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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.	DISE	District Information System for Education
5.	GDDP	Gross District Domestic Product
6.	GVA	Gross Value Added
7.	GSVA	Gross State Value Add
8.	ITI	Industrial Training Institute
9.	FICSI	Food Industry Capacity and Skill Initiative
10.	IT-ITES	Information Technology and Information Technology Enabled Services
11.	LFPR	Labour Force Participation Rate
12.	Manuf.	Manufacturing
13.	MIS	Management Information System
14.	MSME	Micro, Small and Medium Industries
15.	NEET	Not in Education, Employment, or Training
16.	NIC	National Industrial Classification (2008)
17.	NSDA	National Skill Development Agency
18.	NSQF	National Skills Qualification Framework
19.	PMKVY	Pradhan Mantri Kaushal Vikas Yojana
20.	PSU	Public Sector Undertaking
21.	Pub. Admin.	Public Administration
22.	QP-NOS	Qualification Pack National Occupational Standards
23.	SIDCO	Tamil Nadu Small Industries Development Corporation Limited
24.	SIPCOT	State Industries Promotion Corporation of Tamil Nadu
25.	SIR	Special Investment Region
26.	TNSDC	Tamil Nadu Skill Development Corporation
27.	TNSRLM	Tamil Nadu State Rural Livelihood Mission
28.	Tr. & Tou.	Trade and Tourism Sectors
29.	WPR	Worker Population Ratio
30.	ZLD	Zero Liquid Discharge

2. **Quantitative employer survey**: covering 1,321 employers (45 employers from each district) 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 focus group discussions and individual consultations with over 25 stakeholders - 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	• The decadal growth rate of the population in the District was 16% between 2001 and 2011 matching the population growth dynamics at the State level, and compared to a much lesser growth rate (of 9%) during the previous decade. • Only 17% of the District is urbanised as opposed to 48% at the State level. • By 2026, the median age is set to become 33 years much lesser than the State average of 37 years; over 34% of the population were between 35-59 years of age, during 2011.
Economic Analysis	• The District witnessed a positive GDDP growth of 5% from 2011-12 to 2016-17. • The District economy is dominated by the contributions from the service sector; which accounts for about 45% of the GVA during 2016-17. • Agriculture is also a major contributor accounting for about 31% of the GVA. • Dharmapuri has six clusters; of which, three are related to food processing including tamarind processing, jiggery manufacturing and tapioca starch (sago) processing. • About 52% of the industrial workforce is employed in spinning, weaving and finishing of textiles. • Real estate, logistics, travel and tourism are major contributors to service sector GVA. Real estate accounts for 28% 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 6%. • According to the data collected from the RBI, the industry sector has been the highest recipient of corporate credit, accounting for a growth of 32% between 2013 and 2016.
Labour Market Analysis	• The overall labour force participation rate is 58% and worker population ratio is 56% • About 68% of workers in the district are wage employed and 33% are self-employed. The unemployment rate is at 2%, lower than the State average of 4%. • About 39% of the workforce are involved in agriculture and allied activities, 22% in manufacturing and 19% in trade related activities.
Education & Skill Development	• With respect to school education, Dharmapuri is a well performing district. The Gross Enrolment Ratio at the Primary level is 101 and at the Upper Primary level is 106. • The dropout rates is also lower 0.8% at the upper primary level. • Dharmapuri has 16 ITIs and 17 polytechnics • The current skill training courses offered by PMKVY and TNSDC focus on Electronics and Hardware, Media and Entertainment, Automotive, Retail, Logistics, Medical and Nursing, Beauty And Wellness and Fashion Design sectors.
Findings from Primary Survey	
Youth Profile and Aspirations	• About 31% of the overall respondents were female and about 78% were from rural areas. • The respondents were predominantly part of the NEET category (30%). About 26% were wage/salaried employed. • Over 49% of the respondents between 20-24 years of age are in the NEET category. Overall, 21% have opted for self-employment. • Only 49% of the respondents are currently engaged in some economic activity. • Majority (97%) of female respondents receive an income of not more than 10,000 per month. Among males, 28% received an income between 10,000-15,000 per month.

	• The youth in the district mostly prefer to have a wage/salaried employment in the public sector (57%) and 33% prefer to be self-employed. • The main factors determining the aspiration of the youth are Salary (wages) / Income (80%), job security (48%) and closeness to residence (16%). • The key factors enhancing their employability, according to the respondents, were level of educational attainment (53%), work experience (31%) and certifications of technical skills (14%). • Most respondents (40%) aspire to earn between 15,000-20,000 per month. The income aspirations of women are much lower 48% aspire for an income between 5,000-15,000 per month. • The most important source for the job related information was through newspaper/media (73%), online job portals (64%) and, friends and peers (29%). • With respect to preferred sectors to work in, 52% were interested in jobs under the BFSI sector. Among female respondents, 12% were interested in food processing sector jobs and 11% in IT sector jobs. • About 52% of the total respondents are interested in undergoing full-time training courses. However, most are interested only in short term certificate courses less than 6 months (56%).
Employer & Other Key Stakeholder Perspectives	**Quantitative Survey** • Of the overall sample, 27% were micro industries, 59% were small-scale industries and 16% were medium industries. • Employee references is the major mode of recruitment (93%). About 17% of employers also use local community for recruiting workers. The most common challenge faced by employers was candidate disinterest and attitude (56%), followed by high local wages (53%). • On an average, 59% of the employees in the respondent industries were male. • Semi-skilled workers dominated the share of workforce (44%) followed by skilled workers (26%) and unskilled workers (25%). • Lower wage (83%) and availability of better job opportunities (63%) are the reasons given by most employers for attrition. • Over 29% of the employers feel there is high growth prospects in their respective industries. Most employers (53%) feel that the level of technology adoption in the future will be low. Only about 9% have plans to introduce automation. **Qualitative Inputs** • Employers claimed that, when candidates were recruited from within a radius of 10 kms or less, the attrition rate is lesser. • Youth prefer jobs in cities like Bangalore and Chennai and place a sense of pride to working there even when the pay is very less (say, not more than 10,000 per month). • Women workforce is reserved for packing and allied activities in food processing. • There is a high demand for job roles such as fitters and operators equipped with a Diploma in mechanical engineering; as there is requirement to work with imported machines.
Incremental Demand	• In the next 6 years, Dharmapuri will see a demand for about 45,000 skilled and semi-skilled workers. Major sectors that drive the demand are manufacturing, construction, agriculture and allied activities. • The major demand is from the growing food processing industry. Though the skill gap for the next six years in the district is only about 8,000 additional jobs, there is a strong need for upskilling farmers and workers within the food production industry.

Recommendations: Following are the key recommendations for due consideration:

Enhance Gender Responsiveness: There is a need for dismantling the attitude of gender-based discrimination among employers. Promotion of Skill Training for women in non-traditional sectors like mechanical and electrical engineering should be undertaken.

Industry-ITI Collaborations: There is visible gap in theoretical knowledge acquired and the practical application of the same in real-time context, say, on work, among the ITI students. Through better industry-ITI collaboration, this gap can be bridged; guided industry visits and internships in relevant industries are crucial in bridging the gap.

Developing QP/NOS for specific food processing related jobs: Major food processing activities like jaggery processing and tamarind pulp extraction do not have specific QP/NOS. These can either be developed in collaboration with the Food Industry Capacity and Skill Initiative (FICSI) or a Q-file process could be adopted to secure approval from the NSDA.

Online registry of local jobs: A registry of local jobs can be created on an online platform in collaboration with the District Employment Office (DEO). This would be more effective in making the youth aware of and be informed about the local employment opportunities, as 64% of the survey respondents claimed that they search for jobs online.

Awareness on Skilling in Schools: The appetite for participation in skill training is very low in the District, among the local population. Village level and school level awareness drives and mobilization workshops should be planned in order to make the youth more aware and motivated in being skilled.

Counselling sessions as part of skill training: There is a need for improved counselling services as part of skill training. Training providers can hold weekly counselling sessions 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.

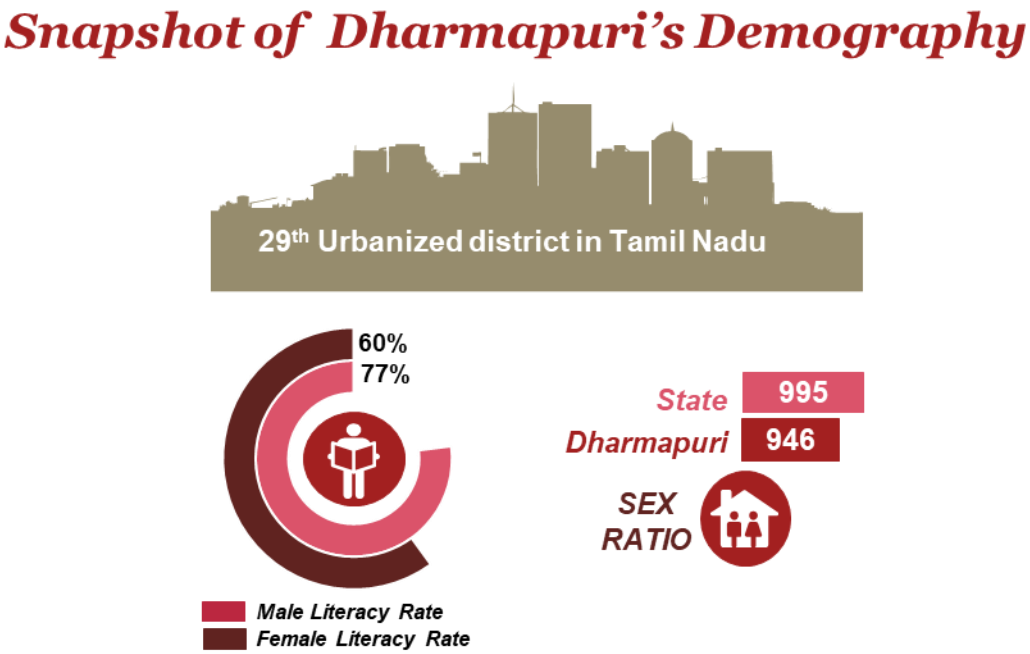
1. District Profile

Dharmapuri District was initially a part of Salem District; and formed as a separate District in 1965. It was further bifurcated in 2004, when Krishnagiri was formed. It is surrounded by Thiruvanamalai and Villupuram Districts in the East, Karnataka State in the West, Krishnagiri in the North and Salem in the South. The rivers Cauvery, Chinnar and Vanniyar flow through here and the famous Hogenakkal dam is also located here.

