
Human Resource and Skill Requirement Study for 21 Coastal Districts of India

Prepared for:
Sagarmala, Ministry of Shipping and
National Skill Development
Corporation

Puducherry

Final Report

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1. District Profile

Puducherry

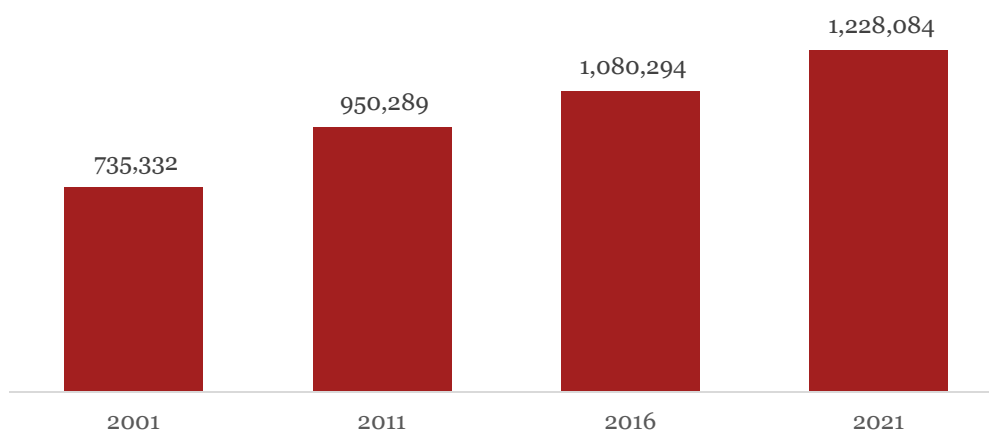
The district (also known as Pondicherry) is the capital of the eponymous union territory which was created upon the merger of territories of the French in South India with the Union of India. The district consists of several exclaves completely surrounded by the districts of Cuddalore and Villupuram in Tamil Nadu. Thus the area of influence of Puducherry's economy exceeds beyond its territorial boundaries. Industry (25%) and service sector (65%) have the largest share in the overall district economy. It has been a traditional hub for tourism, health and wellness and fishing industries. Puducherry houses one minor port, Puducherry Port Trust and the major exportable items produced in the district are chemicals, steel, garments, handicrafts and processed food¹.

1.1. Demographic Profile²

Indicator	Value
Total population	950,289
Decadal rate of growth of population (2001-11)	29.23%
Rural population	31%
Female	51%
SC population	16%
ST population	0%
Workforce participation	37%
Main workers (As % of total population)	33.2%
Marginal (As % of total population)	3.4%
Non-workers (As % of total population)	63.4%
*Number of people with vocational training in the age group of 15+ ³	43 per 1,000

Population trends⁴

Figure 1 Population Trends in Puducherry 2001-2021



¹ Brief Industrial Profile of Puducherry District, MSME

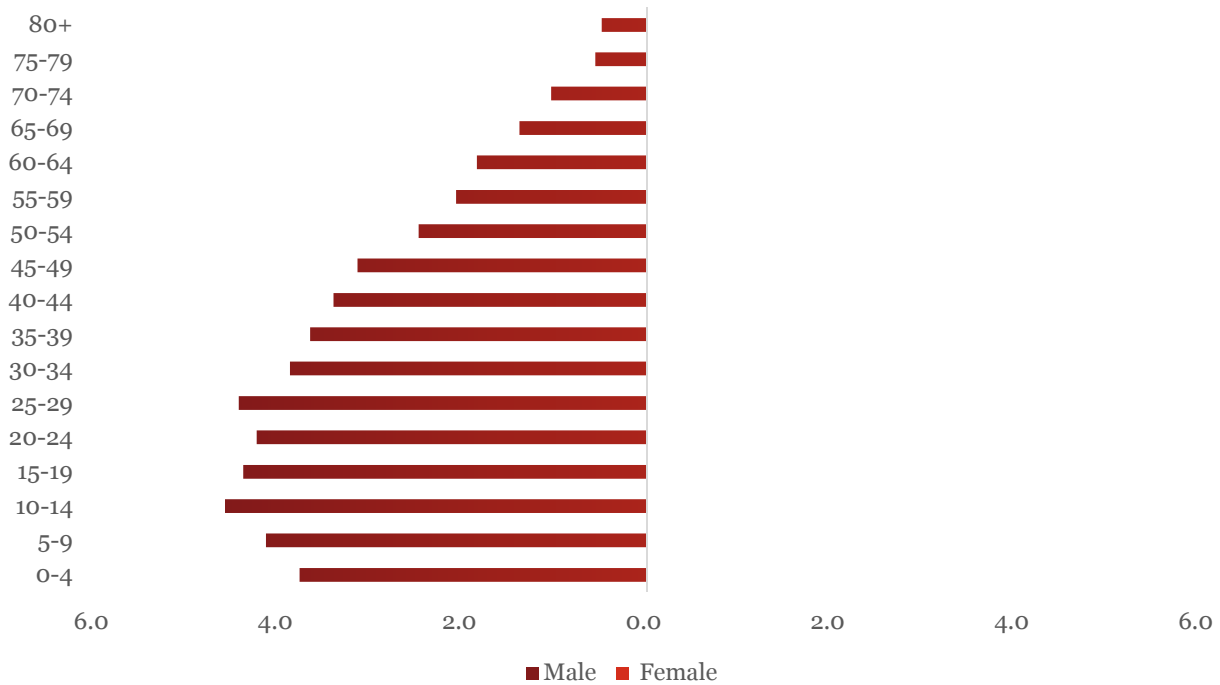
² Census 2011

³ Employment and Unemployment Survey Vol III, Labour Bureau, 2015-16

⁴ Based on Census 2001, 2011

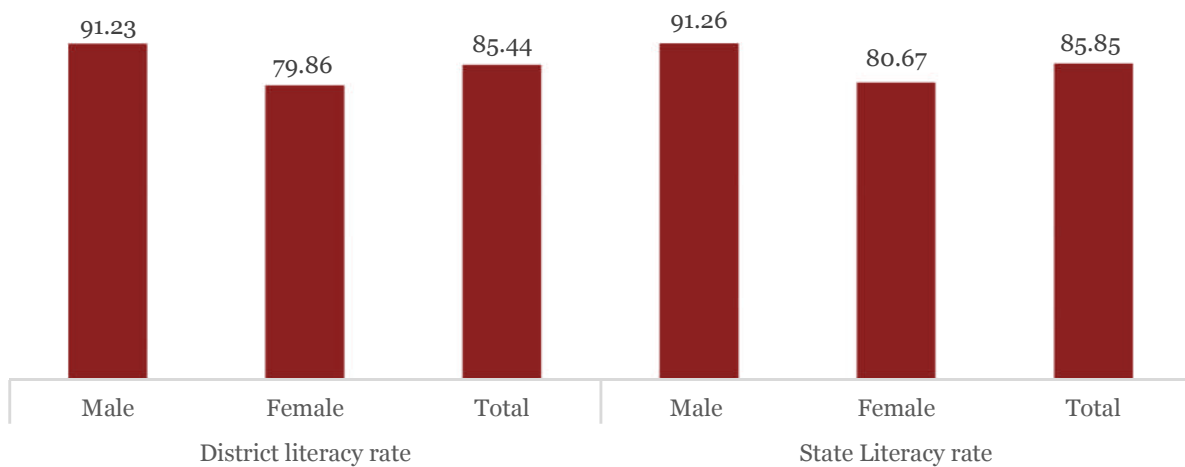
The demographic dividend bulge in Puducherry is expected to shift upward in the coming 10 years. Estimating the population for the period 2001-11 (10 years), the population is estimated to be 10,80,294 and 12,28,084 in 2016 and 2021 respectively. The projected absolute growth in the population from 2016 to 2021 is 13.7%.

Figure 2 Population Pyramid Puducherry, Census 2011



Literacy rates⁵

Figure 3: Puducherry District vs Puducherry UT literacy rates



⁵ Census, 2011

Total literacy rate of district of Puducherry, as per the Census 2011, is approximately 85.44%, which is marginally lesser than the entire UT's literacy rate of around 85.85%. Also, the female literacy rate of Puducherry is 79.86% which is lower than the male literacy rate of 91.23% and is also marginally lower than the UT level literacy amongst women.

Age specific population trends and education level⁶

As per the Census 2011, the population in the age-group of 15 to 24 years was 492,873 (18.71 of the overall population). Projecting the population in the age group of 15-59 years, it is estimated to be about 7,30,168 and 8,40,302 in 2016 and 2021 respectively. The projected absolute growth in the population from 2016 to 2021 is 15.1%.

Figure 4: Growth trend of population in the age group 15-59 years in Puducherry

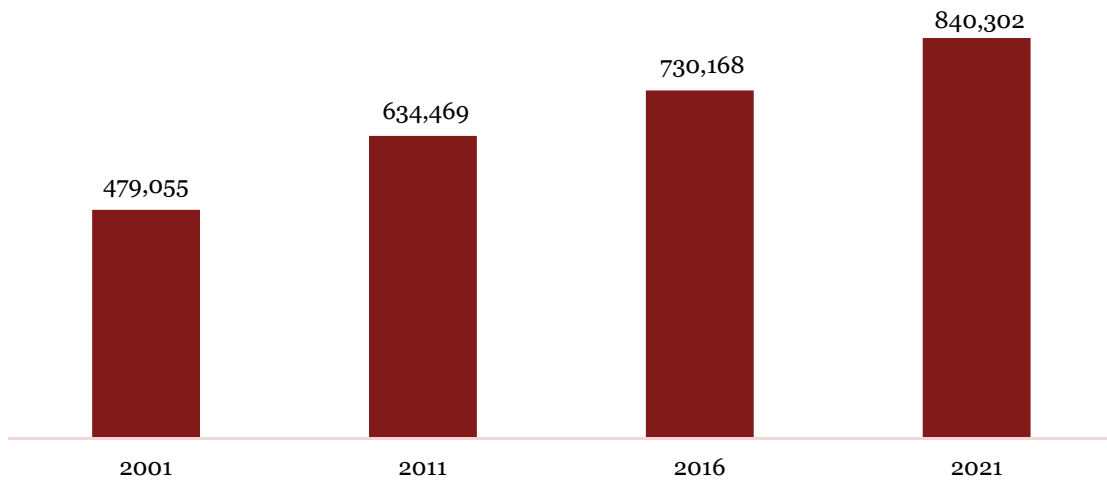


Figure 5: Age specific population (15-59 years)

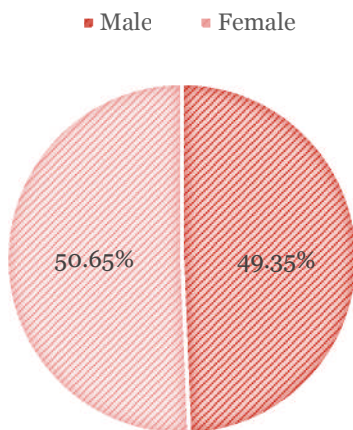
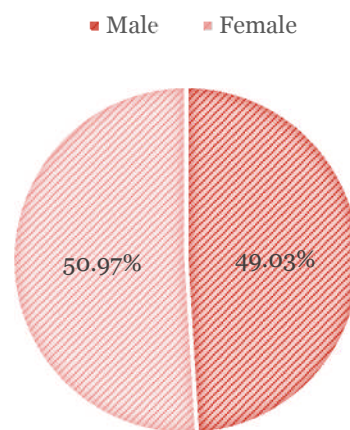


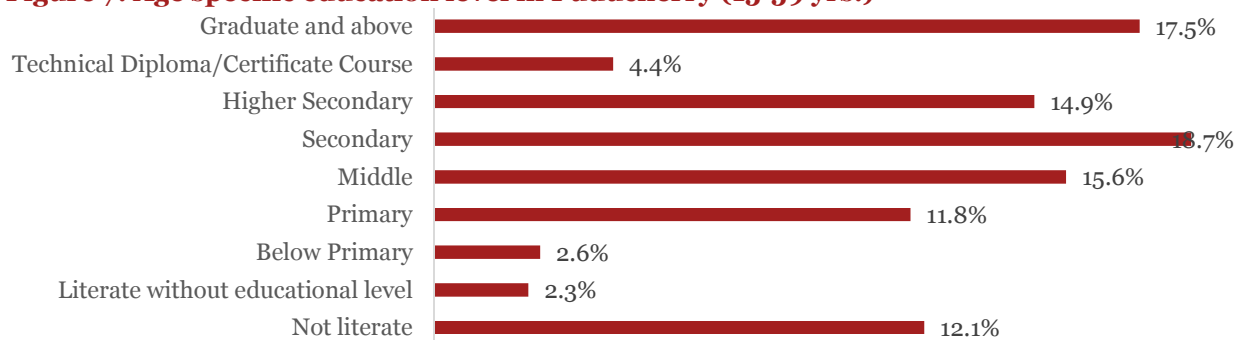
Figure 6: Age specific population (15-24 years)



The share of population of males and females in total population of Puducherry is around 50% each in both the age categories-15-59 and 15-24 years. The share of females is higher than the share of males in the district.

