



Skilling for the Future

Skill Gap Assessment & Action Plan for Tamil Nadu

District Skill Development Plan for Erode District

November 2019



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List of Abbreviations

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

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/programmatically 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 13 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: Ammapet, Talavedi, Andiyur, Erode, Bhavani and Perundurai







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"> The decadal growth rate of the population in the district was 12% between 2001 and 2011, compared to 16% at state level. 32% of the population was between 15-34 years in 2011; and the Median age of the District was 26 years, which is much lower than the median age of the state, which was 29 years.
 Economic Analysis	<ul style="list-style-type: none"> Erode is known for textile, sugar and other food processing industries. Some of the prominent industries include: cotton mills, sugar processing and steel fabrication. Erode ranks twelfth in per capita GDDP across the state. Between 2011-12 and 2016-17, the GDDP grew by 7%. All sectors have had a fluctuating growth during the past five years. The economy of the District is dominated by the service sector, which accounts to about 43% of the GVA in 2016-17. However, the industrial sector's share in the GVA grew by 10% from 2011-12 to 2016-17.
 Labour Market Analysis	<ul style="list-style-type: none"> The overall labour force participation rate is 67% and worker population ratio is 66% - higher at the district level than at state. About 54% of workers in the district are casual labourers and 25% are self-employed. About 39% of the workers are involved in agriculture and allied activities, 22% in manufacturing and 19% in trade related activities.
 Education & Skill Development	<ul style="list-style-type: none"> With respect to school education, Erode is one of the preferred districts. The Gross Enrolment Ratio at both Primary and Upper Primary are higher than the state averages. The dropout rates is also lower – 0.5% at the primary level and 2.1% at the upper primary level. Erode has 16 ITIs. There are also 9 polytechnics and 34 colleges of higher education.
Findings from Primary Survey	
 Youth Profile and Aspirations	<ul style="list-style-type: none"> Only 49% of the respondents are currently engaged in some economic activity; out of which 83% are involved in a work related to their education/training. About 30% of technical diploma holders claim to be employed as unskilled workers. Only 11% of respondents reported to be aware of government run skill development programmes and only 7 respondents out of 360 have undergone such training. The youth in the district mostly prefer to be self-employed (36%). About 28% prefer wage / salaried employment with the private sector The main factors determining the aspiration of the youth are Salary (wages) / Income (91%), job security (47%) and closeness to residence (35%). Location of the job seems to be a major determinant of youth's attitudes towards work. About 93% of female respondents and 89% of males wanted a job in their own hometown. About 16% of youth aspire to work in the auto and auto components sector and 13% wish to work in healthcare. About 8% also wish to work in handloom and handicrafts.
 Employer & Other Key Stakeholder Perspectives	<p>Quantitative Survey</p> <ul style="list-style-type: none"> Employee reference is the major mode of recruitment (73%). Employers also use local community and media advertisements and manpower agencies for recruiting labourers. The most common challenge faced by employers was candidates' disinterest and attitude (48%), followed by high local wages (23%) and lack of prior experience (18%).

	<ul style="list-style-type: none"> • The employers had a majority of female employees – on an average, the enterprises employed 72% females. • Skilled workers dominated the share of workforce (57%), followed by semi-skilled workers (16%) and unskilled workers (17%). • Over 43% of the employers feel there is high growth prospects in their respective industries. <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. • Migrant workers are majorly employed in the textile mills. • Most migrants in Erode are from the southern districts of Tamil Nadu. There are also migrants from East Indian states working as unskilled workers.
 <p>Incremental Demand</p>	<ul style="list-style-type: none"> • In the next 6 years, Erode will see a demand for about 1.4 lakh workers. Major sectors that drive the demand are textile, food processing, construction, transportation and real estate.

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

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. This constrains the interested candidates economically (economic opportunity costs, transportation cost, etc.). 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.

A set of QP/NOS along with a Q-File can be developed and secured approval from NSDA, for **Sago Processing**, which is a major industry in Erode.

The appetite for skill training is very low among the youth in the district. Village level awareness drives and mobilization workshops should also be planned in order to make the youth more interested in skilling.

There is a need for **improved counselling services** as part of skill training to improve candidate attitudes towards jobs. Alumni can also 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.



1. District Profile

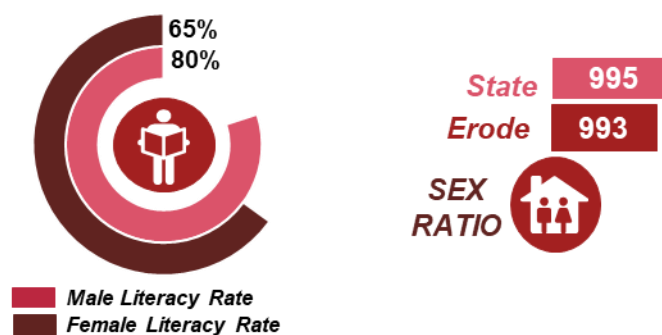
Erode district, a part of the Kongu region of Tamil Nadu, was formed after Coimbatore district was bifurcated in 1979. It shares its boundaries with Namakkal and Karur to the East, Dindigul to the South, Coimbatore and Nilgiris to the West. The river Kaveri and its tributaries run through the region. The dense Sathyamangalam forest areas are located here forming a part of the Western Ghats.

1.1. Demographic Profile

Table 1: Key Demographic Indicators – Erode vs Tamil Nadu³

SN	Indicator	Erode	Tamil Nadu
1	Total population	22,51,744	72,147,030
2	Female Population	11,21,876	36,009,055
3	Population Density per sq.km (2011)	391	555
4	Urbanization	51%	48%
5	SC population (as % of total population)	16%	20%
6	ST population (as % of total population)	1%	1%
7	Differently abled population (as % of total population)	2%	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)	35%	37%
10	ST population aged 15-34 years (as % of ST population)	33%	35%
11	Literacy rate	73%	80%

Snapshot of Erode's Demography



³ Census 2011 & 2011

Key Highlights from the analysis of Census Data:

- **Population Growth and Urbanization:** The decadal growth rate of the population in the district was 12% between 2001 and 2011, compared to 16% at the State level.
- **Literacy:** The district has a lower literacy rate compared to the State. The female literacy rate is at 65% while the male literacy rate was 80%.
- **Youth Demography:** 32% of the population was between 15-34 years in 2011 with a Median age of 26 years, much lower than the median age of the State, which was 29 years.

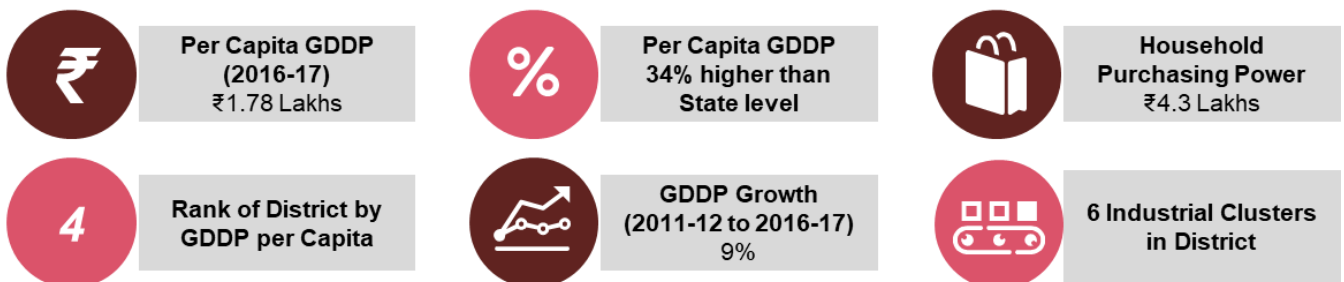
Figure 1 Age-wise Population Pyramid of Erode (2011 vs 2026)⁴



1.2. Economic Profile

Erode is known for its textile, sugar and other food processing industries. As seen in Figure 2, Erode ranks twelfth in per capita GDDP across the state. Between 2011-12 and 2016-17, the GDDP grew by 7%.

Figure 2 Key Economic Indicators of Erode District



1.2.1. 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

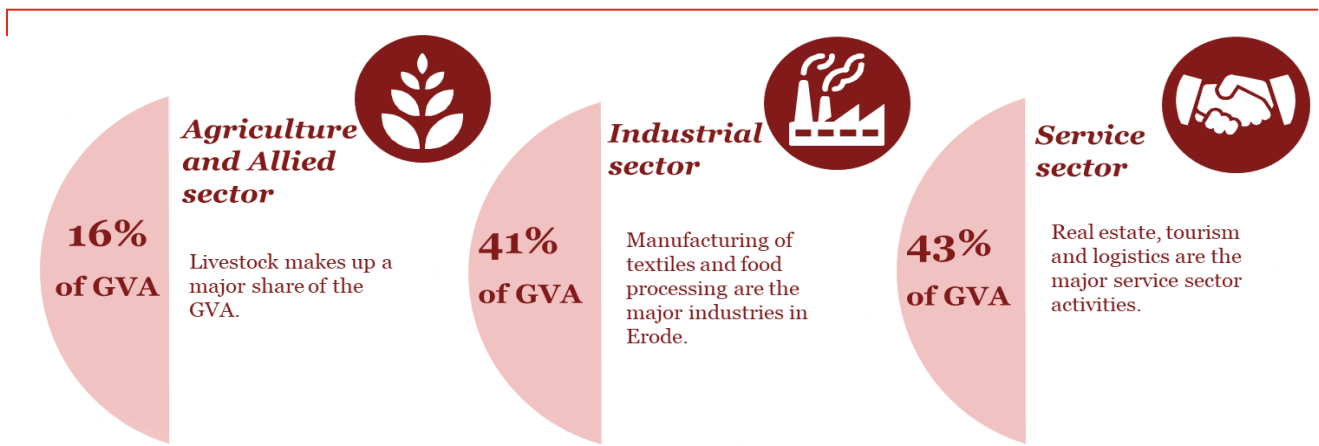
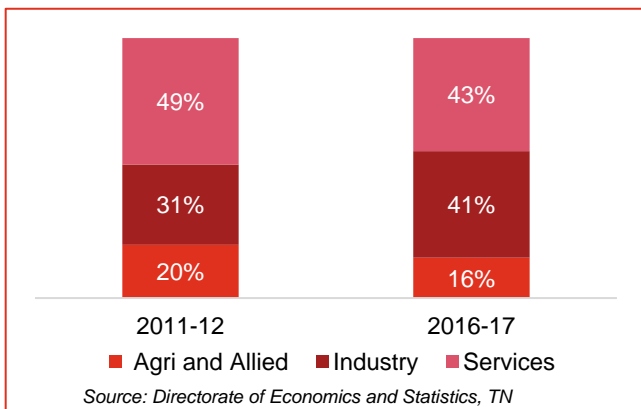


Figure 4 Sectoral Share of GVA (2011-12 & 2016-17)



The economy of the district is dominated by the service sector, which accounts for about 43% of the GVA in 2016-17.