1.1. Demographic Profile

Table 1: Key Demographic Indicators Dharmapuri vs Tamil Nadu[3]

SN	Indicator	Dharmapuri	Tamil Nadu
1	Total Population	15,06,843	72,147,030
2	Female Population	7,32,540	36,009,055
3	Population Density per sq.km (2011)	335	555
4	Urbanization	17%	48%
5	SC population (as % of total population)	16%	20%
6	ST population (as % of total population)	4%	1%
7	Differently abled population (as % of total population)	1%	2%
8	Population in age group 15-34 years (as % of total population)	35%	35%
9	SC population aged 15-34 years (as % of SC population)	34%	37%
10	ST population aged 15-34 years (as % of ST population)	36%	35%
11	Literacy rate	69%	80%



Key Highlights from the analysis of Census Data:

[3] Census 2011 & 2011

1.2.1. Sector wise Analysis[6]

Figure 3 Sectoral Snapshot of GVA 2016-17

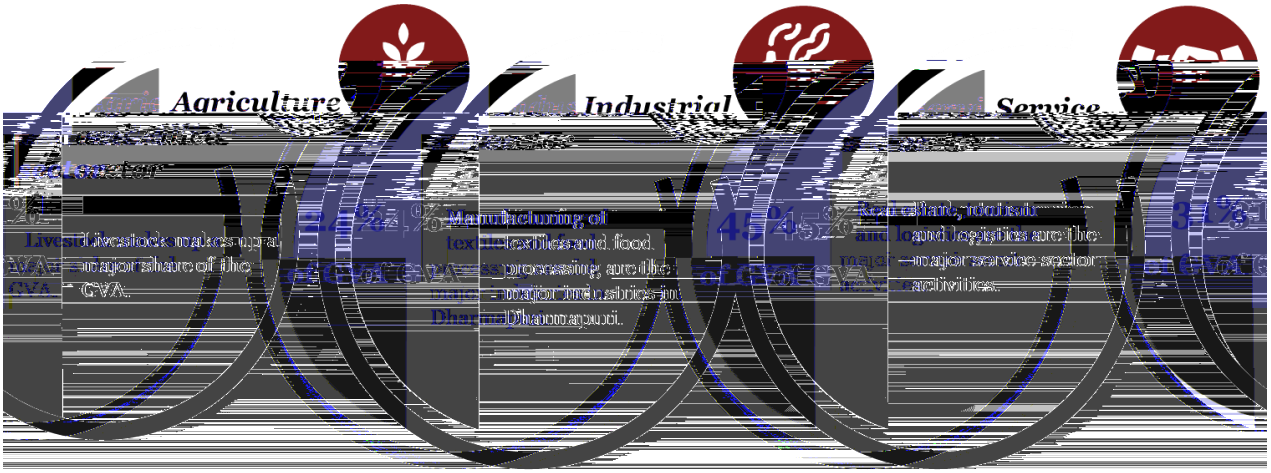
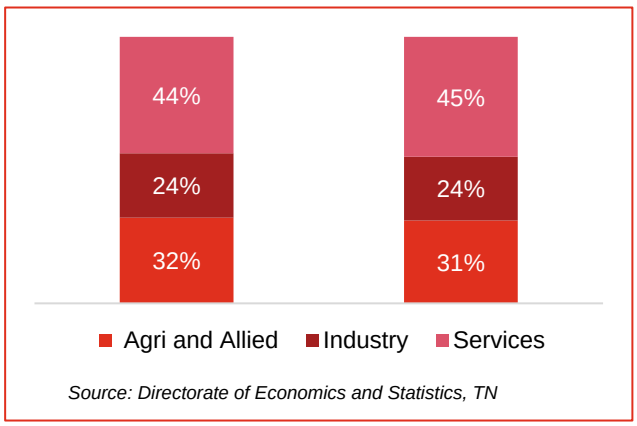


Figure 4 Sectoral Share of GVA (2011-12 & 2016-17)



Source: Directorate of Economics and Statistics, TN

The economy of the District is dominated by the service sector, which accounted for about 45% of the GVA in 2016-17. Agriculture is also a major contributor accounting for about 31% of the GVA. Despite witnessing a negative growth during 2012-13 and 2013-14, the agriculture sector has managed to record an overall CAGR of 4% from 2011-12 to 2016-17. The industrial sector, which accounts for 24% of the GVA has had a fluctuating growth rate.

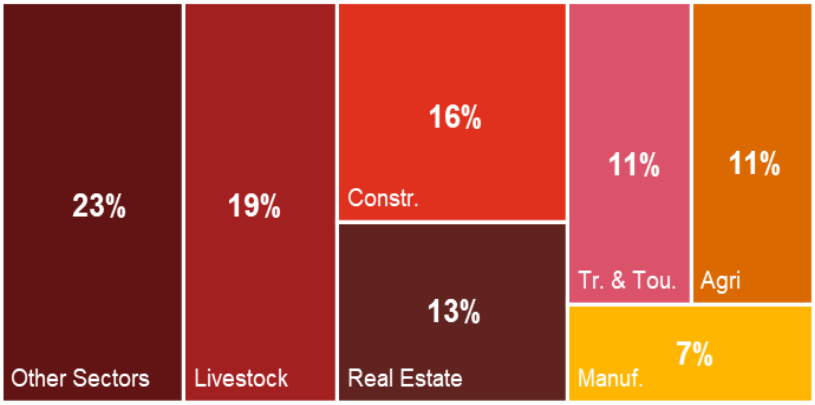
The industry sector experienced a slump in 2014 after several industries that did not comply with Zero Liquid Discharge norms (ZLD) had to shut down. Since agriculture is majorly dependant on monsoons and the inflow of water from the Cauvery River, it had witnessed bad years during 2011-14. Most farmers have also developed cattle farming (especially, poultry and dairy farming) to compensate farm incomes during water scarce seasons.

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

Sector	2012-13	2013-14	2014-15	2015-16	2016-17	CAGR
Agri & Allied	-18%	-1%	10%	22%	14%	4%
Industry	5%	7%	0%	10%	2%	5%
Services	7%	9%	2%	6%	5%	6%

[6] Directorate of Economics and Statistics, Tamil Nadu

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



The single major contributor to GVA is livestock (19%) followed by construction (16%) and real estate (13%). Manufacturing accounts for only 7% but has scope for future growth

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

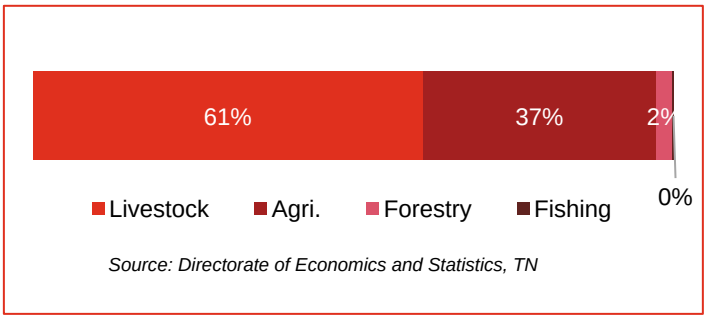
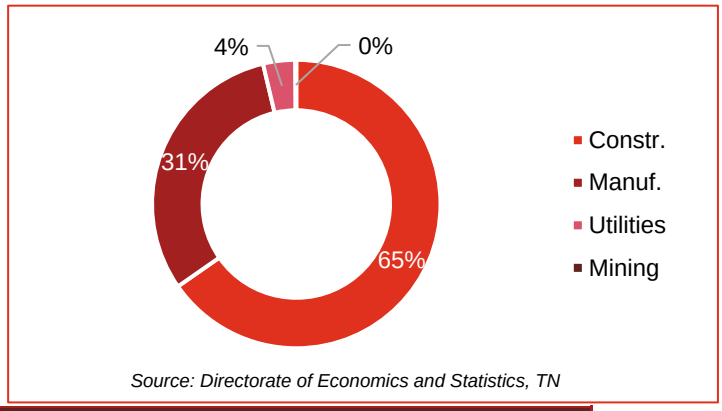


Figure 6 shows the share of the different components in the agriculture and allied sector GVA of 2016-17. Livestock accounts for 61% of the district agriculture GVA. Sericulture is majorly practiced, including rearing of silkworms and growing of mulberry crop.

Major crops grown in Dharmapuri are sugarcane, pulses, oilseeds, fruits like mango and papaya, tapioca and vegetables like tomato and brinjal. Despite being irrigated by several rivers, Dharmapuri region requires the southwest monsoon to provide a good agricultural harvest.

Over the past decade, the agriculture sector in the District has found different ways to reinvent itself and support the population dependant on agriculture. Farmers have switched from extensive rice cultivation to grow different millets that do not require as much water. They have also been more responsive to the changing technologies and have adopted precision farming to reduce production costs. It is seen that these technologies have helped bring about an 80% increase in tomato yield and 34% increase in brinjal[7].

Figure 7 Industrial Sector GVA (2016-17)



Manufacturing makes up 65% of the industrial sector GVA and construction contributes to 31%. The CAGR of manufacturing sector is 9% between 2011-12 and 2016-17. Textiles, food and dairy processing are the major industries here.