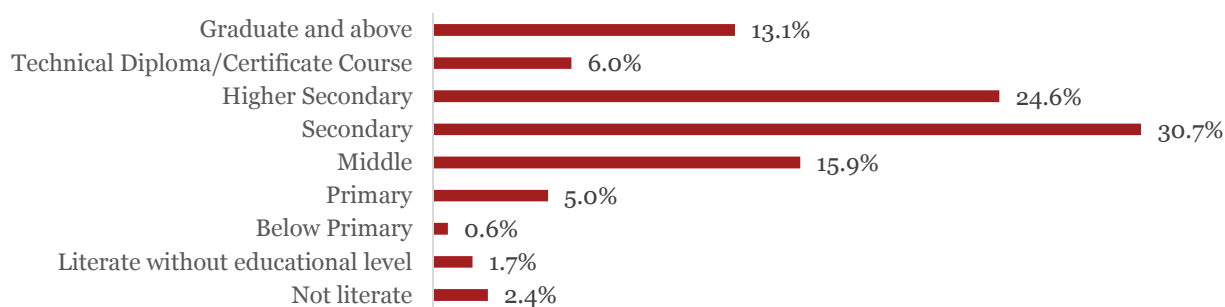
⁶ Based on Census 2001, 2011

Figure 7: Age specific education level in Puducherry (15-59 yrs.)



From the Census 2011, we understand that for the age category of 15-59 years, literacy in the working age group is 87.9%. Graduates and Technical Diploma holders make about 22% of the population. More than 52% of the population are educated with secondary or higher levels of education. However, 28% of the population is educated at primary or lower levels of education. Though there is a high share of educated workforce, the share of under educated workforce will prove to be a challenge for employment.

Figure 8: Age specific education level in Puducherry (15-24 yrs.)

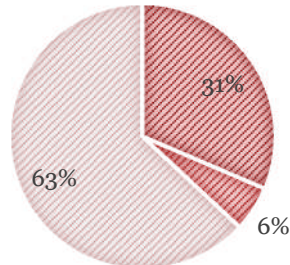


For the age category of 15-24 years, 2.4% of the population of Puducherry is not literate, 1.7% are literate without any educational qualification, 0.6% have attended school till below primary level and 5% have completed schooling only up to primary level. Roughly 16% of the population in 15-24 years category have done schooling up to the middle level, whereas, around 30.7% of the population in 15-24 years category have been educated till secondary. Only 6% of the population of this district have done a certificate/diploma course and 13.1% are graduates and above.

Age specific distribution of workers and educational level⁷

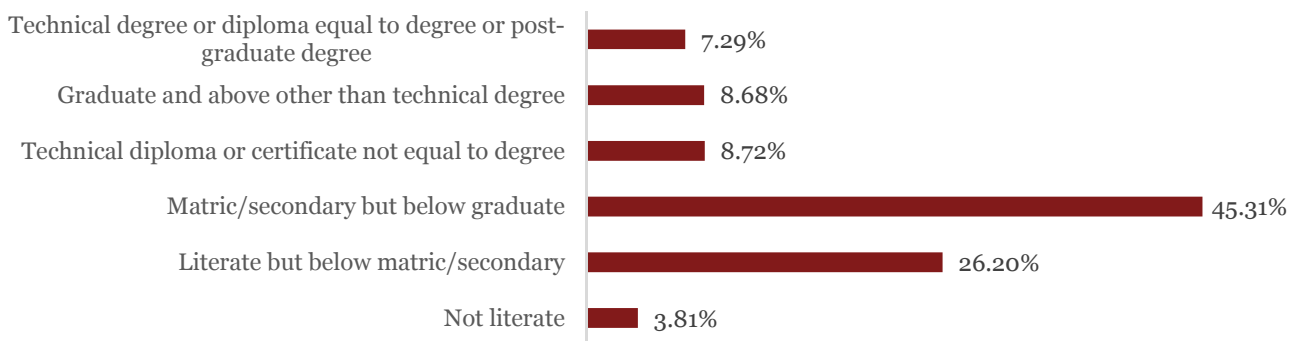
Figure 9: Age specific distribution of workers in Puducherry (15-24 yrs.)

■ Main Workers ■ Marginal Workers ■ Non-workers



The total workforce participation rate for this district, according to census 2011, is 42.74% and 63% of the population in the age group of 15-24 years are reported as non-workers. 31% of the population are main-workers, whereas 6% are engaged in marginal work i.e. working for 3-6 months during the year.

Figure 10: Education level of marginal workers in Puducherry (15-24 yrs.)



Amongst the 2443 marginal workers in the age group of 15-24 years, 178 (7.29%) hold technical degree or a diploma equal to degree or post-graduate degree and 212 (8.68%) are graduate and above other than a technical degree. 213 (8.72%) have a diploma or a certificate (not equal to degree). 1107 (45.31%) are educated up to the matric/secondary level but below graduate and 640 (26.20%) are literate with an educational qualification of below matric/secondary level. 93 (3.81%) marginal workers in this age group are not literate.

⁷ Based on Census 2011

The proportion of main workers who are illiterate (in the age category 15-24 years) is the same as the proportion of marginal workers available for work and who are illiterate. We also find that the proportion of main workers who are literate but below matric/secondary (in the age category 15-24 years) is more than (4 percentage difference point between the two) the proportion of marginal workers who are available for work and are literate but below matric/secondary.

The proportion of main workers who are matric/secondary level but below graduate (in the age category 15-24 years) is less than (8% percentage difference point between the two) the proportion of marginal workers who are available for work and are matric/secondary level but below graduate.

The proportion of main workers who are graduate and above other than technical diploma (in the age category 15-24 years) is almost same as the proportion of marginal workers who are available for work and are graduate and above other than technical degree.

The proportion of main workers who have attained a technical degree or diploma equal to degree or post-graduate degree (in the age category 15-24 years) is slightly greater than (3 percentage difference point between the two) the proportion of marginal workers available for work and who have attained a technical degree or diploma equal to degree or post-graduate degree.

Figure 11: Educational level for main workers in Puducherry (15-24 yrs.)

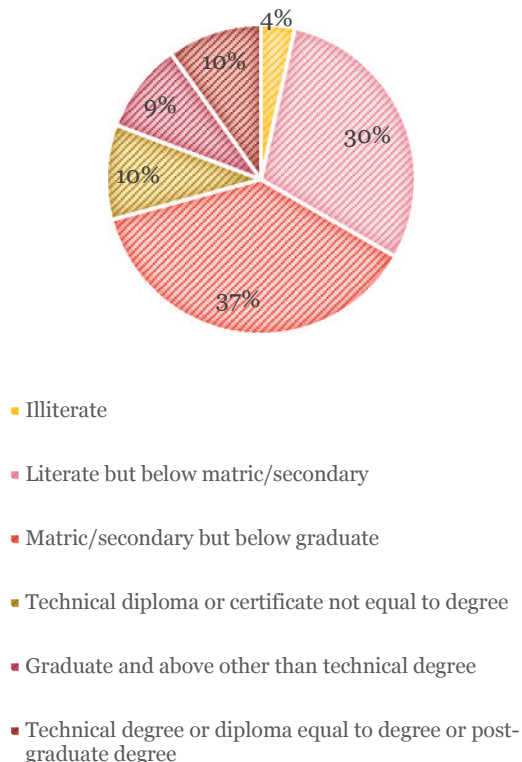
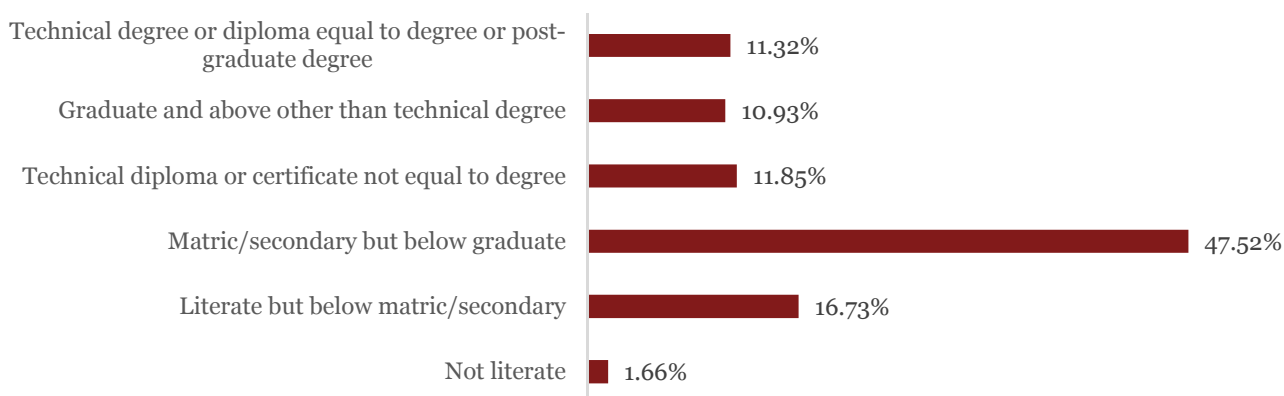


Figure 12: Education level of non-workers in Puducherry (15-24 yrs.)



Amongst the 11,928 non-workers in the age group of 15-24 years, 1350 (11.32%) hold a technical degree or a diploma equal to degree or post graduate degree and 1304 (10.93%) have a graduate and above other than a technical degree. 1413 (11.85%) have a diploma or a certificate (not equal to degree). 5668 (47.52%) are educated up to the matric/secondary level but below graduate and 1995 (16.73%) are literate but below matric/secondary level. 198 (1.66%) non-workers are not literate

1.2. Key Economic Drivers

According to Directorate of Economics and Statistics, Puducherry, the Gross Domestic Product of the union territories (at constant prices- 2004-05) was INR 1,228,778 crore in 2012-13 and it has steadily grown at a CAGR of 9.5% over the period 2004-05 to 2012-13. The sectoral break up suggests that services sector contribution to district GDP is more than half (65%) followed by industries sector (25%). Further disaggregation suggests that logistics sector has a share of 30% and manufacturing has a share of 16% in the district GDP. Other sectors driving the district economy are agriculture (8%) and construction sector (8%).

The key economic drivers of the district are illustrated below:

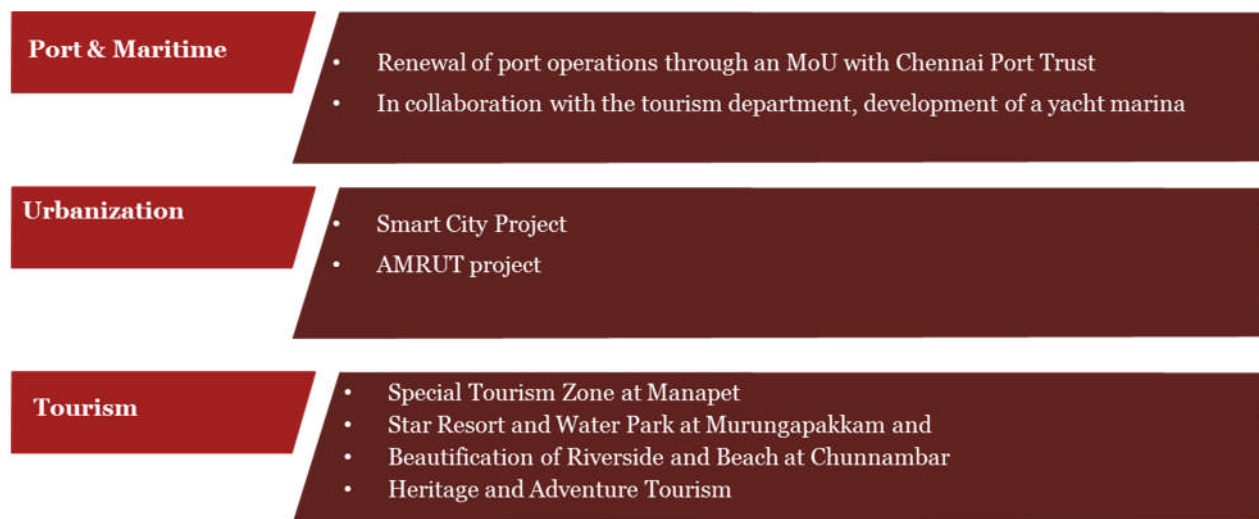
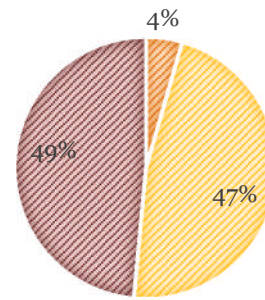


Figure 13: Sectoral breakup of Puducherry GDP at constant prices (2004-05)



■ Agriculture ■ Industry ■ Services

1.3. Priority Sectors

In Puducherry, the identified priority sectors are **Ports and Maritime** and allied sectors like: **logistics, fisheries, tourism and construction**. Other sectors that have been identified as priority sectors from the point of view of their contribution to district GDP are **manufacturing and agriculture**.

