



Skilling for the Future

Skill Gap Assessment & Action Plan for Tamil Nadu

District Skill Development Plan for Krishnagiri

November 2019



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List of Abbreviations

S.No	Abbreviation	Expansion
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.	HOSTIA	Hosur Small and Tiny Industries Association
8.	HOSMEA	Hosur Micro Enterprises Association
9.	HOSMEC	Hosur Small Micro Engineering Components
10.	DIC	District Industries Centre
11.	GVA	Gross Value Added
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.	NCVT	National Council for Vocational Training
18.	NEET	Not in Employment, Education or Training
19.	NIC	National Industrial Classification (2008)
20.	NSDC	National Skill Development Corporation
21.	NSQF	National Skills Qualification Framework
22.	NULM	National Urban Livelihood Mission
23.	PMKVY	Pradhan Mantri Kaushal Vikas Yojana
24.	PSU	Public Sector Undertaking
25.	Pub. Admin.	Public Administration
26.	QP-NOS	Qualification Pack National Occupational Standards
27.	SIDCO	Tamil Nadu Small Industries Development Corporation Limited
28.	SIPCOT	State Industries Promotion Corporation of Tamil Nadu
29.	SIR	Special Investment Region
30.	SSC	Sector Skill Council
31.	TIDCO	Tamil Nadu Industrial Development Corporation
32.	TN-GIM	Tamil Nadu Global Investors Meet
33.	TNSDC	Tamil Nadu Skill Development Corporation
34.	TNSRLM	Tamil Nadu State Rural Livelihood Mission
35.	Tr. & Tou.	Trade and Tourism Sectors
36.	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

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.

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 and the State as a whole. 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

ed 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 engaged

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 the labour supply and estimating the existing and emerging skill gaps. The Skill Gap study offers insi

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 up(3 Tm100C->-3(o)14(mo(ab)-7(l)sc)-3(t3Qq2t-10(o)q2aud)-19(y)18(b)-7 sd(or)9(b)4(o)-9(95(y)18(-97(t

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

Demographic Analysis	<ul style="list-style-type: none"> • Krishnagiri district is only 23% urban (compared to the state average of 48%) as per Census 2011. However, there has been an increase in urbanization in the following years and Hosur is set to become a municipality. • The median age is set to increase from 26 years in 2011 to 30 years by 2026; the district will still have a much younger population compared to the rest of the state.
Economic Analysis	<ul style="list-style-type: none"> • The economy of the district is dominated by the Industrial sector, which consistently accounts for about 54-55% of the GVA between 2011-12 and 2016-17. • The agriculture and allied sector has a CAGR of 12% from 2011-12 to 2016-17; Industries at 8% and services sector has a CAGR of 7%, over the same period. • -18). • The central government has announced plans for a defence corridor which passes through the district. This is expected to bring in new investments related to defence manufacturing from both private and public players.
Labour Market Analysis	<ul style="list-style-type: none"> • The overall labour force participation and worker participation ratio are marginally lower at the district level than at state. • About 34% of workers in the district are self-employed, 33% are casual labourers and 18% are wage employed.
Education & Skill Development	<ul style="list-style-type: none"> • The Gross Enrolment Ratio at both Primary and Upper Primary are higher than the state averages. The dropout rates are marginal 1.8% at the primary level and 1.1% at the upper primary level. • The College of Poultry Production and Management, Hosur is taking steps to offer a specialised B.Tech. in Poultry Technology. • Most large scale companies have their own training programmes after which they offer employment within the company.
Findings from Primary Survey	
Youth Profile and Aspirations	<ul style="list-style-type: none"> • About 28% of the youth respondents are Not in Education, Employment or Training (NEET), whereas 23% are self-employed. • Youth respondents aspire mostly to be self-employed (37%) or have a salaried job in the private sector. • Only 18% are aware of skill training programmes but 87% indicated an interest to undergo part-time skilling. • Female respondents aspired for jobs in construction (39%) and food processing (30%) sectors. Males mostly preferred auto components (30%) and the iron and steel fabrication sectors (19%).
Employer & Other Key Stakeholder Perspectives	<p>Quantitative Survey</p> <ul style="list-style-type: none"> • Common modes of recruitment included employee reference, passing information through local community and media advertisements. • Skilled workers dominated the share of workforce (43%) followed closely by semi-skilled workers (34%). • The most common challenge faced by employers was the inability to pay higher wages and the presence of several better paying jobs in the informal sector. • Most employers prefer minimally skilled workers who can be trained on the course of the job. • About 20% of industries indicated there is a potential for automation in the industry. <p>Qualitative Inputs</p> <ul style="list-style-type: none"> • Local youth do not prefer shop-floor roles and prefer white-collar jobs. • Only large-scale units are able to automate or use the newest technology. • Traditional family attitudes prevent women from working in the manufacturing sector. Most women stick to job roles such as tailoring, front office executives, etc.
Incremental Demand	<ul style="list-style-type: none"> •x

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

- Training Hub for Defence Manufacturing
- Training to be provided through MSME Associations
- Creating Awareness on Skilling and conducting counselling sessions
- Skilling for Migrant Labourers

1. District Profile

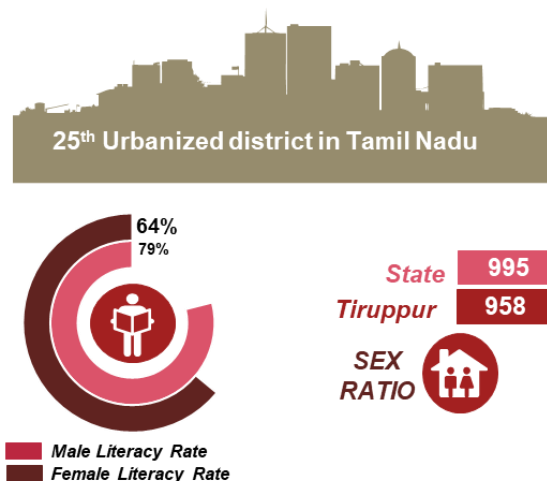
Krishnagiri district was carved in 2004 from the district of Dharmapuri. It is located adjoining the states of Andhra Pradesh and Karnataka. The close proximity of Bangalore to the district has strategically helped in the industrial development of Krishnagiri.

1.1. Demographic Profile

Table 1: Key Demographic Indicators– Krishnagiri vs Tamil Nadu¹

SN	Indicator	Krishnagiri	Tamil Nadu
1	Total population	18,79,809	72,147,030
2	Female Population	9,19,577	36,009,055
3	Population Density per sq.km (2011)	367	555
4	Urbanization	23%	48%
5	SC population (as % of total population)	14%	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)	36%	35%
9	SC population aged 15-34 years (as % of SC population)	38%	37%
10	ST population aged 15-34 years (as % of ST population)	33%	35%
11	Literacy rate	71%	80%

Snapshot of Krishnagiri's Demography



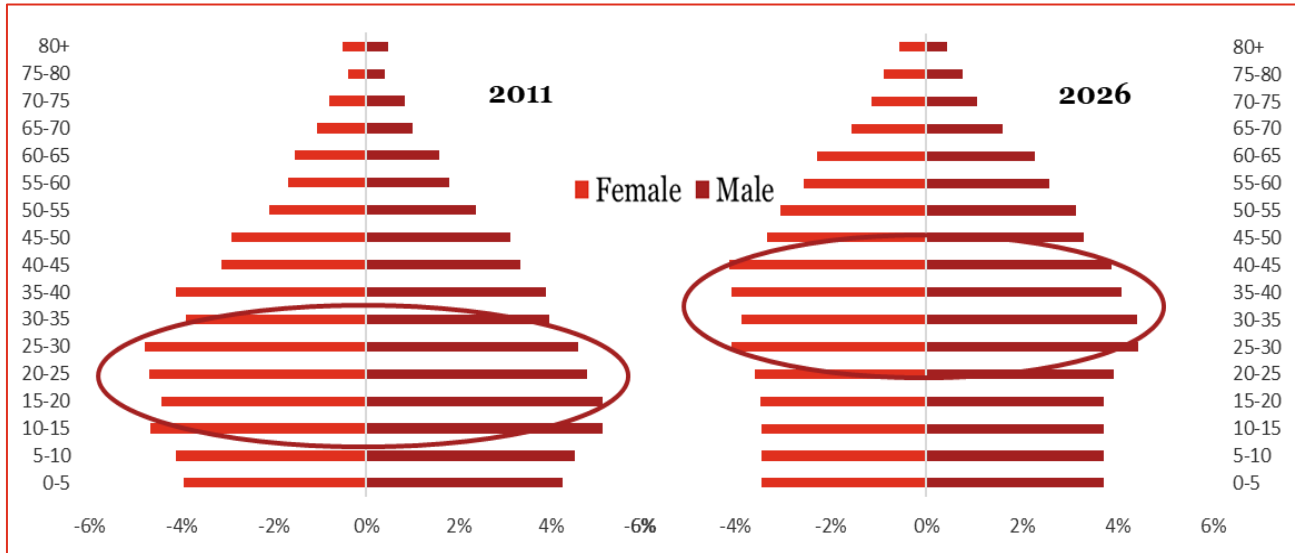
Key Highlights from the analysis of Census Data:

- Population Growth and Urbanization:** The Decadal growth rate of the population in the district was **29%** between 2001 and 2011, compared to **16%** at state level. The share of urban population in the district is 23% much lower than the state average of 48%.

¹ Census 2011 & 2011

- **Literacy:** The district had a female literacy rate of 64% while the male literacy rate was 79%. These are lower than the corresponding literacy rates at the state level.
- **Youth Demography:** Over 36% 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. The population is set to get older in 2026 with a median age of around 33 years, with 35% of the population in the age group of 35-59 years, as illustrated in the age-wise population pyramid of the district presented below.

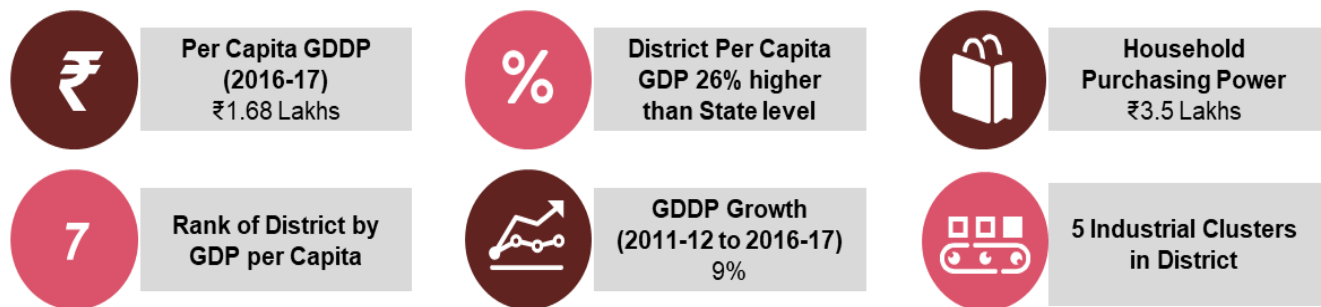
Figure 1 Age-wise Population Pyramid of Krishnagiri (2011 vs 2026)²



1.2. Economic Profile

As seen in Figure 2, Krishnagiri ranks seventh in per capita GDP across the state. Between 2011-12 and 2016-17, the GDDP grew by 9%; and the District ³.