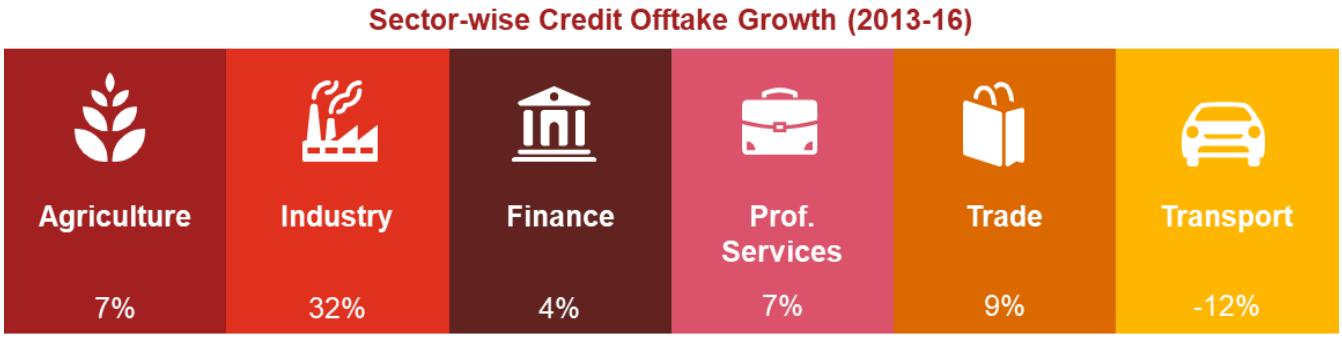
Dharmapuri has six clusters; of which, three are related to food processing including tamarind processing, jiggery manufacturing and tapioca starch (sago) processing.

Key Clusters and Traditional Industries

[7] Precision Farming Technology, Adoption Decisions and Productivity of Vegetables in Resource-Poor Environments, Maheswari R., Ashok K.R., Prahadeeswaran M., 2008

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 industry, trade and agriculture.

According to the data collected from the RBI, the industry sector has seen the highest credit growth at 32% between 2013 and 201516. Dharmapuri is also expected to see large-scale investments mainly in textile and food processing. It is one of the ten districts, where the State has proposed to establish production centres for the Agricultural Supply Chain Project at a cost of 32.45 Crores.

1.3. Labour Market Profile[8]

The overall labour force participation rate is 58% and worker population ratio is 56% - marginally lower than the State average. About 68% of workers in the district are wage employed and 33% are self-employed. The unemployment rate is at 2%, lower than the State average.

Figure 10 Key Labour Market Indicators[9]

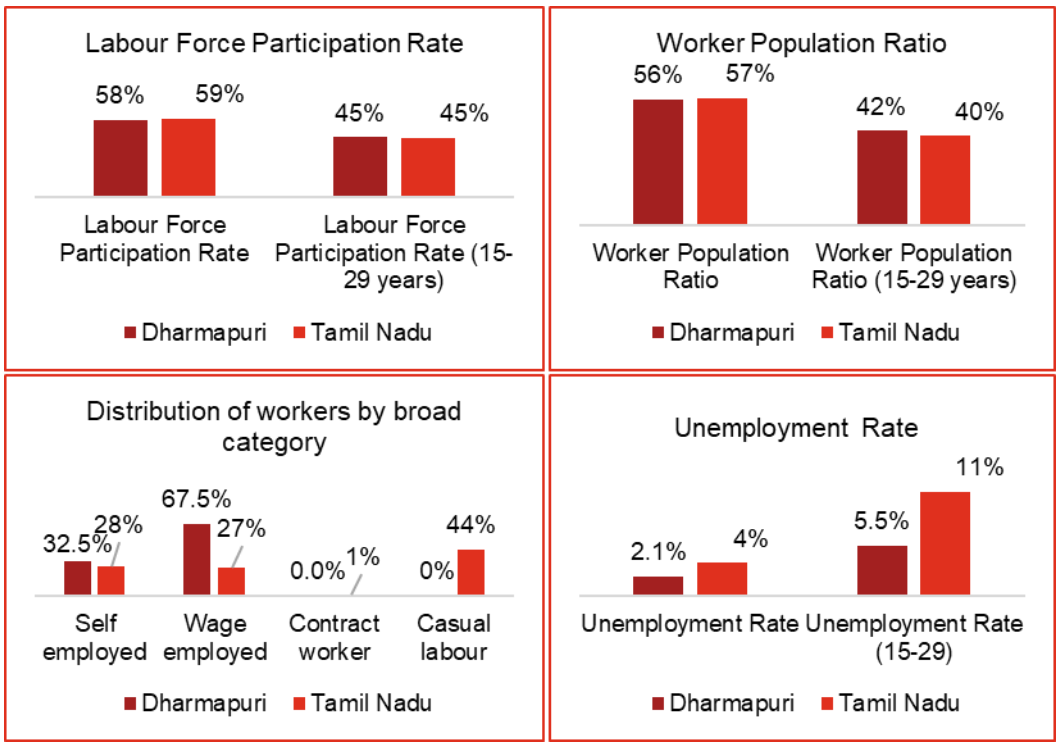


Figure 11 Distribution of Working status by Qualification: District Level Estimates

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

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

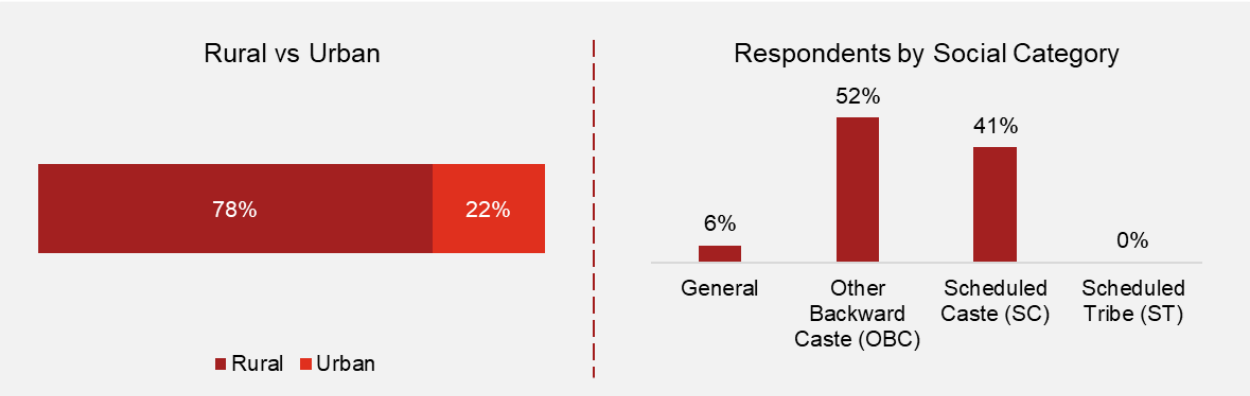
A total of 360 youth in the age group of 15-34 years were covered through a structured household survey tool. This covered a sample of six blocks out of the 14 blocks in the district Morappur, Harur, Nallampalli, Pennagaram, Dharmapuri and Palakkodu. About 31% of the overall respondents were female and about 78% were from rural areas. The survey has tried to achieve a balanced representation of various socioeconomic and demographic characteristics of the population.

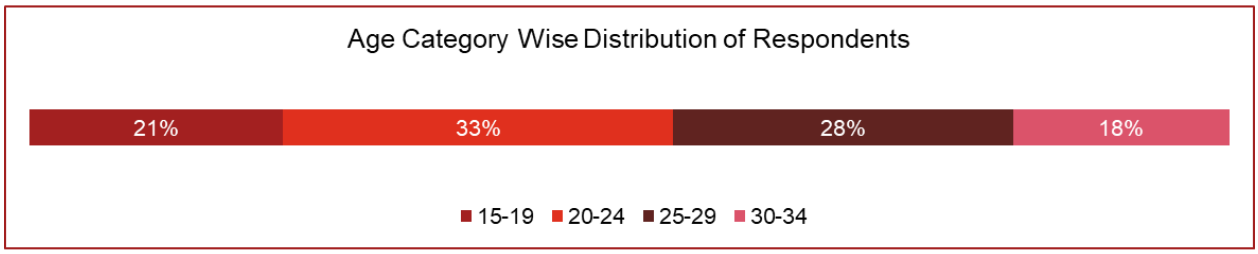
Figure 15 Respondent Profile of Youth Aspiration Survey

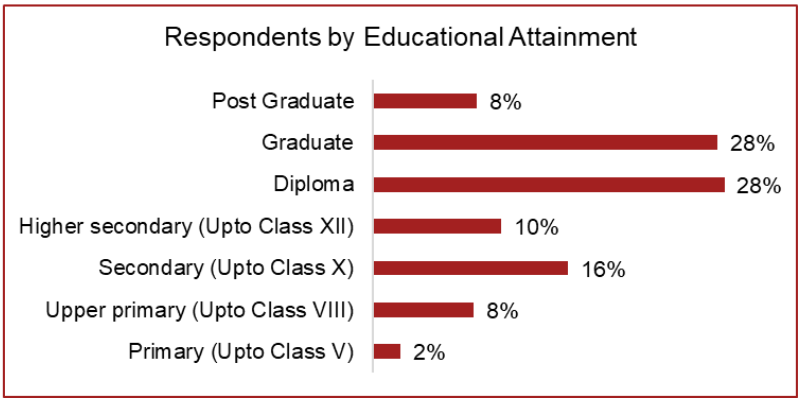
Blocks covered	
Morappur	Nallampalli
Harur	Pennagaram
Dharmapuri	Palakkodu