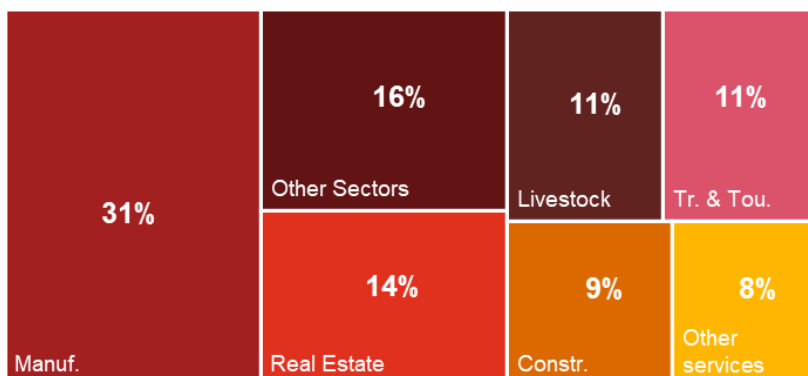
Though the overall contribution of the service sector to GVA has decreased by 6 percentage points between 2011-12 and 2016-17, the sector still had a positive growth rate. The decline is attributed to the higher industrial growth rate. The industrial sector's share in the GVA grew by 10% from 2011-12 to 2016-17 and is currently at 41%. All sectors have had a fluctuating growth in the past five years. The proposal for the Coimbatore-Tiruppur-Erode Industrial

Corridor spurred a line of investments and promoted industrial growth, which can be seen in the steep growth rate of 28% in 2015-16. Agriculture in the district is mostly reliant on water inflow from the Cauvery River. During the seasons when the water inflow is sufficient, there is a high growth rate.

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

Sector	2012-13	2013-14	2014-15	2015-16	2016-17	CAGR between 2011-2016
Agri & Allied	-2%	11%	7%	11%	-11%	3%
Industry	22%	13%	6%	28%	7%	15%
Services	6%	10%	9%	3%	3%	6%

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

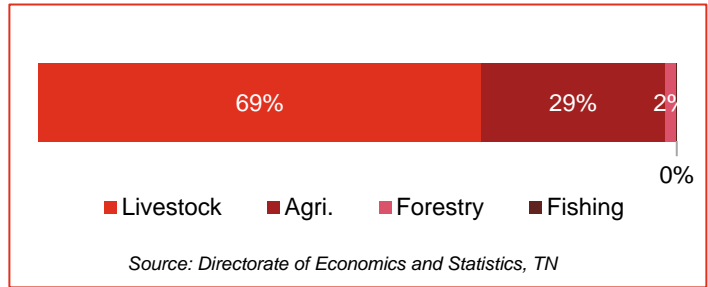


Manufacturing is the major contributor to the GVA (31%) followed by real estate (14%). Other major contributors are livestock (11%), travel and tourism (11%) and Construction (9%).

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 69% of the district GVA. Erode is also home to the specific breed of Kangayam and Bargur cows. The Veterinary University Training and Research center is located here which conducts regular trainings on livestock rearing. A cattle research station is also located in Bargur.

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



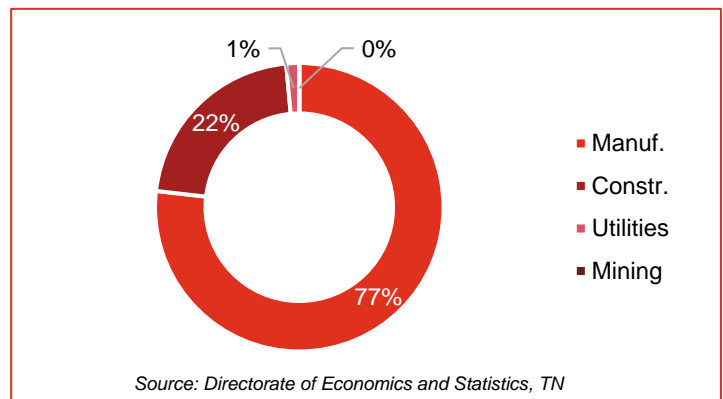
The major crops grown are sugarcane, coconut, paddy and oilseeds. The turmeric grown here is of special quality and has recently acquired its own GI tag. Tubers are also grown in the district which are processed for their starch in the sago processing industries.

Industrial Sector

Manufacturing makes up 77% of the industrial sector GVA and construction contributes to 22%. Though not a significant contributor to GVA, some mining activities are carried out in Erode. The CAGR of manufacturing sector is 22% between 2011-12 and 2016-17. This indicates that the sector has been growing and has potential for future growth with relevant investments coming in.

Prominent large scale industries in the District are cotton mills, sugar processing and steel fabrication.

Figure 7 Industrial Sector GVA (2016-17)



Key Clusters and Traditional Industries

Leather (Erode)	Oil Mill (Kangeyam, Vellakovil)	Coir (Erode, Pollachi)
Moon Stone (Devangapuram)	Readymade garments (Erode)	Rice Mill (Kangayam)

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
Manufacture of knitted and crocheted apparel	72	1,94,958	17,158	17%	238
Spinning, weaving and finishing of textiles	330	1,37,010	52,410	52%	159
Manufacture of other food products	38	1,18,196	7,728	8%	203
Manufacture of prepared animal feeds	14	42,341	2,241	2%	160
Manufacture of grain mill products, starches and starch products	108	21,727	1,517	2%	14
Sale, maintenance and repair of motorcycles and related parts and accessories	12	19,980	NA	NA	NA
Repair of fabricated metal products, machinery and equipment	22	19,281	307	0%	14
Manufacture of other textiles	62	15,412	2,559	3%	41
Manufacture of dairy products	14	13,618	2,082	2%	149
Casting of metals	8	12,785	546	1%	68
Manufacture of plastics products	17	10,293	860	1%	51

Source: Annual Survey of Industries 2014-15

According to the ASI 2014-15, most of the industries belong to the textile manufacturing sector. Manufacture of food products is also an important sector in Erode. About 52% of the industrial workforce is employed in spinning, weaving and finishing of textiles.

Existing Industrial Estates

- Govt Industrial Estate, Erode
- SIDCO, Nanjai Uthukuli, Perundurai
- SIPCOT, Perundurai

Proposed Industrial Estate:

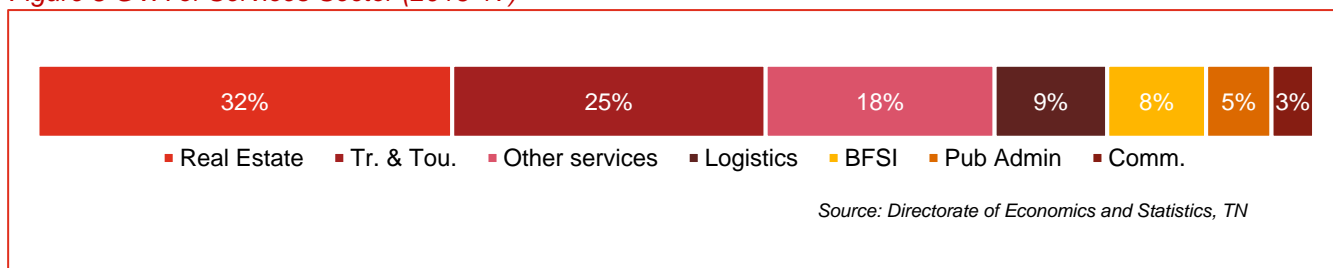
- SIDCO, Rasathivalasu, Vadamugam Kangayampalayam, Chennimalai

Services Sector

Real estate, logistics, travel and tourism are major contributors to service sector GVA. Real estate accounts for 32% of the service sector in 2016-17 and had a CAGR of 8% between 2011-12 and 2016-17. The travel and tourism industry has also been growing at a CAGR of 5%.

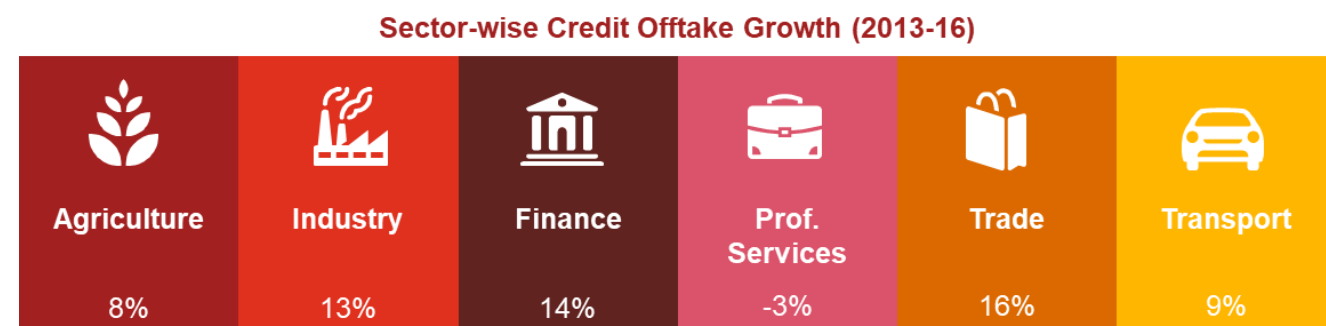
The major tourist attractions in the district are temples and the Sathyamangalam forest reserve which houses a wide variety of flora and fauna. The Vellode bird sanctuary also attracts tourists.

Figure 8 GVA of Services Sector (2016-17)



1.2.2. Investments and key economic drivers

Figure 9 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 industry.

According to the data collected from the RBI, the trade sector has seen the highest credit growth at 16%. Erode is also expected to see large-scale investments mainly in textile and food processing.

Figure 10 Large-scale Investments in Erode⁶



1.3. Labour Market Profile⁷

The overall labourforce participation rate is 67% and worker population ratio is 66% - higher at the district level than at state. About 54% of workers in the district are casual labourers and 25% are self-employed. The overall unemployment rate is at 3% but the youth (15-29 years) unemployment rate is much higher at 11%.