Figure 2 Key Economic Indicators of Krishnagiri District



² Age wise Population projected for 2026 based on age group wise life expectancy, birth and death rates

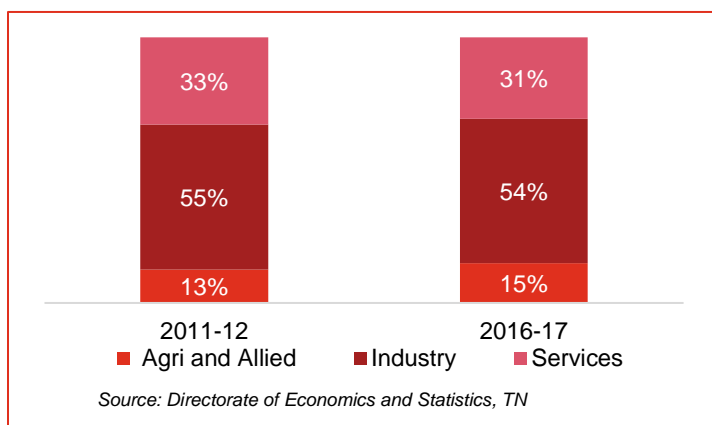
³ Household Purchasing Power is calculated from the total purchasing power (disposable income after savings/ investments) of the district, divided by the projected number of households (savings/ investment data calculated from RBI database on savings). Data downloaded from districtmetrics.in, and calculated based on data from Reserve Bank of India, NSSO and Census of India, 2011. A strong correlation exists between the Per Capita GDP, the Banking Sector indicators (adjusted to population) and the consumption expenditure (disposable income) reported under NSSO at the national and state level. This relationship was further verified with data over several years. The state level purchasing power is then further broken down to the district level based on the district level banking data (savings and deposits) and the district level consumption estimates of the NSSO.- Source: Districtmetrics.com

1.2.1. Sector wise Analysis⁴

Figure 3 Sectoral Snapshot of GVA 2016-17



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

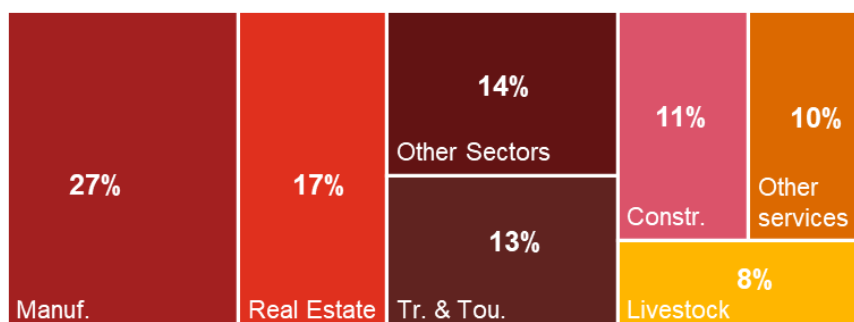


The economy of the district is dominated by the Industrial sector, which consistently accounts for about 55% of the GVA. The agriculture and allied sector has a CAGR of 12% from 2011-12 to 2016-17; Industries CAGR is at 8% and services has a CAGR of 7%.

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

Sector	2012-13	2013-14	2014-15	2015-16	2016-17	CAGR
Agri & Allied	-2%	25%	11%	12%	15%	12%
Industry	8%	6%	0%	19%	9%	8%
Services	9%	11%	5%	5%	5%	7%

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

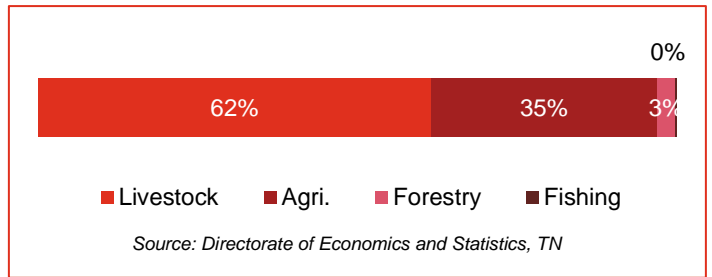


Though the share of manufacturing sector has decreased from 30% in 2011-12 to 27% in 2016-17, it still is a major contributor to the economy. Real Estate has also seen a steady growth.

⁴ Directorate of Economics and Statistics, Tamil Nadu

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

Figure 6 shows the share of the different components in the agriculture and allied sector GVA of 2016-17. Livestock has had the major share (62%). The district has large poultry-farming units. The College of Poultry Production and Management is located in Hosur, which offers specialised courses for developing poultry technologies. Another allied activity carried out here is sericulture. Over 5,000 acres of land is under mulberry cultivation in Krishnagiri.

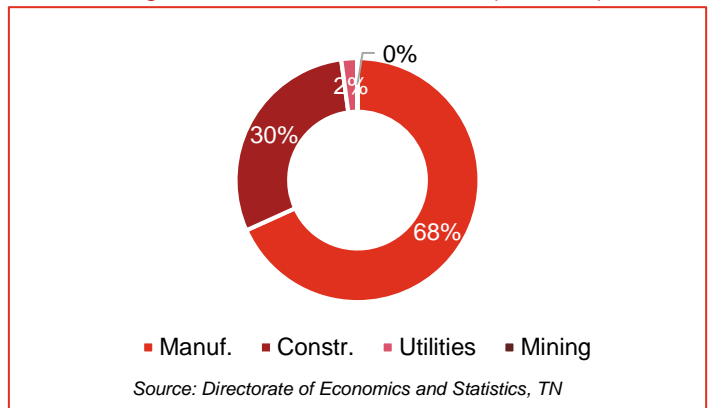


Given the climate here, floriculture has also been practised. A cut flowers cluster is established at Bargur, which ranges.

Other major crops grown here are mangoes, paddy, coconut, ragi, millets and vegetables.

Manufacturing makes up 68% of the industrial sector GVA. There are several largescale manufacturing units in auto and auto components, watches, cookers, etc. This has helped several MSME units in these sectors to come up.

Figure 7 Industrial Sector GVA (2016-17)



The central government has announced plans for a defence corridor which passes through the district. Several large players have promised investments for the corridor. This would be another boost to the industries here. Sectors like fabrication, precision engineering, and testing have scope for growth in the future.

The city of Hosur is being made into a corporation. Hosur is also in close proximity to Bangalore which has spurred several new construction activities here.

Key Clusters and Traditional Industries		
Auto Components, Hosur	Printing, Krishnagiri	Cut Flowers, Bargur
Granite polishing, Krishnagiri	Mango pulp extraction, Krishnagiri	Coir, Kaveripattinam

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 general purpose machinery	26	2,63,665	8,890	13%	342
Manufacture of transport equipment n.e.c.	25	1,68,463	10,609	16%	424
Manufacture of jewellery, bijouterie and related articles	11	1,16,099	1,980	3%	180
Manufacture of other fabricated metal products; metalworking service activities	63	66,284	2,446	4%	39
Manufacture of non-metallic mineral products n.e.c.	48	61,751	3,534	5%	74

Industry	No. of Units	Gross Value Added (share in total GVA)	No. of Employees	Share of Employment	Average workers per unit
Manufacture of measuring, testing, navigating and control equipment; watches and clocks	5	52,999	6,347	9%	1,269
Manufacture of paper and paper products	25	46,260	971	1%	39
Manufacture of basic iron and steel	17	42,366	548	1%	32
Manufacture of parts and accessories for motor vehicles	31	41,410	6,899	10%	223
Manufacture of electric motors, generators, transformers and electricity distribution and control apparatus	8	32,100	1,916	3%	240
Processing and preserving of fruit and vegetables	36	29,107	1,443	2%	40
Manufacture of electronic components	9	26,948	629	1%	70

Source: Annual Survey of Industries 2014-15

According to the ASI 2014-15, manufacture of auto components and general-purpose machinery have the maximum number of factories and persons employed. Other major industries are manufacture of watches and jewellery.

Existing Industrial Estates

- Govt Industrial Estate, Krishnagiri
- SIDCO, Uthangarai, Bargur, Pollupalli
- SIPCOT, Hosur, Bargur
- CFC for Printing cluster, Krishnagiri
- CFC for Engineering Cluster, Hosur

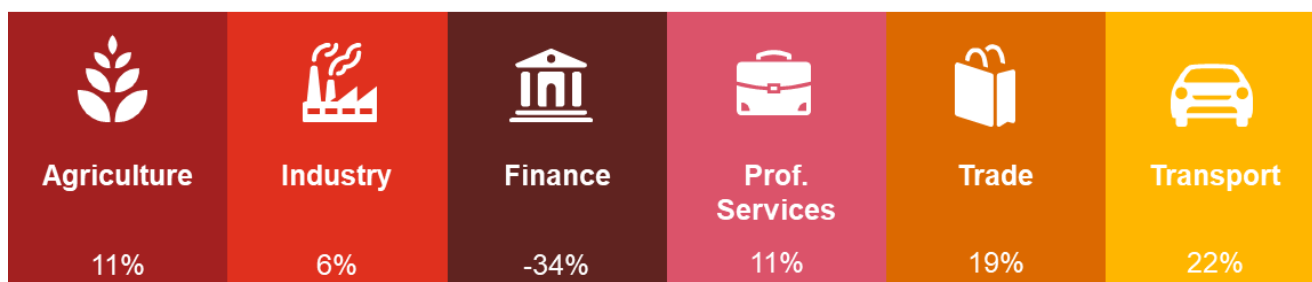
Real estate, and travel and tourism are major contributors to service sector GVA. The increasing urbanization rate in the district has increased the demand for real estate.

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 transport, agriculture, industry and trade

According to the data collected from the RBI⁵, the transport sector has seen the highest credit growth at 22%. The manufacturing industry and trade have also seen a significant growth.

Another advantage of Krishnagiri is that the district South Corridor intersect. This has made the district a natural choice for several industries. GMR is planning a Special Infrastructure Region (SIR) here at a span of 2,100 acres as part of the Make in India initiative.

Other key investments and sectors include:

Table 4 Key Investments in Krishnagiri

Sector	Company Name	Project Name	Cost
Retail	Cleveland Cyclewerks	Hosur Cleveland CycleWerks Showroom Project	-
Electrical & Electronics	Delta Electronics India Pvt. Ltd.	Gurubarapalli (Hosur) Power Electronics & Energy Management Products Plant Expansion Project	883 Crore
	Exide Industries Ltd.	Hosur Lead Acid Batteries Expansion Project	113.5 Crore
Food Processing	Government Of Tamil Nadu	Krishnagiri Mega Food Park Project	-
Renewable Energy	Raasi Solar Energy Pvt. Ltd.	Krishnagiri Lithium Ion Battery/Cells Plant Project	-
Infrastructure	Tamilnadu Waste Mgmt. Ltd.	Bargur Integrated Common Hazardous Waste Treatment, Storage & Disposal Facility Project	80 Crore

⁵ Source: geocrede.com

1.3. Labour Market Profile⁶

The overall labourforce participation and worker participation ratio are marginally lower at the district level than at state. About 34% of workers in the district are self-employed, 33% are casual labourers and 18% are wage employed.

