Cold Storage Technician	4	FIC/Q7004	3	240 hours		1,500	₹1.54 Crores
Fruit Pulp Processing Technician	4	FIC/Q0106	1	240 hours		500	₹0.66 Crores
Packaging Technician	5	FIC/Q7001	1	240 hours		1,500	₹1.98 Crores
Sago processor	-	QP to be developed	1	240 hours		500	₹0.66 Crores
Multi Skill Technician (Food Processing)	4	FIC/Q9007	1	600 hours		1,500	₹1.98 Crores
Total Training Cost						6,000	₹ 6.47 Crores
Total Assessment and Certification cost (₹1,000 per candidate)							₹0.6 Crore
Total Cost							₹7.07 Crore
Key Considerations:							
<ul style="list-style-type: none">Students in degree and engineering colleges can be targeted.Sago processing is a major industry. A set of QP/NOS can be developed for this.							

Table 27 Training Project 9: Construction

Name of the Project: Training in Construction Sector							
Key Economic Drivers:							
• The upcoming smart city projects will bring a huge demand in construction sector							
Key Partners: ITI, engineering colleges, Granite Processing units							
Job Roles:	NSQF Level	NSQF Code	Cost Category	Duration of Training	Target Group	Training Target	Cost of Training
Foreman – Electrical Works (Construction)	5	CON/Q0 604	1	900	Youth and migrant workers	1,000	₹4.95 Crores
Metal Inert Gas/Metal Active Gas/Gas Metal Arc Welder (MIG/MAG/GMAW)	4	CSC/Q0 209	1	600		500	₹1.65 Crores
Marble, Granite and Stone	4	CON/Q0 106	1	600		500	₹1.65 Crores
Foreman Wet Finishing and Flooring	5	CON/Q0 109	1	600		1,000	₹3.29 Crores
Bar Bender and Steel Fixer	4	CON/Q0 203	1	400		1,500	₹3.29 Crores
Assistant Electrician	3	CON/Q0 602	1	400		1,500	₹3.29 Crores
Total Training Cost						6,000	₹ 18.13 Crores
Total Assessment and Certification cost (₹1,000 per candidate)							₹0.6 Crores
Total Cost							₹18.73 Crores
Key Considerations:							
• The trainings should be inclusive of school drop-outs/ young men in NEET category and migrant workers.							
• Trainings can be accompanied by stipends.							
• Trainings can focus on sustainable practices.							

6.2. Key Recommendations

Salem district is expected to have a growing economy due to the textile and food processing industry here. In the next six years, there is an emerging demand for skilled workforce in fabrication, textile, food processing and other sectors.

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

Revision of ITI syllabus as per the technology change in industry:

There is a gap in terms of industrial requirement and offering from ITIs – industry prefers candidates with MIG welding skills, whereas ITIs teach only TIG welding skills. Only selected private institutions offer this trade. There is a need for overall revision and updating of the syllabus in ITIs for all trades.

Apprenticeship programme to promote traditional sectors:

The Thammampatty wood carvers feel that the art is dying as the next generation is not interested in it due to lack of sufficient income. In order to promote such niche industries, an apprenticeship programme can be promoted in collaboration with the Tamil Nadu Handicraft Development Corporation. The apprentices can learn from the master artists and a stipend can be provided to both the artisans and apprentices.

Revision of Agriculture skill training norms

Skilling courses in agriculture such as organic farming, micro irrigation technician and other farming techniques have the same requirements as other industrial training courses. This requires the skill training provider to give training in one field throughout the entire training duration as mandated by NSDC norms. However, skill training providers feel that this is restrictive for agriculture. Mandatory field visits would help farmers to understand different agricultural practices suited to different soil and land types.

Development of QP/NOS for Sago Processing

Sago processing is a method of extracting the starch from tuber crops. This is a major activity carried out in Salem. However, there are no specific QP/NOS that cover sago processing. This can be developed and course can be offered in this job role under the food processing sector.

Counselling sessions as part of skill training:

There is a need for improved counselling services as part of skill training. In order to overcome this, weekly counselling sessions can be conducted as part of the training. Alumni can be invited to give talks on the employment scenario and success stories of hardworking candidates needs to be documented and showcased by every skill training provider.