1.4. About Port

Ports & Maritime			
Major Ports: Nil	Minor Ports: 1	Shipyards: Nil	
Details			
Puducherry Port			
<i>Operations:</i>	PPP (Under Tender)	<i>Capacity</i>	1 MN tonnes P.A
<i>Key Cargo</i>	Containers (99%), Ferry Movement	<i>No of berths:</i>	1
		<i>Draft</i>	2-2.5M
<i>Description and key Trend</i>	<p>The Port of Puducherry, riverine port administered by the Puducherry Maritime Board has been out of operations over the last few years owing to litigation. With legal clearance, it is set to witness increased traffic after a MoU with Chennai Port Trust for Container Traffic through barges. Ferry service is also planned between Chennai, Puducherry and Karaikal. This is expected to boost to the allied sectors in logistics, dredging etc.</p> <p>There are plans to develop</p> <ul style="list-style-type: none"> • Facilities for handling bulk cargo through barges from an anchorage point farther out in the sea. • Boat and Barge Repair Facilities 		

1.5. Investments

The table below summarizes the investments that are in the pipeline in next few years:

Table 1: Proposed Key Investments for the year 2016-22 in Puducherry

Sector	Proposed Investment (INR Cr)	Number of Projects	Expected Employment	Key Players
Port & Maritime	-	3	350 persons	Puducherry Port, Chennai Port Trust
Manufacturing	2000	1	>2000 persons	Lenovo
Infrastructure	592.15	7	--	Town and Country Planning Department, Smart Cities Mission, NHAI

In the port and maritime sector, the Puducherry port has only recently planned to resume its operations by means of a MoU with the Chennai Port Trust. Details of proposed investments in this sector are given below:

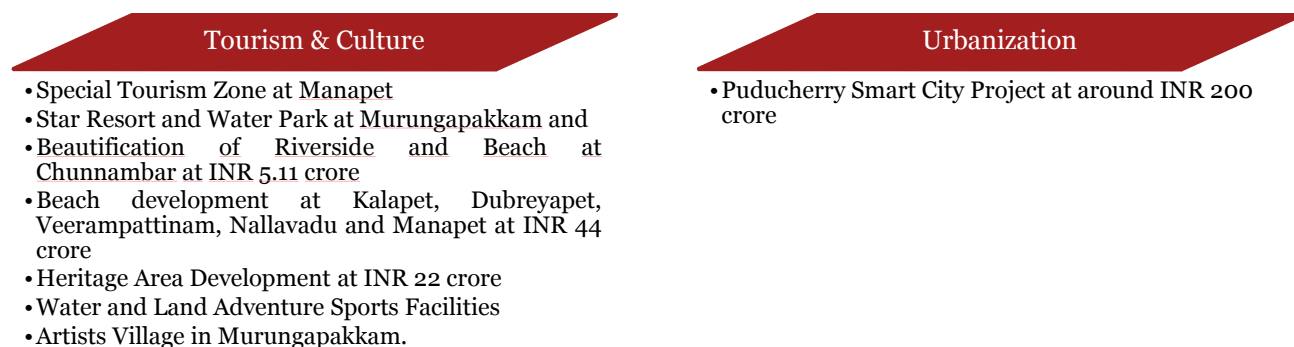
Table 2: Details of Investments in Port and Maritime sector in Puducherry

Project	Proposed Investment (INR Cr)	Expected Employment	Key Players
MoU with Chennai Port Trust (ChPT) for developing Puducherry Port as a sister concern for handling container berths	-	300 persons	ChPT, Puducherry Port

Projects sanctioned under the Jawaharlal Nehru National Urban Renewal Mission, Atal Mission for Rejuvenation and Urban Transformation and Smart Cities will be implemented. Several projects are to be executed in the district in Urban planning, Retro-fitting, Sanitation, and Transport spaces.

Tourism & Trade is one of the major drivers of the Puducherry economy as the district is a hub for leisure, spiritual and historic locations including Sri Aurboindo Ashram, Auroville (partly in Villupuram district of Tamil Nadu), the White Town, Arikamedu Archaeological Site, Beaches at Kalapet, Veerampattinam and backwaters. The Govt. of Puducherry is also planning to tap the heritage aspect of tourism to boost production of Handicrafts through an Artist's village in Murngampakkam.

Figure 14: Details of proposed investments across different sectors



1.6. Youth Aspiration

The key findings of the youth aspirations include youths' exposure to vocational training and educational aspiration, job aspirations, training aspirations and self-employment.

Respondent Profile

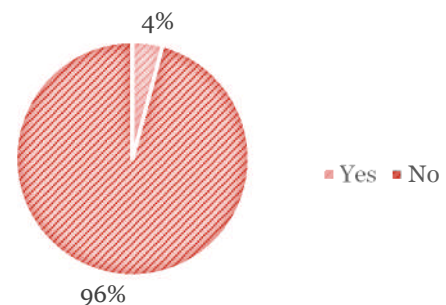
The table below provides an overview of the respondent profile:

Profile	Details
Total Sample Size	384
Gender Profile	Male – 64.6% Female -35.4%
Age Group	15-24 years
Education Level (top 3)	Senior Secondary Schooling (Class 9 to 10)- 25.6% Higher secondary schooling with commerce (Class 11 to 12)- 16.4% Secondary schooling(Class 9 to 10)- 11.6%
APL/BPL/AAAY/Don't know	APL -12.8 % BPL – 66.1 % Don't know/Can't Say – 21.1 %
Occupational Profile (top 3)	Student (43.5%), Unemployed (23.4%), Salary from employment (18.2%)

Exposure to Vocational Training and Educational Aspiration

Regarding the exposure to the vocational training most students reported that they had not completed any vocational training course. Overall, ~96% of the respondents had not enrolled in vocational training course (Figure 15).

Figure 15: Percentage of respondents who completed vocational training course -



The respondents were asked about the level of education they wished to attain. More than half of the respondents (55%) didn't aspire for further education. The desire to attain technical education is relatively low with only 4.2% aspiring for graduation or post-graduation in technical fields with general degrees preferred (22%) (Figure 16: Desired level of education).

Further, of the total respondents who underwent vocational training (which is 4%), most were from Polytechnics (56.3%) and ITIs (25%). Figure 17 exhibits the percentage of respondents who completed different types of courses as part of their vocational training.

Figure 16: Desired level of education - Puducherry

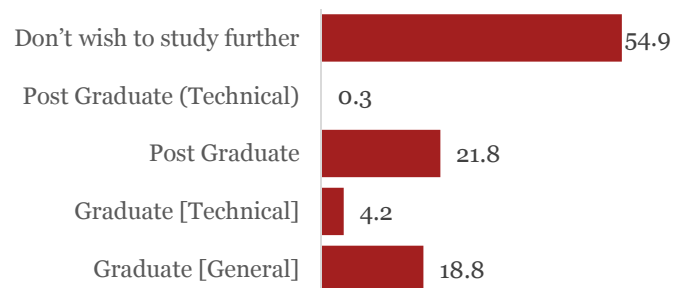
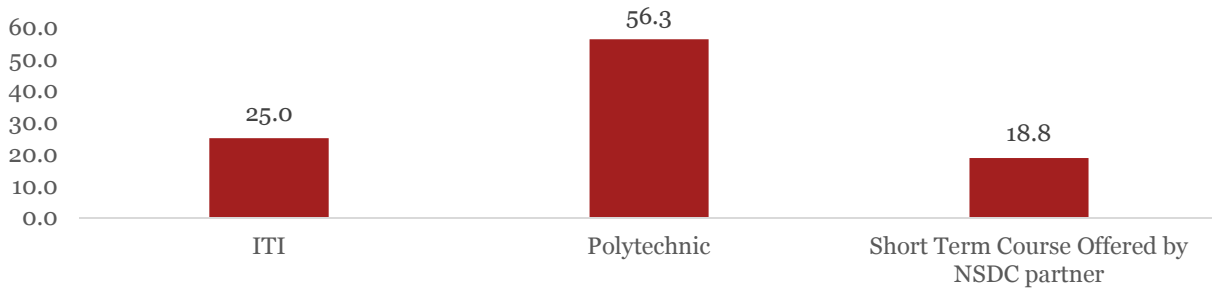


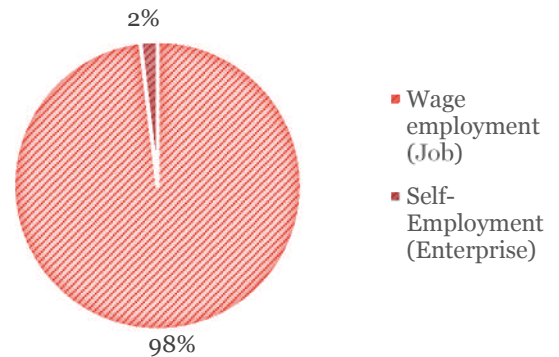
Figure 17: Percentage of respondents completed courses in vocational training - Puducherry



Job Aspiration

One of the important findings of the survey has been the high preference for wage employment over self-employment among the youth of the district. Over 98% of the respondents reported their preference for wage employment over self-employment (Figure 18).

Figure 18: Percentage of respondents aspiring for wage and self-employment - Puducherry



The respondents were further asked to identify the factors important for securing employment in the area of interest. 62% of the respondents identified industry specific skills as the most important factor for securing employment followed by good personality and job opportunities (29.4%) and interest in the area (28.6%) (Figure 19).