360 Respondents

31% Female Respondents





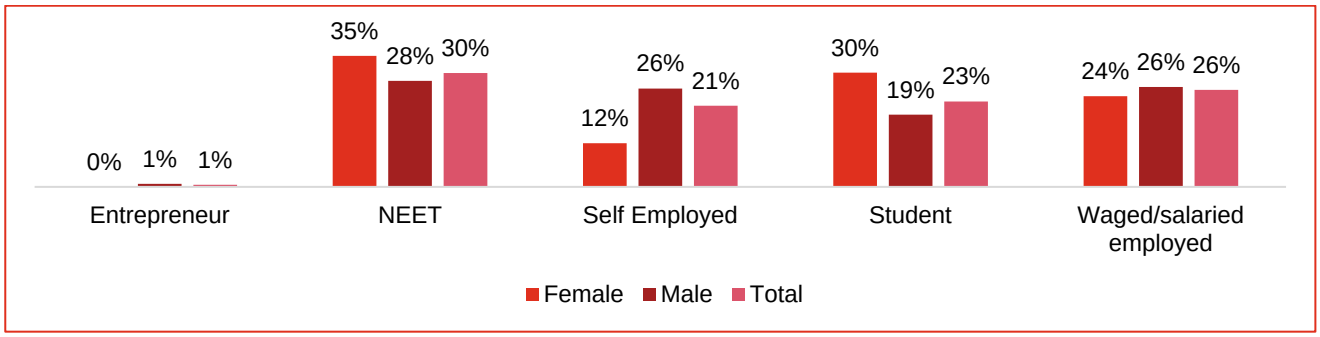


- ***96% respondents were from the BPL (below poverty line) category***
- ***24%*** *of respondents reported a monthly household expenditure of* ***not more than Rs. 10,000***

2.2. *Youths' Educational and Economic Engagement Status*

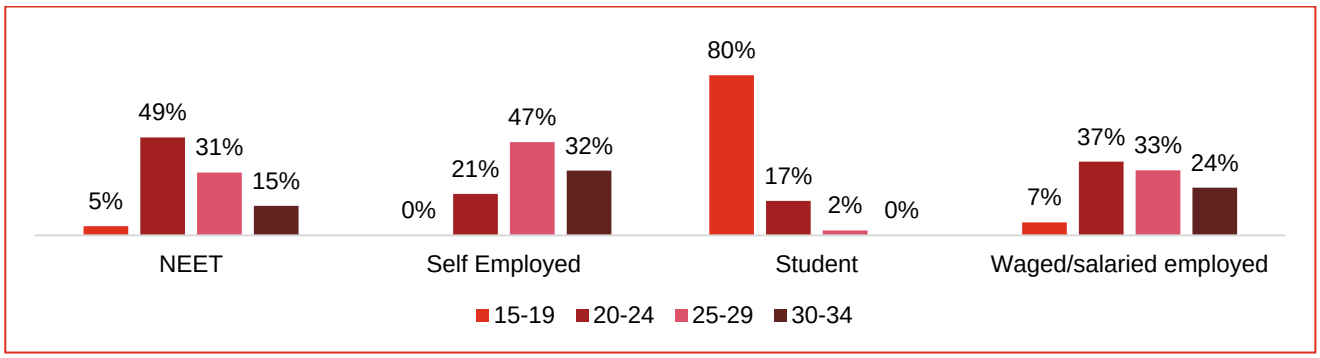
Figure 16 illustrates the gender wise classification (current status) of the respondents interviwed during the household survey. The respondents were predominantly part of the NEET category (30%). About 26% were wage/salaried employed.

Figure 16 Current Status of Respondent by gender



Going by the age of the respondents, 49% of the respondents between 20-24 years of age are in the NEET category. Overall, 21% have opted for self-employment[12]. About 80% in the age group of 15-19 years identify as students.

Figure 17 Current Status of Respondent by Age Category

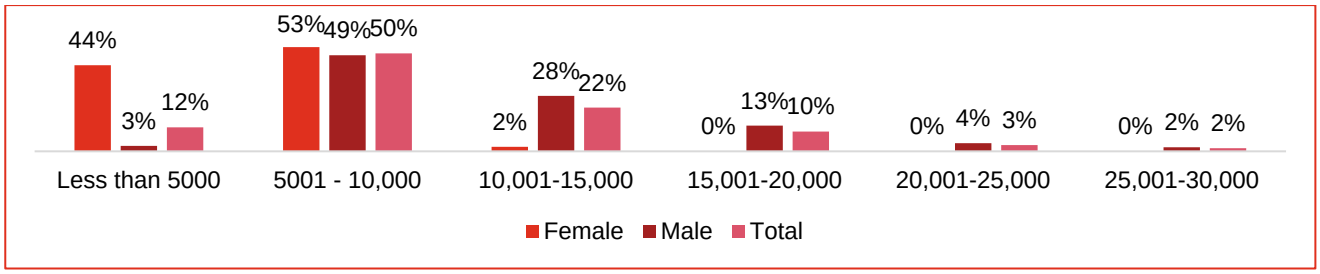


2.3. Economic Engagement of Youth

Only 49% of the respondents are currently engaged in some economic activity and 91% are involved in a work related to their education/training.

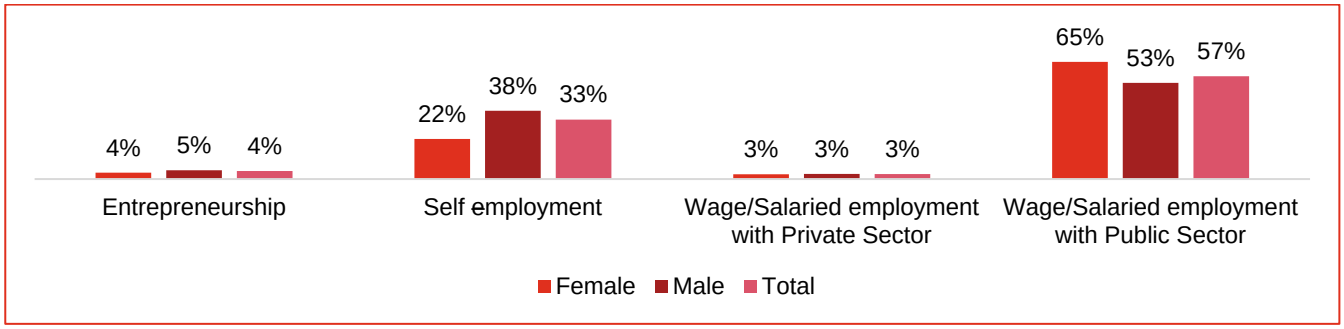
As seen in Figure 18, 97% of female respondents receive an income of not more than 10,000 per month. Among males, 28% received an income between 10,000-15,000 per month.

Figure 18 Distribution of Respondents across Monthly Income Category across gender



[12] 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.

Figure 19 Career Aspiration of Youth



The main factors determining the aspiration of the youth are Salary (wages) / Income (80%), job security (48%) and physical proximity to residence (16%). The emphasis on job security is also seen in their overwhelming preference for public sector jobs. About 98% of the total respondents feel they are completely prepared for requirements for a job. About 59% 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
Salary (wages) / Income	80%
Gender suitable role	7%
Social Status	9%
Traditionally Acquired Skills / Family Business	1%
Flexible work arrangements (location, schedule)	2%
Job Security	48%
Closeness to Residence	16%
Retirement Plans	2%
Safety / Security	1%
Employer provided benefits and perks	1%

Perception of Preparedness for Jobs (n=171)	Responses
Completely Prepared	98%
Moderately Prepared	1%
Somewhat prepared	1%
Not Prepared	0%

Availability of Job Opportunities (n=360)	Responses
Neither adequate nor inadequate	0%
Somewhat adequate	4%
Somewhat inadequate	33%
Very adequate	1%
Very inadequate	59%
	2%

Multiple response question

Most respondents (90%) feel that there is no challenge in pursuing their desired job. About 6% said that the lack of appropriate guidance on job availability was a challenge.

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%	Low financial strength	2%
Lack of guidance / information on appropriate job available for skill levels	6%	No Challenge	90%

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

As seen in Table 10, the key factors perceived to be enhancing employability to achieve his/her desired job, according to the respondents were, the level of educational attainment (53%), work experience (31%) and

certifications of technical skills (14%). Creativity, originality and initiative (72%), communication skills (39%) and leadership (17%). In order to get their desired jobs, 36% wished to continue education. About 27% respondents said that their next step would be to gather work experience; 26% said they planned to attend skill trainings.

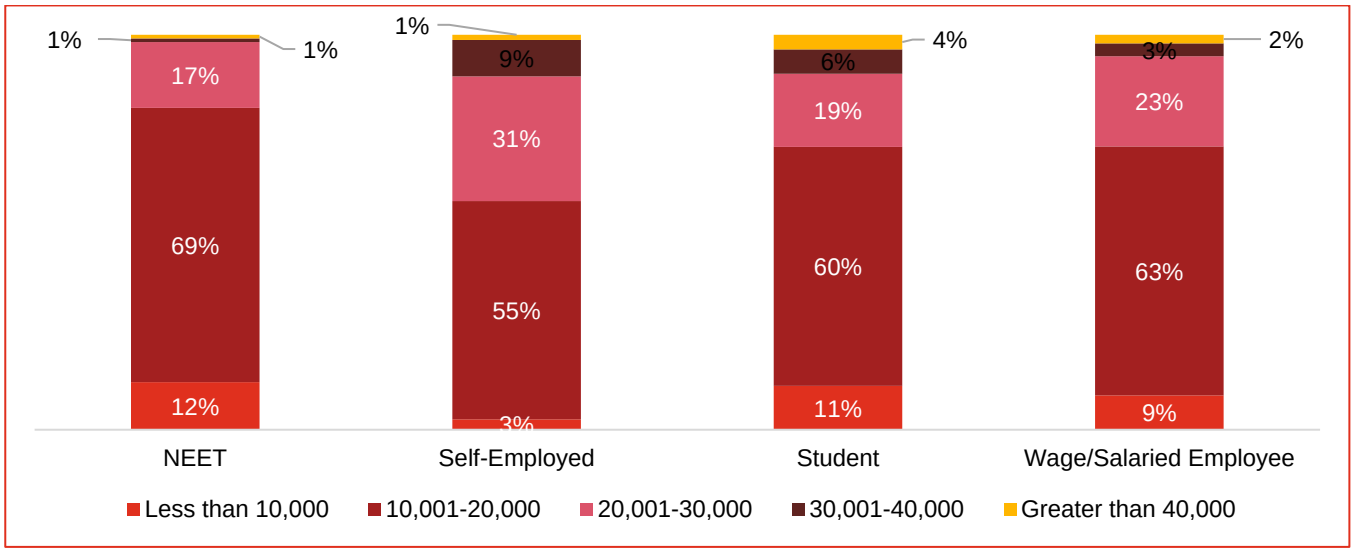
Table 10 Key Requirements to enhance employability and steps to achieve aspirations