Figure 11 Key Labour Market Indicators⁸

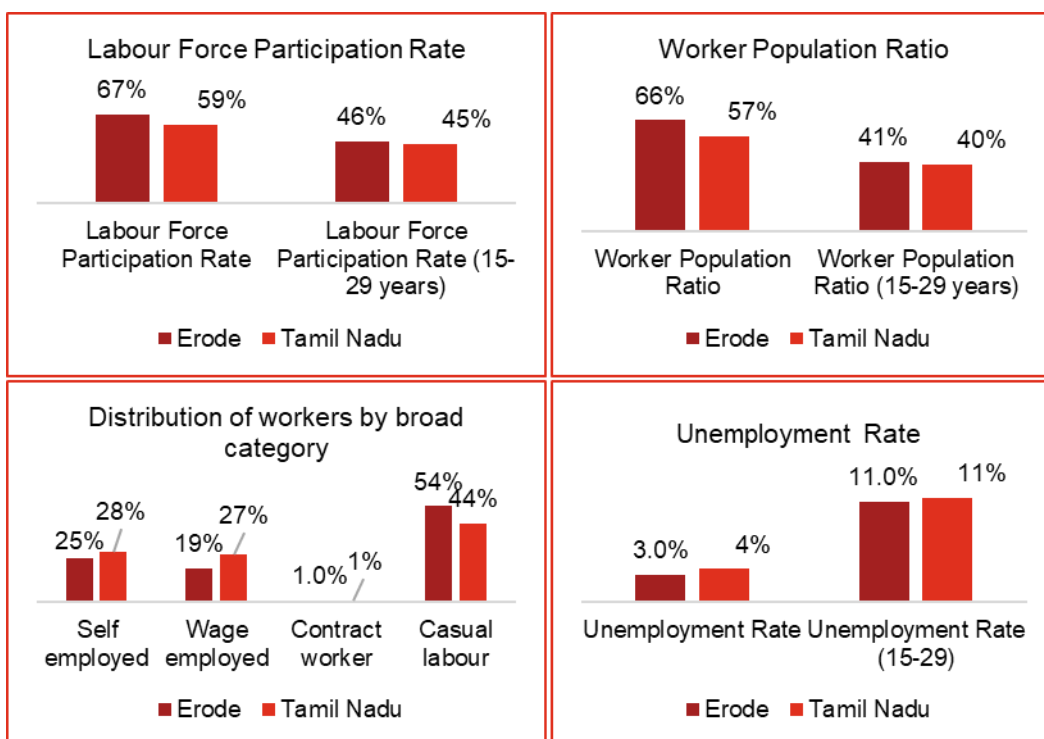
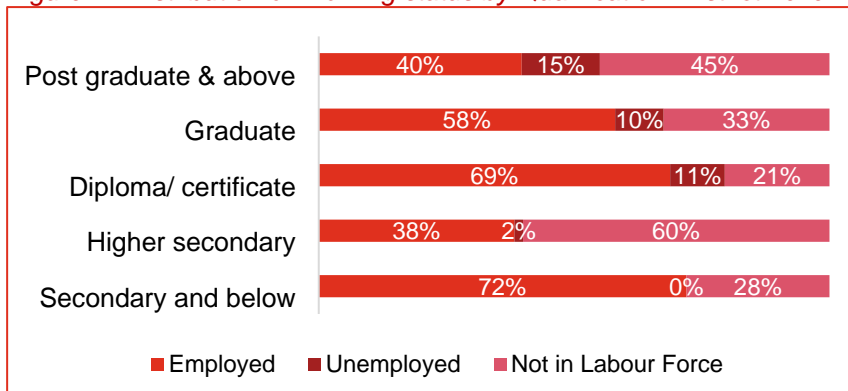


Figure 12 Distribution of Working status by Qualification: District Level Estimates



The education-level classification of the district population reveals that a significant working age population is not in the labour force. Among graduates, 58% are not in the labour force. The youth survey conducted in the district also shows that about 25% of the overall respondents are in neither in education, nor in employment nor in any training. Women in the district have lesser tendency to seek employment.

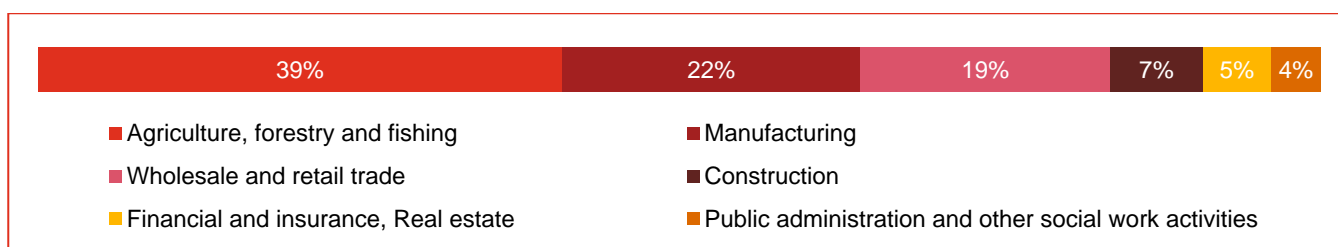
About 39% are involved in agriculture and allied activities, 22% in manufacturing and 19% in trade related activities.

⁶ CAPEX data

⁷ Analysis in this section are based on the District Level Estimates, EUS, 2013-14, Labour Bureau

⁸ District Level Estimates, EUS, 2013-14, Labour Bureau

Figure 13 Sector-wise share of Employment



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

1.4. Education and Skill Development Profile

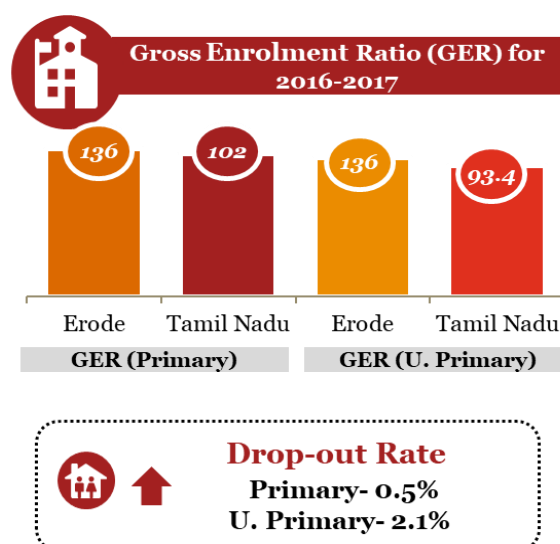
1.4.1. Education Profile

With respect to school education, Erode is one of the preferred districts. The Gross Enrolment Ratio at both Primary and Upper Primary are higher than the state averages. The dropout rates is also lower – 0.5% at the primary level and 2.1% at the upper primary level.

Erode has 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 14 GER and Drop-out Rates - DISE



1.4.2. 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.

Table 4 Vocational Training under Short Term Skill Development Programs⁹

Scheme	Sector	Job Role	No. of Training Centres
Pradhan Mantri Kaushal Vikas Yojana	Logistics	Documentation Assistant	1
	Handicrafts and Carpet	Handloom Weaver (Carpets)	1
	Media and Entertainment	Makeup Artist	2
		Hairdresser	1
	Retail	Retail Sales Associate	1
		Trainee Associate	1
	Apparel	Self Employed Tailor	1
		Export Assistant	1
IT-ITeS	CRM Domestic Non-Voice	1	
Green Jobs	Solar PV Installer - Electrical	1	
	Automotive Repair	Basic Automotive Servicing 2 Wheeler 3 Wheeler	1
TNSDC			

⁹ 2017-2018 training year report.

		Basic Automotive Servicing 4 Wheeler	2
	Health Care	Emergency Medical Technician Basic	1
		Assistant Physiotherapist	1
		Operating Theatre Technician	1
		Radiology Technician	1
		Dental Assistant	1
		Medical Laboratory Technician	1
		Refractionist	1
		Pharmacy Assistant	1
		General Duty Assistant	3
		Production And Manufacturing	CNC Turning
	Garment Making	Hand Embroider	3
		Tailor (Basic Sewing Operator)	2
	Leather Others	Cutting And Tailoring	1
	Electrical	Electrician Domestic	1
	Information And Communication Technology	Accounts Assistant Using Tally	2
	Banking & Accounting	Accounting	2
	Apparel	Sewing Machine Operator	1
	Capital Goods	Draughtsman Mechanical	1
	Electronics	Field Technician Networking And Storage	1
	Electronics	Mobile Phone Hardware Repair Technician	1
	Insurance	Insurance Sales Associate	1
	Gem And Jewellery	Foundation Course For Jewellery	1
	BFSI	Accounts Executive Receivables & Payable)	1
	Agriculture	Organic Grower	1
	Beauty And Wellness	Mehendi Specialist	1
	IT/ITES	Domestic Data Entry Operator	1
	Business & Commerce	Junior Human Resource Associate	1
		Small Office/ Home Office Coordinator	1
		Junior Marketing Associate	1
	Iron & Steel	EOT/ Overhead Crane Operator	1

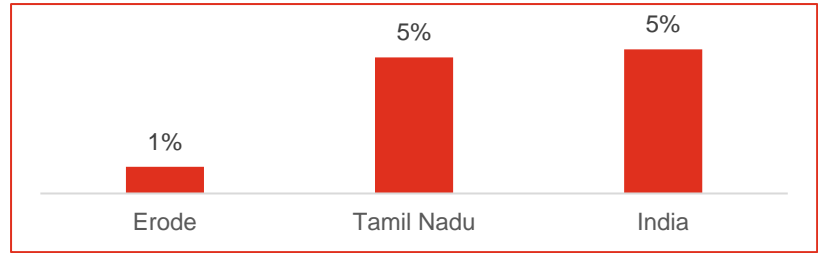
The long-term skill development programs are predominantly offered through the Industrial Training Institutes, which offer one and two year programs across various sectors and trades. Table 5 below presents the courses offered through ITI, and the number of such institutes offering each trade/ training for job role.

Table 5 Vocational Training under Long Term Skill Development Programs (ITI)

Sector		Trade Name	ITI Count
Automobiles and Auto Components		215-Mechanic (Motor Vehicle)	11
Capital Goods		217-Draughtsman (Civil)	1
		212-Welder	3
Construction		231-Electrician	16
		951-Electrician (DST)	1
Electronics & Hardware		232-Wireman	6
Handicrafts & Carpets		221-Turner	1
Infrastructure Equipment		219-Electronics Mechanic	1
		201-Mechanic Diesel	2
Iron and Steel		222-Machinist	1
IT/ ITeS		242-Computer Operator and Programming Assistant	5
		220-Information Communication Technology System Maintenance	1
Mining		227-Fitter	10
		952-Fitter (DST)	1
Plumbing		209-Plumber	1
Textile and Apparel		237-Textile Wet Processing Technician	1

Figure 15 Proportion Undergone Vocational training 2015-16, MoLE¹⁰

With respect to vocational training in the district, only 10 persons out of every 1,000 persons in the district had received training on some skills, when compared to 51 person in the State as per Employment and unemployment survey 2015-16.