Figure 19: Factors important for securing employment in area of interest (%) - Puducherry

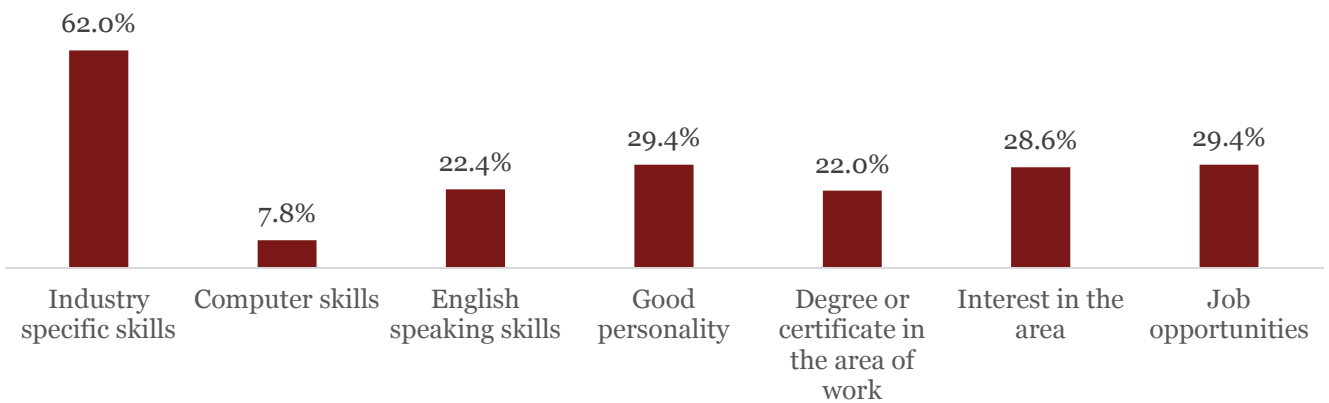
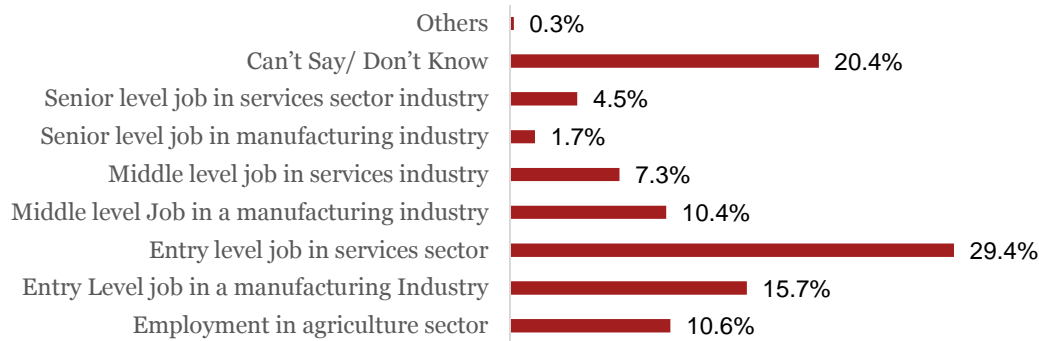
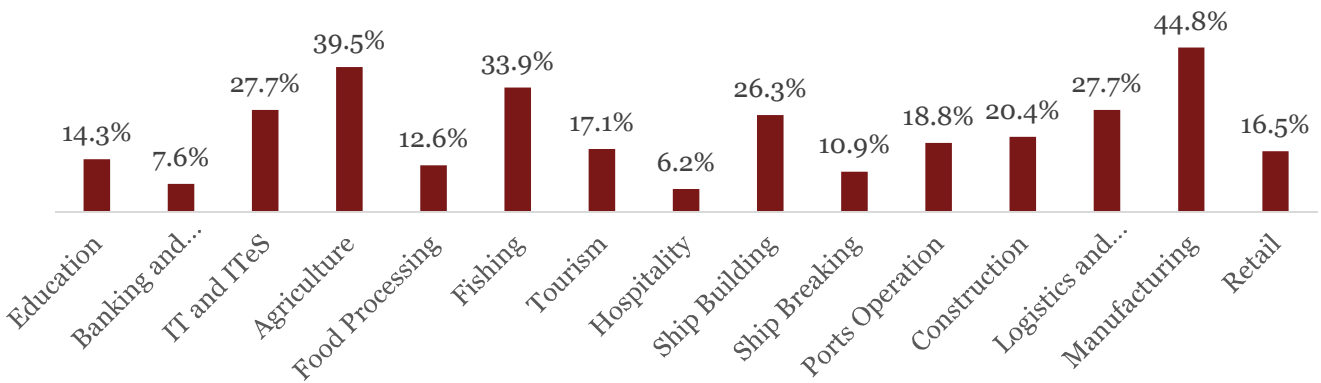


Figure 20: Desired job profile after completion of education/training - Puducherry



Regarding job aspirations of the respondents after completion of education or training, it can be observed that there is a demand for services sector with 30% aspiring for entry level jobs and 7% aspiring for middle level jobs. This is followed by manufacturing sector entry level jobs (16%) and middle level jobs in services sector (10%). About 11% want to enter the Agriculture sector. (Figure 20)

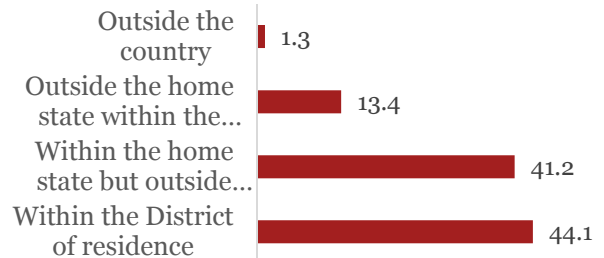
Figure 21: Sectors in which respondents' foresee getting a desired job (%) - Puducherry



Further, Manufacturing (44.8%), Agriculture (39.5%), Fishing (34%), IT/ITES (27.7%) and Logistics (27.7%) have been identified as sectors in which the respondents feel that they are mostly likely to get a job which is in alignment with their considerable interest for a job in all three sectors. The details of other sectors are mentioned in Figure 21.

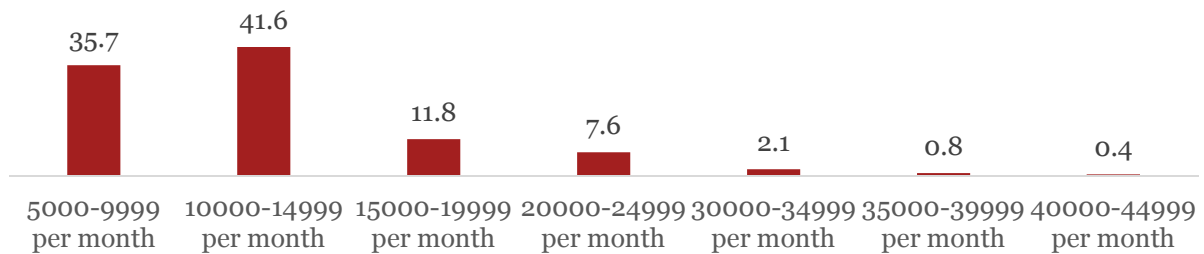
Out of total respondents, 85% preferred to work in the same state. However about half of the of the respondents (44%) preferred to work in the same district and 13% expressed willingness to migrate to other districts in the same state suggesting some flexibility among the youth of the district.(Figure 22)

Figure 22: Preferred work location of candidates - Puducherry



A high proportion of the respondents (41.6%) reported that their monthly salary expectation was in the range of INR 10000-15000. For 35.7% of respondents the expected salary is reported to be of range 5000-10000 per month (Figure 23).

Figure 23: Monthly salary expectation of respondents - Puducherry



Training Aspiration

Regarding willingness of the respondents to participate in the training programme in next one year, more than two thirds expressed interest. (Figure 25)

Further, when enquired about the key focus areas of skill training, 79% of respondents reported that emphasis must be laid on technical skills followed by personality development (57%) and life skills (11%). (Figure 26)

Figure 24: Willingness to participate in trainings- Puducherry

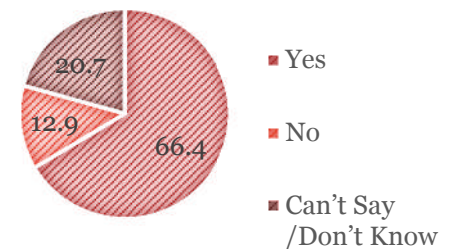
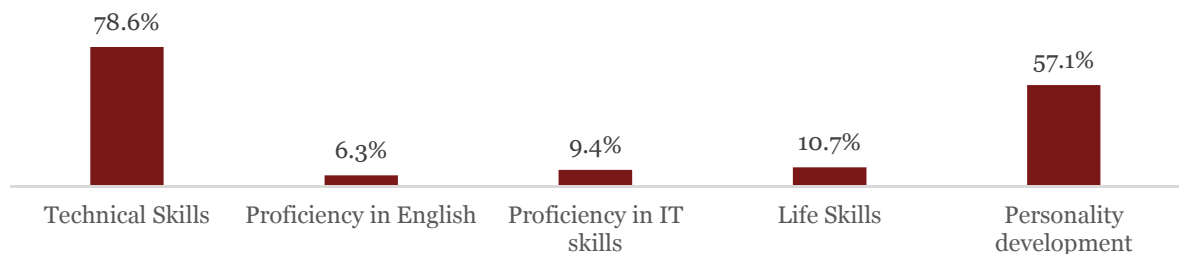
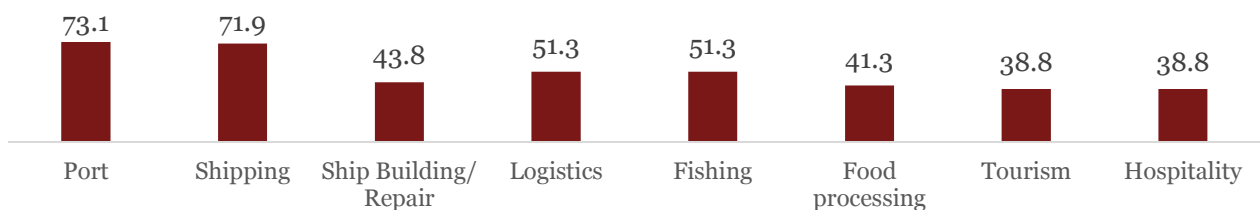


Figure 26: Focus area on skills training - Puducherry



Overall there is high acceptability for training in port (73%) and shipping (72%), logistics and fishing (51.3%) and ship building (43.8%) indicating a demand for trainings in the core sectors of this study. (Figure 27)

Figure 27: Willingness of respondents to participate in trainings of different sectors - Puducherry

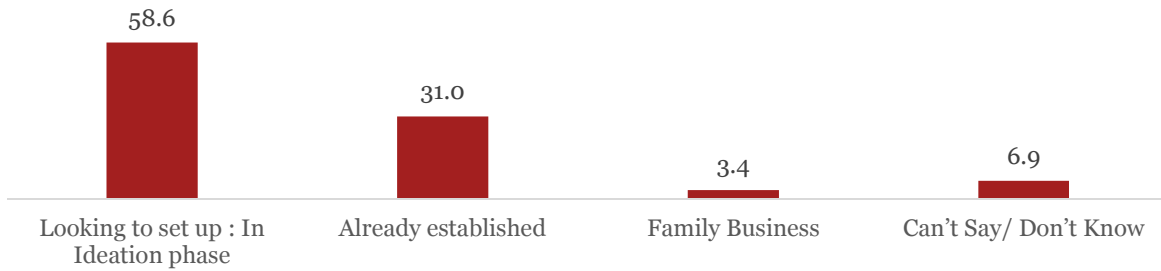


Self-Employment

Only 29 respondents (which is less than 7% of the respondents) wanted to engage in Entrepreneurial ventures.

Regarding current status of the Entrepreneurial Venture of the respondents who are in self-employment, 58.6% were looking to set up a venture, 31% had already established businesses and only about 3% were in family business (Figure 28).

Figure 28: Current Status of Entrepreneurial Venture (%) - Puducherry



Further, 64.3% of the respondents expressed a desire to undergo a training programme for enhancing their entrepreneurial skills (Figure 29).

Food Processing (41.2%), tour operations (41.2%), retail (12%) and logistics (6%) emerged as the key sectors which the respondents want to set up ventures in. IT/ITeS services and hospitality have found no takers as most preferred sectors for setting own enterprise (Figure 30).

Figure 29: Interested in skill development for enhancing entrepreneurial skills (%) - Puducherry

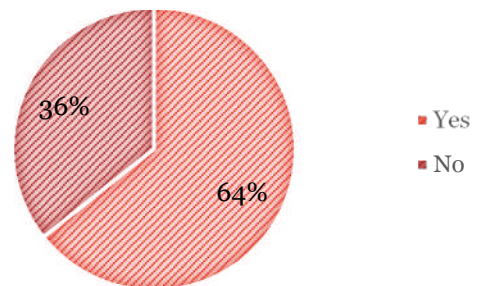
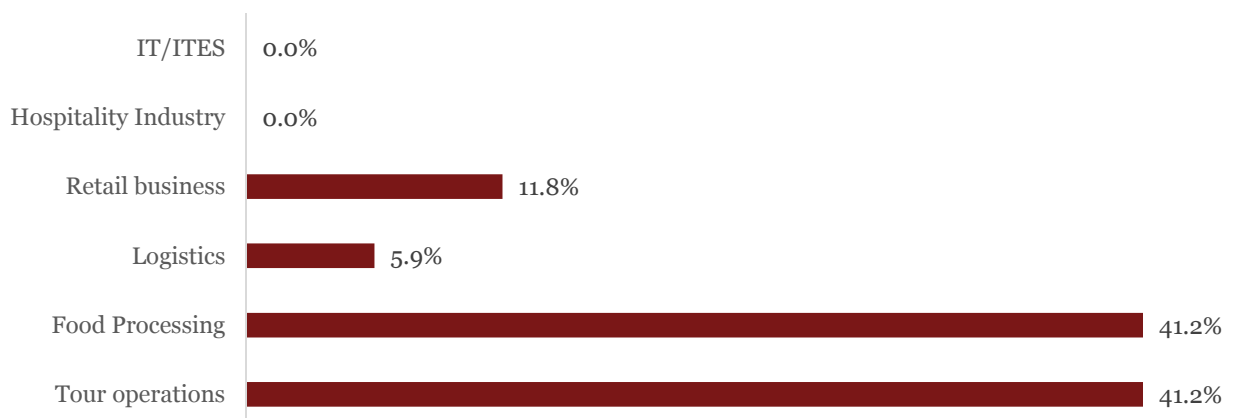


Figure 30: Sectors for establishing enterprise (%) - Puducherry



1.7. Training Infrastructure

Type of training infrastructure	Total number of institutions	No of trades	Top 5 trades based on enrolment and seat capacity
ITI	10	15	Fitter, Electrician, Wireman, Electronics Mechanic, Draughtsman (Civil)
Polytechnic	9	10	Electrical & Electronics Engineering, Electronics & Communication Engineering, Civil Engineering, Instrumentation & Control Engineering, Mechanical Engineering
Training centers under PMKVY	2	5	Assistant Beauty Therapist, Beauty Therapist, Hand Embroiderer, Field Technician – Computing and Peripherals, Handset Repair Engineer
PMKK	Not Allotted	Not Allotted	Not Allotted
DDU GKY	Not Allotted	Not Allotted	Not Allotted

The training infrastructure in the district is dominated by the ITIs and Polytechnics. However, the trades are largely focussed on technical and engineering trades.