Figure 10 Key Labour Market Indicators⁷

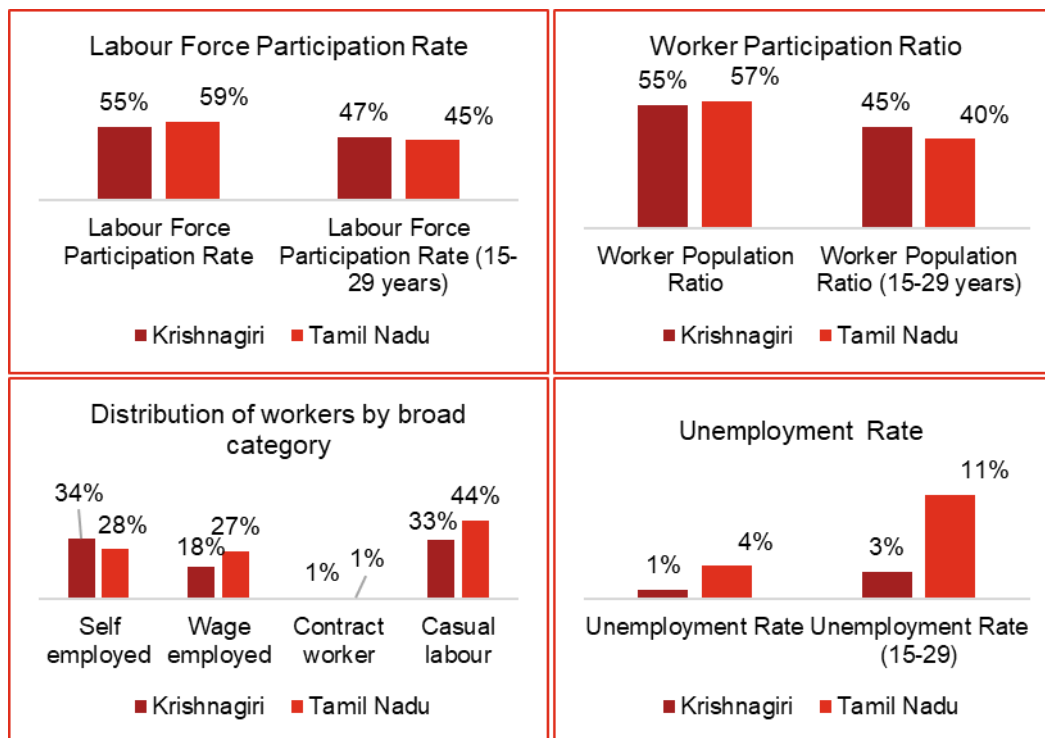
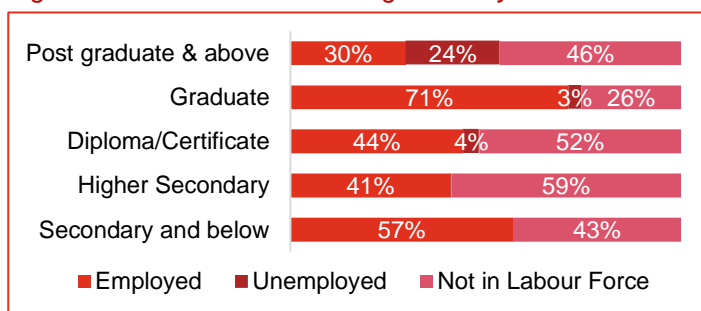


Figure 11 Distribution of Working status by Qualification: District Level Estimates



The education-level classification of the district population reveals that a significant population is not in the labour force. Among graduates and diploma holders, 52% and 63% respectively are not in the labour force. The youth survey conducted in the district also shows that about 28% of the overall respondents are neither in employment, nor in education nor in any training.

Table 5: LFPR and Unemployment Rate by gender & Location

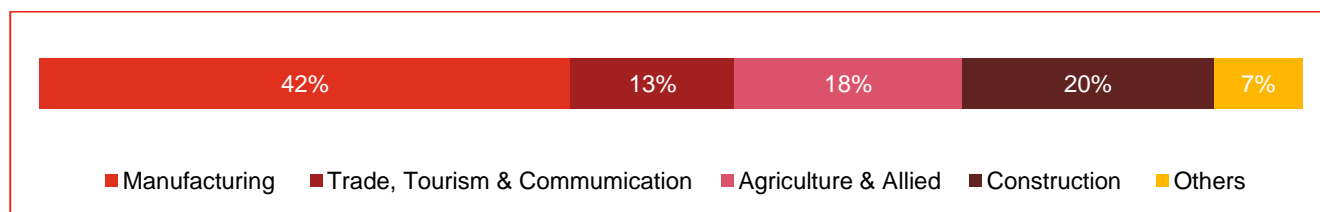
Sex	LFPR		Unemployment Rate	
	Rural	Urban	Rural	Urban
Male	80%	70%	0.5%	3.7%
Female	34%	16%	0.8%	3.5%

Disaggregation by area and sex, it is found that females have a rural labour force participation rate of 34%, more than double the LFPR in urban areas (16%). Given the constant demand for labour in the district, the unemployment numbers are very low.

⁶ Analysis in this section are based on the District Level Estimates, EUS, 2013-14, Labour Bureau

⁷ District Level Estimates, EUS, 2013-14, Labour Bureau

Figure 12 Sector-wise share of Employment



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

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

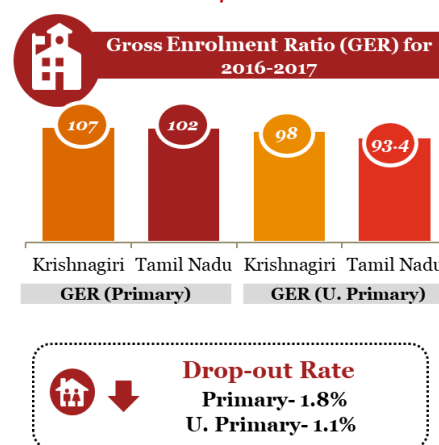
1.4. Education and Skill Development Profile

1.4.1. Education Profile

The Gross Enrolment Ratio at both Primary and Upper Primary are higher than the state averages. The dropout rates are marginal 1.8% at the primary level and 1.1% at the upper primary level.

Krishnagiri has 6 ITIs of which one is government run. There are also 10 polytechnics including 3 government run ones.

Figure 13 GER and Drop-out Rates - DISE



1.4.2. Vocational Education and Skill Development Profile

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

Under the PMKVY scheme, training institutes offer courses on CCTV and collar panel installation, food processing, agriculture, etc. The skilling courses offered by TNSDC focus on nursing, midwifery, tailoring and accounts.

Table 6 Vocational Training under Short Term Skill Development Programs⁸

Scheme	Sector	Job Role	No. of Training Centres	Actual Intake
Pradhan Mantri Kaushal Vikas Yojana	Electronics and Hardware	CCTV Installation Technician	1	-
		Solar Panel Installation Technician	1	-
	Media and Entertainment	Hairdresser	1	-
	Agriculture	Organic grower	1	-
	Food Processing	Traditional Snacks and Savoury Maker	1	-
Tamil Nadu Skill Development Programs	Logistics	Documentation Assistant	1	-
	IT/ITeS	Domestic Data entry Operator	1	20
		Tailor (Basic Sewing Operator)	1	80
	Information And Communication Technology	Accounts Assistant using Tally	1	40
	Tourism & Hospitality	Food & Beverage Service Steward	1	20
		Multi-cuisine Cook	1	20
	Retail	Retail Operations	1	230
Medical And Nursing	Nursing Aides	2	90	

⁸ 2017-2018 training year report.

Scheme	Sector	Job Role	No. of Training Centres	Actual Intake
		Midwifery Assistant	1	20
		Basic of Anatomy & Physiology	1	20

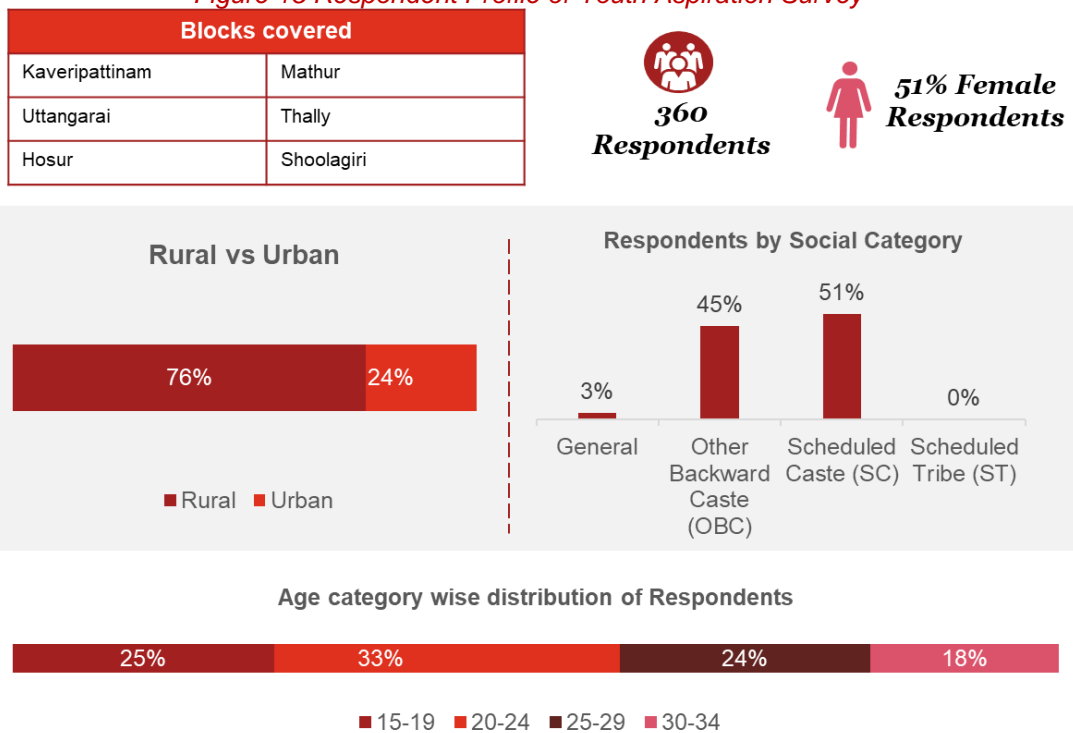
2. Youth Perspective

The study covered youth, employers, industrial associations and other key stakeholders to understand the demand and supply side perspectives of skill ecosystem in the district. The information was collected through both quantitative and qualitative surveys.

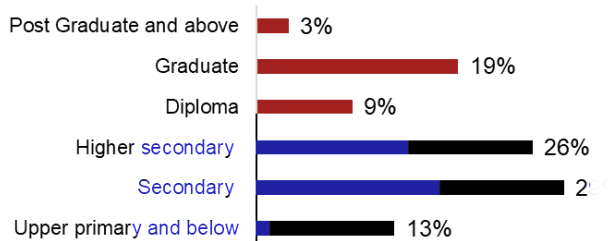
2.1. Profile of Respondent Youth

A total of 360 youth in the age group of 15-34 years were covered through a structured household survey tool. This covered a sample of six blocks out of the overall 30 blocks in the district – Kaveripattinam, Thally, Mathur, Uttangarai, Hosur and Shoologiri. About 51% of the overall respondents were female and about 76% were from rural areas. The survey has tried to achieve a balanced representation of various socioeconomic and demographic characteristics of the population.