¹⁰ Employment and Unemployment Survey 2015-16, Ministry of Labour and Employment

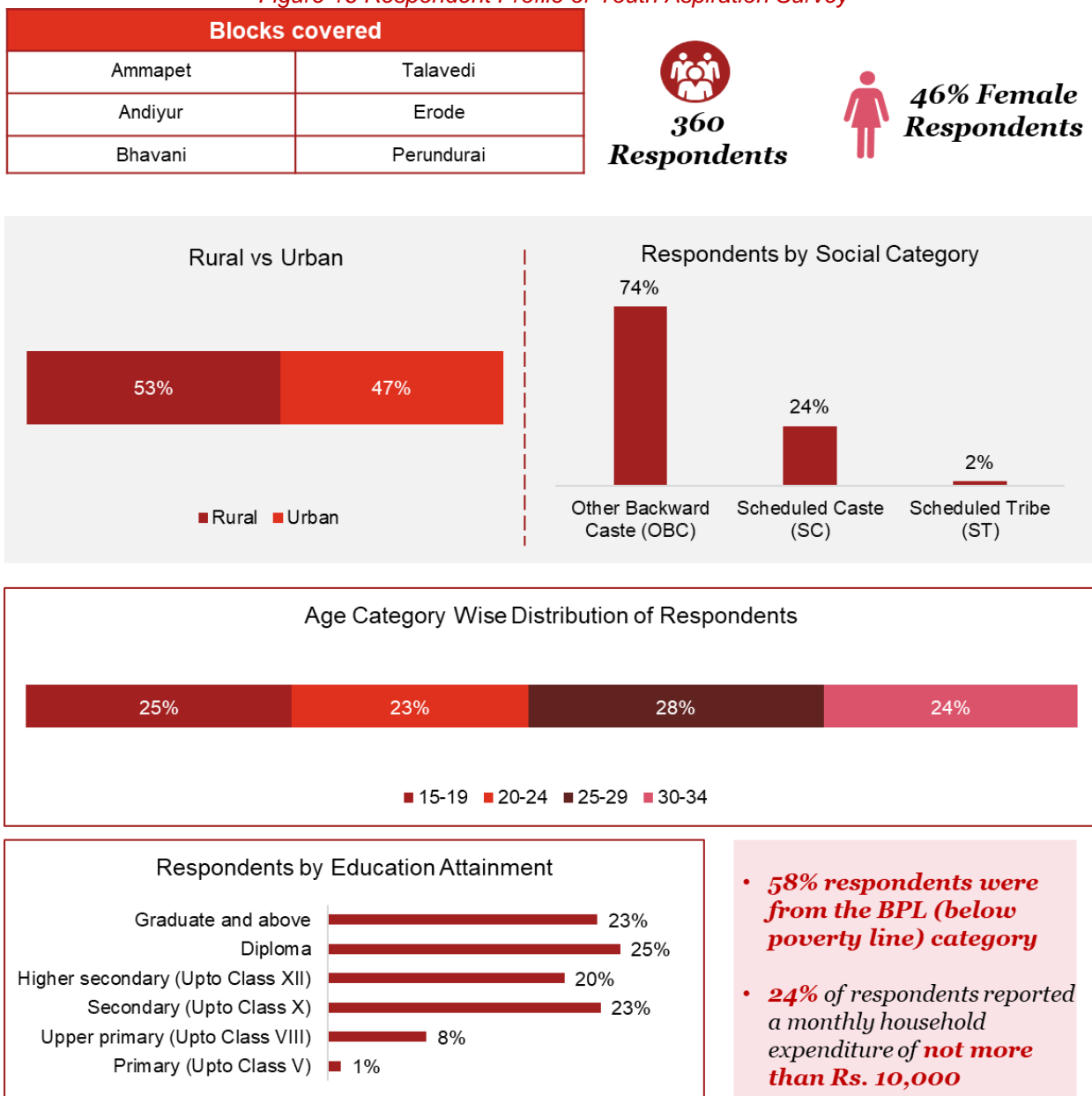
2. Youth Perspective

In order to understand the youth perspective, 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.

2.1. Profile of Respondent Youth

A total of 360 youth in the age group of 15-34 years were covered through a structured household survey tool. This covered a sample of six blocks out of the 14 blocks in the district – Ammapet, Talavedi, Andiyur, Erode, Bhavani and Perundurai. About 46% of the overall respondents were female and about 53% were from rural areas. The survey has tried to achieve a balanced representation of various socioeconomic and demographic characteristics of the population.

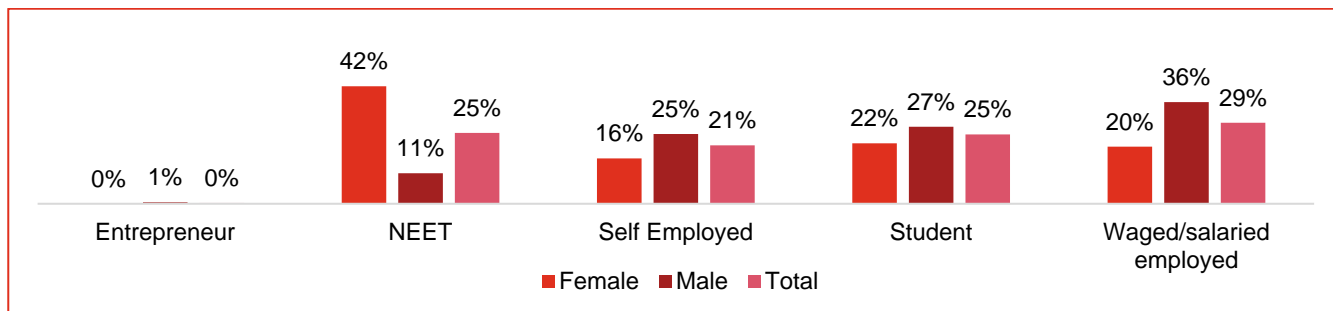
Figure 16 Respondent Profile of Youth Aspiration Survey



2.2. Youths' Educational and Economic Engagement Status

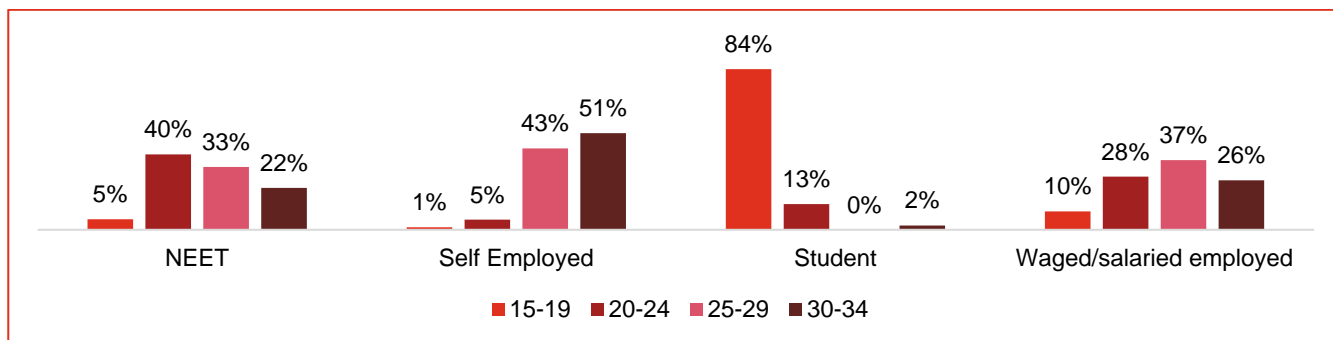
Figure 17 illustrates the gender wise classification (current status) of the respondents interviewed during the household survey. The female respondents were predominantly part of the NEET category (47%) and the male respondents were mostly wage employed (36%).

Figure 17 Current Status of Respondent by gender



Going by the age of the respondents, 51% of the respondents between 30-34 years of age have opted for self-employment¹¹. About 84% in the age group of 15-19 years identify as students.

Figure 18 Current Status of Respondent by Age Category

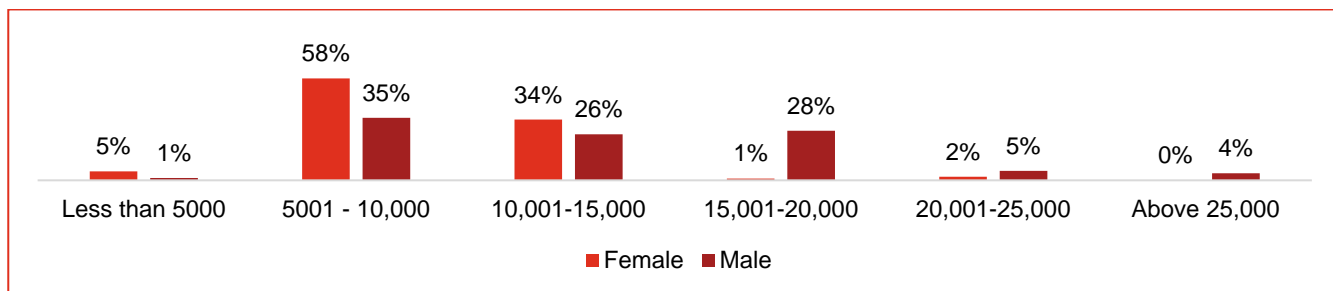


2.3. Economic Engagement of Youth

Only 49% of the respondents are currently engaged in some economic activity; and 83% of which, are involved in a work related to their education/training.

As seen in Figure 19, 58% of female respondents reported that they receive an income of INR 5,000-10,000 per month. Among males, 28% received an income between INR 15,000-20,000 per month. There is a considerable difference in the income received by men and women. The main reason appears to be the fact that women are not equitably viewed by the employers, and the employers do not distinctly acknowledge skills. Job roles such as tailoring and front office assistants are mostly preferred for women.

Figure 19 Distribution of Respondents across Monthly Income Category across gender



¹¹ 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) are predominantly employed in farm activities (50%). About 30% of diploma holders claim to be employed as unskilled workers.

Table 6 Education Qualification of Respondents and Employment Type*

	Primary and below	Upper Primary	Secondary	Higher secondary	Diploma	Graduate	Post Graduate
Farm Activities	50%	28%	9%	2%	-	-	-
Livestock	0%	7%	-	-	-	-	-
Unskilled worker	25%	34%	28%	33%	30%	4%	11%
Salaried Employment (teacher, government official, etc.)	-	3%	8%	15%	14%	54%	67%
Skilled worker (tailor, mason, electrician, plumber etc.)	-	24%	35%	27%	35%	18%	11%
Petty Business/ Trade/ Manufacturing	25%	14%	22%	25%	22%	22%	11%
Number of Respondents	4	29	65	55	37	50	9

*Multiple response question

2.4. Youth under NEET Category

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

About 42% of women were in the NEET category. **Table 7** shows the profile of NEET category respondents based on their duration in the category and their desire to enter the workforce. Though 80% of NEET category respondents wish to work, only 48% are actively seeking work. Most males (48%) have been part of the NEET category only for the previous six months.