- ITIs -There are 10 ITIs providing training in 15 different trades. However according to Dept. of Training & Employment, in the Private ITI's, of the total sanctioned seats, there is an average of 42% vacancy across all trades.
- Polytechnics – Core engineering sectors like Civil, Electrical & Electronics, Electronics & Communication and Mechanical remain the most dominant trades, however, new age trades such as Hotel Management, Mechatronics, Production Technology, etc. are also gaining traction. The students prefer to move to full time engineering courses post diploma.
- No DDU-GKY /PMKK has been allocated under the scheme. This is also an opportunity for the Ministry of Shipping to partner with NSDC to establish one training centre in the district..

2. Skill Gap Assessment, Job Roles and Emerging Job Roles

2.1. Incremental Demand⁸ for Skilled & Semi Skilled Manpower

The district of Puducherry is witnessing increased industrialization and it is emerging as a major destination of trade with the Port being considered as an engine for the same. Our analysis suggests that the manufacturing sector is expected to generate a higher demand for skilled and semi-skilled workers.

Table 3: Incremental Demand for Skilled & Semi Skilled Workers in Puducherry

Sector	2017	2018	2019	2020	2021	2022	Total
Core Sectors							
Ports & Allied	100	100	100*	-	-	-	300
Logistics	152	154	155	157	158	160	936
Tourism	165	169	173	178	184	189	1,058
Construction	598	617	638	660	681	704	3,898
Other Dominant Sectors in the District							
Manufacturing	1769	1829	1889	1953	2018	2084	11,542
Trade (Retail & Wholesale)	331	340	349	359	370	381	2,130
Agriculture	-535	-528	-521	-514	-508	-500	-3,106
TOTAL							16,578

Key trends in Core Sectors

- **Ports and Allied Sectors:** Port of Pondicherry which has been dormant for a while is set to restart operations handling container traffic from the Chennai Port. Dredging works are currently underway. The traffic is set to increase to a maximum capacity* of 1 million tonnes in the next three years.
- **Logistics:** The restart of operations in the port and the development of the Chennai-Kanyakumari Industrial Corridor are set to boost the requirement of the skilled workers in the sector. Currently, the sector has slowed down owing to lack of port traffic.
- **Tourism & Hospitality:** A weekend getaway for the residents of Chennai and which sees substantial expatriate visitors from France, the district is a traditional tourist destination, the district is seeing the development of Marina, water sports, themed restaurants etc.
- **Construction:** The infrastructure sector with road-way up-gradation (East Coast Road), Smart City related urban development projects in Underground Sewage Systems, Water supply, are expected drivers.
- **Fisheries:** The promotion of sustainable fishing, inland fishing, shrimp and prawn farming are growing owing to proximity to both fresh and salt water sources.

Key trends in other Dominant Sectors in the District

- **Manufacturing & Industry:** The Puducherry Industrial Policy envisages a multi-sector industrial promotion, making use of the proximity to the manufacturing hubs in and around Chennai. Sectors of

⁸ 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.

thrust include Automobiles and Components, Plastics, Agro and Food Processing, Marine Products, Solar Power etc. Land banks have been identified in Seddarpet for establishment of an Industrial Estate.

- **Trade:** Trade will be boosted by the proposed industrialization and increased port operations. There is a trend of formalization with the opening up of several apparel chains, fast food chains etc.
- **Agriculture & Fisheries:** Urbanization and Industrialization has made agriculture a sector a lower preference for employment and investment returns, this has affected employment prospects. However, fisheries has seen continuous increase in output and will be boosting employment in the sector.

2.2. Gap between Total Demand⁹ and Supply for Skilled workforce in Select Sectors

The gap in the **existing total skilled workforce** connotes the gap between the total requirement of **skilled manpower** and workforce in the district with recognized trainings in the said sectors

Figure 31: Gap between Skilled Manpower Requirement and Workforce in District with Trainings in Select Sectors in Puducherry



- **Construction Sector:** The percentage of total skill availability is still low. The gap is set to increase from 19,533 to 23,173 assuming present rates of growth of population and demand for skilled workforce, a jump of 4,000.
- **Logistics Sector:** Less than 1,000 skilled workers are available to meet the **total requirement of skilled manpower** of 12,000. These are very exacerbated by the limited options available recognized trainings and certificates in the sector. However the incremental requirement for workforce in the district is expected to increase the gap further by nearly half.

⁹ Total Demand refers to the total stock of workforce including the existing workforce in a sector in a district given the expected Economic Conditions in the period of study. This may help in identifying Scope for RPL and Upskilling

- **Manufacturing Sector:** The manufacturing sector faces high skill gap owing to lack of sufficient training infrastructure in the district. With the gap nearing a lakh.
- **Tourism and Hospitality:** Given the present trends of increased formalization and requirement of skilled workers in the sector the gap between the **total requirement of skilled manpower** and **availability of workforce with recognized trainings** is set to increase by a more than 50% by 2022. The requirement for initiating new trainings and recognizing prior learning in the sector is thus a priority.

2.3. Job Roles High in Demand

This sections captures the jobs that have been reported to be high in demand in Puducherry. The job roles that are listed below have been identified by the stakeholders. Across the sectors few of job roles are susceptible to be impacted by technological disruptions and automation. The sub-sections below describe the job roles that are high in demand across the sectors.

Port and Maritime Sector

The sector has seen little activity owing to shut down of the Port for the last 4-5 years. The operations are set to resume with container and bulk cargo movement in the present calendar year.

The matrix below captures the jobs roles that are high in demand:

Job Roles: Port & Terminal operations	Findings
<ul style="list-style-type: none"> • Forklift Operator • Reach Stacker Operator • Crane Mechanic • Surveyors • Tug Operator • Dredging Machine Operators/ Mechanics 	<ul style="list-style-type: none"> • Currently minimal operations in the port. • Container movement planned after MoU with Chennai Port. • Annual Capacity would be 1 million tonnes. • Reach stackers would be the required personnel. • Constant requirement of dredging necessitates continuous requirement of personnel on board a dredger. The dredging is to be let out to third party.

Other Priority Sectors

The job roles that are high in demand in the sectors and that have been identified as priority sectors are listed in this sub-section. Like port and maritime sector, sectors such as logistics, manufacturing, and construction will also be susceptible to technological disruptions and automation that will negatively impact jobs of manual nature.

Logistics

Truckers are high in demand but the existing workforce that is engaged in trucking lack life skills. Truckers who could be equipped with skills for handling hazardous substances will be greatly demanded by the manufacturing firms and the CFS.

The matrix below captures the jobs roles that are high in demand:

Job Roles: Logistics	Findings
<ul style="list-style-type: none"> • Surveyors • Fork lift operators • Supervisors • Truck Driver • Helper 	<ul style="list-style-type: none"> • Increasing volumes of cargo from port operations and Chennai-Kanyakumari Industrial Corridor. • Skills shortages for handling hazardous substances. • Life skills training required for truckers. • Increased use of ICT and automation in work processes will impact the manual jobs.

Construction

Setting up of new age industries, power plants and urban sanitation and renewable energy projects would necessitate skill and knowledge up-gradation. There is a deficiency in availability of resources in these sectors.

The matrix below captures the jobs roles that are high in demand:

Job Roles: Construction	Findings
<ul style="list-style-type: none"> • Supervisor-Finishes • Solar Panel Technician • Plumbing Retrofitting • Supervisor - Electrical Works • Painter (Machine operated) • Plumbers • Sanitation Technicians 	<ul style="list-style-type: none"> • Demand expected from Industrialization, Urbanization and Smart City Projects. • Safety is a key area of requirement. Awareness of safety equipment requires adequate orientation. • Demand for new age installation and maintenance skills especially in renewable energy sector. • Retrofitting may be required in the Smart City projects.

Manufacturing

Puducherry is home to manufacturing industries like Plastics, Food Processing, and Apparel etc. These sub-sectors demand skilled workforce that could work in manufacturing processes. This sector will also require technological literacy among the workers.

The matrix below captures the jobs roles that are high in demand:

Job Roles: Manufacturing	Findings
<ul style="list-style-type: none"> • Production Assistants • Welder • Fitter • Mechanic • Plumber • Electrician • Turner • Motor Binding • Tailoring • Quality Assurance 	<ul style="list-style-type: none"> • Industrial areas in and around the district demand skilled workforce. • Food processing industry is widespread as an MSME industry and can employ women. • Low availability for apprenticeship arrangements, combining formal training off-the-job with on-the-job training. • Industry associations design custom trainings as an add-on for the sector. • Quality Assurance will be a key differentiator for promoting the production.

Tourism & Trade

Tourism sector is set to further develop on new areas of skill trainings, via Water Sports, Chauffeur, etc.

The matrix below captures the jobs roles that are high in demand:

Job Roles: Tourism	Findings
<ul style="list-style-type: none"> • Front Office Executive • Chef • Kitchen Steward • Housekeeping Supervisor • Tour guide • Facility Store Keeper • Billing Executive • Boatman • Lifeguards • Food and Beverage Executive 	<ul style="list-style-type: none"> • Traditionally strong sector in the district. • High migration rates result in higher turnover in employees. • Requirement for English & French language skills. • Focus required on communication skills/public relations; reporting skills; administration skills and financial skills.

Fisheries & Sea Food Processing

The presence of the sensitive bio-diversity in the marine eco-system are both an opportunity and a challenge in the district. Inland fishing and aquaculture hold sizable opportunities. Packaged sea products are also widely exported.

The matrix below captures the jobs roles that are high in demand:

Job Roles: Fisheries	Findings
<ul style="list-style-type: none">• Deep Sea Fisherman• Engine & Boat Mechanics• Inland Fishing• Prawn & Crab Farmer• Cold Storage Technician• Warehouse Manager• Mechanic• Glass/Tunnel/Trolley Freezer Operator• Grading supervisor• De-heading supervisor• Aquaculture Technician• Mari culture Technician	<ul style="list-style-type: none">• Potential for employment for women in sea food processing.• Export potential for produce.• Unused land parcels can be used for aquaculture with appropriate skill up-gradation.• Usage of navigation, satellite imagery, for identifying optimal catch.• Quality assurance would be a key requirement for the entire value chain.

3. District Action Plan

3.1. Background

An actionable roadmap is one of the deliverables to be submitted to MoS for implementing skill training programmes in each of the districts. To develop these District specific plans, the team has mapped the emerging skilling opportunities across the 21 districts. Further, similar training opportunities or training requirements from the same sector have been clubbed in to one programme to ensure optimal use of resources and to build economies of scale for delivery partners. This has been proposed to improve the chances of developing and proposing feasible and viable training delivery models.

Further, the team has also estimated the broad capital and operational expenditure expected to be incurred in operationalizing the training initiatives in the districts. Apart from this, critical operational aspects such as training delivery mechanisms, availability of curriculum and employers have also been explored. The current status of these critical aspects will help ascertain the feasibility of initiating these trainings immediately and assess the gaps that need to be bridged before these training can be rolled out.