Figure 15 Respondent Profile of Youth Aspiration Survey



Respondents by Educational Attainment



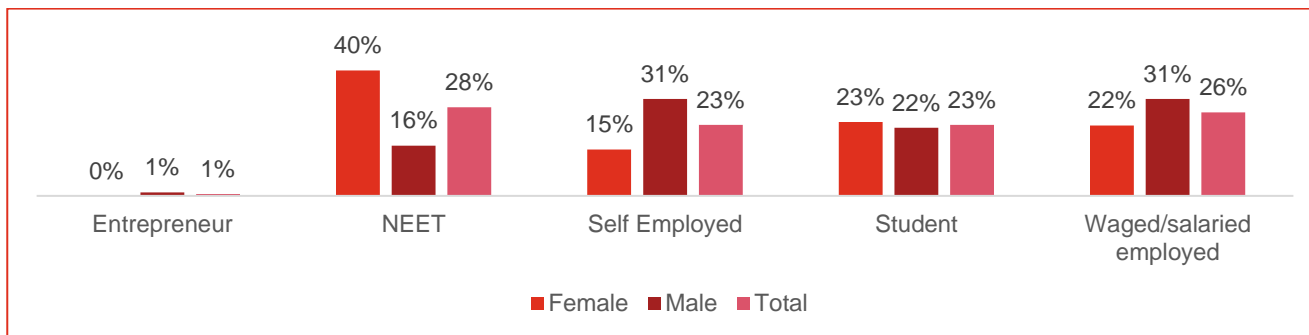
• 94% respondents were from the BPL (below poverty line) category

Household
 Annual Income of not more
 than Rs. 10,000

2.2. Respondent's Current Status

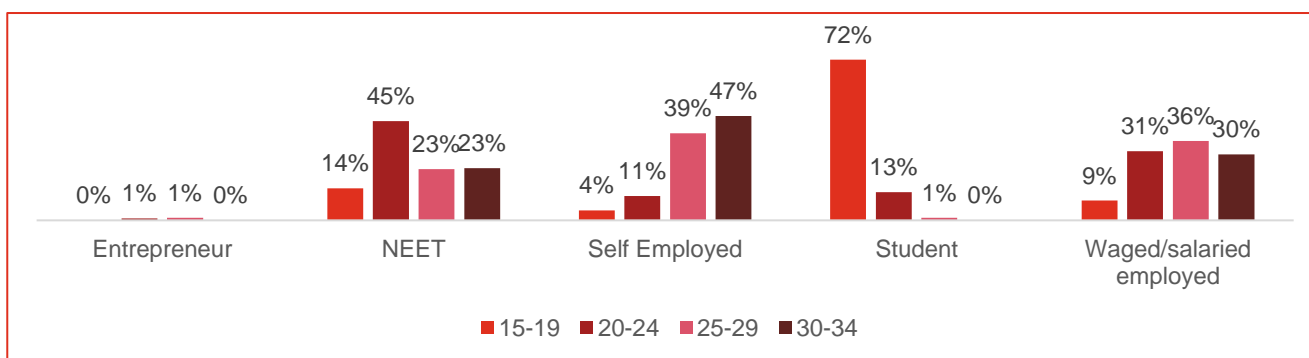
The figure below illustrates the gender wise classification (current status) of the respondents interviewed during the household survey. The female respondents were predominantly part of the NEET category (40%); and 22% were in a wage/salaried employment. Among the male respondents, 23% identified as students.

Figure 16 Current Status of Respondent by gender



Going by the age of the respondents, 47% of the respondents between 30-34 years of age have expressed their aspiration to become self-employed. This is in keeping with the qualitative findings, which shows that most of the entrants into the labour force try to gain experience in order to set up their own working arrangements self-employment or entrepreneurship.

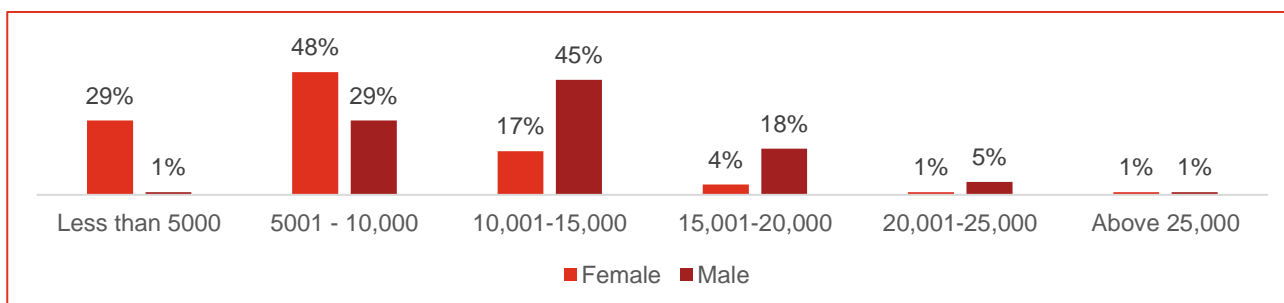
Figure 17 Current Status of Respondent by Age Category



2.3. Economic Engagement of Youth

As seen in Figure 18, 48% of female respondents reported that they receive an income of 5,000-10,000 per month. Among males, 45% received an income between 10,000-15,000 per month. Interviews with employers reveal that they are unable to pay above 10,000 per month for entry-level jobs and this is a major hindrance to attracting workers.

Figure 18 Distribution of Respondents across Monthly Income Category across gender



The table below gives the employment category of respondents according to their educational qualification. Across the different education levels, most are employed as skilled workers. About 35% of respondents with an educational qualification of upper primary and below are involved in livestock related activities.

Table 8 Education Qualification of Respondents and Employment Type*

	Upper Primary and Below	Secondary	Higher secondary	Diploma	Graduate	Post Graduate
Farm Activities	9%	12%	3%	5%	-	-
Non-Timber Forest Produce	5%	17%	5%	-	-	-
Livestock	35%	17%	15%	16%	15%	20%
Unskilled worker	-	-	3%	16%	31%	60%
Skilled worker (tailor, mason, electrician, plumber etc.)	50%	56%	70%	53%	50%	40%
Petty Business/Trade/Manufacturing	-	6%	13%	5%	8%	-
Major Business/Trade/Manufacturing	-	-	-	11%	-	-
Others	2%	2%	-	5%	-	-
Number of respondents	45	66	40	19	26	5

Multiple response question

2.4. Youth under NEET Category

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

About 40% of the NEET category respondents were females. Majority of the NEET respondents (45%) were between the age group of 20-24 years. About 37% of the NEET respondents reported to have completed their Diploma course and 30% had completed their graduation.

Majority of respondents (52%) under the NEET category claimed that the presence of only low paid jobs has been the reason for their status of not being engaged in economic activities. **Table 9** shows the profile of NEET category respondents based on their profile and their desire to enter the workforce. Though 83% of NEET category respondents wish to work, only 51% of females in the category are actively seeking for employment. About 35% were searching for a job during the past 6 months.

Table 9 NEET Category Respondents

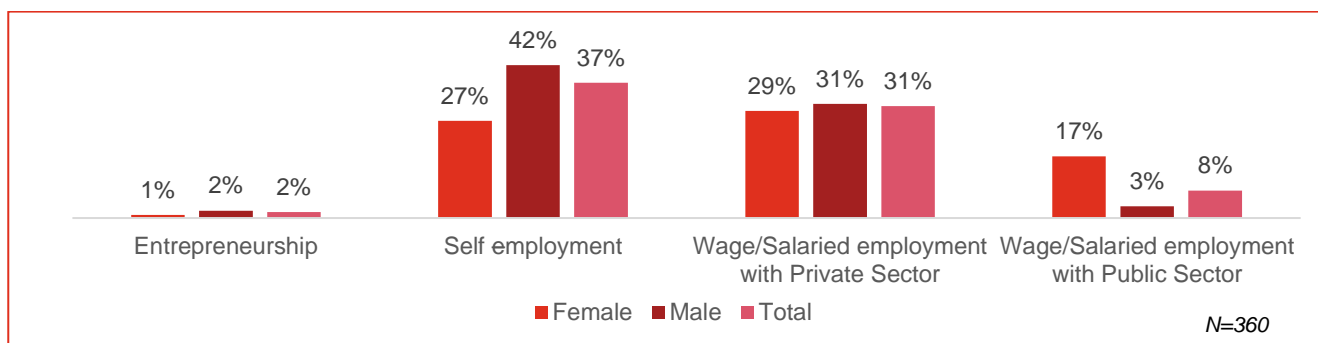
Duration in NEET Category (n=101)	Wish to Work		
	Female	Male	Total
Less than 6 months	14%	29%	18%
6 months - 1 year	10%	29%	15%
1- 2 years	23%	14%	21%
2- 3 years	15%	18%	16%
3 - 4 years	11%	4%	9%
4 - 5 years	12%	4%	10%
More than 5 years	15%	4%	12%
	Actively Seeking Work (n=92)		
	Female	Male	Total
Yes	51%	92%	64%
Total	51	25	76

Only 18% of respondents are aware of government run skill development programmes and only 5 respondents out of 360 have undergone any such training.

2.5. Youth Career Aspiration

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

Figure 19 Career Aspiration of Youth



The main factors determining the aspiration of the youth are Salary (wages) / Income (97%), Social Status (37%) and Gender suitable role (46%). About 53% of the total respondents feel they are completely prepared for requirements for a job. About 25% respondents also feel that the availability of job opportunities in the district is somewhat inadequate.

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

Factors Determining Aspiration* (n=360)	Responses	Perception of Preparedness for Jobs (n=360)	Responses
Salary (wages) / Income	97%	Completely Prepared	53%
Gender suitable role	46%	Largely Prepared	7%
Social Status	37%	Moderately Prepared	33%
Opportunities for promotion and career development	20%	Somewhat prepared	6%
Closeness to Residence	19%	Availability of Job Opportunities (n=360)	
Safety / Security	5%	Neither adequate nor inadequate	64%
Traditionally Acquired Skills / Family Business	4%	Somewhat adequate	5%
Emigration Prospects	3%	Somewhat inadequate	25%
Employer provided benefits and perks	2%	Very adequate	1%
Salary (wages) / Income	97%	Very inadequate	5%

*Multiple response question

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

Table 11 Career Aspiration – Challenges in pursuing desired career

Challenges (n=360)	Responses*	Challenges (n=360)	Responses*
Lack of sufficient education qualification	24%	Lack of work experience	2%
Unsafe working environment	31%	Low financial strength	21%
Lack of vocational skills	12%	Pressure related to getting married	21%
Lack of jobs locally	21%	No Challenge	17%