Table 7 NEET Category Respondents

Duration in NEET Category (n=91)	Wish to Work (n=91)		
	Female	Male	Total
Less than 6 months	3%	48%	13%
6 months- 1 year	11%	29%	15%
1- 2 years	33%	0%	25%
2- 3 years	24%	5%	20%
3 - 4 years	4%	5%	4%
4 - 5 years	3%	0%	2%
More than 5 years	21%	14%	20%
	Actively Seeking Work (n=73)		
	Female	Male	Total
Yes	33%	89%	48%
Total	18	17	35

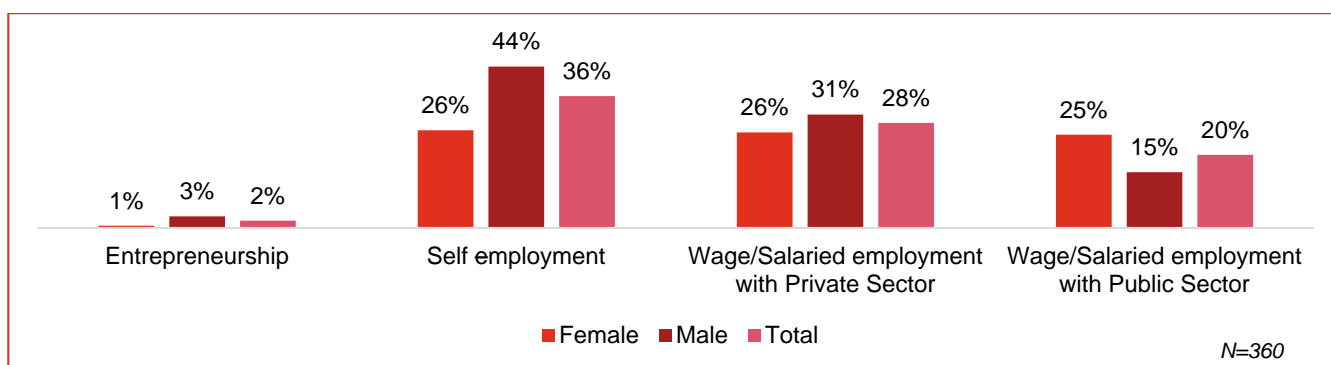
2.5. Vocational Training Awareness and Experience of Youth

Only 11% of respondents are aware of government run skill development programmes and only 7 respondents out of 360 have undergone such training.

2.6. Youth Career Aspiration

The youth in the district mostly prefer to be self-employed (36%). About 28% prefer wage / salaried employment with the private sector as seen in the figure below.

Figure 20 Career Aspiration of Youth



The main factors determining the aspiration of the youth are Salary (wages) / Income (91%), job security (47%) and closeness to residence (35%). About 47% of the total respondents feel they are completely prepared for requirements for a job. About 46% respondents also feel that the availability of job opportunities in the district is very adequate.

Table 8 Career Aspiration - Factors, Preparedness and Availability of Jobs

Factors Determining Aspiration* (n=360)	Responses	Perception of Preparedness for Jobs (n=171)	Responses
Salary (wages) / Income	91%	Completely Prepared	47%
Gender suitable role	5%	Moderately Prepared	28%
Social Status	11%	Somewhat prepared	14%
Traditionally Acquired Skills / Family Business	1%	Not Prepared	7%
Flexible work arrangements (location, schedule)	33%	No Answer/ Don't Know	4%
Job Security	47%	Availability of Job Opportunities (n=360)	
Opportunities for promotion and career development	1%	Neither adequate nor inadequate	5%
Closeness to Residence	35%	Somewhat adequate	9%
Emigration Prospects	0%	Somewhat inadequate	7%
Retirement Plans	5%	Very adequate	46%
Safety / Security	16%	Very inadequate	6%
Employer provided benefits and perks	3%	No Answer/ Don't Know	5%

*Multiple response question

Unsafe working environment, lack of local jobs and low financial strength are the major reasons given by respondents on the challenges in pursuing their desired career. About 12% also said that the pressure to get married was a reason in not being able to pursue their desired job.

Table 9 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	1%	Lack of jobs locally	28%

Challenges (n=360)	Responses*	Challenges (n=360)	Responses*
Pressure related to getting married	12%	Lack of Soft Skills	0%
Lack of guidance / information on appropriate job available for skill levels	10%	Low financial strength	14%
Lack of sufficient education qualification	11%	Inadequate infrastructure to access work-place	1%
Lack of technical / vocational skills	12%	Unsafe working environment	22%
Lack of work experience	2%	No Challenge	30%

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

As seen in Table 10, the key factors enhancing their employability, according to the respondents, were level of education attainment (39%), work experience (26%) and basic soft skills (22%). Communication skills (64%) and coordination skills (40%) are the main skills according to respondents for their desired job.

Table 10 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	22%	Performance in Interviews	4%
Certifications of Technical Skill	6%	Relevant work experience in similar position or field	3%
Education attainment (level of education)	39%	Years of Work Experience	26%
Key Skills Required for desired job*			
Analytical thinking	9%	Creativity, originality and initiative	17%
Team work	10%	Coordination Skills	40%
Clear communication	64%	Attention to detail	3%
Complex problem-solving	3%	Time management	4%
Leadership	9%	Critical thinking and analysis	4%
Active listening	4%	Others	4%
New Steps to achieve aspirations*			
Steps	Responses	Steps	Responses
Vocational/ Skill Training	26%	Already Achieved	33%
Continuing Education	6%	Apprenticeship / Gathering Work Experience	52%

*Multiple response question

Most respondents aspire to earn between INR 15,000-20,000 per month. About 63% of self-employed respondents expected a salary between INR 20,000-30,000 per month.

Figure 21 Aspired monthly salary of respondents

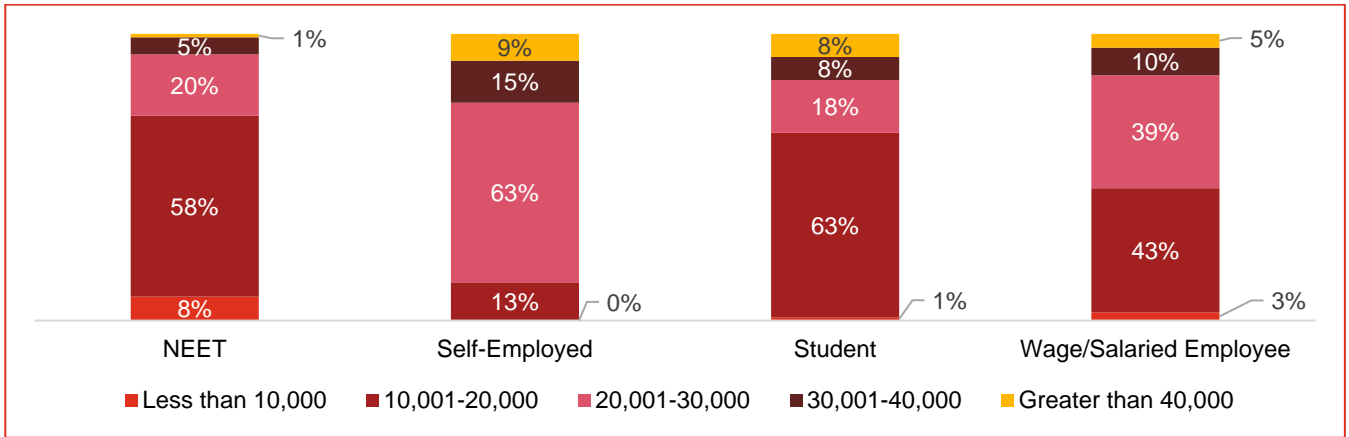
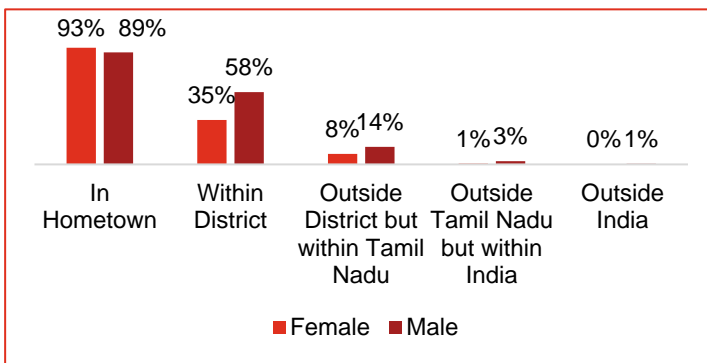
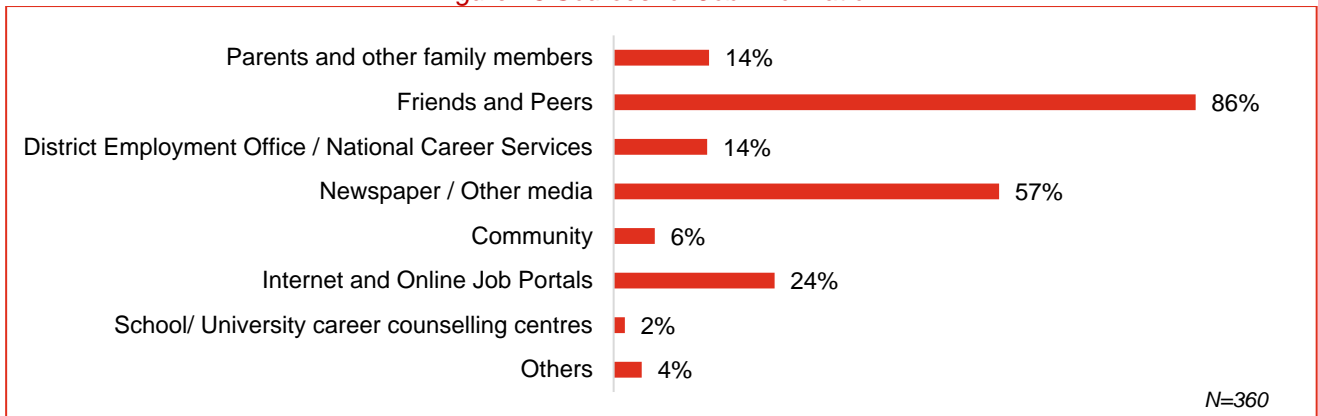


Figure 22 Preference for Work Location¹²



Location of the job seems to be a major determinant of youth's attitudes towards work. About 93% of female respondents and 89% of males wanted a job in their own hometown. Very few preferred jobs outside the district and within the state.

Figure 23 Sources for Job Information*

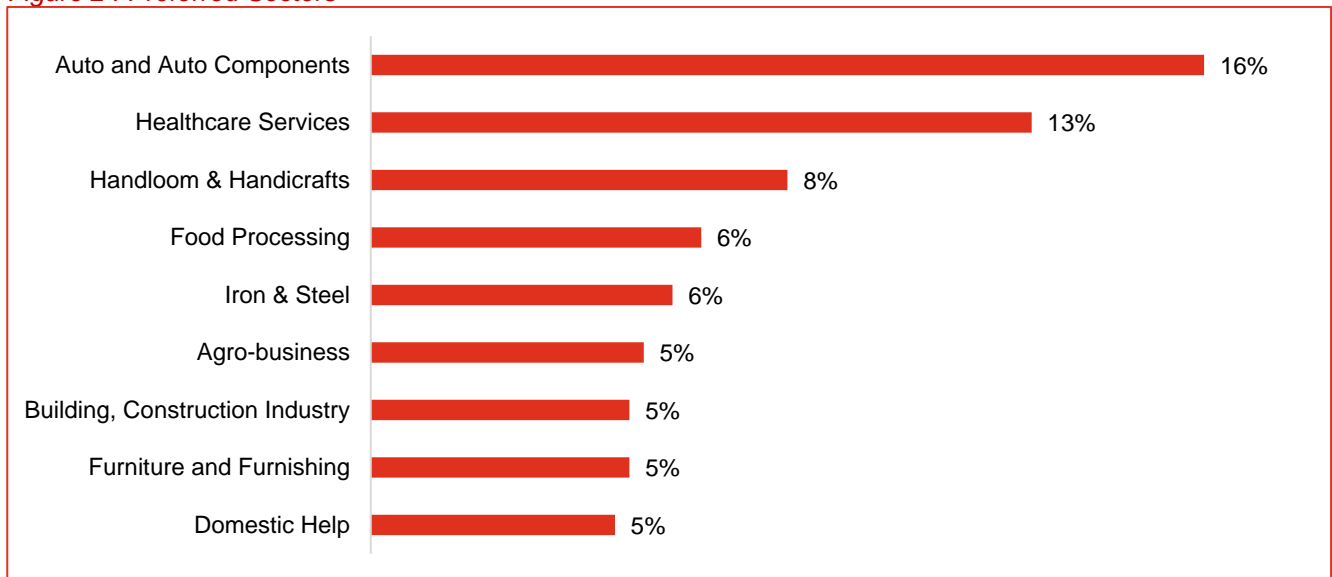


The most important source for the job related information was through friends and peers (86%) and newspaper/media (57%). About 24% responded saying they also used internet and online job portals to search for jobs.

