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1. District Profile

1.1. Ganjam

About Ganjam

Ganjam houses Gopalpur Port which is a private minor port in the district of Ganjam. Some of the major exportable items produced in the district are engineering products, chemical products, nylon, synthetic readymade garments, embroidered fabrics, textiles, cotton, silk, food products and pharmaceutical product. Contribution of primary sector and services sectors to the district GDP is 23% and 67% respectively.

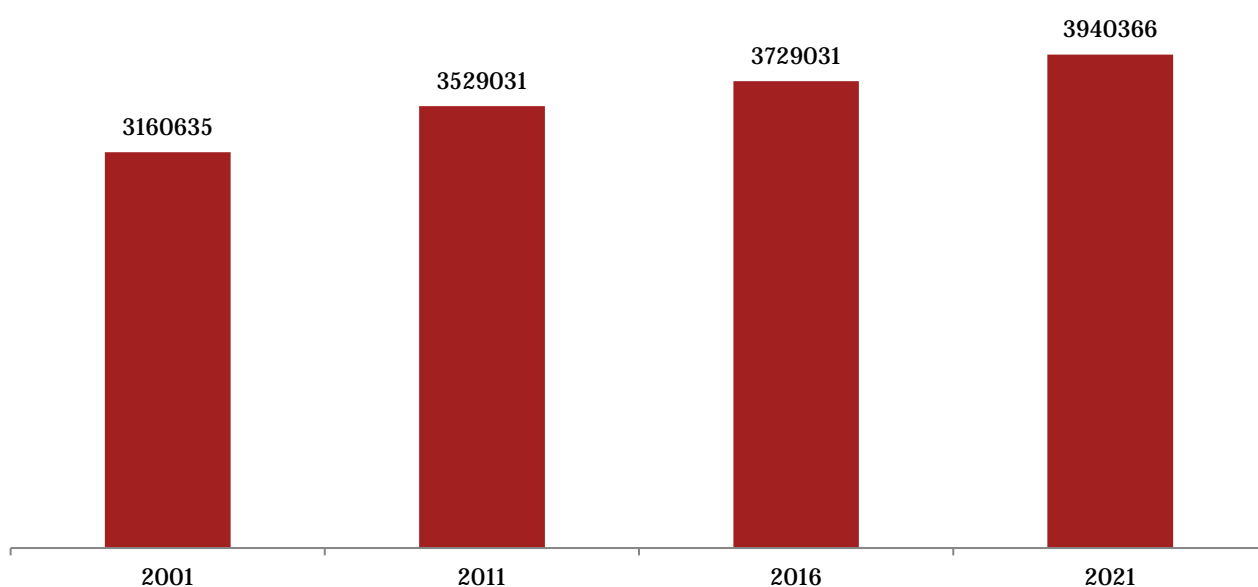
1.1.1. Demographic Profile

Indicator	Value
Total population	3,529,031
Decadal rate of growth of population (2001-11)	11.66%
Rural population	78.23%
Female	49.6%
SC population	19.5 %
ST population	3.37 %
Workforce participation (As % of total population)	42.55%
Main Workers (As % of total population)	25.52%
Marginal (As % of total population)	17.03%
Number of people with vocational training in the age group of 15+ in the state	36 per 1000