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

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

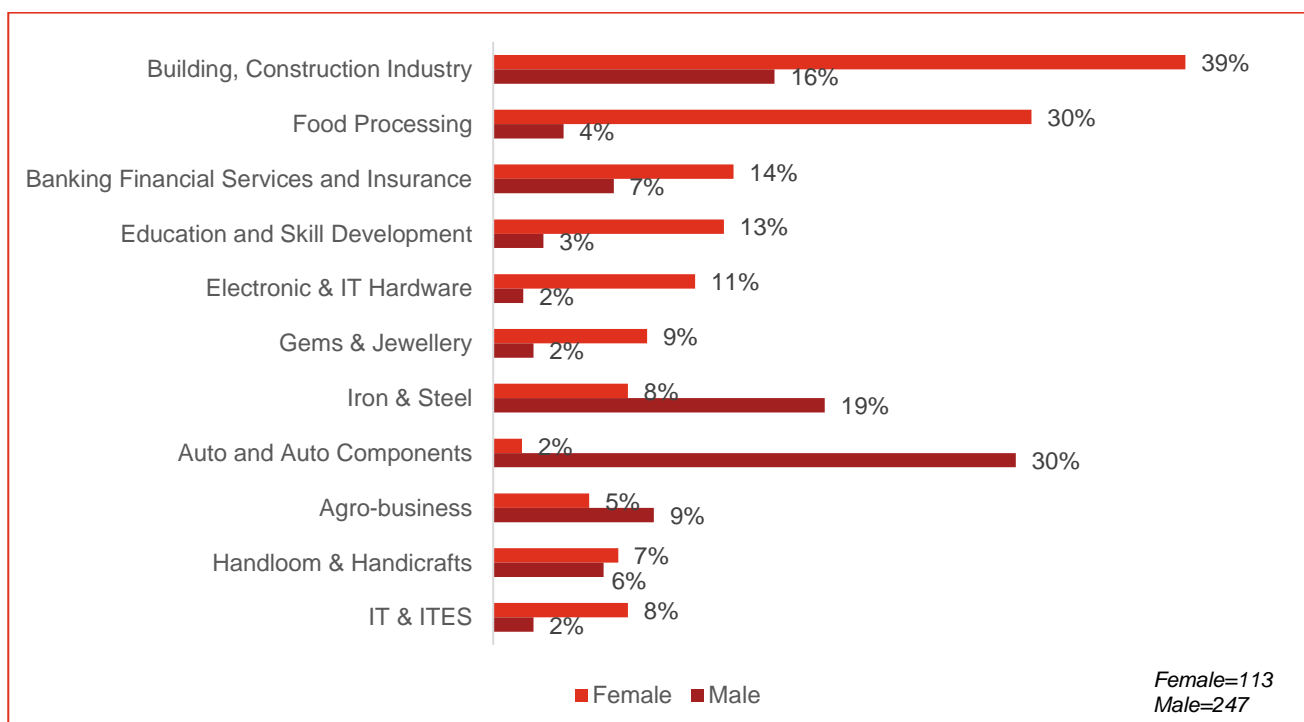
Table 12 Key Requirements to enhance employability and steps to achieve aspirations

Key Requirements to enhance employability* (n=360)			
Requirements	Responses	Requirements	Responses
Education attainment (level of education)	27%	Years of Relevant Work Experience	25%
Soft skills	33%	Performance in interviews	3%
Certifications of Technical Skill	13%	Relevant work experience in similar position or field	1%
Key Skills Required for desired job*			
Clear communication	5%	Leadership	1%
Coordination Skills	17%	Creativity, originality and initiative	1%
Team work	73%	Complex problem-solving	8%
Time management	53%	Attention to detail	1%
Analytical thinking	9%		
New Steps to achieve aspirations*			
Steps	Responses	Steps	Responses
Already in Pursuit	38%	Apprenticeship / Gathering Work Experience	44%
Vocational/ Skill Training	7%	Continuing Education	30%

*Multiple response question

Female respondents aspired for jobs in construction (39%) and food processing (30%) sectors. Males mostly preferred auto components (30%) and the iron and steel fabrication sectors (19%).

Figure 20 Sectors aspired by respondents



75% of the total respondents stated that they were not interested to take up any gig work.

The median wage expectation 20,000 per month. Around 34% of the respondents have 20,000. Male respondents aspired for higher salaries compared

to their female counterparts. Respondents currently in education system had higher income expectation, 10% aspired more than 40,000 monthly.

Figure 21 Aspired monthly salary of respondents

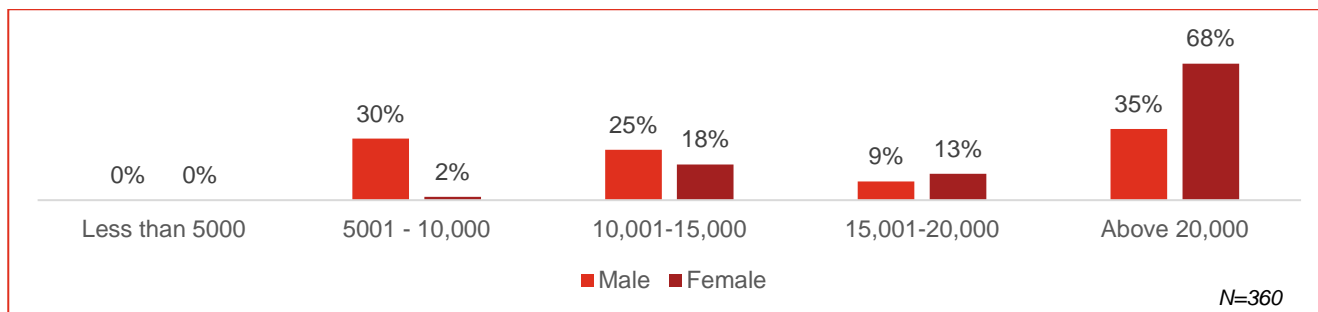
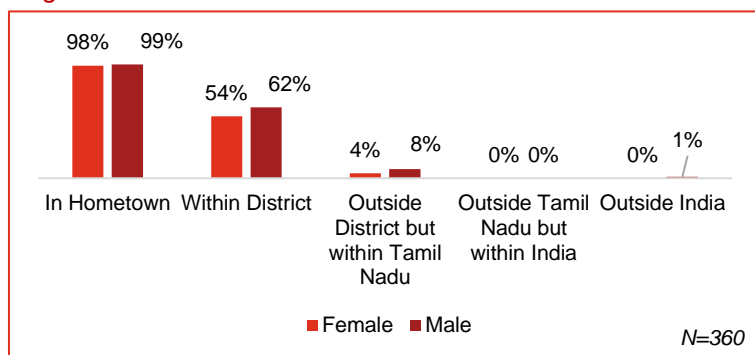
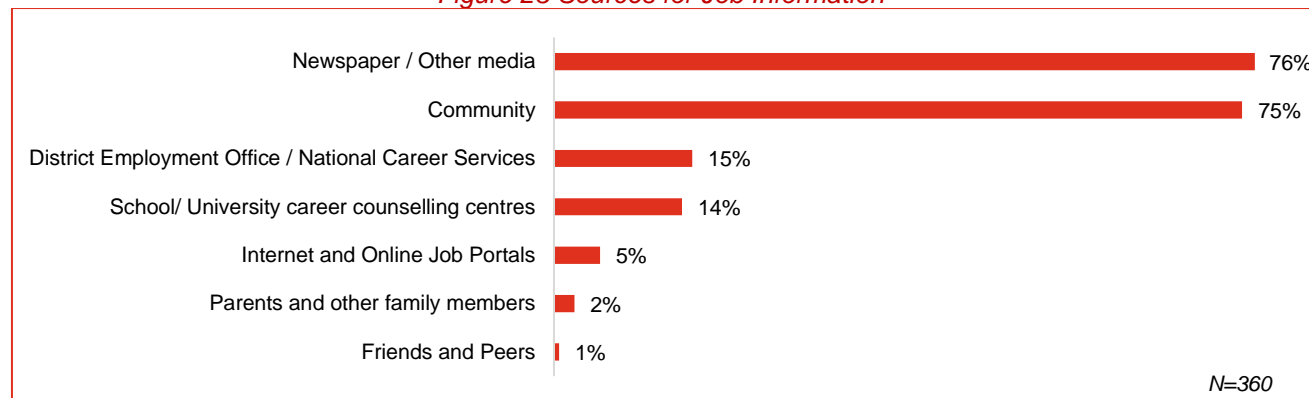


Figure 22 Preference for Work Location¹⁰



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

Figure 23 Sources for Job Information*

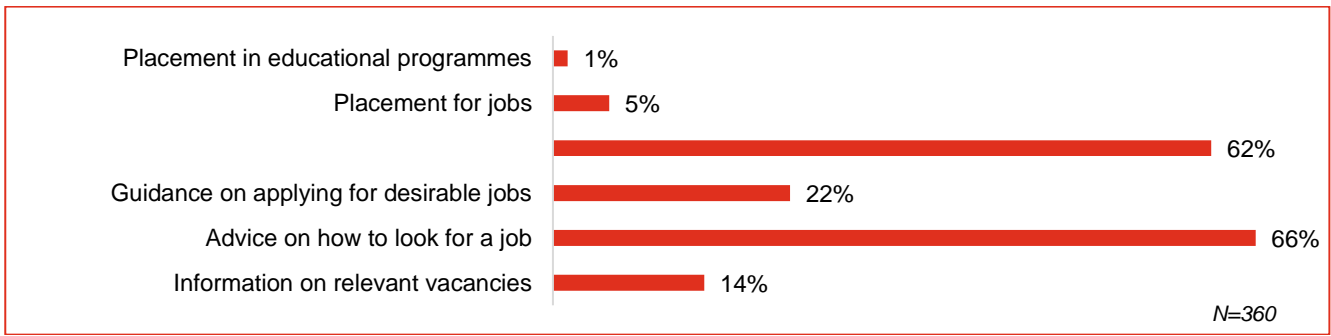


The most important source for the job related information was secured through the newspaper/media (76%) followed by information obtained from the local community (75%). Over 60% of the respondents felt that the counselling services were adequate in meeting their requirements.

The key inputs requested by the respondents from career counselling services include advice on searching for job opportunities (66%), and guidance on applying for relevant education or training pursuits (62%).

Figure 24 Preference on Counselling Services*

¹⁰ Multiple Response, Sum may exceed 100%



2.6. Skill Training Preferences of Youth



Only 18% of the total respondents had any awareness of Govt. run vocational or skill training programmes. However, 84% of them were interested in undergoing part-time skill training. Over half of the respondents prefer short-term certificate courses that are 6 months or lesser.

Figure 25 Duration of Skill Training type interested in

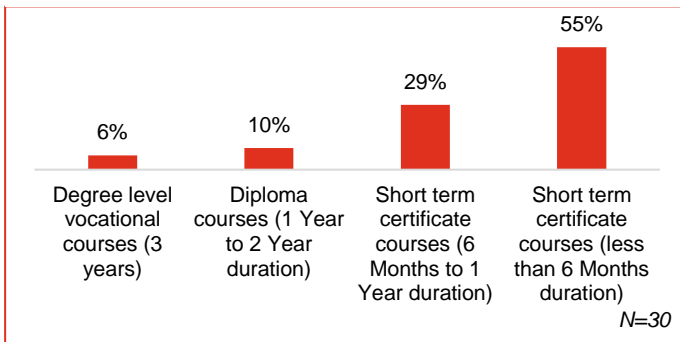
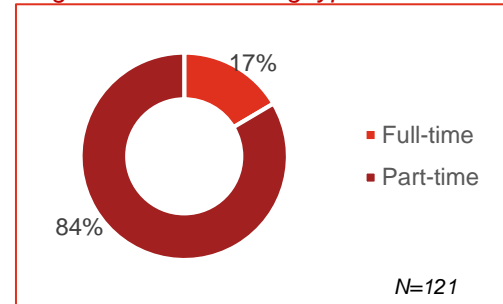


Figure 26 Skill Training type interested in



Auto components, food processing, construction are the sectors with high career aspirations.