About 16% of youth aspire to work in the auto and auto components sector and 13% wish to work in healthcare. About 8% also wish to work in handloom and handicrafts.

¹² Multiple Response, Sum may exceed 100%

Figure 24 Preferred Sectors*



*Multiple response question

2.7. Skill Training Preferences of Youth

About 72% of the total respondents are interested in undergoing part-time training courses. However, most are interested only in short term certificate courses of less than 6 months duration (68%).

Figure 25 Duration of Skill Training type interested in

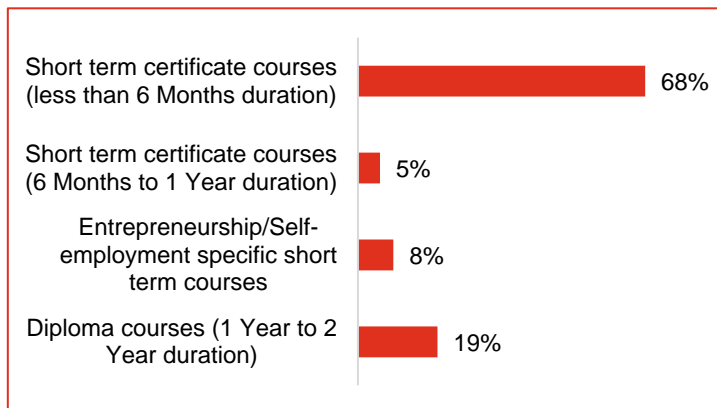
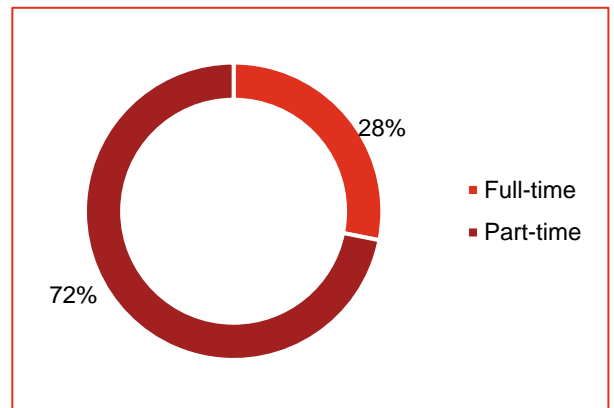


Figure 26 Skill Training type interested in



3. Employers' and Other Stakeholders' Perspective

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

3.1. Employers' Perspective

The survey covered 45 Industries covering fourteen sectors. The sector wise coverage of industries is given in

Table 11. Majority of industries were from the textile and apparel, plastics, food processing and the iron and steel sector. Of the overall sample, 22% were micro industries, 24% were small scale industries, 36% were medium industries and 18% were large industries.

Figure 27 Distribution of Industries by Size

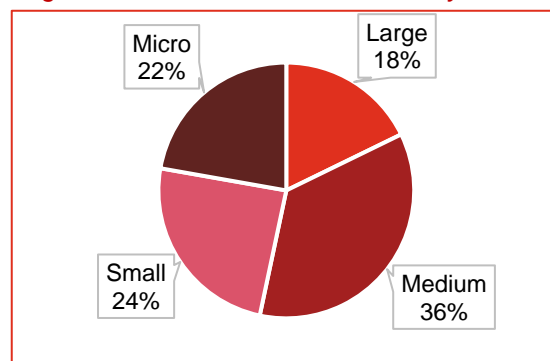


Table 11 Sector wise coverage of Industries in Employer Survey

S.No	Sector	Number of Industries Surveyed	S.No	Sector	Number of Industries Surveyed
1.	Agro-business	2	2.	IT and ITES	1
3.	Auto and Auto Components	1	4.	Leather & Leather Goods	2
5.	Building Construction Painting Industry	4	6.	Textile and Apparel	9
7.	Chemical & Pharmaceuticals	1	8.	Tourism Travel and Hospitality	1
9.	Food Processing	5	10.	Machinery Equipment	4
11.	Furniture and Furnishings	1	12.	Plastics	7
13.	Healthcare Services	1	14.	Paper and Paper Products	1
15.	Iron, Steel and Other Metals	5			

As seen in Table 12, employee reference is the major mode of recruitment (73%). Employers also use local community and media advertisements and manpower agencies for recruiting labourers. The most common challenge faced by employers was candidates' disinterest and attitude (48%), followed by high local wages (23%) and lack of prior experience (18%).

Table 12 Modes and Challenges in Recruitment Process*

Key Modes of Recruitment (n=44)			Key Challenges faced in Recruitment (n=43)		
S.No	Particulars	%	S.No	Particulars	%
1.	Campus recruitment in arts/science/commerce colleges	9%	1.	Candidate Disinterest and Attitude	48%
2.	Campus recruitment in Engineering Colleges	7%	2.	High local wages	23%
3.	Campus recruitment in ITIs/Polytechnic	11%	3.	Lack of basic education requirement	13%
4.	Employee Reference/ Other Referrals	73%	4.	Lack of requisite soft skills	15%
5.	Recruitment/ Manpower Agencies	20%	5.	Lack of requisite core skills	23%
6.	Local Community	64%	6.	Lack of Prior Experience	18%
7.	Advertisements in Newspapers	30%	7.	Nature of work requires strenuous physical labour	13%
8.	Social Networks	7%	8.	Work hours	3%
9.	Job Melas	11%	9.	Resistance by family to allow them to work	3%
10	Others	5%	10.	Attrition/Uncertainty due to involvement in Household chores	5%

*Multiple response question

Figure 29 Average distribution of workers by Sex

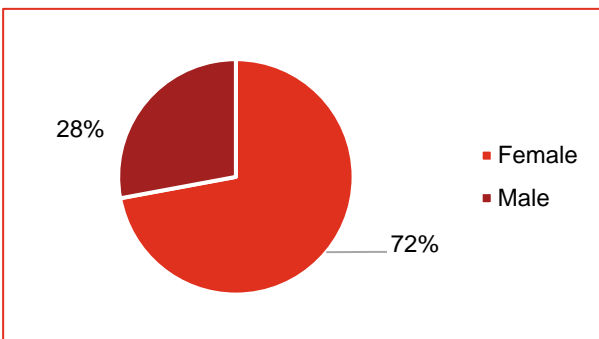
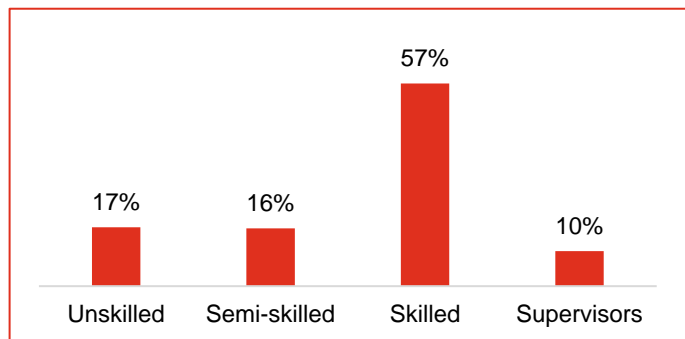


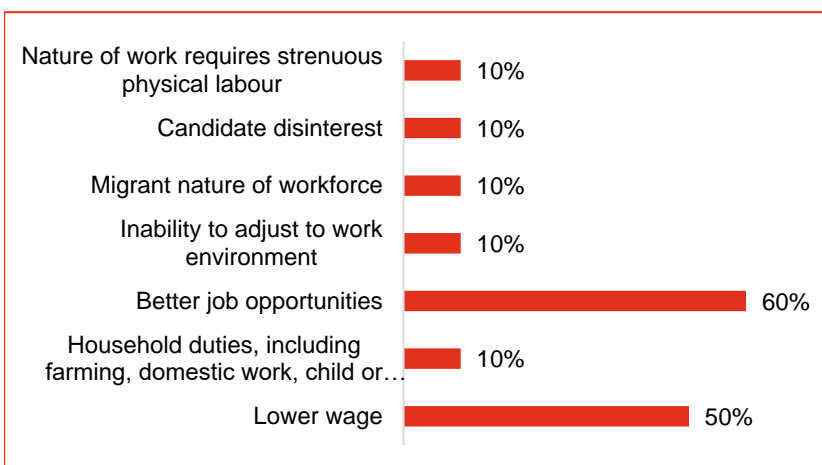
Figure 28 Distribution of workers by Skill Levels



The employers had a majority of female employees – on an average, the enterprises employed 72% females.

Skilled workers dominated the share of workforce (57%) followed by semi-skilled workers (16%) and unskilled workers (17%). 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.

Figure 30 Key causes of Attrition



Lower wage (50%) and search for better job opportunities (60%) are the reasons given by most employers for attrition.

Over 43% of the employers feel there is high growth prospects in the industries. About 30% note that the level of technology adoption in the future will be high and 18% have plans to introduce automation.

*Multiple response question

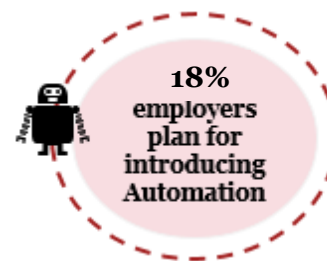
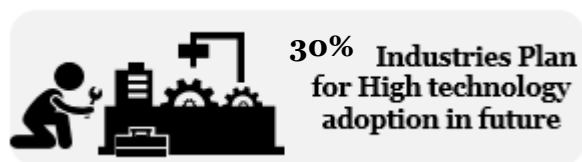


Table 13 Growth Prospects and prospective adoption of technology

Growth Prospects of Industry (n=30)	%	Level of Technology adoption (n=27)	%	Plans to adopt Technology (n=45)	%
High	43%	High	30%	Yes	18%
Medium	37%	Medium	41%		
Low	20%	Low	26%	No	53%
		Indifferent	4%	Indifferent	29%

As seen in the figure below, employers feel there is a need for upgraded domain skills among workers (54%). Other skills deemed important by employers are time management, IT and communication skills. About 37% of the employers said there would be a high demand for skilled workers in the next five years.