Population trends¹

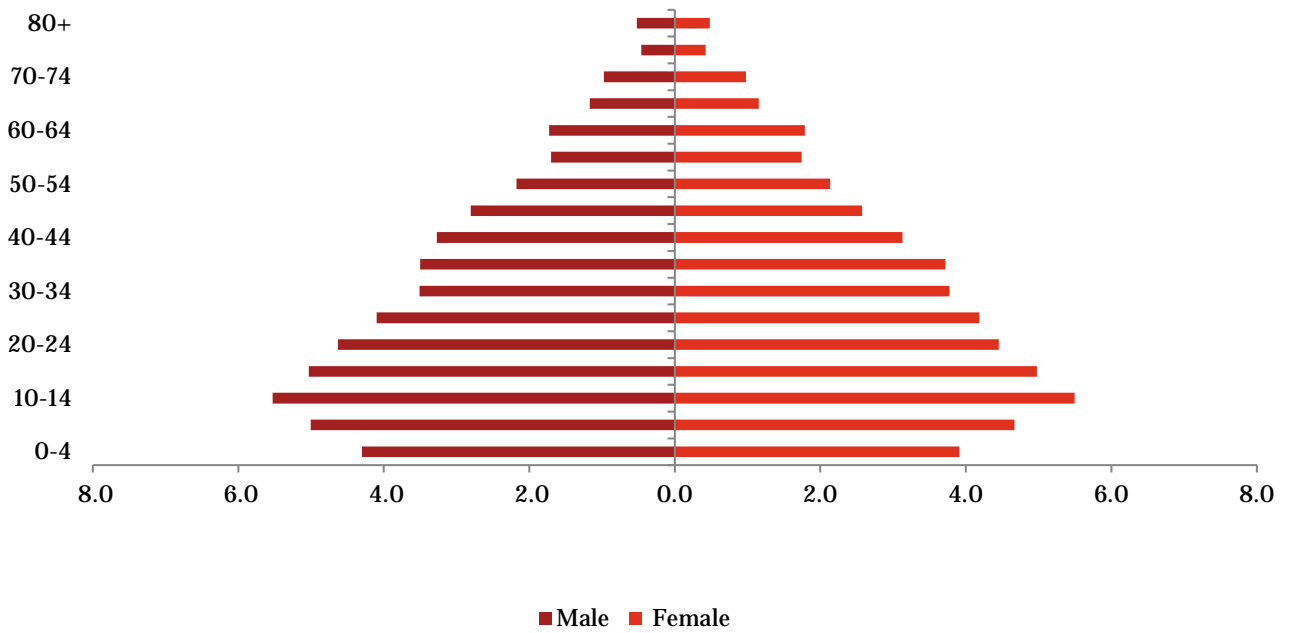
The population growth of Ganjam has almost been steady for the last 10 years and is expected to grow at the same rate in the coming future. The projected population of Ganjam will be 3.94 lakhs by 2021.

Figure 1: Population trends in Ganjam (2001 - 2021)



¹ (Census of India, 2001 and 2011), PwC Analysis
Human Resource and Skill requirement study for 21 Coastal Districts of India

Figure 2: Population Pyramid: Ganjam 2011

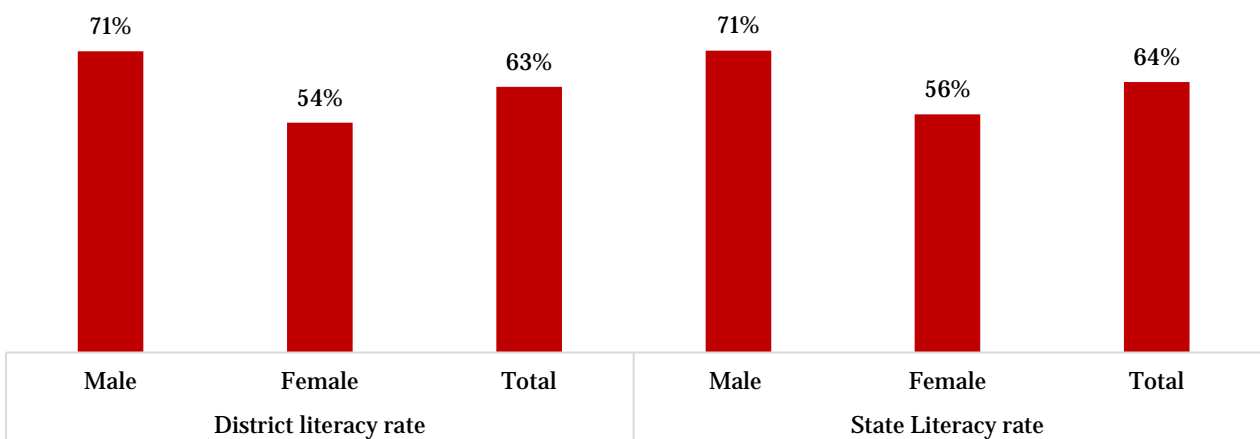


The demographic dividend bulge in Ganjam will remain intact for the next 10 years. Using proportional² method for estimating the population for the period 2011-21 (10 years)³, the population is estimated to be 37, 29,031 and 39, 40,366 in 2016 and 2021 respectively. The projected absolute growth in the population from 2016 to 2021 is 6%.