3. Employers' Perspective

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

The survey covered 45 employer Industries across eleven sectors. The sector wise coverage of industries is given in Table 13. Majority of industries were from the auto components and manufacturing sector. Of the overall sample, 71% were small scale industries, 20% were micro industries and 7% were medium industries.

Figure 27 Distribution of Industries by Size

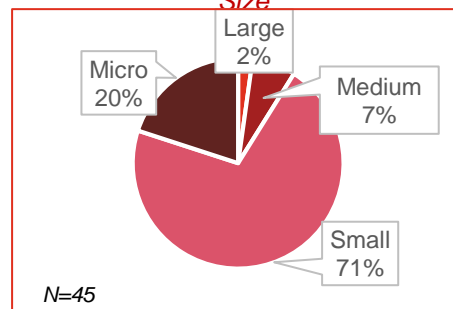


Table 13 Sector wise coverage of Industries in Employer Survey

S.No	Sector	Number of Industries Surveyed	S.No	Sector	Number of Industries Surveyed
1.	Auto and Auto Components	16	2.	Capital Goods	1
3.	Other Manufacturing	15	4.	IT and ITES	1
5.	Others	4	6.	Oil Gas and Hydrocarbon	1
7.	Iron and Steel	2	8.	Power	1
9.	Tourism Travel and Hospitality	2	10.	Warehousing and Packaging	1
11.	Aviation and Aerospace	1			

As seen in Table 14, employee reference is the major mode of recruitment (96%). Employers also use local community and media advertisements and manpower agencies for recruiting labourers. The most common challenge faced by employers was candidate disinterest and attitude (91%), followed by high local wages (75%) and the nature of work requiring of strenuous physical labour (36%).

Table 14 Modes and Challenges in Recruitment Process*

Key Modes of Recruitment (n=45)			Key Challenges faced in Recruitment (n=45)		
S.No	Particulars	%	S.No	Particulars	%
1.	Employee Reference/ Other Referrals	96%	1.	Candidate Disinterest and Attitude	91%
2.	Local Community	31%	2.	High local wages	75%
3.	Advertisements in Newspapers	11%	3.	Nature of work requires strenuous physical labour	36%
4.	Campus recruitment in ITIs/Polytechnic	2%	4.	Lack of requisite core skills	27%
5.	Social Networks	2%	5.	Attrition/Uncertainty due to marriage and children	7%
6.	Web Portals	2%	6.	Attrition/Uncertainty due to involvement in Household chores	7%
7.	Others	2%	7.	Work hours	5%

Figure 29 Average distribution of workers by Sex

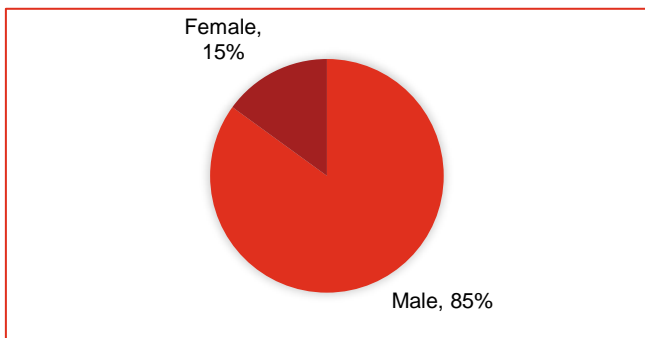
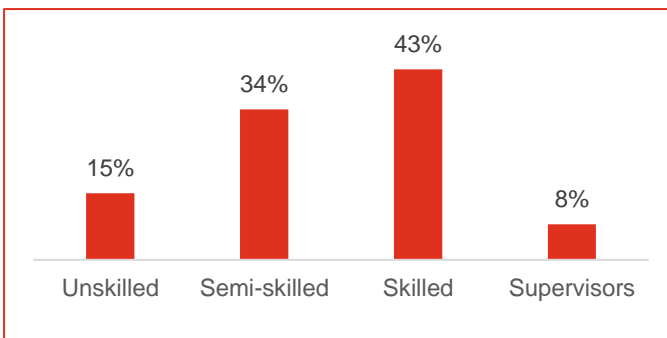


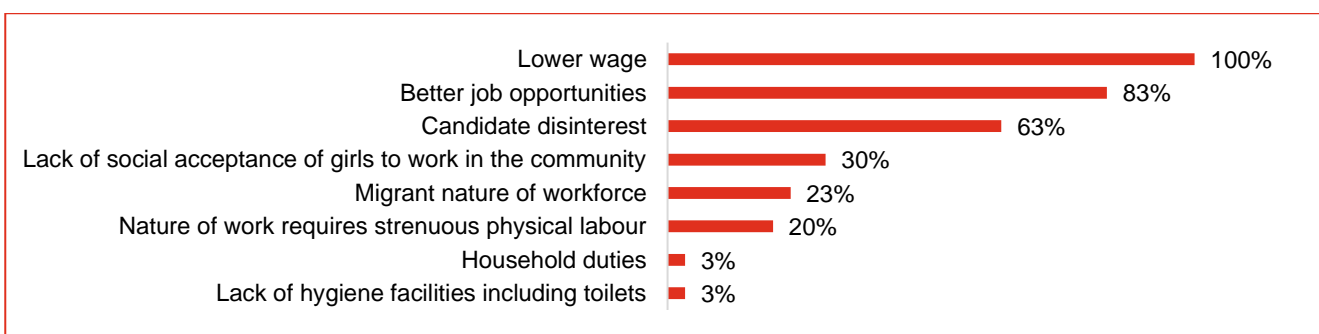
Figure 28 Distribution of workers by Skill Levels



The employers had a majority of male employees – on an average, the enterprises employed 85% males.

Skilled workers dominated the share of workforce (43%) followed closely by semi-skilled workers (34%). All the employers stated that they recruited employees from Eastern India. States of Bihar, West Bengal and Odisha were the key sources of migrant workers.

Figure 30 Key causes of Attrition



Lower wage and search for better job opportunities are the reasons given by most employers for attrition. The MSME units in the district are unable to pay high salaries and opt for migrant workers instead. The proximity of Bangalore makes better job opportunities available to the workers, beyond the District boundaries.

Over 38% of the employers feel there is high growth prospects in the industries. About 13% note that the level of technology adoption in the future will be high and 20% have plans to introduce automation. MSME units feel that they do not have the capabilities to opt for newer and more efficient technologies.

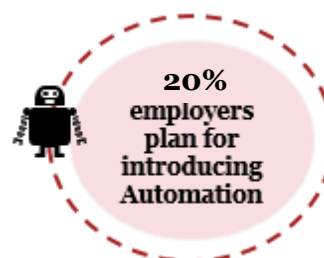
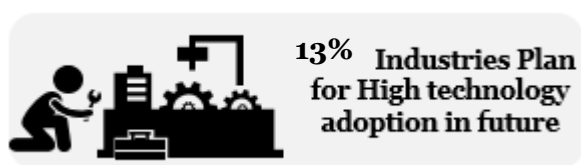


Table 15 Growth Prospects and prospective adoption of technology

Growth Prospects of Industry	%	Level of Technology adoption	%	Plans to adopt Technology	%
High	38%	High	13%	Yes	20%
Medium	33%	Medium	50%		
Low	24%	Low	24%	No	80%
Indifferent	5%	Indifferent	13%		

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

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

	Minimally Skilled	Skilled	Supervisory
High Demand	43%	42%	-
Medium Demand	11%	9%	-
Low Demand	7%	13%	7%

4. Other Stakeholders' Perspective

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

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

Table 17: Qualitative findings in Krishnagiri

S No	Topic	Responses
1.	Awareness of government skill training programs/ jobs/ job melas	<ul style="list-style-type: none"> The workforce is aware of skill training programmes. However, there is not much interest to attend skilling interventions. Low level of awareness regarding job fairs that are being conducted locally.
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. School curriculum needs to be revised and aligned with skill training.
3.	Candidate Attitudes/ Abilities	<ul style="list-style-type: none"> Local youth do not prefer shop-floor roles and prefer white-collar jobs. Women employed in the industry do not have a good scope for vertical mobility. Candidates are demotivated by the strict rules at the residential facilities provided and the need to work on a shop floor.
4.	Migrant workers	<ul style="list-style-type: none"> It is estimated that over two lakh migrant labourers are a part of Krishnagiri workforce. Most of the migrant labourers are from the East Indian states. Attrition is high among the migrant workforce. Most of them do not stay for beyond 6 months. The skill levels of most of the migrant workers is very low or unskilled. They learn the skill on the job.
5.	Technological Transformation/ Automation	<ul style="list-style-type: none"> Only large-scale units are able to automate or use the newest technology. The automobile sector would see a high level of automation in the next decade.
6.	Industrial Scenario	<ul style="list-style-type: none"> The defence corridor is expected to improve growth in the fabrication and precision engineering sectors. New investments of about 1,070 crore are planned for the district.
7.	Labour Requirements	<ul style="list-style-type: none"> The large scale industries attract skilled workers from within and outside the state. Since they are well-established industries, they have a steady source of workforce. The MSME units require skilled workforce but are unable to pay them sufficiently.
8.	Women Employment	<ul style="list-style-type: none"> The participation of women in the workforce is very low. Traditional family attitudes prevent women from working in the manufacturing sector. Most women stick to job roles such as tailoring, front office executives, etc. The large-scale watch manufacturing units employ women in watch assembly. Day Care facilities where children can be taken care of and sufficient toilets at work will help addressing women employment.
9.	Skill Gaps	<ul style="list-style-type: none"> The automobile and general engineering sector requires skilled workers like CNC operators, fitters, draughtsmen, etc.

5. Skill Gap Analysis

Skill Gap Assessment - Incremental Demand¹¹ for Skilled & Semi Skilled Workforce

Driven by the Manufacturing sector, the district of Krishnagiri will witness a total labour demand of ~1 lakh workers including skilled and semi-skilled. Construction, agriculture and allied activities are other sectors that would have a high prospects for employment.

Given Krishnagiri district, a skill gap of 64,099 workers has been estimated over the next six years. In order to supply the required labour force and benefit from the expanding economy, there is a need for targeted skill training in relevant sectors.