Key Requirements to enhance employability* (n=360)			
Requirements	Responses	Requirements	Responses
Certifications of Technical Skill	14%	Relevant work experience in similar position or field	1%
Education attainment (level of education)	53%	Years of Work Experience	31%
Key Skills Required for desired job*			
Analytical thinking	5%	Creativity, originality and initiative	72%
Team work	4%	Coordination Skills	0%
Clear communication	39%	Attention to detail	0%
Leadership	17%	Time management	14%
Active listening	1%		
New Steps to achieve aspirations*			
Steps	Responses	Steps	Responses
Vocational/ Skill Training	26%	Already Achieved	19%
Continuing Education	36%	Apprenticeship / Gathering Work Experience	27%

**Multiple response question*

Most respondents (40%) aspire to earn between 15,000-20,000 per month. The income aspirations of women are much lower 48% aspire for an income between 5,000-15,000 per month. Salary aspiration also varies with - about 31% of self-employed respondents expected a salary between 20,000-30,000 whereas only 17% of NEET category respondents expected a salary in that range.

Figure 20 Aspired monthly salary of respondents



2.6. Skill Training Preferences of Youth

Only **4%** of respondents are aware of government skill training programmes

65% of respondents are interested in undergoing skill training

34% are interested in residential training programmes

About 52% of the total respondents are interested in undergoing full-time training courses. However, most are interested only in short term certificate courses of less than 6 months duration (56%).

Figure 25 Duration of Skill Training type interested in

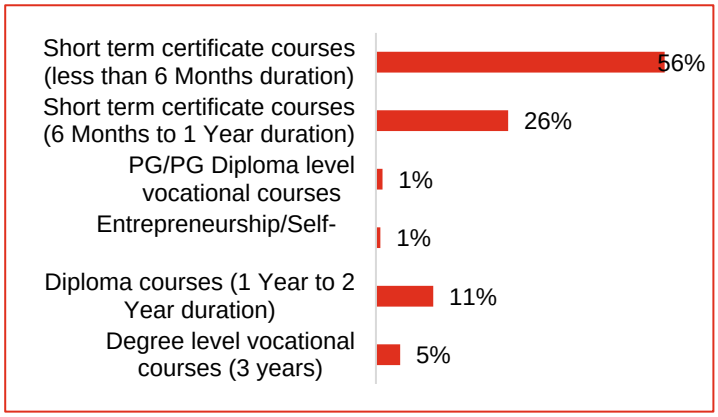
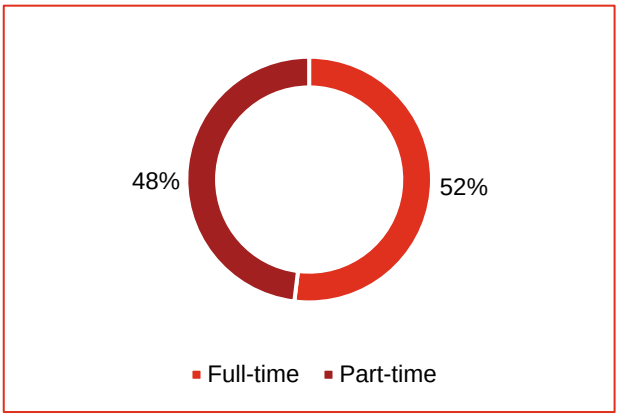


Figure 26 Skill Training type interested in



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 ten sectors. The sector wise coverage of industries is given in

Table 11. Majority of industries were from the textile and apparel, iron and steel and chemicals and pharmaceuticals sectors. Of the overall sample, 27% were micro industries, 59% were small-scale industries and 16% were medium industries.

Figure 27 Distribution of Industries by Size

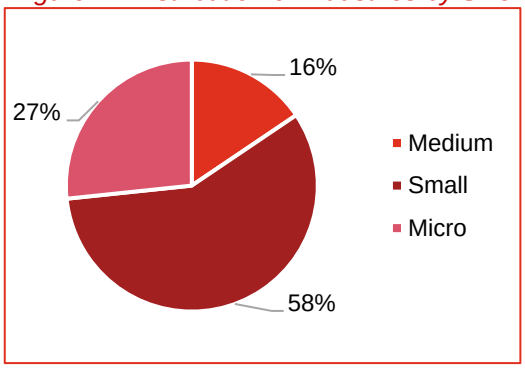


Table 11 Sector wise coverage of Industries in Employer Survey

S.No	Sector	Number of Industries Surveyed	S.No	Sector	Number of Industries Surveyed
1.	Auto and Auto Components	4	2.	Iron, Steel and Other Metals	9
3.	Building Construction Painting Industry	5	4.	Textile and Apparel	12
5.	Chemical & Pharmaceuticals	8	6.	Tourism Travel and Hospitality	1
7.	Electronic and IT Hardware	2	8.	Plastics	1
9.	Food Processing	2	10	Paper and Paper Products	1

As seen in Table 12, employee reference is the major mode of recruitment (93%). About 17% of employers also use local community for recruiting workers. The most common challenge faced by employers was candidate disinterest and attitude (56%), followed by high local wages (53%).

*Table 12 Modes and Challenges in Recruitment Process**

Key Modes of Recruitment (n=42)			Key Challenges faced in Recruitment (n=43)		
S.No	Particulars	%	S.No	Particulars	%
1.	Campus recruitment in ITIs/Polytechnic	2%	1.	Candidate Disinterest and Attitude	56%
			2.	High local wages	53%
2.	Employee Reference/ Other Referrals	93%	3.	Lack of basic education requirement	7%
			4.	Lack of requisite soft skills	7%
3.	Local Community	17%	5.	Lack of requisite core skills	2%
			6.	Lack of social acceptance of girls to work in the Community	2%
4.	Social Networks	2%	7.	Nature of work requires strenuous physical labour	9%
			8.	Work hours	14%
5.	Others	5%	9.	Resistance by family to allow them to work	5%
			10.	None	19%

Figure 29 Average distribution of workers by Sex

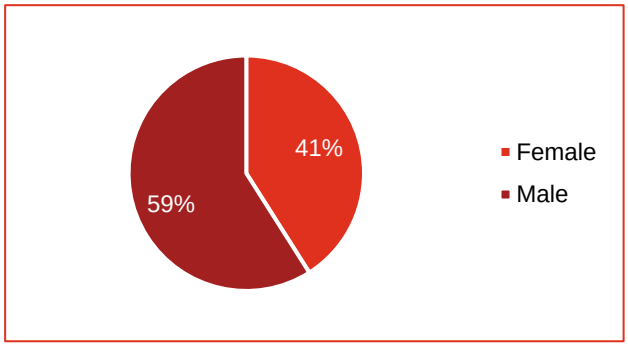
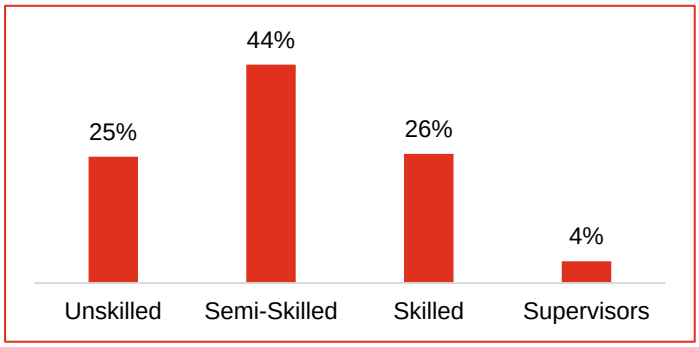


Figure 28 Distribution of workers by Skill Levels

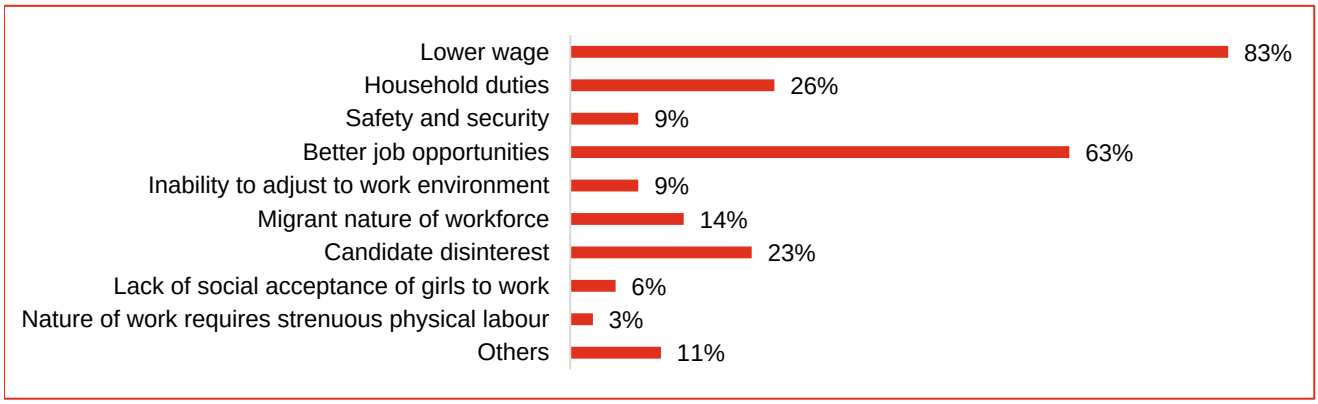


On an average, 59% of the employees in the respondent industries were male.