Literacy rates

Total literacy rate of Ganjam, as per the Census 2011, is approximately 63%, which is slightly less than the State’s literacy rate of around 64%. Also, the female literacy rate of Ganjam (54%) is substantially lower than the male literacy rate, which is 71 % as per Census 2011.

Figure 3: Ganjam vs Odisha literacy rates (2011)



² The proportion of district and state population in 2011, and the estimated population of state in 2016 and 2021 that is reported in the population projections for India and state 2001-2026 estimates, are taken into account in estimating the district level population in 2016 and 2021.

³ (Census of India, 2011), PwC Analysis
Human Resource and Skill requirement study for 21 Coastal Districts of India

Age specific population trends and education level for 2011⁴

As per Census 2011, the population in the age-group of 15 to 24 years was 6,71,639 (19.03% of the overall population). Using proportional method, the population in the age group of 15-59 years is estimated to be 2,289,833 and 2,423,436 in 2016 and 2021. The projected absolute growth in the population from 2016 to 2021 is 6%.

Figure 4: Growth trend of population in the age group 15-59 year in Mumbai (2001-2021)

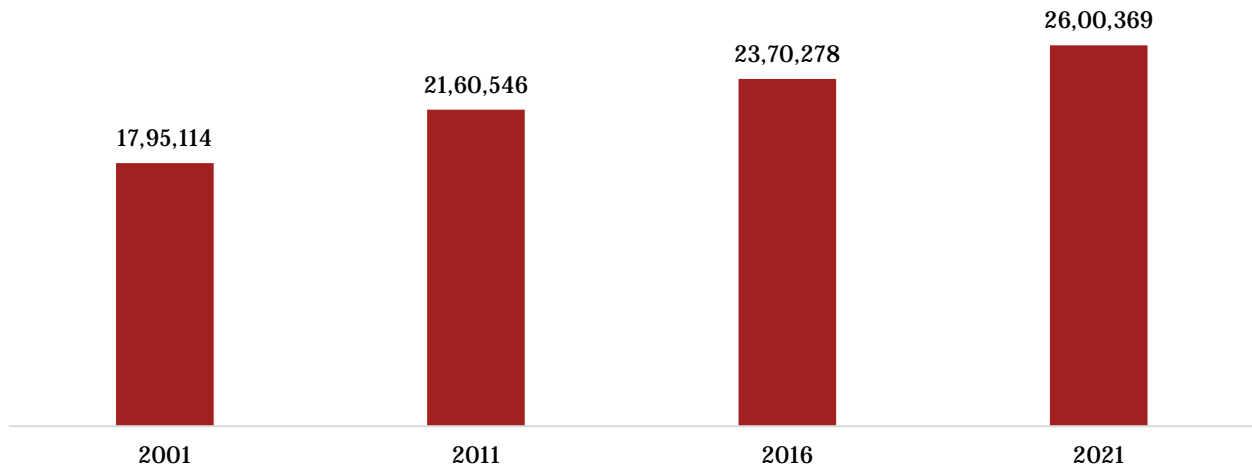


Figure 6: Age Specific Population in Ganjam (15-59 year)