3.2. Objective of developing the plan

The District action plans have been developed with an overall objective of providing a step by step skill implementation plan to the Ministry of Shipping in the 21 coastal districts. The specific objectives include the following:

- Mapping various skilling opportunities available in the district, keeping in mind the requirements of Port led development and emergence of CEZs.
- Mapping the current status of various pre-requisites such as availability of qualifications, curriculum, funding for training, potential training delivery partners, availability of assessors and certification processes and institutions for the training programmes.
- Identify the potential/target beneficiaries for the training courses.
- Map the infrastructure and the investment that may be required to deliver the training programmes in the district.
- Provide an estimate of the investment required to create/hire the skilling infrastructure.
- Provide a step by step action plan for MoS to implement the skilling initiatives.

3.3. Methodology

Stakeholder consultations¹⁰ that were held at national, state and district level and that included stakeholders from government, industries, associations, and private firms. A separate plan has been prepared for each of the 21 district. The plan has been divided into several sections and include sections on training delivery, potential partners, and investments. The investments component has been divided into two broad heads: capital expenditure and operational expenditure. Capital expenditure has only been proposed in cases in which there were very limited possibilities of using existing institutional framework for partnership and for using existing infrastructure and equipment. Operational expenditure includes the cost of the running the training programmes including the salary of the instructors. The common cost norms are the basis of calculating the operational expenditure. Capital expenditure has been worked out bearing in mind the infrastructure requirements of the

¹⁰ Roughly 700 primary consultations informed the development of these plans for 21 districts

programme and duration of training programmes. Wherever, feasible partnership with existing programmes such as DDU-GKY and PMKVY has been suggested in the plan.

3.4. Summary of projects for Puducherry

SN	Project Name	Job Roles	Type of training	No. of people to be trained
1.	Training for artisans (with focus on entrepreneurial development)	Artisans, Chiseler, Stone Crafter, Paper Mache Art Designer	Fresh Training	500 in next 5 years
2.	Skill Development in tourism and hospitality Sector – drivers cum guides	Taxi Driver, Tour Guides, Counter Sales Executives	Fresh Training and Upskilling	1200 in next 5 years
3.	Fishing - Sustainable Fishing and Safety Training, Boat/Ship Repair	Fisherman, VPS Navigator, Boat repair mechanic	Fresh Training	1600 in next 5 years
4.	New age Building Construction	Solar electric System Installer & Service Provider, Solar Hot Water system installer, Assistant Solar PV Technician, Solar PV Technician	Fresh Training	1300 in next 5 years
5.	Scuba diving/Snorkeling Trainers – Adventure sports and tourism	Water Tank Cleaner, Boat Jetty In-charge, Scuba diving trainer, Adventure Sport trainer	Fresh Training and Upskilling	450 in next 5 years
6.	Aquaculture and Sea Food Processing	Aquaculture/ Mari culture Technicians, Brackish water aquaculture farmer, Quality assurance Manager/Lab Technician Food microbiologist/ Food Processing Worker Processed Food Entrepreneur	Fresh Training and Upskilling	1000 in next 5 years
7.	Beauty and Wellness Trainings	Beautician, Hair Stylist, Makeup artiste Pedicurist/ Manicurist / Nail Technician	Fresh Training	1200 in next 5 years

SN	Project Name	Job Roles	Type of training	No. of people to be trained
		Tattoo Artist/ Mehendi Designer Spa Manager, Masseur		
8.	Medical Tourism	Cardiac Lab Technology Radiographic & Imaging Technology Operation Theatre Technology Renal Dialysis Technology Optometry Technology	Fresh Training	1000 in next 5 years
9.	Language Lab – French, Hindi, English and German	Tourist Guides, Cab Drivers etc.	Fresh and Up Skilling	1200 in next 5 years

3.5. Action Plan for Puducherry

Project 1: Training for artisans (with focus on entrepreneurial development)				
Key economic drivers	<ul style="list-style-type: none"> Well established handicrafts industry with a Geographical Indication (GI) for two crafts – Villianur Terracotta Works and Tirukanur Paper Mache Craft Presence of ready market from the visiting tourists 			
Rationale for the project	<p>The district is home to specialized craftworks like Kora mat weaving (cluster in Odiampet), Terracotta and pottery (Villianur) and soapstone sculpting (Kossampalayam) and Papier Mache Craft (Tirukanur). In recent years, the number of junior level artisans engaged in these crafts has reduced despite the huge demand due to non-availability of specialized training centers and necessary infrastructure. The DIC is currently conducting training programs with major artisans and has also set up an arts and crafts village at Murungapakkam. Trainings can be conducted for unemployed youth in the district in these trades to satisfy the demand.</p> <p>In addition artisans have a home-based business, they are often faced with the issue of insufficient market linkage opportunities or lack sufficient support to identify and pursue such opportunities. For this reason, the junior artisans may be provided marketing trainings which will enable them to understand the market beyond the local, establish strong forward linkages.</p>			
Job roles in demand	Training courses	Target Beneficiaries	Type of Trainings	Total Number of beneficiaries
	Handicrafts and Handloom Artisans (Terracotta, Mat Weaving, Stone Work, Papier Mache, leather, etc.)	<ul style="list-style-type: none"> Local artisans Local youth and young entrepreneurs 	Fresh Training (300 Hours)	500 in 5 years

Availability of curriculum	Job roles	Target Group	Available QP/NOS	MES	CTS
	Terracotta, Mat Weaving, Stone Work, Papier Mache, leather works	Local youth and young entrepreneurs	QP available for: <ul style="list-style-type: none"> • Artisans • Chiseler Stonecraft • Paper Mache Art Designer 	No course available	No course available
	Entrepreneurial Skills	Handicraft and Handloom artisan	QP does not exist	No course available	No course available
Investment (INR In lakhs)		Incubation and training centre			
		Operational Expenditure	65		
		Capital Expenditure	5		
Potential Partners		Partner	Areas of Support		
		DIC & Puducherry Tourism Department	<ul style="list-style-type: none"> • Space and infrastructure for establishing the incubation and training center 		
		Entrepreneurship Development Institute	<ul style="list-style-type: none"> • Inputs in designing curriculum on entrepreneurship skill development • Guest faculty 		
		NID	<ul style="list-style-type: none"> • Input for designing curriculum for various art crafts • Guest faculty 		
		Industry Associations (Pondicherry Craft Foundation)	<ul style="list-style-type: none"> • Industry interface • Facilitate sourcing of crafts to retails chains • Facilitate exports of crafts 		
		Training Partner	<ul style="list-style-type: none"> • Training delivery • Co-management of the training facility 		
		Handicraft Sector Skill Council	<ul style="list-style-type: none"> • Development of QPs for the identified job roles • Develop model training programs for the identified job roles • Identification and certification of trainers • Identification and certification of assessors • Assessment of trainees • Certification of trainees 		
Training Delivery		Training to be conducted by empaneled TSP. The newly constructed artists' village has ample space for training and marketing/incubation of new entrepreneurs.			

Work Plan

Handicraft	in Months					
	1	2	3	4	5	6
TSP Empanelment						
SSC affiliation						
QP -NOS Review and Development						
Training centre setup						
Appointment of staff members						
Mobilization of prospective trainees						
Enrolment of trainees						

Roll-out training programme							
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Project 2: Skill Development in tourism and hospitality sector					
Key economic drivers		<ul style="list-style-type: none"> • Inflow of foreign tourists coming to Puducherry • Large scale investment planned in tourism in Puducherry 			
Rationale		<p>As Puducherry is a hub for leisure, spiritual and historic locations, Tourism is one of the major growth drivers of Puducherry. Considering the huge number of foreign tourists (more than a lakh)¹¹, guides cum cab/tourist vehicle drivers are required who can fluently speak in English, Tamil and French/German.</p> <p>The upcoming tourism projects like beachfront development in six locations, heritage tourism, etc., would also demand a large number of high quality guides and tour operators.</p>			
Trainings		Training courses	Target Beneficiaries	Type of Trainings	Total Number of beneficiaries
		Training for Taxi Drivers cum guides	<ul style="list-style-type: none"> • Existing Taxi Driver • Unemployed Youth 	Upskilling	600 in next 5 years
				Fresh Training	300 in next 5 years
		Training for Marine Tourism and Hospitality trades	<ul style="list-style-type: none"> • Unemployed Youth / Women 	Fresh Training	300 in next 5 years
Availability of curriculum	Job Roles	Target Groups	QP/NOS	MES	CTS
	Taxi Drivers cum guides	Existing auto/taxi drivers, unemployed youth	QP available for: <ul style="list-style-type: none"> • Taxi Driver 	• Driver HMV	Not Available
	<ul style="list-style-type: none"> • Tour Guides • Counter Sales Executives 	• Tour Operators	QP available for: <ul style="list-style-type: none"> • Tour Guide • Counter Sales Executives • Front Office Associate 	MES available for: <ul style="list-style-type: none"> • Tour Assistant • Ticket Reservation Assistant 	Course available for: <ul style="list-style-type: none"> • Travel Tour Assistant • Tour Guide
Investment (INR In lakhs)		Training for Taxi Drivers			
		Operational Expenditure			64
		Training for Marine Tourism			
		Operational Expenditure			27
		Capital Expenditure			22
		Total Operational Expenditure			91
Potential Partners		Partner	Areas of Support		
		PMKVY / PSSDM Training Providers	<ul style="list-style-type: none"> • Provide the infrastructure and lab for training • Training delivery 		
		Puducherry Women's ITI / other ITIs	<ul style="list-style-type: none"> • Provide the infrastructure and lab for training • Training delivery 		
		Driving Schools and Private Taxi Agencies	<ul style="list-style-type: none"> • Input for designing curriculum • Guest faculty 		
		Tourism SSC, PTDC	<ul style="list-style-type: none"> • Develop model training programs • Identification and certification of trainers • Identification and certification of assessors 		

¹¹ Puducherry at a glance-2016, Directorate of Economics and Statistics, Govt. of Puducherry

		<ul style="list-style-type: none"> • Assessment of trainees • Certification of trainees
Training Delivery		<ul style="list-style-type: none"> • NSDC has already initiated trainings for Front Office Executives through empaneled TSPs under PMKVY. This could be expanded. • Additional allocation could be made to the Puducherry Woman's ITI for expansion of training in the Tourism and Hospitality Sector, currently plans are underway for trainings in the sector.

Work Plan

Travel and Hospitality Trades	in Months					
	1	2	3	4	5	6
TSP enplanement						
Training centre setup						
Appointment of trainers						
Mobilization of prospective trainees						
Enrolment of trainees						
Roll-out of centre and training programme						

Project 3: Fishing - Sustainable Fishing and Safety Training, Boat Repair					
Key economic drivers	<ul style="list-style-type: none"> • Destruction of corals due to unsustainable fishing practices • Safety training to fisherman to prevent getting lost in the sea 				
Rationale	<p>The intention to catch large quantities of fish often results in adoption of unsustainable and destructive methods of fishing. Fishermen need to be trained to move from a capture-based approach to a culture-based one, thereby effecting an increase in fish population as well.</p> <p>The amount that a crew can catch, depends on their skillset. The spotter is the person who spots the fishes in the sea without any scientific training. Training can be given on spotting fish, safety mechanisms to be followed including basic navigation, reading the VPS (Vehicle Positioning systems) and basic health and hygiene training on handling the fish post-harvest.</p> <p>Ship and boat repair training can also be provided to the fishermen as the Puducherry Port is set to re-open for operations including revamping their dry docking facilities that allow for ship repair. This can be an additional means of income for the fishermen or the local community.</p>				
Trainings in high demand	Training courses	Target Beneficiaries	Type of Trainings	Total Number of beneficiaries	
	Sustainability Training	• Fisherman and crew members	Fresh	600 in next 5 years	
	Safety Training	• Local fishing community • Fish cooperative Members	Fresh	600 in next 5 years	
	Ship/boat repair	• Local community • Fishermen	Fresh	400 in the next 5 years	
Availability of curriculum	Job Roles	Target Group	QP/NOS	MES	CTS
	Fisherman	• Local fishing community • SHG members • Fish cooperative Members	Fishing Equipment Technician Marine Capture Fisherman cum Primary Processor	Not Available	Not Available
	Boat Repairman	• Local community • Fishermen	Fish Boat Maintenance Worker	Not Available	Not Available