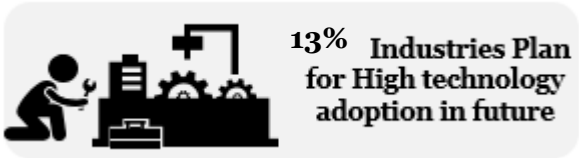
Semi-skilled workers dominated the share of workforce (44%) followed by skilled workers (26%) and unskilled workers (25%). The cotton milling and food processing industry usually prefers unskilled workers who can be trained on the job. Only about 4% of employees are in supervisorial job roles.

Lower wage (83%) and availability of better job opportunities (63%) are the reasons given by most employers for attrition. About 23% of employees attribute attrition to candidate disinterest and 26% feel it is due to household duties, especially in the case of women.

Figure 30 Key causes of Attrition



Over 29% of the employers feel there is high growth prospects in the industries. Most employers (53%) feel that the level of technology adoption in the future will be low. Only about 9% have plans to introduce automation. The food processing industry in the District is in need of better technology adoption. Hence, there is a need for better awareness of new technology and skilled persons with knowledge of operating them.



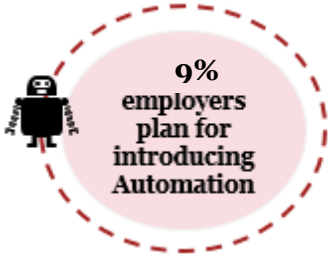


Table 13 Growth Prospects and prospective adoption of technology

Growth Prospects of Industry (n=41)	%	Level of Technology adoption (n=40)	%	Plans to adopt Technology (n=45)	%
High	29%	High	13%	Yes	9%
Medium	46%	Medium	25%		

Growth Prospects of Industry (n=41)	%	Level of Technology adoption (n=40)	%	Plans to adopt Technology (n=45)	%
Indifferent	24%	Low	53%	No	84%
		Indifferent	10%	Indifferent	7%

As seen in the figure below, employers feel there is a need for upgraded domain skills among workers (50%). Other skills deemed important by employers are time management (8%) and IT skills (25%). About 29% employers said there would be a medium demand for skilled workers in the next five years.

Figure 31 Skills required for workers

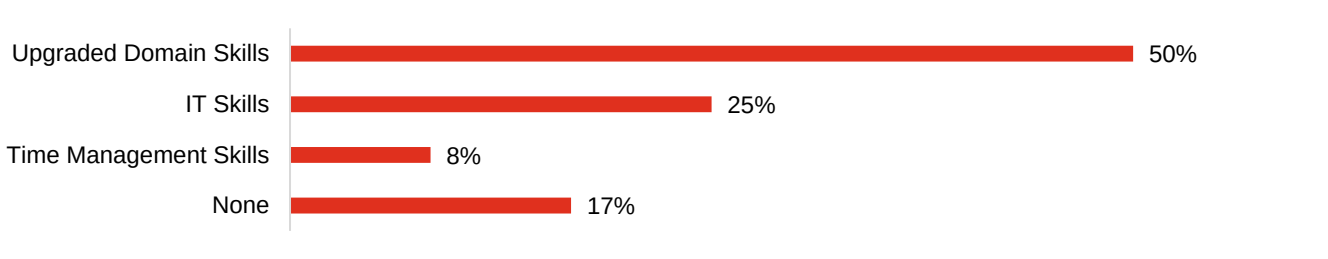


Table 14 Demand for workers by Skill Level and type of training provided to workers

Demand for Workforce in next 5 years	Minimally Skilled	Skilled	Supervisory	Type of Training Provided for Skilled Workers: Type of Training	%
High Demand	6%	9%	-	Domain skills on recruitment	50%
Medium Demand	21%	29%	-		
Low Demand	9%	9%	6%	Up-skilling to meet technical needs	50%

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 Dharmapuri

S No	Topic	Responses
1.	Awareness of government skill training programs/ jobs/ job melas	• The workforce is not fully aware of skill training programmes. • There is also not much interest to participate in skilling programmes.
2.	Education- schools, ITI/ Polytechnics/ Engineering colleges in the district	• Most candidates in the District do not prefer a diploma or ITI education. • The enrolment levels in ITIs is only three fourth the capacity. Low student attendance and higher levels of dropouts has also been a major issue.
3.	Candidate Attitudes/ Abilities	• The attrition rate is lesser when candidates are recruited from within a radius of 10 kms or less. • Most of the candidates prefer to have desk-based roles and ideally prefer managerial positions and require managerial-level compensation as well. • Candidates prefer to work in the informal sector; however, do not prefer any job that involves working in the shop floor. • Youth prefer jobs in cities like Bangalore and Chennai and place a sense of pride to working there irrespective of low salaries offered (not more than 10,000 per month). • A good amount of Engineering graduates show interest in locally available work. However, they demand high wages and do not continue with any work for a longer duration.

S No	Topic	Responses
4.	Women Employment	• Women are mostly involved in the textile spinning and garment manufacture industry. • Women workforce is reserved for packing and allied activities in food processing industries. • There is a need for dismantling the attitude of gender-based discrimination among employers, who either selectively allocate work or provide differential wages/ salaries
5.	Migrant workers	• There is demand for unskilled labour and this is at present satisfied by employing migrants from Bihar and Jharkhand. Local candidates do not prefer to take up job-roles in MSMEs. The shortage of labour is due to the physical nature of work, which does not attract the local workforce.
6.	Industry	• Employers are willing to offer a maximum of 15,000 per month, as salaries/ wages.
7.	Skill Gaps	• There is a need for skilled persons in food processing and textile sector. • There is a high demand for job roles such as fitters and operators equipped with Diploma in mechanical engineering as there is requirement to work with imported machines. • There is demand for technicians/repair-men to work on servicing of machines. At present, the machines are being transported to Salem for repairs and maintenance.

4. Skill Gap Analysis

4.1. Skill Gap Assessment - Incremental Demand[14] for Skilled & Semi Skilled Workforce

In the next 6 years, Dharmapuri will see a demand for about 45,000 workers. Major sectors that drive the demand are manufacturing, construction, agriculture and allied activities.

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	-	-	-	-	-	-	-
Allied Activities	271	426	697	1,897	2,985	4,882	5,580
Mining and quarrying	128	182	310	214	303	517	827
Manufacturing	1,398	2,067	3,466	2,797	4,135	6,931	10,397
Electricity, gas, water supply and other utility services	20	28	47	40	55	95	142
Construction	900	1,358	2,258	2,249	3,395	5,644	7,902
Trade & Repair Services	263	369	632	909	1,278	2,187	2,819
Hotels and restaurants	102	144	247	199	279	478	724
Transportation and storage;	155	213	368	373	510	883	1,251
Communication and services related to broadcasting	549	891	1,439	274	445	720	2,159
Financial and insurance activities	461	709	1,170	230	355	585	1,755
Real estate, ownership of dwelling and business services	126	191	317	316	476	792	1,109
Public Administration	-	-	-	-	-	-	-
Education; Human health & Social Work Activities	852	1,212	2,064	681	970	1,651	3,715
Arts, entertainment and recreation	266	387	653	212	310	522	1,175
Other Services	1,312	1,913	3,226	1,050	1,531	2,581	5,806
Total Demand	6,804	10,090	16,893	11,442	17,026	28,468	45,362
Total Supply	5,244	6,991	12,235	10,632	14,176	24,809	37,044
Total Skill Gap	1,560	3,098	4,658	810	2,850	3,660	8,318

As seen in the table, the major demand is from the growing food processing industry. Though the skill gap for the next six years in the district is only about 8,000 additional jobs, there is a strong need for upskilling farmers and workers in the food production industry. Trainings have been proposed focusing on these sectors.

[14] 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:

- **Attitudes towards women employment:** Overall, it has been observed that women in Dharmapuri are mostly employed in job roles traditionally set aside for women like tailoring, packing, low skilled jobs in food processing, etc. Incidentally, these jobs pay much lesser than others. Both employers and local community prefers these stereotypical job roles for women. In addition, most of the employers also discriminate women while fixing of salaries/ wages.
- **Food Processing:** Despite the agriculture GVA increasing in the district, farmers rely heavily on the monsoon and water release from the Cauvery River for their crops. In order to augment their income, value addition of agriculture food products is necessary.
- **Agricultural skill training:** More people are moving out of agriculture jobs (farming and casual labour). Research in Dharmapuri has shown that adopting precision farming that reduces production costs also brings an increase in yield[15]. Local farmers and youth will need to be trained (upskilled) in these new agriculture technologies and practices. Precision and technology-supported farming could also play an important aspect of presenting agricultural livelihoods as to the youth.