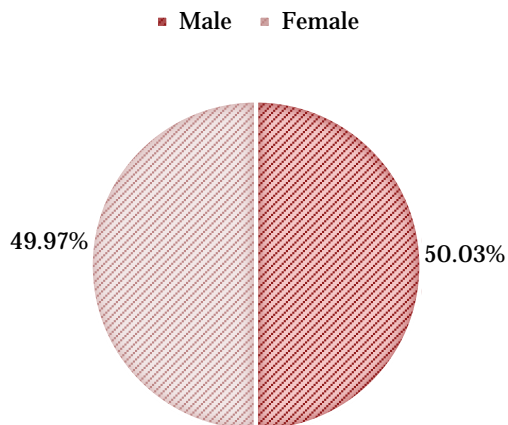
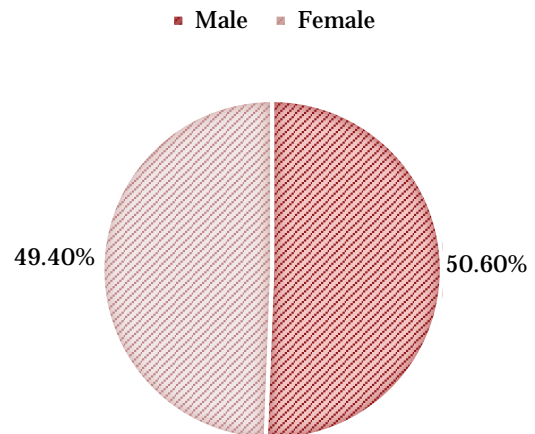


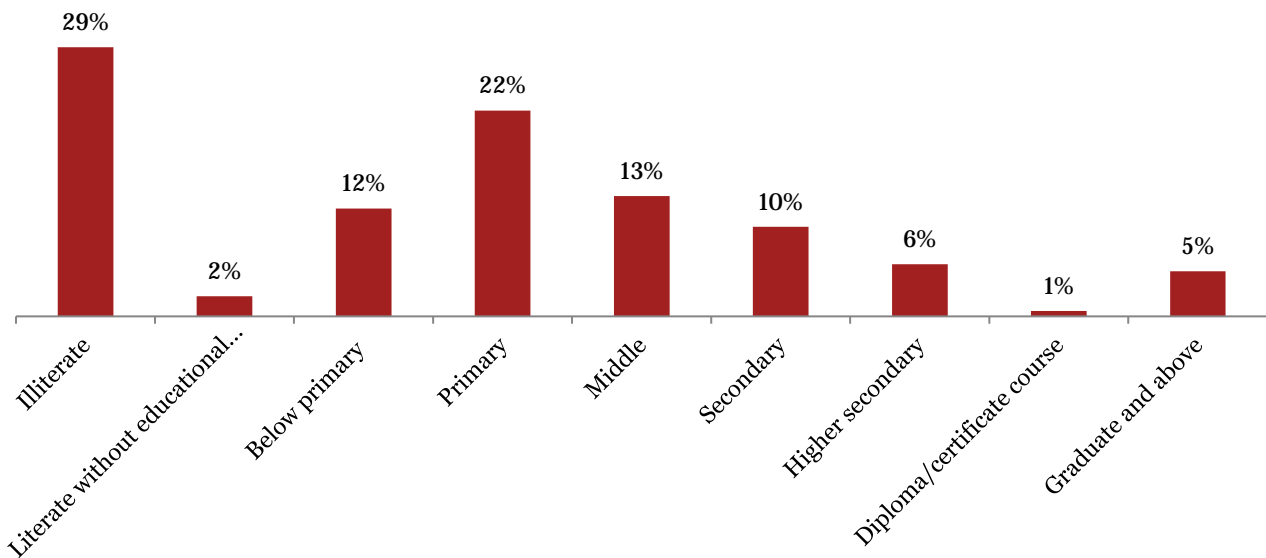
Figure 5: Age specific population in Ganjam (15-24 year)



In the age group of 15-59 years, the share of population of males and females in the total population of Ganjam is around 50.03% and 49.97% respectively. Similarly, the share of population of males and females in the age group of 15-24 years is 50.60% and 49.40% respectively.