Investment (INR In lakhs)	Safety and Sustainability Training	
	Operational Expenditure	72
	Ship/boat Repair	
	Operational Expenditure	51
	Total Operational Expenditure	124
Potential Partners	Partner	Areas of Support
	Fisheries Department and MSSRF	<ul style="list-style-type: none"> • Providing trainers • Space and infrastructure for establishing training • Practical training • Input for designing curriculum
	Agriculture Sector Skill Council	<ul style="list-style-type: none"> • Develop model training programs • Identification and certification of trainers • Identification and certification of assessors • Assessment of trainees • Certification of trainees
Training Delivery	<p>Fisheries Department to provide training infrastructure (near fishing harbor) and deliver training through empaneled TSPs.</p> <p>MSSRF has already developed a short training program. Currently the expansion is constrained by requirement of funds.</p>	

Fisheries	in Months			
	1	2	3	4
Development and finalization of the curriculum by TNFU				
Purchase of consumables				
Appointment of additional staff members				
Mobilization of prospective trainees				
Enrolment of students				
Roll-out of training programme				

Project 4: New age Building Construction – Trainings				
Key economic drivers	<ul style="list-style-type: none"> • Smart city projects • Chennai – Kanyakumari Industrial Corridor • Tourism Development Projects 			
Rationale	<p>The Smart City project which is in its initial phase in the district aims to invest in sustainable forms of energy and aims to invest in solar technology. There would be a significant demand for solar panel technicians in the next 2- 3 years. There is also requirement emerging from the neighboring districts of Tamil Nadu like Villupuram, Kanchipuram and Chennai.</p> <p>Basic training in plant science, landscape construction and maintenance would be required with the proposed drive in industrial development as part of the Chennai-Kanyakumari Industrial Corridor, Tourism Projects and the Smart Cities. There will also be a demand for workforce that could work in renewable energy and waste management domain.</p>			
Trainings in high demand	Training courses	Target Beneficiaries	Type of Trainings	Total Number of Beneficiaries
	Green Jobs Trainings- Solar Power	• Local youth	Fresh Training	500 in next 5 years

		Landscaping	• Existing Construction workers	Up Skilling	500 in next 5 years
		Façade/ Office Fitting Installations	• Local youth	Fresh Training	300 in next 5 years
Availability of curriculum	Job Role	Target groups	QP/NOS	MES	CTS
	Solar panel installation technician and solar panel maintenance technician	ITI (Electrical and Mechanical)/Diploma (Electrical and Mechanical) candidates	QP available for: • Solar Panel Installation technicians	Course available for: Solar electric System Installer & Service Provider, Solar Hot Water system installer, Assistant Solar PV Technician, Solar PV Technician	No course available
	Landscaping	Existing Construction Workers	Façade Installers Interior Finishes Pavement Layer		
Investment (INR In lakhs)		Green Jobs Training			
		Operational Expenditure		87.6	
		Landscaping			
		Operational Expenditure		26.5	
		Facade Office Installation			
		Operational Expenditure		38.8	
		Total Operational Expenditure		153	
		Total Capital Expenditure		34	
Potential Partners		Partner	Areas of Support		
		Training Institutes	• Provide infrastructure for training • Training delivery		
		Industry Association	• Industry interface • Facilitate On-Job-Training • Facilitate in identifying the firms that could recruit the trained graduates		
		Skill Council for Green Jobs Construction Sector Skill Council	• Development of QPs for the identified job roles • Develop model training programs for the identified job roles • Identification and certification of trainers/assessors • Assessment and Certification of trainees		
Training Delivery		• Engage a TSP affiliated with PMKVY/ Puducherry Skill Development Society to deliver the training			

Work Plan

Smart City	in Months
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	1	2	3	4	5	6
TSP empanelment						
SSC affiliation						
Training centre setup						
mobilization of prospective trainees						
Enrolment of trainees						
Roll-out of training programme						

Project 5: Scuba diving/Snorkeling Trainers – Adventure sports and tourism					
Key economic drivers		<ul style="list-style-type: none"> • Inflow of foreign tourists coming to Puducherry (more than a lakh)¹² • A weekend getaway for the residents of Chennai • Large scale investment planned in adventure sports in Puducherry • Presence of corals and rare fishes 			
Rationale		<p>Puducherry is one of the sites for sighting of a variety of fish and corals which makes it a hub for tourists who are interested in adventure sports. There is a huge shortage of certified scuba diving trainers. Since the district is also a popular weekend getaway for residents of Chennai, the demand for these is increasing.</p> <p>Pondicherry Tourism Development Corporation (PTDC) has projects like setting up a yacht marina, dolphin watch tours and water sports in the pipeline. The Chunnambar boat house has been developed into a water sports complex with facilities for adventure sports on the pipeline. These would require skilled life guards, boat operators, water sports trainers, etc.</p>			
Trainings		Training courses	Target Beneficiaries	Type of Trainings	Total Number of beneficiaries ¹³
		Scuba diving trainers, Adventure sports trainers	• Coastal community	Fresh Training	150 in next 5 years
		Boat operators, life guards	• Unemployed Youth	Fresh Training	300 in next 5 years
Availability of curriculum	Job Roles	Target Groups	QP/NOS	MES	CTS
	Scuba diving trainers	Coastal community	Not Available	Not Available	Not Available
	<ul style="list-style-type: none"> • Life Guard • Boat Jetty In-charge 	Coastal Community	QP available for: <ul style="list-style-type: none"> • Water Tank Cleaner • Boat Jetty In-charge 	MES available for: <ul style="list-style-type: none"> • Tour Assistant 	Course available for: <ul style="list-style-type: none"> • Travel Tour Assistant • Tour Guide
Investment (INR In lakhs)		Training for Adventure Sports			
		Operational Expenditure			10.2
		Training for Life guards / Boat Drivers			
		Operational Expenditure			31.4
		Total Operational Expenditure			41.4
		Capital Expenditure			50
Potential Partners		Partner	Areas of Support		
		Scuba diving schools	<ul style="list-style-type: none"> • Input for designing curriculum • Guest faculty 		
		Tourism SSC, PTDC	<ul style="list-style-type: none"> • Develop model training programs • Identification and certification of trainers 		

¹² Puducherry at a glance-2016, Directorate of Economics and Statistics, Govt. of Puducherry

¹³ To be reviewed after year 3 to increase targets.

		<ul style="list-style-type: none"> • Identification and certification of assessors • Assessment of trainees • Certification of trainees
	Training Partner, NSDC	<ul style="list-style-type: none"> • Provide the infrastructure and lab for training • Training delivery
Training Delivery	<ul style="list-style-type: none"> • Training can be provided by the empaneled TSP from DDU-GKY and PMKVY 	

Work Plan

Travel and Hospitality Trades	in Months					
	1	2	3	4	5	6
TSP enplanement						
Training centre setup						
Appointment of trainers						
Mobilization of prospective trainees						
Enrolment of trainees						
Roll-out of centre and training programme						

Project 6: Food Processing: <i>Aquaculture and Sea Food Processing</i>				
Key economic drivers	<ul style="list-style-type: none"> • Tracts of land parcels that are available and could be used aqua-culture and Mari-culture • Huge demand for shrimps, crabs and other fish • 63 % of the workers in the industries in the District of Villupuram (Tamil Nadu) work in food processing sector where Exports of fisheries is one of the major exportable item. (Villupuram, Cuddalore and Puducherry have cluster of Exclaves and Enclaves shared between them.) 			
Rationale	<p>Marine and Inland Aquaculture, Shrimp farming and sea food processing industries of MSME scale are well established in the East Coast Road. The location is a series of Exclaves and Enclaves shared between Puducherry and the Vanur block of Villupuram district of Tamil Nadu.</p> <p>Trainings imparted in aquaculture could help in providing the fishing community opportunities for improved livelihoods. There is a huge demand for shrimps and crabs in food sub segment and high quality produce could be exported.</p> <p>Around 36,000 people are involved in fishing and allied activities in the three adjacent districts of Villupuram, Puducherry and Cuddalore. This provides a sizable population to conduct short term trainings for value addition.</p>			
Trainings	Training courses	Target Beneficiaries	Type of Trainings	Total Number of Beneficiaries
	Aquaculture & Mariculture	<ul style="list-style-type: none"> • Existing workforce engaged in fishery • Agriculturalists • Coastal communities 	Fresh Training	1000 in next 5 years
	Quality assurance Manager/Lab Technician	<ul style="list-style-type: none"> • Local youth • Agriculturalists • SHGs 	Fresh Training	

		Food microbiologist/ Food Processing Worker	<ul style="list-style-type: none"> • Local youth • Agriculturalists • SHGs 	Fresh Training/ Up Skilling	
		Processed Food Entrepreneur	<ul style="list-style-type: none"> • Local youth • Agriculturalists • SHGs 	Fresh Training/ Upskilling	
Availability of curriculum	Job Roles	Target groups	Available QP/NOS	MES	CTS
	Aquaculture/ Mariculture Technicians Brackishwater aquaculture farmer	Fishermen community Unemployed youth Agriculturalists	QP available for: <ul style="list-style-type: none"> • Aquaculture technician • Aquaculture worker • Brackish water aquaculture farmer • Mariculture operator • Shrimp farmer • Crab fattening farmer 	No course available	No course available
	Quality assurance Manager/Lab Technician	Graduates in the District, women entrepreneurs, SHGs	<ul style="list-style-type: none"> • Quality Assurance Manger 	No course available	No course available
	Food microbiologist/ Food Processing Worker	Graduates in the District, women entrepreneurs, SHGs	<ul style="list-style-type: none"> • Food microbiologist 	No course available	No course available
	Processed Food Entrepreneur	Existing and Potential Food Processing Workers, SHGs	<ul style="list-style-type: none"> • Industrial Production Worker – Food Processing 	No course available	No course available
	Investment (INR In lakhs)	Incubation and training centre Aquaculture & Mari culture Operational Expenditure 33.5 Quality Assurance Technician Operational Expenditure 26.2 Food Microbiologist Operational Expenditure 24 Food Process Entrepreneur Operational Expenditure 21 Total Operational Expenditure 116 Capital Expenditure 15-20			
Potential Partners	Partner		Areas of Support		
	Fisheries Dept. Govt. of Puducherry		<ul style="list-style-type: none"> • Provide infrastructure for training • Training delivery • Support in setting up/scaling up the training centre as per the required SSC norms • Provide training 		

	Central Marine Research Institute	<ul style="list-style-type: none"> • Input for designing the curriculum • Guest faculty
	Fisheries Development Board, Skill Development Societies (TN and PY), NFDB	<ul style="list-style-type: none"> • Supply funds for training, infrastructure development,
	Agriculture Sector Skill Council	<ul style="list-style-type: none"> • Develop model training programs for the identified job roles • Identification and certification of trainers • Identification and certification of assessors • Assessment of trainees • Certification of trainees
Training Delivery	<ul style="list-style-type: none"> • Fisheries Training Dept. will provide the infrastructure and deliver the training programs • Agriculture Sector Skill Council will certify the training programs • Department of Fisheries and MoS through Puducherry Skill Development Mission could fund the training 	

Work Plan

Aquaculture and Sea Food Processing	in Months					
	1	2	3	4	5	6
TSP enplanement						
Training centre setup						
Appointment of trainers						
Mobilization of prospective trainees						
Enrolment of trainees						
Roll-out of centre and training programme						

Project 7: Beauty and Wellness Training Courses				
Key economic drivers	<ul style="list-style-type: none"> • Inflow of tourists coming to Puducherry creates market for beauty and services • A nascent industry with huge potential for improvement • Largely supported by workforce from outside the state. 			
Rationale	<p>The large tourist economy brings in the demand for basic beauty and wellness services in Pondicherry. Since this is a nascent trade in the district, there is huge scope for expansion and improvement. Courses on entrepreneurship and establishing beauty & wellness parlours can also be included as part of the training to support candidates in setting up their business. In addition to this, courses for tattooing & mehendi design, masseur & spa therapist can also be offered as this has good traction among tourists.</p> <p>Basic Beautician courses are also a significant income generator for housewives who offer services to their local neighbourhoods instead of working in or establishing parlours bringing them the comfort of working from home with flexible timings.</p>			
Trainings	Training courses	Target Beneficiaries	Type of Trainings	Total Number of beneficiaries
	Beautician	• Unemployed Youth / Women	Fresh Training	400 in next 5 years
	Manicurist / Nail Specialist	• Unemployed Youth / Women	Fresh Training	200 in next 5 years