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 Dharmapuri:

Table 17 Summary of Trainings

S No	Sector	Trades	Target (Persons)	Budget (₹)
1.	Agriculture and allied	• Dairy Farmer • Broiler Poultry Farm Worker • Sericulturist • Paddy Cultivator • Organic Farmer • Micro Irrigation Technician	3,000	4.21 Crores
2.	Textile and Apparel	• Warper Direct Warping Machine • Sewing Machine Operator • Packing Checker • Fabric Checker • Quality Checker	3,000	4.68 Crores
3.	Healthcare	• General Duty Assistant • Blood Bank Technician • Cardiac Care Technician • Diabetes Educator • Emergency Medical Technician - Basic	1,000	2.85 Crores

[15] Precision Farming Technology, Adoption Decisions and Productivity of Vegetables in Resource-Poor Environments, Maheswari R., Ashok K.R., Prahadeeswaran M., 2008

S No	Sector	Trades	Target (Persons)	Budget (₹)
		• Medical Records & health Information Technician		
4.	Domestic Appliance Services	• Helper Electrician • Plumber (General) • Solar Domestic Water Heater Technician • Field Technician AC • Field Technician Refrigerator • Field Technician - Washing Machine • Field Technician - Other Home Appliances	1,500	3.81 Crores
5.	Food Processing	• Dairy Processing Equipment Operator • Cold Storage Technician • Food Products Packaging Technician • Grain Mill Operator • Multi Skill Technician (Food Processing) • Sago Processing • Jaggery Manufacturer • Tamarind Processor • Quality Assistant	4,000	6.43 Crores
6.	Logistics	• Warehouse Packer • Inventory Clerk • Warehouse Supervisor • Reach Truck Operator • Receiving Assistant • Warehouse Quality Checker	2,000	3.07 Crores
7.	Construction	• 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	3,500	4.55 Crores
		Total	**20,000**	**₹29.57 Crores**

Note:

1. The intended target groups are different from the eligibility criteria prescribed as part of the Qualification Pack. Target Group refers to the preferred set of youth who stakeholders have identified are most likely to benefit from the training. This could come from the Aspirations expressed in the Quantitative Survey, feedback from Industry and Govt. Stakeholders. For instance, though a training in handicrafts might require only 5th grade as an eligibility- criteria, the target group would be rural women in a cluster. TNSDC and the TSPs can continue to use the minimum criteria as mentioned in the Qualification Pack; however, qualifications that may constrain an interest-group may appropriately considered on a case- to-case basis (as approved by TNSDC).
2. The QP NOS reference numbers and the training hours have been taken as per the latest QP NOS compilation (as on 17th October 2019). However, in the same compilation, some job roles do not have training hours mentioned. In such cases, we have taken the average training hours for the sector and NSQF level within the sector and applied
those as notional hours. We have also used insights from field consultations to arrive at training hour estimates which to reflect the market requirements.
3. An attempt was made to map each proposed job role with a QP NOS reference number. In the cases where accurate mapping has not been possible, we have mapped the job role with the nearest QP NOS reference number. In cases where we have proposed new job roles, we have indicated that a QP NOS reference is to be designed for the same.
4. The Cost of Training has been calculated using the following method: Each job role has training hours, training target (persons), and a cost category. The cost category has been determined by the National Skills Qualification Framework (NSQF) with respect to the level of capital expenditure and operational expenditure for imparting the course aligned to that specific job role. Therefore, each cost category corresponds to a particular cost norm calculated per trainee per hour. The calculations have been done as per the Government order (H-22011/2/2014-SDE-III) issued by MSDE on 4th January 2019. The categories are defined as follows:

- INR 42.40 for Category-I

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

The Cost of training in the project shelves represents the calculation of: (training target × training hours × per hour cost) + (training target × number of days of training × INR 100).
Where:
Number of days of training = training hours / 8
Transportation costs per trainee per day = INR 100
To the figures arising from the above formula, the training and assessment costs (INR 1,000 per trainee × training target for the whole project) has also been added. The total training cost for each project arrived through such a process has been added to the summary table above.

The training projects are described below:

Table 18 Training Project 1: Agriculture and allied

Name of the Project: Agriculture and allied sector training							
Key Economic Drivers:							
Agriculture has seen a steady growth in the district from 2011-12 to 2016-17. Sericulture is a major contributor to agriculture GVA. But there is a need for trained farmers to increase the production of silk. Organic farming and technology adoption is an immediate need in agriculture as more people are moving out of the field and there is lesser availability of agricultural workforce.							
Key Partners: Dept. of Sericulture, Dept. of Agriculture							
Job Roles:	**NSQF Level**	**NSQF Codes**	**Duration of Training**	**Cost category**	**Target Group**	**Training Target (People)**	**Cost of Training (₹)**
Dairy Farmer	4	AGR/Q4101	200 hours	1	5th pass	300	0.33 Crores
Broiler Poultry Farm Worker	3	AGR/Q4302	210 hours	2	5th pass	200	0.21 Crores
Sericulturist	5	AGR/Q5201	200 hours	3	5th pass	500	0.43 Crores
Watershed Engineer	6	AGR/Q6606	315 hours	1	12th pass	500	0.87 Crores
Organic Farmer	4	AGR/Q1201	200 hours	2	5th pass	1,000	0.98 Crores
Micro Irrigation Technician	4	AGR/Q1002	200 hours	1	8th pass	1,000	1.1 Crores
	Total training cost					**3,000**	**₹ 3.91 Crores**
	Total Assessment and Certification cost (1,000 per candidate)						**₹ 0.30 Crores**
	Total cost						**₹ 4.21 Crores**
Key Considerations: 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. The training can also include inputs on marketing and business management in order to promote entrepreneurial ventures.							

Table 19 Training Project 2: Textile and Apparel

Name of the Project: Training in Textile and Apparel sector
Key Economic Drivers:
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	Duration of Training	Cost category	Target Group	Training Target (People)	Cost of Training (₹)
Warper Direct Warping Machine	4	TSC/Q2101	300 hours	1	10th Class Pass, 12th Class Pass Special focus on Women 10th Class	500	0.83 Crores
Sewing Machine Operator	4	AMH/Q0301	270 hours	1	10th Class Pass, 12th Class Pass Special focus on Women 10th Class	500	0.75 Crores
Sewing Machine Operator	4		120 hours (upskilling)	1	Existing textile sector workforce	500	0.33 Crores
Packing Checker	4	TSC/Q0301	300 hours	1	10th Class Pass, 12th Class Pass Special focus on Women 10th Class	500	0.83 Crores
Fabric Checker	4	TSC/Q2301	300 hours	1	10th Class Pass, 12th Class Pass Special focus on Women 10th Class	500	0.83 Crores
Quality Checker	4	TSC/Q0501	300 hours	1	10th Class Pass, 12th Class Pass Special focus on Women 10th Class	500	0.83 Crores
	Total Training Cost					**3,000**	**₹ 4.38 Crores**
	Total Assessment and Certification cost (1,000 per candidate)						**₹ 0.3 Crores**
	Total cost						**₹ 4.68 Crores**

Table 20 Training Project 3: Healthcare

Name of the Project: Training in Healthcare Sector							
Key Economic Drivers:							
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**	**Duration of Training**	**Cost category**	**Target Group**	**Training Target**	**Cost of Training**
General Duty Assistant	4	HSS/ Q5101	240 hours	2	8th pass	200	0.24 Crores
Blood Bank Technician	4	HSS/ Q2801	1,000 hours	1	12th pass	100	0.55 Crores

Cardiac Care Technician	4	HSS/ Q0101	840 hours	1	12th pass	200	0.93 Crores
Diabetes Educator	4	HSS/ Q8701	240 hours	2	12th pass	100	0.12 Crores
Emergency Medical Technician - Basic	4	HSS/ Q2301	240 hours	1	12th pass	200	0.27 Crores
Medical Records & health Information Technician	4	HSS/ Q5501	600 hours	1	12th pass	200	0.66 Crores
	Total training cost					**1,000**	**₹ 2.75 Crores**
	Total Assessment and Certification cost (1,000 per candidate)						**₹ 0.10 Crores**
	Total cost						**₹2.85 Crores**

Key Considerations:
Residential training and part-time training modes should be explored to allow women of all backgrounds to attend

Table 21 Training Project 4: Domestic Appliance Service

Name of the Project: Domestic Appliance Service

Key Economic Drivers:
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	Duration of Training	Cost category	Target Group	Training Target (People)	Cost of Training (₹)
Helper Electrician	2	CON/Q0601	480 hours	1	10th Class	250	0.66 Crores
Plumber (General)	3	PSC/Q0104	480 hours	1	5th Class	250	0.66 Crores
Field Technician AC	4	ELE/Q3102	480 hours	2	8th Class	250	0.59 Crores
Field Technician Refrigerator	4	ELE/Q3103	480 hours	2	8th Class+2 yrs	250	0.59 Crores
Field Technician - Washing Machine	4	ELE/Q3104	480 hours	2	8th Class+2 yrs	250	0.59 Crores
Field Technician - Other Home Appliances	4	ELE/Q3106	480 hours	2	8th Class	250	0.59 Crores
	Total training cost					**1,500**	**₹ 3.66 Crores**
	Total Assessment and Certification cost (1,000 per candidate)						**₹ 0.15 Crores**
	Total cost						**₹3.81 Crores**

Table 22 Training Project 5: 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

Key Partners: ITI/ Degree colleges, engineering colleges

Job Roles:	NSQF Level	NSQF Code	Duration of	Cost category	Target Group	Training Target	Cost of Training

			Training (hours)				
Dairy Processing Equipment Operator	4	FIC/Q2002	240	1	10th pass	500	0.66 Crores
Cold Storage Technician	4	FIC/Q7004	240	3	12th pass	800	0.83 Crores
Food Products Packaging Technician	5	FIC/Q2002	240	1	10th pass	800	1.06 Crores
Packaging Technician	5	FIC/Q7001	240	1	8th pass	700	0.93 Crores
Sago Processing*	5	FIC/Q7001	240	1	8th pass	300	0.4 Crores
Jaggery Manufacturer*	5	FIC/Q7001	240	1	8th pass	200	0.27 Crores
Tamarind Processor*	5	FIC/Q7001	240	1	8th pass	200	0.27 Crores
Multi Skill Technician (Food Processing)	4	FIC/Q9007	600	1	12th pass	500	1.65 Crores
	Total training cost					**4,000**	**₹6.03 Crores**
	Total Assessment and Certification cost (1,000 per candidate)						**₹ 0.40 Crores**
	Total cost						**₹6.43 Crores**

Key Considerations:
Students in degree and engineering colleges can be targeted.
Sago, tamarind and jiggery processing is a major industry. A set of QP/NOS can be developed for this.

Table 23 Training Project 6: Logistics

Name of the Project: Training in Logistics Sector

Key Economic Drivers:

Due to its expanding food processing industry, Dharmpuri will require more manpower in logistics, transportation and communications.