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

Sectors	Incremental Demand for Skilled Workers			Incremental Demand for Semi Skilled Workers			Total Incremental Demand
	2019-21	2022-25	Total	2019-21	2022-25	Total	Total
Agriculture	147	197	344	1,030	1,378	2,409	2,753
Allied Activities	435	695	1,130	3,045	4,868	7,912	9,043
Manufacturing	5,309	8,389	13,699	10,619	16,778	27,397	41,096
Construction	1,177	1,834	3,010	2,942	4,584	7,526	10,537
Trade & Repair Services	470	667	1,137	1,626	2,309	3,935	5,072
Hotels and restaurants	198	281	479	384	545	929	1,408
Transportation and storage; Post and Telecommunications	274	380	654	657	913	1,569	2,223
Other Services	6,787	10,501	17,288	5,278	8,108	13,386	30,674
Total Demand	14,889	22,945	37,835	25,655	39,483	65,138	1,02,973
Total Supply	5,156	6,875	12,030	11,504	15,339	26,843	38,873
Total Skill Gap	9,733	16,071	25,804	14,151	24,144	38,295	64,099

¹¹ 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 presented below suggests the potential areas for skill development interventions and job opportunities in the future. 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 table below presents the summary of training projects for Krishnagiri:

Table 19 Summary of Trainings

S No	Sector	Trades	Target (Persons)	Budget (₹)
1.	Agriculture and allied	<ul style="list-style-type: none"> • Sericulturist • Floriculturist • Organic Farmer • Micro Irrigation Technician 	3,000	3.29 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 	8,000	22.78 Crores
3.	Automotive	<ul style="list-style-type: none"> • Auto Component Assembly Fitter • Machining Assistant • Automotive Painting Technician • Vehicle Assembly Fitter 	6,000	12.42 Crores
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) • Solar Panel Installation Technician • Field Technician AC • Field Technician Refrigerator • Field Technician - Washing Machine • Field Technician - Other Home Appliances 	1,500	2.97 Crores
6.	Digital Marketing and Finance	<ul style="list-style-type: none"> • Marketing and Social Media manager • GST Accounts Assistant • Export Assistant 	1,000	1.03 Crores
7.	Poultry farming	<ul style="list-style-type: none"> • Poultry shed designer • Chick grading technician • Broiler Poultry Farm Supervisor 	1,200	1.27 Crores
8.	Food Processing	<ul style="list-style-type: none"> • Dairy Processing Equipment Operator • Cold Storage Technician • Food Products Packaging Technician • Grain Mill Operator 	2,000	3.76 Crores

S No	Sector	Trades	Target (Persons)	Budget (₹)
		<ul style="list-style-type: none"> Multi Skill Technician (Food Processing) Quality Assistant 		
9.	Logistics	<ul style="list-style-type: none"> Warehouse Packer Inventory Clerk Warehouse Supervisor Reach Truck Operator Receiving Assistant Warehouse Quality Checker 	2,000	3.08 Crores
10.	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 	4,500	15.55 Crores

Total

Table 20 Training Project 1: Agriculture and allied

Name of the Project: Agriculture and allied sector training							
Key Economic Drivers:							
<p>Agriculture has seen a steady growth in the district from 2011-12 to 2016-17. Floriculture has seen a huge demand from the neighbouring city of Bangalore and across Tamil Nadu The mangoes cultivated here sustain the mango pulp processing industry. A mango pulp cluster is also located in Krishnagiri.</p>							
Key Partners: Dept. of Sericulture							
Job Roles:	NSQF Level	NSQF Codes	Duration of Training (hours)	Cost Category	Target Group	Training Target (People)	Cost of Training (₹)
Sericulturist	5	AGR/Q5201	200	3	5 th Pass	500	0.43 Crores
Floriculturist	5	AGR/Q0701	200	2	5 th Pass	500	0.49 Crores
Organic Farmer	4	AGR/Q1201	200	2	5 th Pass	1,000	0.98 Crores
Micro Irrigation Technician	4	AGR/Q1002	200	1	8 th Pass	1,000	1.1 Crores
Total Training Cost						3,000	2.99 Crores
Total Assessment and Certification cost (1,000 per candidate)							0.3 Crores
Total Cost							3.29 Crores
Key Considerations:							
<p>The Dept. of sericulture provides support to farmers in mulberry plant growing, silk twisting, rearing silk worm, etc. Their support can be sought to provide training</p>							

Table 21 Training Project 2: Fabrication

Table 22 Training Project 3: Auto Components

Name of the Project: Training in Auto Components							
Key Economic Drivers:							
<p>The large number of MSME units have consistent demand for shop floor workers. The migrant workers often join as unskilled workers in these trades. Formal training would help them in getting better wages and increase their efficiency. Youth within the district have a very low level of interest in these trades. Integrating skill training with the school curriculum is necessary to increase awareness.</p>							
Key Partners: HOSMEA, FSI, TTPK, TEA							
Job Roles:	NSQF Level	NSQF Code	Duration of Training (hours)	Cost Category	Target Group	Training Target (People)	Cost of Training (₹)
Auto Component Assembly Fitter	4	ASC/Q3701	400	1	10 th Pass	2,000	4.39 Crores
Machining Assistant/ C2 - Helper	2	ASC/Q3502	250	1	10 th Pass	1,000	1.38 Crores
Automotive Painting Technician C3	3	ASC/Q3303	300	1	10 th Pass	1,000	1.65 Crores
Vehicle Assembly Fitter	4	ASC/Q3601	400	1	10 th Pass	2,000	4.39 Crores
Total Training Cost						7,000	11.82 Crores
Total Assessment and Certification cost (1,000 per candidate)							0.7 Crores
Total Cost							12.42 Crores
Key Considerations:							
<p>Training can be focused on MSME units as most large-scale companies have an in-house training. MSME units also require a large number of skilled workers. HOSMEA can be a training partner. The trainees can be trained in the units owned by the members.</p>							

Table 23 Training Project 4: Healthcare

Name of the Project: Training in Healthcare Sector							
Key Economic Drivers:							
Krishnagiri is growing and urbanizing, and hence would require an expanded healthcare system Healthcare sector has scope for young men and women, and career mobility as well							
Key Partners: Hospitals, Nursing Colleges							
Job Roles:	NSQF Level	NSQF Code	Duration of Training (hours)	Cost Category	Target Group	Training Target	Cost of Training
General Duty Assistant	4	HSS/ Q5101	240	2	8 th Pass, 10 th Pass	200	0.23 Crores
Blood Bank Technician	4	HSS/ Q2801	1,000	1	10 th Pass	100	0.55 Crores
Cardiac Care Technician	4	HSS/ Q0101	840	1	12 th Pass	200	0.92 Crores
Diabetes Educator	4	HSS/ Q8701	240	2	12 th Pass	100	0.12 Crores
Emergency Medical Technician - Basic	4	HSS/ Q2301	240	1	12 th Pass	200	0.26 Crores
Medical Records & health Information Technician	4	HSS/ Q5501	600	1	12 th Pass	200	0.66 Crores
Total Training Cost						1,000	
Total Assessment and Certification cost (1,000 per candidate)							0.1 Crore
Total Cost							
Key Considerations:							
Residential training and part-time training modes should be explored to allow women of all backgrounds to attend.							

Table 24 Training Project 5: Domestic Appliance Service

Name of the Project: Domestic Appliance Service							
Key Economic Drivers:							
As Krishnagiri becomes more urbanized, the demand for household services like plumbing and electrician is slated to grow.							
Key Partners: Dept. of Sericulture							
Job Roles:	NSQF Level	NSQF Codes	Duration of Training (hours)	Cost Category	Target Group	Training Target (People)	Cost of Training (₹)
Helper Electrician	2	CON/Q0601	350	1	12 th Pass	500	0.96 Crores
Plumber (General)	3	PSC/Q0104	410	1	5 th Pass	500	1.13 Crores
Solar Panel Installation Technician	4	ELE/Q5901	200	1	8 th Pass	100	0.11 Crores
Field Technician AC	4	ELE/Q3102	300	2	8 th Pass	100	0.15 Crores
Field Technician Refrigerator	4	ELE/Q3103	300	2	8 th Pass	100	0.15 Crores
Field Technician - Washing Machine	4	ELE/Q3104	300	2	8 th Pass	100	0.15 Crores
Field Technician - Other Home Appliances	4	ELE/Q3106	360	2	8 th Pass	100	0.18 Crores
Total Training Cost						1,500	2.82 Crores
Total Assessment and Certification cost (1,000 per candidate)							0.15 Crores
Total Cost							2.97 Crores
Key Considerations:							
Residential training and part-time training modes should be explored to allow women of all backgrounds to attend.							

Table 25 Training Project 6: Digital Marketing and finance

Name of the Project: Training in Digital Marketing and Finance							
Key Economic Drivers:							
The large number of MSME units have need for better marketing and financial management of their enterprises. These skill training programmes would also benefit the traditional sector artisans in the district.							
Key Partners: BFSI, HOMEA, HOSTIA							
Job Roles:	NSQF Level	NSQF Code	Duration of Training (hours)	Cost Category	Target Group	Training Target (People)	Cost of Training (₹)
Marketing and Social Media manager	4	ASC/Q1110	500	2	Diploma/ Graduation	200	0.49 Crores
GST Accounts Assistant	4	BSC/Q0910	100	3	Diploma/ Graduation	700	0.3 Crores
Export Assistant	5	AMH/Q1601	270	2	Diploma/ Graduation	100	0.13 Crores
Total Training Cost						1,000	0.92 Crores
Total Assessment and Certification cost (1,000 per candidate)							0.1 Crores
Total Cost							1.03 Crores
Key Considerations:							
Large scale units that have similar operations can take the lead in helping the MSME units to understand and operate more easily.							

Table 26 Training Project 7: Poultry

Name of the Project: Training in Poultry							
Key Economic Drivers:							
Krishnagiri is home to a significant part of Tam							
Key Partners: CPPM Hosur							
Job Roles:	NSQF Level	NSQF Code	Duration of Training (hours)	Cost Category	Target Group	Training Target (People)	Cost of Training (₹)
Poultry shed designer	6	AGR/Q4304	240	2	ITI/ Diploma/ Graduation	500	0.59 Crores
Chick grading technician	4	AGR/Q4403	200	2	Class 10 th pass	200	0.2 Crores
Broiler Poultry Farm Supervisor	5	AGR/Q4301	150	2	Class 10 th pass	500	0.37 Crores
Total Training Cost						1,200	1.15 Crores
Total Assessment and Certification cost (1,000 per candidate)							0.12 Crores
Total Cost							1.27 Crores
Key Considerations:							
The trainings can be combined with the activities carried out with the help of the College of Poultry Production and Management, Hosur.							

Table 27 Training Project 8: Food processing

Name of the Project: Training in Food Processing							
Key Economic Drivers:							
Food processing is a major sector in the district, and has scope for growth due to increasing incomes, population growth and urbanization. A mango pulp cluster is already operating in the district.							
Key Partners: ITI/ Degree colleges, engineering colleges							
Job Roles:	NSQF Level	NSQF Code	Duration of Training (hours)	Cost Category	Target Group	Training Target	Cost of Training
Dairy Processing Equipment Operator	4	FIC/Q2002	240	1	10 th Pass	200	0.26 Crores
Cold Storage Technician	4	FIC/Q7004	250	3	12 th Pass/ Diploma	300	0.32 Crores
Food Products Packaging Technician	5	FIC/Q7001	240	1	12 th Pass	300	0.4 Crores
Grain Mill Operator	4	FIC/Q1003	240	1	8 th Pass	200	0.26 Crores
Quality Assistant	4	FIC/Q1007	240	1	10 th Pass	500	0.66 Crores
Multi Skill Technician (Food Processing)	4	FIC/Q9007	600	1	8 th Pass	500	1.65 Crores
Total Training Cost						2,000	3.55 Crores
Total Assessment and Certification cost (1,000 per candidate)							0.2 Crores
Total Cost							3.76 Crores
Key Considerations:							
Students in degree and engineering colleges can be targeted.							