		Tattoo Artist/ Mehendi Designer	• Unemployed Youth / Women	Fresh Training	400 in next 5 years
		Spa Therapy	• Unemployed Youth / Women	Fresh Training	200 in next 5 years
Availability of curriculum	Job Roles	Target Groups	QP/NOS	MES	CTS
	Beautician, Hair Stylist, Makeup artiste	Unemployed Youth / Women	QP available for: • Assistant Beautician • Hair Stylist Assistant	• Hair & Skin Make- up • Integrated Course on Skin & make up	Basic Cosmetology
	Pedicurist/ Manicurist / Nail Technician	Unemployed Youth / Women	• Pedicurist & manicurist • Assistant Nail Technician	Not Available	Not Available
	Tattoo Artist/ Mehendi Designer	Unemployed Youth / Women	Not Available	Not Available	Not Available
	Spa Manager, Masseur	Unemployed Youth / Women	• Assistant Spa Technician	• Spa Management • Ayurveda Spa Therapist • Spa Therapy	Spa Therapy
Investment (INR In lakhs)	Training for Beautician				
	Operational Expenditure				36.4
	Training for Pedicurist/ Manicurist / Nail Technician				
	Operational Expenditure				18.2
	Training for Tattoo Artist/ Mehendi Designer				
	Operational Expenditure				36.4
	Training for Pedicurist/ Manicurist / Nail Technician				
Operational Expenditure				18.2	
Total Operational Expenditure				103.2	
Capital Expenditure				50	
Potential Partners	Partner		Areas of Support		
	Puducherry Women's ITI / other ITIs		• Provide the infrastructure and lab for training • Training delivery		
	Beauty Schools, Parlors		• Input for designing curriculum • Guest faculty		
	BWSSC		• Develop model training programs • Assessment of trainees • Certification of trainees		
	PSDS		• Funding		
Training Delivery	• The Puducherry Woman's ITI and other similar ITIs in the district which already run courses on beauty and wellness can be used as training centers				

Work Plan

Beautician Training Courses	in Months			
	1	2	3	4

Partnership with SSC				
Development and finalization of curriculum				
Appointment of trainers				
Mobilization of prospective trainees				
Enrolment of students				
Roll-out of training programme				

Project 8: Trainings in Para- Medical Sector¹⁴					
Key economic drivers		<ul style="list-style-type: none"> Tamil Nadu and Puducherry are key destinations for Medical tourism from across the country. Launching of airplane services through Udaan Scheme will enable quicker access to the hospitals in Puducherry. 			
Rationale		<p>Puducherry attracted more than a million tourists in 2015-16. More than 10% of these were foreigners.¹⁵ The tourism intensive economy of the district is also driven by the medical tourism supported by well-established health infrastructure attracting tourists. Among the In-patients admitted in the hospitals, 30-50% have been recorded to be outside the UT of Puducherry¹⁶. Tamil Nadu the neighboring state is also the national leader in medical tourism. There are 5 hospitals in the district including the prestigious JIPMER which is an institute of national importance in post-graduation education in the Medical Sector.</p> <p>There is consistent demand for skilled technicians to medical sector as para medical staff within Puducherry and in the state of Tamil Nadu. There are opportunities available overseas for such skilled workers as well.</p> <p>Pondicherry University as part of the Vocationalisation of Higher Education program is offering long term B.Voc Program in the Paramedical program.</p>			
Trainings		Training courses	Target Beneficiaries	Type of Trainings	Total Number of Beneficiaries
		Cardiac Lab Technology	• Youth with Higher Secondary education	Fresh Training	200
		Radiographic & Imaging Technology	• Youth with Higher Secondary education	Fresh Training	200
		Operation Theatre Technology	• Youth with Higher Secondary education	Fresh Training	200
		Renal Dialysis Technology	• Youth with Higher Secondary education	Fresh Training	200
		Optometry Technology	• Youth with Higher Secondary education	Fresh Training	200
Availability of curriculum	Job Roles	Target groups	Available QP/NOS	MES	CTS
	Cardiac Lab Technology	Youth with Higher Secondary education	Cardiac Care Technician	Not available	Not available
	Radiographic & Imaging Technology	Youth with Higher Secondary education	Radiology Technician	Radiology Technician	Not available

¹⁴ Added as per request of Pudusherry Skill Development Society

¹⁵ Puducherry at a glance-2016, Directorate of Economics and Statistics, Govt. of Puducherry

¹⁶ <http://health.puducherry.gov.in/Programmes/programmesPDF/HospitalStatistics.pdf>

	Operation Theatre Technology	Youth with Higher Secondary education	Operating Theatre Technician	Operation Theatre Technician	Not available
	Renal Dialysis Technology	Youth with Higher Secondary education	Dialysis Technician	Dialysis Technician	Not available
	Optometry Technology	Youth with Higher Secondary education	Refractionist	Optometrist	Not available
Investment (INR In lakhs)	Training for Cardiac Lab Technology				
	Operational Expenditure				68.2
	Training for Radiographic & Imaging Technology				
	Operational Expenditure				68.2
	Training for Operation Theatre Technology				
	Operational Expenditure				54.9
	Training for Renal Dialysis Technology				
	Operational Expenditure				63.8
	Training for Renal Optometry Technology				
	Operational Expenditure				54.9
Total Operational Expenditure				310	
Capital Expenditure				100	
Potential Partners	Partner		Areas of Support		
	Pondicherry University and Puducherry Skill Development Society		<ul style="list-style-type: none"> • Space and infrastructure for establishing the labs • Assessment of trainees • Certification of trainees 		
	Dept. of Health through Medical Colleges, JIPMER		<ul style="list-style-type: none"> • Guest faculty • Input for designing curriculum 		
	PSDS / Sagarmala/ MHRD		<ul style="list-style-type: none"> • Funding 		
Training Delivery	<ul style="list-style-type: none"> • Pondicherry University has already started courses in the above categories as part of the Vocationalisation of higher education program with an annual capacity of 100. This could be doubled to meet the local demand. • Govt. medical colleges in the district to provide OJT. 				

Work Plan

Paramedical Training	in Months			
	1	2	3	4
Development and finalization of curriculum				
Upgradation of Infrastructure				
Mobilization of prospective trainees				
Enrolment of students				
Roll-out of training programme				

Project 9: Language Lab – French, Hindi, English and German	
Key economic drivers	<ul style="list-style-type: none"> • Puducherry, a former French colony has a huge inflow of tourists from France and other European countries. • The district also draws tourists from North India creating a huge demand for the knowledge of Hindi.
Rationale	The tourism intensive economy of Puducherry constantly requires language skills in English, French and Hindi to cater to the national and international tourists. Of the international tourists, 32% are French, 40% are from English speaking countries such as UK, USA and Australia and 16% from Germany and

		<p>Switzerland¹⁷. Competence in any one of these languages opens up various employment options such as receptionists, tourist guides, customer service executives, sales persons, sommeliers, etc. Setting up of language labs would therefore be a tremendous boost to the tourist economy.</p> <p>Additionally, the language labs could offer specific training modules to those training as taxi drivers, tourist guides, front desk executives, tour operators, etc. as it would be a necessary asset in the travel, tourism and hospitality related trades. The labs could be set up in ITIs as it would make it easier to access for those pursuing other trades.</p>			
Trainings		Training courses	Target Beneficiaries	Type of Trainings	Total Number of beneficiaries
		French, English and Hindi language courses	<ul style="list-style-type: none"> Local community Unemployed youth Taxi drivers, tourist guides, front desk executives and tour operators 	UPSKILLING and Fresh Training	1200 in next 5 years
Availability of curriculum	Job Roles	Target groups	Available QP/NOS	MES	CTS
	Not Available	<ul style="list-style-type: none"> Local community Unemployed youth Taxi drivers, tourist guides, front desk executives and tour operators 	Not available	Not available	Not available
Investment (INR In lakhs)		Language Labs			
		Total Expenditure		100.29	
Potential Partners		Partner	Areas of Support		
		ITIs and other DDUGKY TSPs	<ul style="list-style-type: none"> Space and infrastructure for establishing the labs Assessment of trainees Certification of trainees 		
		Language labs in the district	<ul style="list-style-type: none"> Guest faculty Input for designing curriculum 		
		PSDS	<ul style="list-style-type: none"> Funding 		
Training Delivery		<ul style="list-style-type: none"> Labs can be set up in ITIs across the district so that those pursuing different tourism and hospitality trades can be trained on specific modules. Other empaneled TSPs can also be used for setting up of language labs. 			

Work Plan

Language Lab – French, Hindi, English and German	in Months			
	1	2	3	4
Development and finalization of curriculum				
Appointment of trainers				
Mobilization of prospective trainees				
Enrolment of students				
Roll-out of training programme				

¹⁷ Tourism Survey for Puducherry (Jan-Dec 2014), Ministry of Tourism, Government of India

4. List of Stakeholder Consultations

4.1 Union Territory level consultations- Puducherry

SN	Stakeholder	Person	E-mail	Cell/Phone
1	Directorate Of Industries & Commerce	V. Mokankumar, Assistant Director	v.m.kumar@hotmail.com , ind.pon@nic.in	0413 224 8168, 2248320, 9443537112
2	District Industries Centre	A. Couppoussamy, Assistant Director of Industries cum Deputy Functional Manager	acouppou@gmail.com	0413 2248391, 2249392, 9344575859
3	Puducherry Skill Development Society	Mr. Sarangaraju, Director	psdspdy@gmail.com	0413 2225526, 9443789977
4	Government ITI for Women	Mr. Nagarajan, Instructor		
5	Training (Craftsmen Training Scheme and Apprenticeship), Labour Department	Mrs. Chitra, Assistant Director		9943247022
6	Puducherry Skill Development Society and Instructor, Government ITI	G. Lakshmikantham		9789624102
7	Directorate of Economics and Statistics	Mr. Ramakrishnan, Joint Director	ramkrishnan.pon@nic.in , eands.pon@nic.in	0413 2248816
8	Fisheries Department	Mr. Meera Saheb, Deputy Director (Inland)	Meerasahed.puddala55o@gmail.com	8754244794
9	Fisheries Department	Mr. R. Soundarapandian, Assistant Director (Planning)	fish.pon@nic.in	9952460301
10	Department of Tourism	Mr. Ravi, Manager	pondytourism@gmail.com , tourism.pon@nic.in	+91 413 2358570
11	Pondicherry Tourism Development Corporation (PTDC)	Jayanthi	trip2pondicherry@gmail.com	0413 2339497
12	Chunnambar Water Sports Complex	D.R. Murugesan, MD, Pondicherry Tourism Development Corporation (PTDC)	managingdirectorptdc@gmail.com	0413 23333532
13	Atlanta Travels and Tours	Ms. Shivani, Manager	atlantatravels@hotmail.com	0413 2225468
14	Temple Adventures, Scuba Diving Center	Rob Partridge	dive@templeadventures.com	99402 19449, 98943 51267, 9003122231

15	Phocos India Solar Pvt. Ltm,d.	V. Shanmuganandam, Director	shanmugam@phocos.com	7708000172, 0413 2912182
16	Phocos India Training Provider, PMKK	Mr. Prabhulingam, Trainer	prabhulingam@phocos.com	0413 2912182
17	Pondicherry Port	Mr. Rajendiran, Executive Engineer	port.pon@nic.in	Office : +91-413-2337114 Mobile : +91-9843411611
18	Novel Food Products	Mr. Anilkumar Punathil (Chief Executive)	novelfizz@gmail.com , novelfizz@yahoo.com	+91 9150207073 +91 9150309820 +91 9443958172
19	Pondicherry Craft Foundation	V. K. Munusamy	terracotta_pondy@yahoo.co.in	9790483986
20	Hotel Atithi	Mr. Niranjan, HR Manager	hr@atithipondicherry.com	04132345000
21	Smart Cities Mission	M. Dhinadayalan, Officer on Special Duty	pondysmartcity@gmail.com	0413 2337090
22	Pondicherry Engineering College – Smart Cities Training Program	Dr. Sandanalakshmi. Professor	sandalakshmi@pec.edu	9790972173
23	Association of Small Industries of Union Territory of Pondicherry	Mr. Peter		9842339000
24	KFC, Puducherry	Store Manager		0413 430 2220
25	Muthoot Finance Corporation	Branch Manager		