Key Partners: ITIs

Job Roles:	**NSQF Level**	**NSQF Code**	**Duration of Training**	**Cost category**	**Target Group**	**Training Target**	**Cost of Training**
Warehouse Packer	3	LSC/Q2303	270	1	Youth in the18-21 year age group	500	0.75 Crores
Inventory Clerk	3	LSC/Q2108	250	1		500	0.69 Crores
Warehouse Supervisor	5	LSC/Q2307	240	1		100	0.14 Crores
Reach Truck Operator	4	LSC/Q2111	300	1		300	0.5 Crores
Receiving Assistant	3	LSC/Q2112	250	1		300	0.42 Crores
Warehouse Quality Checker	3	LSC/Q2313	300	3		300	0.39 Crores
	Total training cost					**2,000**	**₹ 2.8 crore**
	Total Assessment and Certification cost (1,000 per candidate)						**₹ 0.20 Crores**
	Total cost						**₹3.07 Crores**

Key Considerations:
The trainings can focus on youth from various backgrounds school dropouts can also be included

Table 24 Training Project 7: Construction

Name of the Project: Training in Construction Sector							
Key Economic Drivers:							
Migrant labours are mostly engaged in physical labours, such as granite cutting & polishing and construction works. Providing formal skill training will help them obtain more secure jobs and livelihood opportunities.							
Key Partners: 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	Youth and migrant workers	500	0.8 Crores
Metal Inert Gas/Metal Active Gas/Gas Metal Arc Welder (MIG/MAG/GMAW)	4	CSC/Q0209	600	1		500	0.55 Crores
Marble, Granite and Stone	4	CON/Q0106	600	1		1,000	0.77 Crores
Foreman Wet Finishing and Flooring	5	CON/Q0109	800	1		500	0.55 Crores
Bar Bender and Steel Fixer	4	CON/Q0203	400	1		500	0.77 Crores
Assistant Electrician	3	CON/Q0602	400	1		500	0.77 Crores
	Total training cost					**3,500**	**₹ 4.19 Crores**
	Total Assessment and Certification cost (1,000 per candidate)						**₹ 0.35 Crores**
	Total cost						**₹4.55 Crores**
Key Considerations: The trainings should be inclusive of school drop-outs/ young men in NEET category and migrant workers. Trainings can be accompanied by stipends. Trainings can focus on sustainable practices.							

5.3. Key Recommendations

Dharmapuri District is expected to receive investments in textile and food processing industry. In the next six years, in addition to the demand for skilled workforce, there is also a need for a change in attitudes among the local community and the employers.

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

Promotion of Skill Training for women in non-traditional sectors:
Women in Dharmapuri are mostly employed in job roles traditionally set aside for women like tailoring, packing, low skilled jobs in food processing, etc. Incidentally, these jobs pay much lesser than others. There is a need to break these stereotypes prevalent among employers and local community by promoting skill training for women in more industry oriented job roles like mechanical and electrical engineering, which are also an integral requirement in the food processing sector.

Industry-ITI interaction:
Employers feel that there is a high demand for job roles such as fitters and operators armed with diploma in mechanical engineering as there is requirement to work with imported machines and also in servicing them. All six ITIs in the district offer the relevant courses but there is a gap in knowledge acquired and the practicality of working

with these machines. Through better industry-ITI collaboration, this gap can be bridged by inviting students for field visits and internships in relevant industries.

Development of QP/NOS for Tamarind and jiggery processing:
Food processing sector is expected to grow in Dharmapuri with several investments being planned. However, the major food processing activities like jaggery processing and tamarind pulp extraction do not have specific QP/NOS associated that can be used to ensure better quality of production. These can be developed in collaboration with the Food Industry Capacity and Skill Initiative (FICSI).

Online Local Jobs Registry:
The survey conducted among youth shows that about 50% of males preferred to work outside the district but within Tamil Nadu. The stakeholder consultations also show that there is a preference for jobs in the nearby cities of Chennai and Bangalore among youth despite the pay being very low. A registry of local jobs can be created on an online platform in collaboration with the District Employment Office (DEO). This would be more effective in making the youth realize local employment opportunities as 64% said they search for jobs online.

Counselling sessions as part of skill training:

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

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 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.

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

To categorize blocks, the fo60 1e951.r59 re

33.33 to 66.67 percentile value and 66.67 to 100 percentile values. The percentile values are calculated with respect to each district as the base.
Based on the percentile classification obtained, blocks were classified as follows:

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

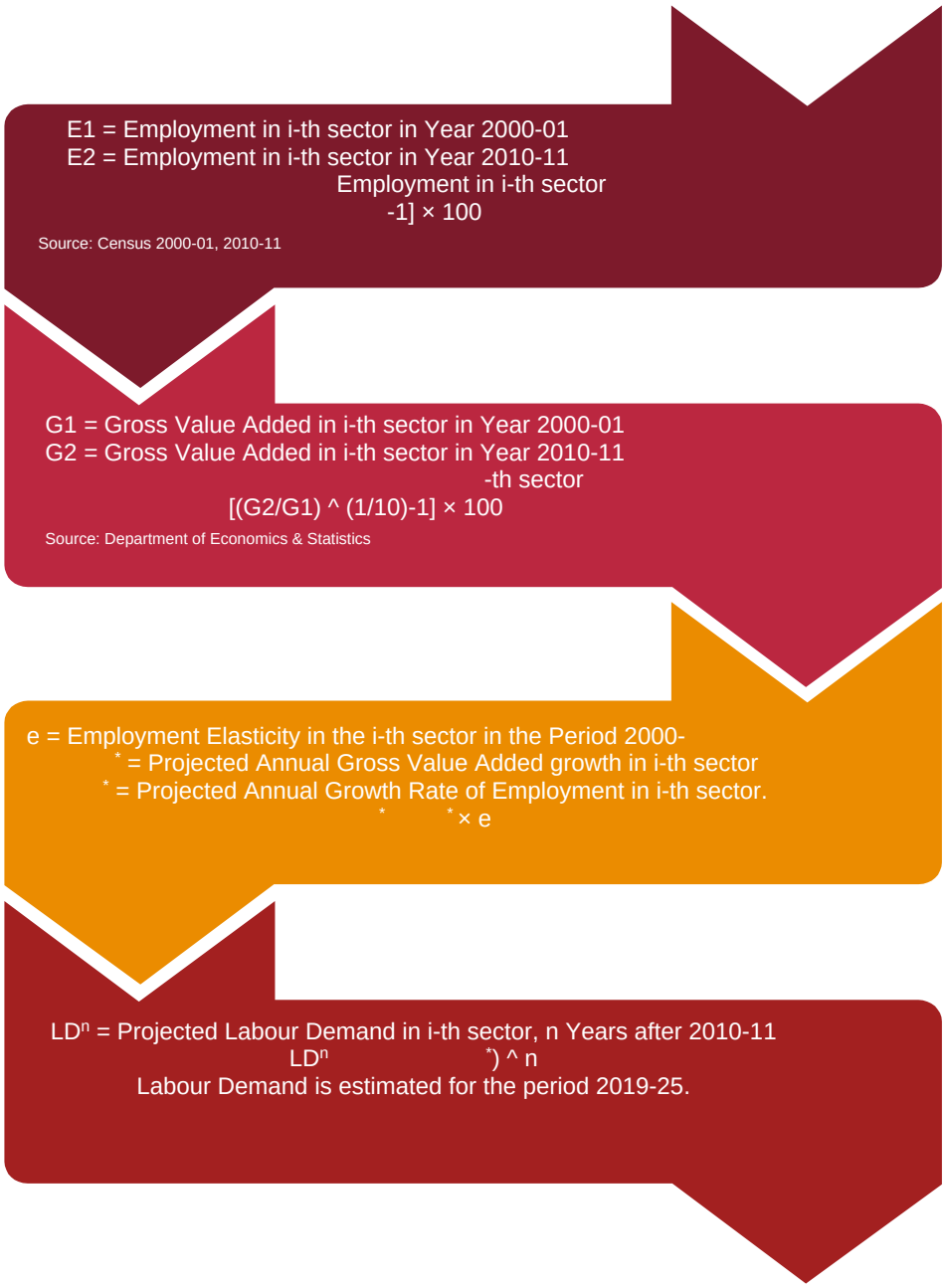
After deriving the above values for the blocks, **t**wo blocks are randomly selected from each category.

The blocks selected were-
Low-Morappur, Harur,
Medium- Nallampalli, Pennagaram,
High- Dharmapuri and Palakkodu.

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:

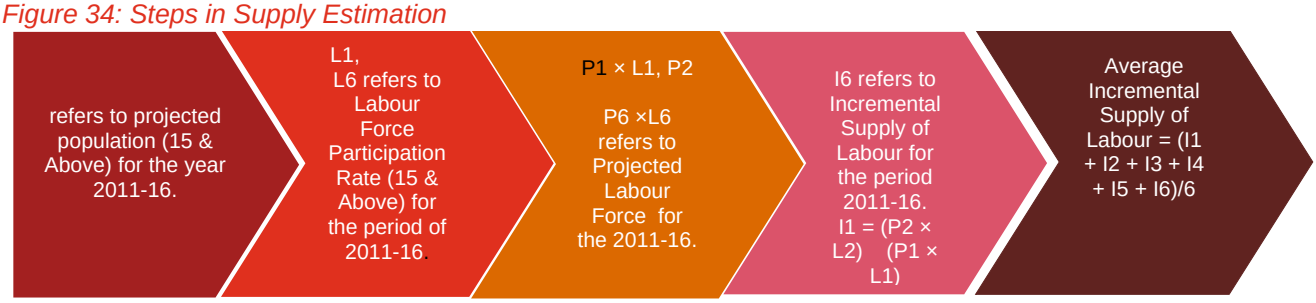
Figure 33: Steps in Demand Estimation



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 state[16]. 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



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

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