Figure 31 Skills required for workers

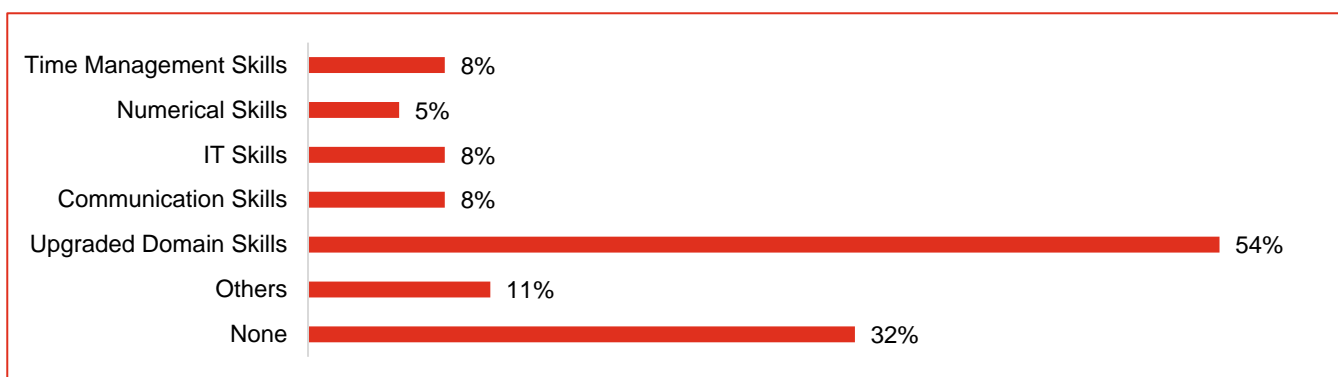


Table 14 Demand for workers by Skill Level and type of training provided to workers

	Demand for Workforce in next 5 years			Type of Training Provided for Skilled Workers	
	Minimally Skilled	Skilled	Supervisory	Type of Training	%
High Demand	12%	37%	-	Domain skills on recruitment	60%
Medium Demand	20%	26%	20%		
Low Demand	48%	22%	28%	Up-skilling to meet technical needs	40%

3.2. Other Stakeholders' Perspective

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

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

Table 15: Qualitative findings in Erode

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. Due to long hours of work in the textile sector, 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 textile mills. Skilling in these trades is necessary as most of them join as unskilled workers. Most migrants in Erode are from the southern districts of Tamil Nadu. There are also migrants from East Indian states working as unskilled workers.
6.	Skill Gaps	<ul style="list-style-type: none"> There is a need for skilled persons in food processing and textile sector.

4. Skill Gap Analysis

4.1. Skill Gap Assessment - Incremental Demand¹³ for Skilled & Semi Skilled Workforce

In the next 6 years, Erode will see a demand for about 1.4 lakh workers. Major sectors that drive the demand are manufacturing, construction, transportation and real estate.

Table 16 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	32	42	74	221	295	516	590
Allied Activities	137	194	330	956	1,355	2,312	2,642
Mining and quarrying	11	15	25	18	24	42	67
Manufacturing	9,679	14,463	24,143	19,359	28,927	48,285	72,428
Electricity, gas, water supply and other utility services	(24)	(31)	(55)	(48)	(62)	(110)	(165)
Construction	1,179	1,837	3,016	2,947	4,593	7,539	10,555
Trade & Repair Services	606	850	1,455	2,096	2,941	5,037	6,492
Hotels and restaurants	248	347	595	480	673	1,152	1,747
Transportation and storage;	602	852	1,454	1,445	2,044	3,489	4,943
Communication and services related to broadcasting	1,282	1,975	3,257	641	988	1,629	4,886
Financial and insurance activities	1,738	2,710	4,448	869	1,355	2,224	6,672
Real estate, ownership of dwelling and business services	290	437	727	725	1,091	1,817	2,544
Public Administration	155	213	369	124	171	295	664
Education; Healthcare & Social Work Activities	3,123	4,708	7,830	2,498	3,766	6,264	14,095
Arts, entertainment and recreation	609	894	1,503	487	715	1,202	2,705
Other Services	967	1,420	2,387	774	1,136	1,910	4,297
Total Demand	22,699	33,953	56,652	35,274	52,471	87,745	144,397
Total Supply	11,067	14,756	25,823	16,598	22,131	38,729	64,552
Total Skill Gap	11,632	19,197	30,829	18,675	30,340	49,015	79,844

As seen in the table, the major demand is from the growing textile industry. A skill gap of about 80,000 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.

¹³ Incremental Demand Estimates the additional stock of workforce that are to be created given the expected Economic Conditions in the period of study. This may help in estimating requirement for fresh trainings.

5. District Action Plan and Recommendations

5.1. Key Findings and Inferences

Some major findings from the study are as follows:

- **Youth Attitudes:** There is a strong disinterest among youth to move out of their hometown for work. Despite the availability of employment opportunities across the district, youth do not stay for beyond 6 months in a job and return to their hometowns.
- **Gig work:** An increasing number of youth are more interested in the cab driving, food service delivery and other service sector work that allows for flexible timings. Even graduates and diploma holders prefer these jobs as shop floor work is disliked by all.
- **Agricultural skill training:** More people are moving out of agriculture jobs (farming and casual labour). As the number of workers reduce, there is a need for mechanisation and adoption of newer practices with the latest technology. Skill training in agriculture should focus on that as the agricultural produce is the backbone for the food processing sector in the district.

5.2. District Action Plan

The district level training projects below suggests the potential areas for skill development interventions and job opportunities in the future. It identifies the potential job roles mapped with NSQF linked QPs and the potential of employment opportunities over the next six 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 Erode:

Table 17 Summary of Trainings

S No	Sector	Trades	Target (Persons)	Budget (₹)
1.	Agriculture and allied	<ul style="list-style-type: none"> • Mango grower • Banana farmer • Organic Grower • Ripening Chamber Operator • Paddy Cultivator • Tuber Crop Cultivator • Micro irrigation technician • Coconut Grower 	2,000	₹2.24 Crores
2.	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 	3,000	₹8.38 Crores
3.	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 	40,000	₹6.51 Crores

S No	Sector	Trades	Target (Persons)	Budget (₹)
		<ul style="list-style-type: none"> Fabric Mender 		
4.	Healthcare	<ul style="list-style-type: none"> General Duty Assistant Blood Bank Technician Cardiac Care Technician Diabetes Educator Emergency Medical Technician – Basic Medical Records & health Information Technician 	1,000	₹2.85 Crores
5.	Domestic Appliance Services	<ul style="list-style-type: none"> Helper Electrician Plumber (General) Field Technician – AC Field Technician – Refrigerator Field Technician – Washing Machine Field Technician – Other Home Appliances 	3,000	₹6.35 Crores
6.	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	₹3.74 Crores
7.	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 	5,000	₹16.43 Crores
Total			20,000	₹ 46.48 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 x training target for the whole project) has also been added. The total training cost for each project arrived through such a process has been added to the summary table above.

The training projects are described below:

Table 18 Training Project 1: Agriculture and allied sector

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 Erode. 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	Class V Pass	200	₹0.2 Crores
Banana farmer	4	AGR/Q0301	2	200 hours		200	₹0.2 Crores
Organic Grower	4	AGR/Q1201	2	200 hours		300	₹0.29 Crores
Ripening Chamber Operator	4	AGR/Q7504	1	200 hours		300	₹0.33 Crores
Paddy Cultivator	4	AGR/Q0101	2	200 hours		200	₹0.2 Crores
Tuber Crop Cultivator	4	AGR/Q0403	2	200 hours		200	₹0.2 Crores
Micro irrigation technician	4	AGR/Q1002	1	200 hours		400	₹0.44 Crores
Coconut Grower	4	AGR/Q0503	2	200 hours		200	₹0.2 Crores
Total Training Cost						2,000	₹2.04 Crores
Total Assessment and Certification cost (₹1,000 per candidate)							₹0.2 Crores
Total cost							₹2.04 Crores

Table 19 Training Project 2: Fabrication

Name of the Project: Training in Capital Goods – Metal and Engineering							
Key Economic Drivers:							
<ul style="list-style-type: none"> Erode has large-scale units in steel fabrication There is a constant need for skilled workers in this sector. 							
Key Partners: DMW CNC Centre							
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	10 th Class Pass	600	₹ 1.65 Crores
Assistant Manual Metal Arc Welder	4	CSC/ Q0204	1	500 hours	10 th Class Pass	400	₹ 1.1 Crores
Assistant Oxy fuel gas cutter	3	CSC/ Q0203	1	300 hours	5 th Class Pass	300	₹ 0.5 Crores
CNC Setter cum operator – Turning	4	CSC/ Q0121	1	600 hours	10 th Class Pass,	1,000	₹ 3.29 Crores
Draughtsman – Mechanical	3	CSC/ Q0402	1	400 hours	10 th Class Pass	700	₹ 1.54 Crores
Total training cost						3,000	₹ 8.08 Crores
Total Assessment and Certification cost (₹1,000 per candidate)							₹ 0.30 Crores
Total cost							₹ 8.38 Crores

Table 20 Training Project 3: Textile and Apparel

Name of the Project: Training in Textile and Apparel sector							
Key Economic Drivers:							
<ul style="list-style-type: none"> • There are new investments in the textile sector and the sector is expected to grow in the coming years. • There is also a need for reskilling existing workers in order to increase efficiency 							
Key Partners: EEDISSIA							
Job Roles:	NSQF Level	NSQF Code	Cost Category	Duration of Training	Target Group	Training Target (People)	Cost of Training (₹)
Cutting Supervisor	5	AMH/Q0610	1	300 hours	10th Class Pass, 12 th Class Pass – Special focus on Women	5,00	₹0.83 Crores
Sewing Machine Operator	4	AMH/Q0301	1	270 hours	10th Class Pass, 12 th Class Pass and migrant workers	1000	₹1.48 Crores
				120 hours (upskilling)	Existing textile sector workforce	1000	₹0.66 Crores
Fabric Checker	4	TSC/Q2301	1	540 hours	10th Class Pass, 12 th Class Pass	500	₹1.48 Crores
Merchandiser	5	AMH/Q0901	1	300 hours	Diploma/ Graduation	500	₹0.83 Crores
Quality Checker	4	TSC/Q0501	1	300 hours	10th Class Pass, 12 th Class Pass	500	₹0.83 Crores
Total training cost						4,000	₹ 6.11 Crores
Total Assessment and Certification cost (₹1,000 per candidate)							₹.40 Crores
Total cost							₹ 6.51 Crores

Table 21 Training Project 4: 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. It is one of the preferred sectors among youth 							
Key Partners: Hospitals, Nursing Colleges							
Job Roles:	NSQF Level	NSQF Code	Cost Category	Duration of Training (hours)	Target Group	Training Target	Cost of Training
General Duty Assistant	4	HSS/ Q5101	2	240	School Graduates – focus on women	200	₹0.23 Crores
Blood Bank Technician	4	HSS/ Q2801	1	1,000		100	₹0.55 Crores
Cardiac Care Technician	4	HSS/ Q0101	1	840		200	₹0.92 Crores
Diabetes Educator	4	HSS/ Q8701	2	240		100	₹0.12 Crores
Emergency Medical Technician - Basic	4	HSS/ Q2301	1	240		200	₹0.26 Crores
Medical Records & health Information Technician	4	HSS/ Q5501	1	600		200	₹0.66 Crores
Total training cost						1,000	₹2.75 Crores
Total Assessment and Certification cost (₹1,000 per candidate)							₹0.1 Crores
Total cost							₹2.85 Crores
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 22 Training Project 5: Domestic Appliances