Table 28 Training Project 9: Logistics

Name of the Project: Training in Logistics Sector							
Key Economic Drivers:							
Due to its expanding economy and trade, Krishnagiri will require more manpower in logistics, transportation and communications. The conversion of Hosur town into a corporation will also fuel this requirement in logistics.							
Key Partners: ITIs, HOSMEC							
Job Roles:	NSQF Level	NSQF Code	Duration of Training (hours)	Cost Category	Target Group	Training Target	Cost of Training
Warehouse Packer	3	LSC/Q2303	270	1	10 th Pass	500	0.74 Crores
Inventory Clerk	3	LSC/Q2108	250	1	12 th Pass/ Diploma	500	0.69 Crores
Warehouse Supervisor	5	LSC/Q2307	240	1	12 th Pass	100	0.13 Crores
Reach Truck Operator	4	LSC/Q2111	300	1	8 th Pass	300	0.5 Crores
Receiving Assistant	3	LSC/Q2112	290	2	10 th Pass	300	0.43 Crores
Warehouse Quality Checker	3	LSC/Q2313	300	3	8 th Pass	300	0.39 Crores
Total Training Cost						2,000	2.87 Crores
Total Assessment and Certification cost (1,000 per candidate)							0.2 Crores
Total Cost							3.08 Crores
Key Considerations:							
The trainings can focus on youth from various backgrounds school dropouts can also be included							

Table 29 Training Project 10: Construction

Name of the Project: Training in Construction Sector							
Key Economic Drivers:							
<p>sector is a major contributor to GDDP, and shows potential for employment generation Granite (both coloured and black) is available in the district. Granite polishing and cutting is currently carried out by unskilled workers. There is need for skilled workforce in this sector.</p>							
Key Partners: ITI, engineering colleges, Granite Processing units							
Job Roles:	NSQF Level	NSQF Code	Duration of Training (hours)	Cost Category	Target Group	Training Target	Cost of Training
Foreman Electrical Works (Construction)	5	CON/Q0604	900	1	10 th Pass	500	2.47 Crores
Metal Inert Gas/Metal Active Gas/Gas Metal Arc Welder (MIG/MAG/GMAW)	4	CSC/Q0209	600	1	10 th Pass	500	1.65 Crores
Mason Marble, Granite and Stone	4	CON/Q0106	600	1	8 th Pass	2,000	6.59 Crores
Foreman Wet Finishing and Flooring	5	CON/Q0109	800	1	10 th Pass	500	2.2 Crores
Bar Bender and Steel Fixer	4	CON/Q0203	400	1	10 th Pass	500	1.1 Crores
Assistant Electrician	3	CON/Q0602	400	1	10 th Pass	500	1.1 Crores
Total Training Cost						4,500	15.1 Crores
Total Assessment and Certification cost (1,000 per candidate)							0.45 Crores
Total Cost							15.55 Crores
Key Considerations:							
<p>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.</p>							

6.2. Key Recommendations

Krishnagiri district is expected to have a growing economy due to the continuously growing automobile industry here. In the next six years, there is an emerging demand for skilled workforce in fabrication, automobile, construction 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:

Training Hub for Defence Manufacturing: With the proposed defence corridor and the already established general engineering industries, Krishnagiri has potential to become an Industry-led Training Hub for Defence Manufacturing. Job roles in precision engineering and other higher-level skill (graduates and above) can be focused on.

Training to be provided through MSME Associations: Large scale units benefit the most from government skill training programs as they already have their inbuilt training facilities. MSME units in automobiles and general engineering have a high demand for skilled workers in their related fields. However, most were unable to recruit the right workers as they were unable to pay them the market wages. Organizations such as HOSTIA are willing to organize and provide training. Another advantage of training using MSME units is that the trainees are involved not just in manufacturing but also get a good understanding of the administrative aspects which grooms them to become entrepreneurs.

Creating Awareness on Skilling and conducting counselling sessions: The appetite for skill training is very low in the district among the local population as seen in the youth survey findings and stakeholder perspective. In order to make the youth interested in 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.

Migrant Labourers: Most employers do not have any incentive to provide formal skill training to the migrant labourers who form a huge chunk of the labour force. In coordination with the skill development departments of the East Indian states, which supply most of the workforce, skilling programmes can be organized to ensure that the migrant labourers are also efficient workers and have a formal training instead of learning on the job.

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 Block

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 Krishnagiri 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%

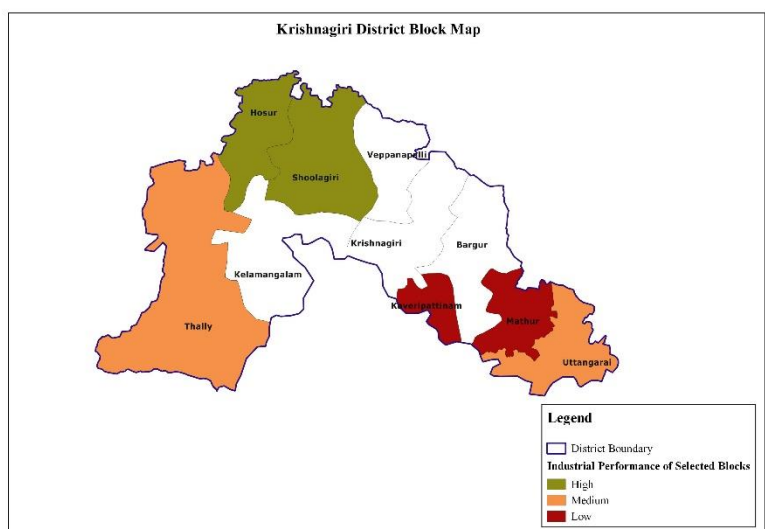
Based on the above weights, the total score of each block was calculated. The total score was capped at 100. To classify the block as High/Medium/Low, the total score was converted into percentile values and categorized into three groups

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**

Figure 31: Blocks Selected for Survey in Krishnagiri



- **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.

Based on this, the following blocks were selected

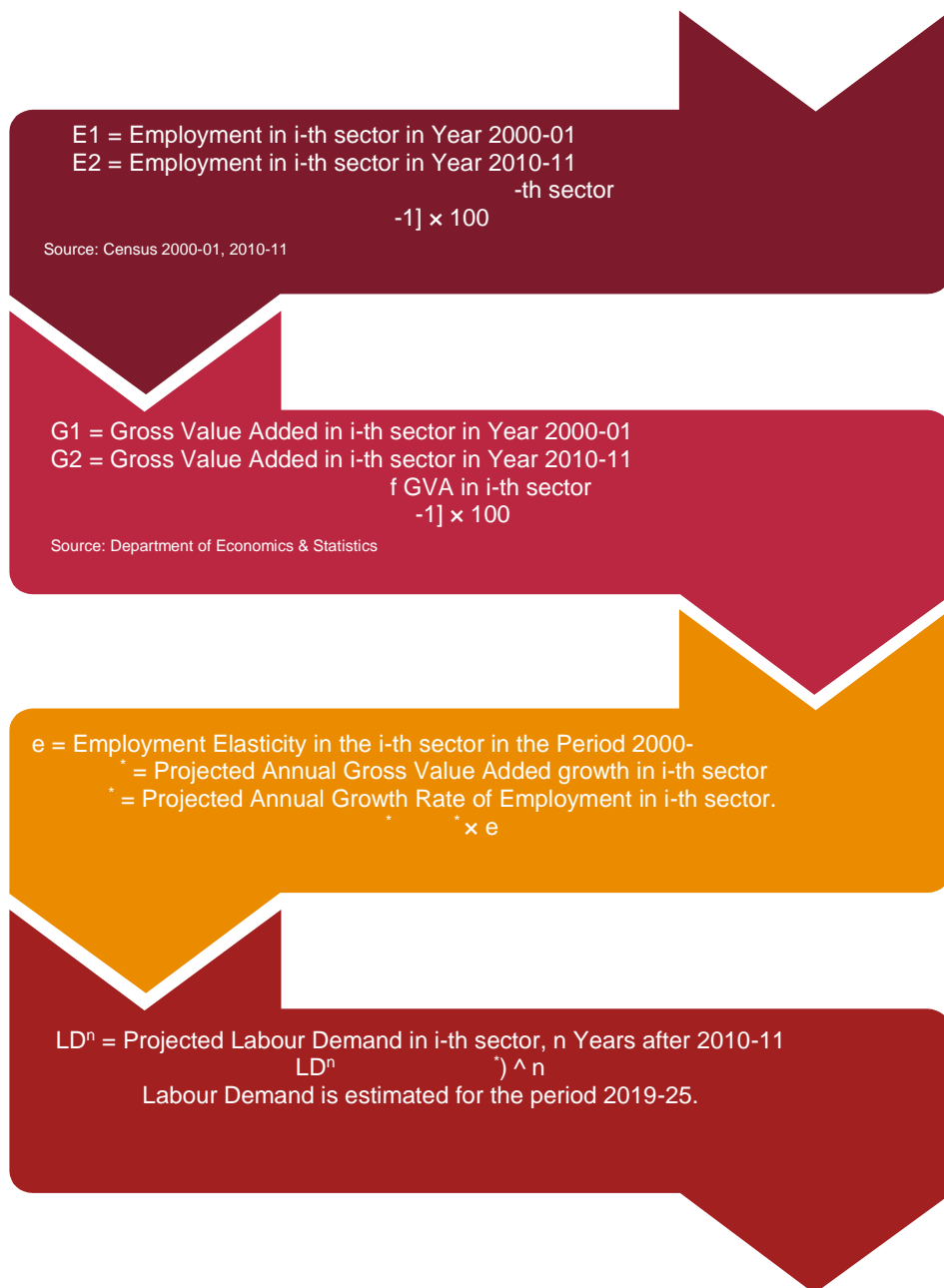
- Low: Kaveripattinam, Mathur
- Medium: Thally, Uttangarai
- High: Hosur, Shoolagiri

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 32: 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 state¹². 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:n:

A.3 List of Stakeholders

Table 30: 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.	Hosur Small and Tiny Industries Association (HOSTIA)	Govt. official
6.	Hosur Industrial Association (HIA)	Industry Association
7.	HOSMEC	Industry Association
8.	HOSMIA	Industry Association
9.	Krishnagiri District Small & Tiny Industries Association	Industry Association
10.	Ray Institute of Hotel Management	Training Service Provider
11.	Government ITI, Hosur	Training Service Provider
12.		

35.	Kjl Engineering	Industry
36.	Mahim Engineering Product	Industry
37.	Tuf Coats	Industry
38.	Sinclar CNC Application	Industry
39.	Annai Auto Mech Industry	Industry
40.	Balu Industries	Industry
41.	R.K.V Residency	Industry
42.	Hotel Annapurna Classic	Industry
43.	Devs Aqua Minerals	Industry
44.	Krishnagiri Print Private Limited	Industry
45.	Chandra Package	Industry
46.	Saroj Egg Packing Industry	Industry
47.	Syamalaa Industries	Industry
48.	Jothi Candle Works	Industry
49.	Ananth Wire Touch Tooling	Industry
50.	Logmatics	Industry
51.	Adroit Diecastings	Industry
52.	Aruna Bright Bars	Industry
53.	Vijayalaskshmi Engineering	Industry
54.	Hi-Tech Aqua System	Industry
55.	Sree Meenakshi Pet Polymers	Industry
56.	Lunar Tools	Industry
57.	Pro Tech Welding Solutions	Industry
58.	Sri Balaji Industrial Components	Industry
59.	Sinclair CNC Applications	Industry
60.	Excel Enviro Controllers	Industry
61.	Maarson Industries	Industry
62.	Haripriya Engineering	Industry
63.	Hosur Metal Finishers	Industry
64.	Tejas Power Solutions	Industry
65.	Fine Rubber Products	Industry
66.	Ananth Wire Tech Tooling	Industry
67.	Cadma Tools	Industry
68.	Ideal Industries	Industry
69.	Jack Industries	Industry
70.	Guru Engineering & Welding Works	Industry