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 Salem selected for the survey. The methodology is explained below:

Figure 34: Blocks Selected for Survey in Salem

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)

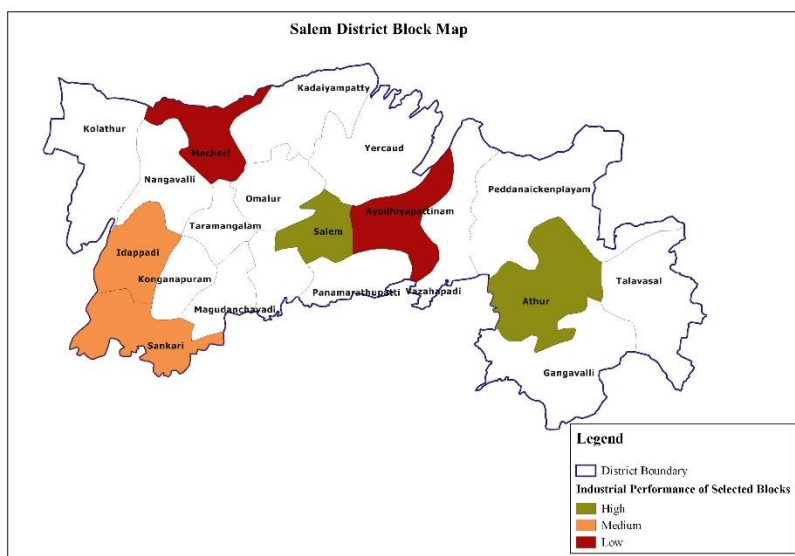
The following weights were assigned post award of marks:

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, two blocks are randomly selected from each category.

High-Salem, Athur

Medium- Idappadi, Sankari

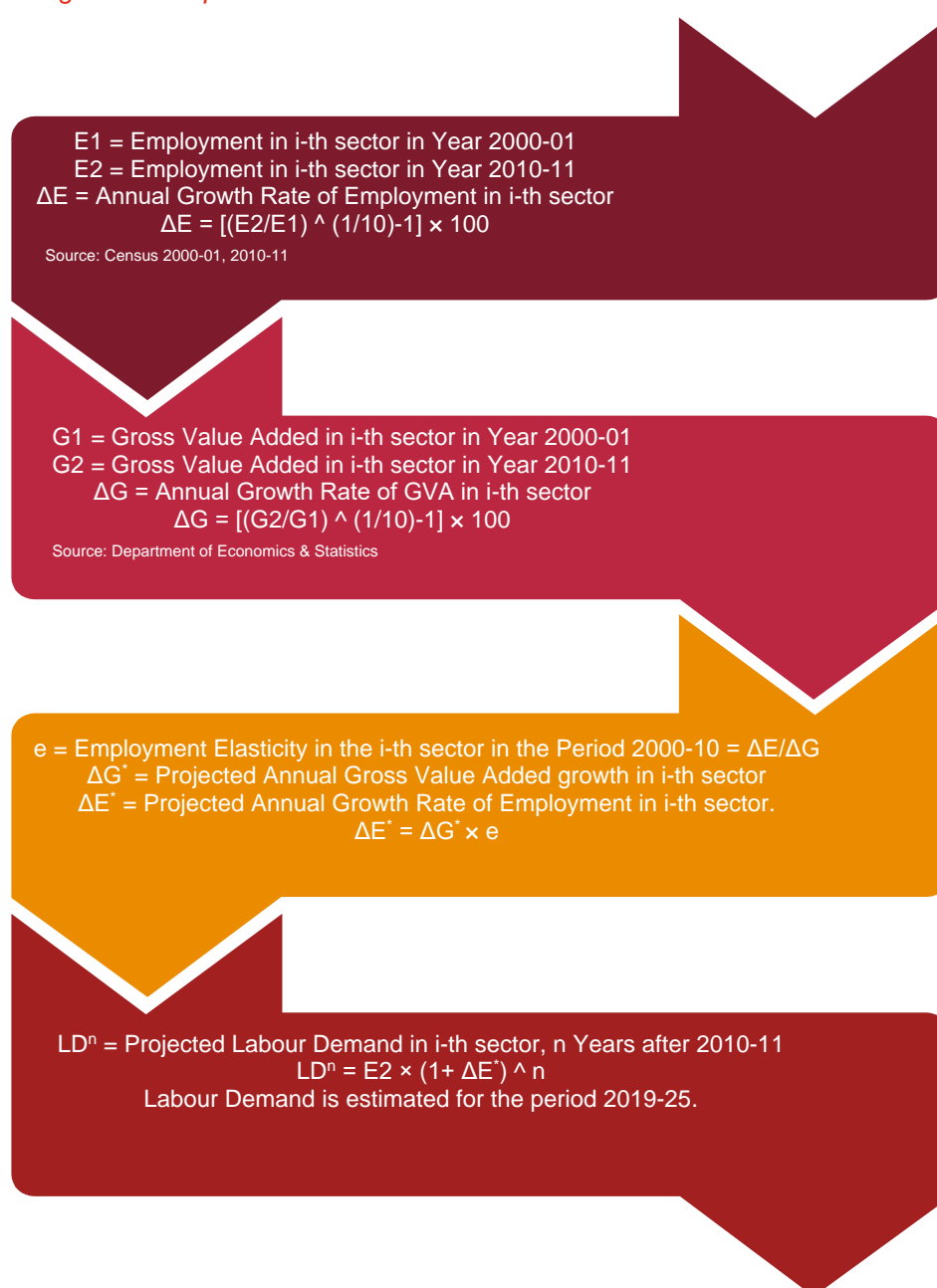
Low- Mecheri, Ayodhiapttinam

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:

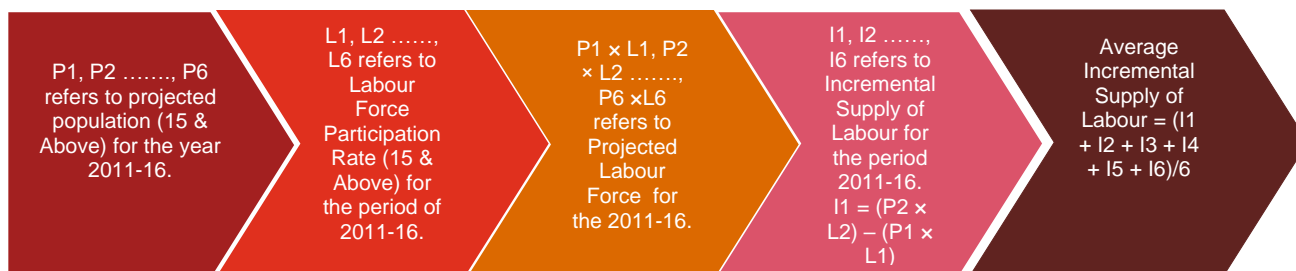
Figure 35: Steps in Demand Estimation



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 state¹⁶. 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



¹⁶ 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.	District Industries Centre- General Manager	Govt. official
2.	District Assistant Director, District Skills Department	Govt. official
3.	District Employment Officer	Govt. official
4.	SIDCO Branch Manager	Govt. official
5.	Salem Productivity Council	Industry Association
6.	Salem Coir Cluster	Industry Association
7.	Salem Steel Cluster	Industry Association
8.	Chemplast – Mettur	Industry Association
9.	Government ITI, Salem	Training Service Provider
10.	Vishaka Institute of Technology	Training Service Provider
11.	Virmodello Technologies	Industry
12.	Shri Shanmuga Tex	Industry
13.	Shri Jayashree Foods	Industry
14.	S K V Industries	Industry
15.	Udhayam Printers	Industry
16.	Spark Engineers	Industry
17.	KTC Starch Industries	Industry
18.	Rams Foods	Industry
19.	Salem Automech	Industry
20.	S V Wires	Industry
21.	Durairaj, Wood carver	Industry
22.	Subramaniam, Potter Association	Industry
23.	Arthanai Loom Center Pvt Ltd	Industry
24.	SP Spinning mills Pvt Ltd	Industry
25.	SRC Projects Pvt Ltd	Industry
26.	Radisson Salem	Industry
27.	MSB Electronic Industries	Industry
28.	Kandagiri Spinning Mills Limited	Industry
29.	Rasi Castings & Industries	Industry
30.	Shrisha silver long chain	Industry
31.	Sri Iyyappa Engineering works	Industry
32.	VV Engineering Industries	Industry
33.	RGV Engineering	Industry
34.	Venus Starch	Industry
35.	Bee Yes Labs	Industry
36.	Jupiter Scientific Company	Industry
37.	Lakshmi Castings	Industry
38.	Vijay Micronisers	Industry
39.	Shivam Plastics	Industry
40.	Meghala Steels	Industry
41.	Aqua Purification Systems	Industry
42.	Rank Plastic	Industry
43.	Sri Amman Engineering	Industry
44.	Ram Foods	Industry
45.	Indo Devi'S Comapny	Industry
46.	Krishna Powers	Industry
47.	Bp International	Industry
48.	Sri Ambika Lorry Body Works	Industry
49.	Satyam Foods And Snacks	Industry
50.	Geetha Paper Plate	Industry
51.	Pvn Power Lines	Industry
52.	Perfect Nails And Rivets	Industry
53.	Tmr Power Industry	Industry
54.	Nkn Industries	Industry
55.	Sri Krishna En	Industry
56.	Jeeva Minerals	Industry

S.No	Stakeholder	Category
57.	Adhiba Paiunts Private Limited	Industry
58.	Vls Minerals	Industry
59.	Eco Super Bags	Industry
60.	Sakthi Radiators	Industry
61.	Sakthi Traders	Industry
62.	Apple Paints	Industry
63.	Ess Vee Buries India Pvt Ltd	Industry
64.	Hi-Fi Biotech India Pvt Ltd	Industry
65.	Abirami Enterprises	Industry
66.	Sri Jayasree Food Products	Industry
67.	T J Associate	Industry
68.	AKN Minerals	Industry