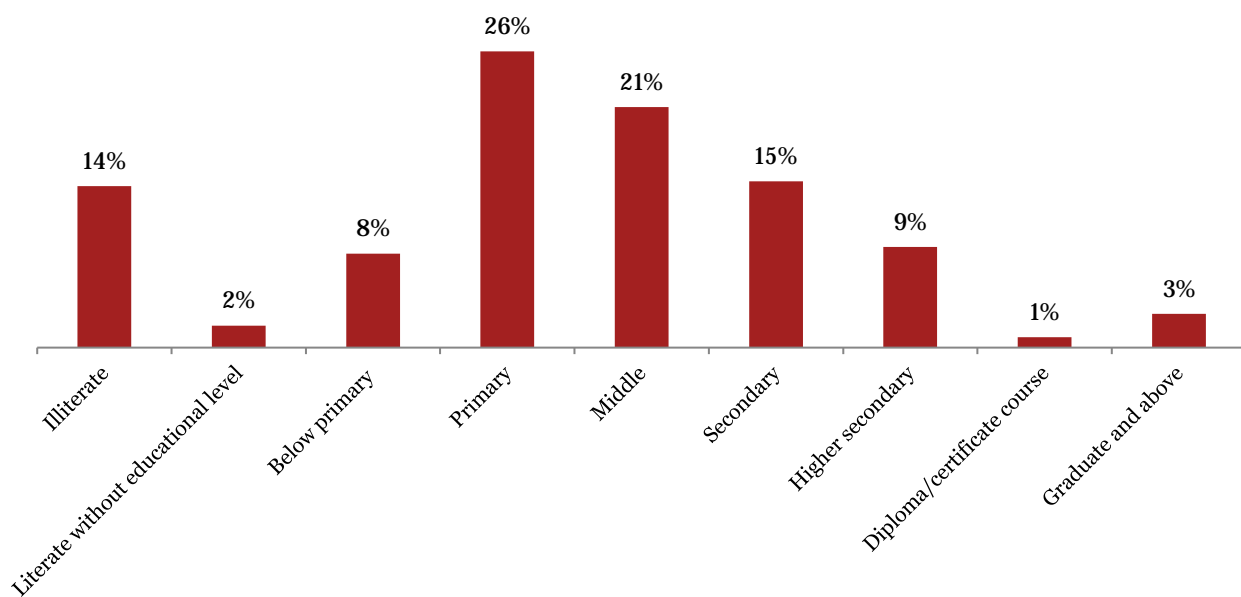
⁴ Ibid.
Human Resource and Skill requirement study for 21 Coastal Districts of India

Figure 7: Age specific education level in Ganjam (15-59 year)



From the Census 2011, depicted above, it is seen that for the age category of 15-59 years, 29% of the population of Ganjam is illiterate. 2% of the population in the age category is literate without any educational qualification, 12% population has attended school till below primary level and 22% has completed schooling only up to primary level. Roughly 13% of the literate population have completed schooling up to the middle level, whereas around 10% of the literate population have been educated till secondary. Only 1% of the population of this district have done a certificate/diploma course and 5% have at least graduated, indicating that a graduate/post-graduate degree is more sought after than a certificate/diploma.

Figure 8: Age specific education level in Ganjam (15-24 year)

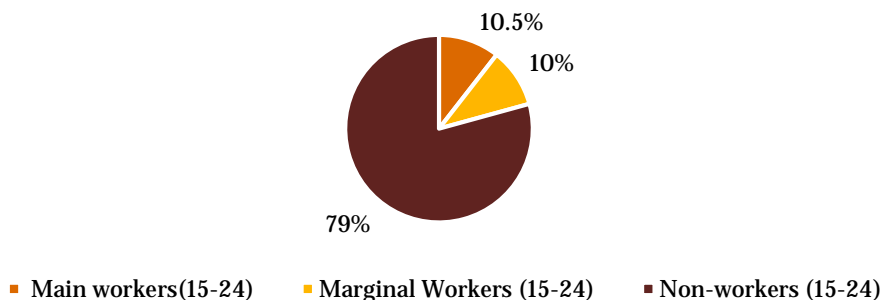


For the age category of 15-24 years, 96,003 of the population of Ganjam is illiterate. 14% of the population are literate without any educational qualification, 8% have attended school till below primary level and 26% have completed schooling only up to primary level. Roughly 21% of the literate population has done schooling up to

the middle level, whereas, around 15% of the literate population has been educated till secondary. Only 1% of the population of this district has done a certificate/diploma course and 3% have at least completed graduation.