Name of the Project: Domestic Appliances (Electrical and Electronics)							
Key Economic Drivers:							
<ul style="list-style-type: none"> During the peak tourist season, 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 - Washing Machine	4	ELE/Q3106	2	360 hours		500	₹0.88 Crores
Field Technician - Other Home Appliances	4	ELE/Q3104	2	480 hours		500	₹1.17 Crores
Total training cost						3,000	₹6.04 Crores
Total Assessment and Certification cost (₹1,000 per candidate)							₹0.30 Crores
Total cost							₹6.34 Crores

Table 23 Training Project 6: 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	200	₹0.26 Crores
Cold Storage Technician	4	FIC/Q7004	3	240 hours		300	₹0.31 Crores
Fruit Pulp Processing Technician	4	FIC/Q0106	1	240 hours		300	₹0.4 Crores
Packaging Technician	5	FIC/Q7001	1	240 hours		200	₹0.26 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		500	₹1.65 Crores
Total training cost						2,000	₹ 3.54 Crores
Total Assessment and Certification cost (₹1,000 per candidate)							₹ 0.20 Crores
Total cost							₹ 3.74 Crores
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 24 Training Project 7: Construction

Name of the Project: Training in Construction Sector							
Key Economic Drivers:							
•							
Key Partners: ITI, engineering colleges, Granite Processing units							
Job Roles:	NSQF Level	NSQF Code	Cost Category	Duration of Training (hours)	Target Group	Training Target	Cost of Training
Foreman – Electrical Works (Construction)	5	CON/Q0604	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/Q0209	1	600		500	₹1.65 Crores
Marble, Granite and Stone	4	CON/Q0106	1	600		500	₹1.65 Crores
Foreman Wet Finishing and Flooring	5	CON/Q0109	1	600		1,000	₹3.29 Crores
Bar Bender and Steel Fixer	4	CON/Q0203	1	400		1,000	₹2.2 Crores
Assistant Electrician	3	CON/Q0602	1	400		1,000	₹2.2 Crores
Total training cost						5,000	₹16.43 Crores
Total Assessment and Certification cost (₹1,000 per candidate)							₹ 0.50 Crores
Total cost							₹16.93 Crores
Key Considerations:							
<ul style="list-style-type: none"> 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. 							

5.3. Key Recommendations

Erode 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 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 Erode. 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.

Creating Awareness on Skilling:

The appetite for skill training is very low in the district among the local population as seen in the youth survey findings and stakeholder perspective. In order to make the youth recognise the employment opportunities that are available through skilling, better awareness sessions need to be conducted in schools, ITIs, polytechnics and colleges. Skill training can be introduced as part of the school syllabus.

Counselling sessions as part of skill training:

There is a need for improved counselling services as part of skill training. The study finds that youth attitudes (strong preference for flexible work and the need to be employed in their hometown) to employment is affecting their ability to continue employment. 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 Erode selected for the survey. The methodology is explained below:

To categorize blocks, the following data points were used.

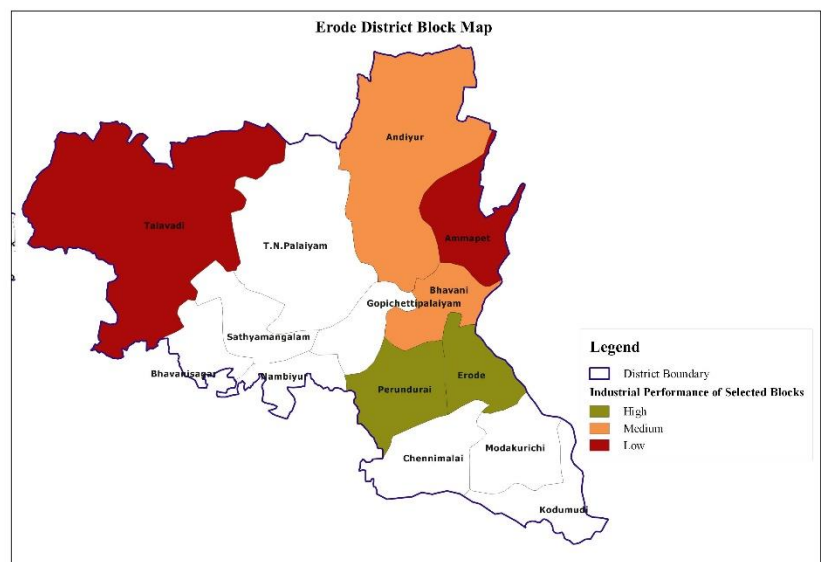
1. Count of MSME Clusters (based on DC-MSME Report)
2. Number of SIDCO Industrial Estates
3. Number of SIPCOT Industrial Estates
4. Credit Outstanding, 2017-18 at Centre-level (Annual Data published by the Reserve Bank of India)

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

Figure 32: Blocks Selected for Survey in Erode



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- Perundurai, Erode

Medium- Bhavani Gopichettipaliyam, Andiyur

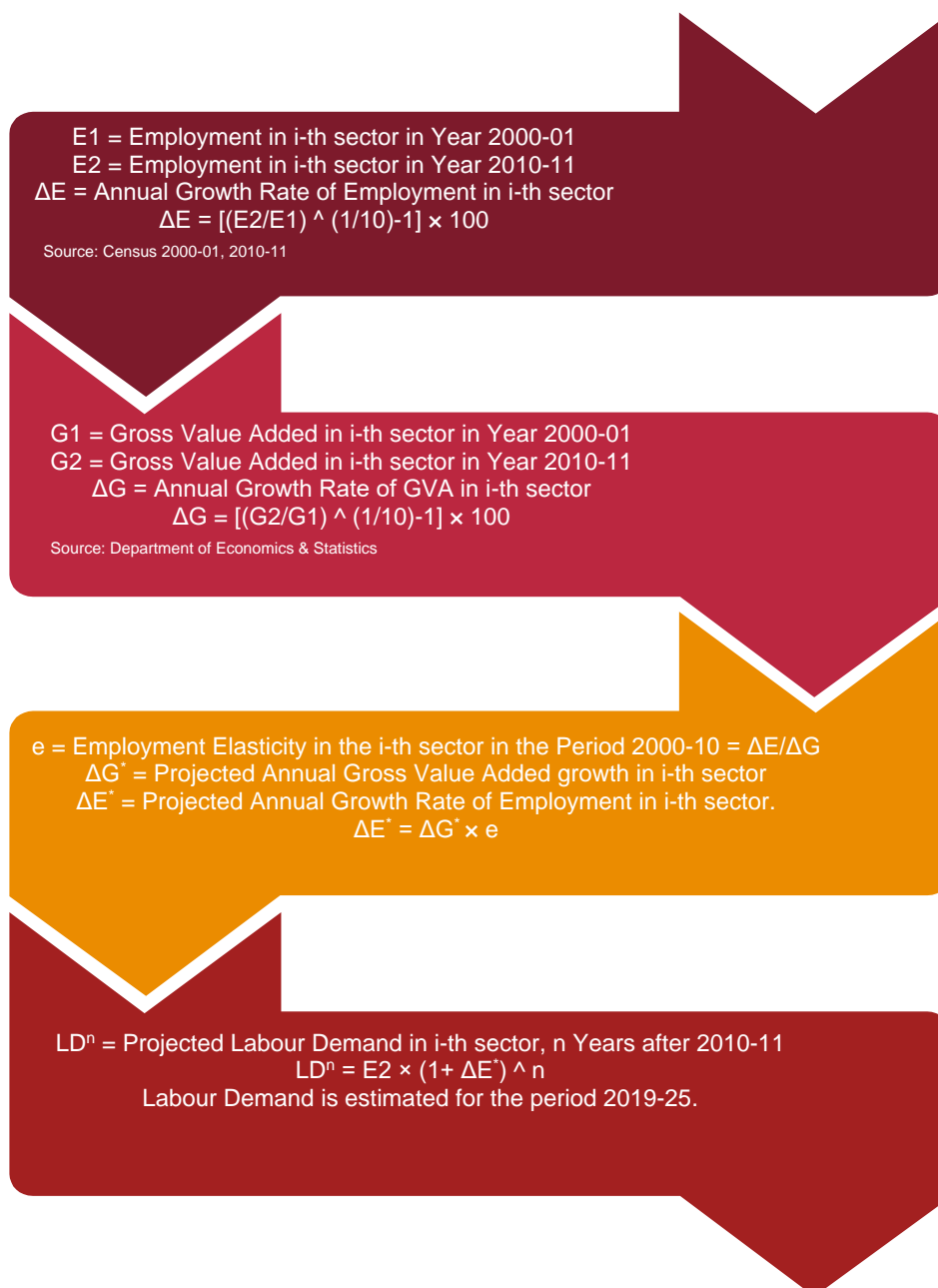
Low- Talavadi, Ammapet

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:

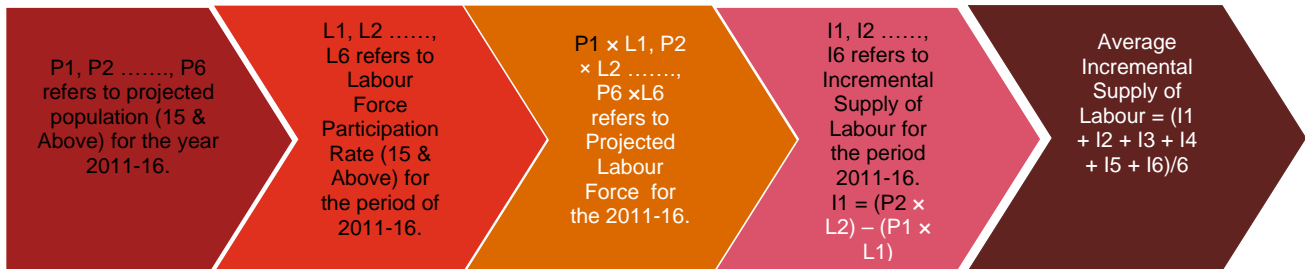
Figure 33: Steps in Demand Estimation



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 state¹⁴. 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 34: Steps in Supply Estimation



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

A.3 List of Stakeholders

Table 25: 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.	EEDISSIA	Industry Association
6.	DMW CNC Solutions	Industry
7.	Sree jagajothi Exports	Industry
8.	Prisma Garments	Industry
9.	Government ITI, Erode	Training Service Provider
10.	Erode Academy	Training Service Provider
11.	The Imaigal Trust	Training Service Provider
12.	DMW CNC Centre	Training Service Provider
13.	Skills India Foundation	Training Service Provider