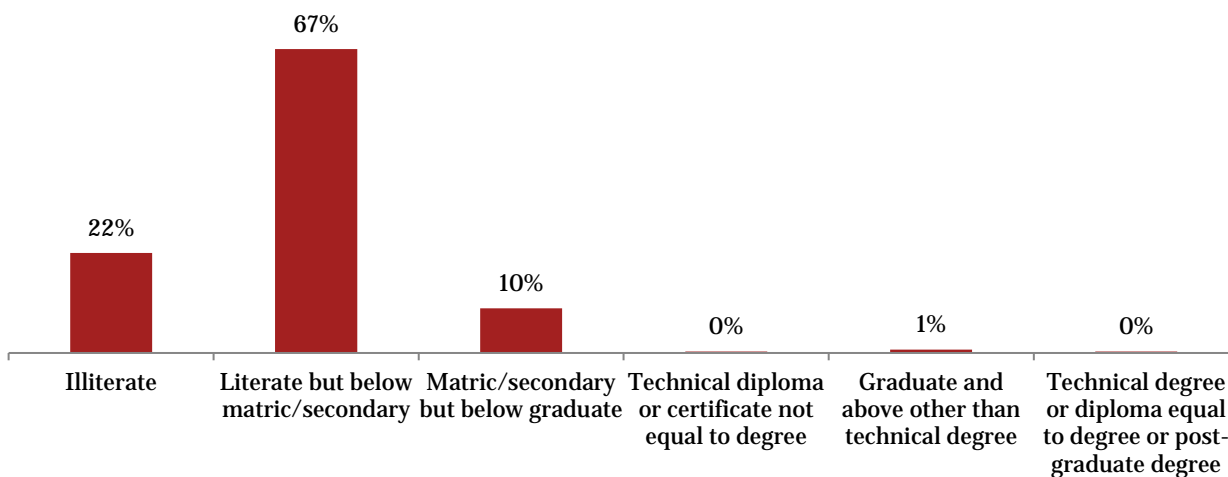
Age specific distribution of workers and educational level⁵

Figure 9: Age specific distribution of workers in Ganjam (15-24 years)



79% of the population in the age group of 15-24 years are non-workers. 10.5% of the population are main-workers, whereas 10% are engaged in marginal work i.e. work for 3-6 months during the year.

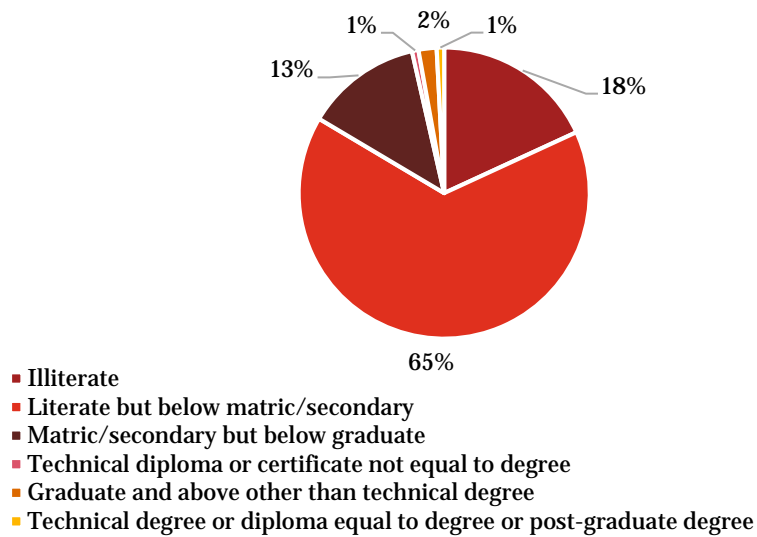
Figure 10: Education level of marginal workers in Ganjam (15-24 year)



Amongst the 98,071 marginal workers in the age group of 15-24 years, the number of workers with technical degree or diploma equal to degree holder is only 283 which constitutes an insignificant proportion of workers and only 1% is graduate and above other than technical degree. 10% of the population is educated up to the matric/secondary level and around 67% are literate with an educational qualification of below metric/secondary level. 22% marginal workers in this age group are illiterate.

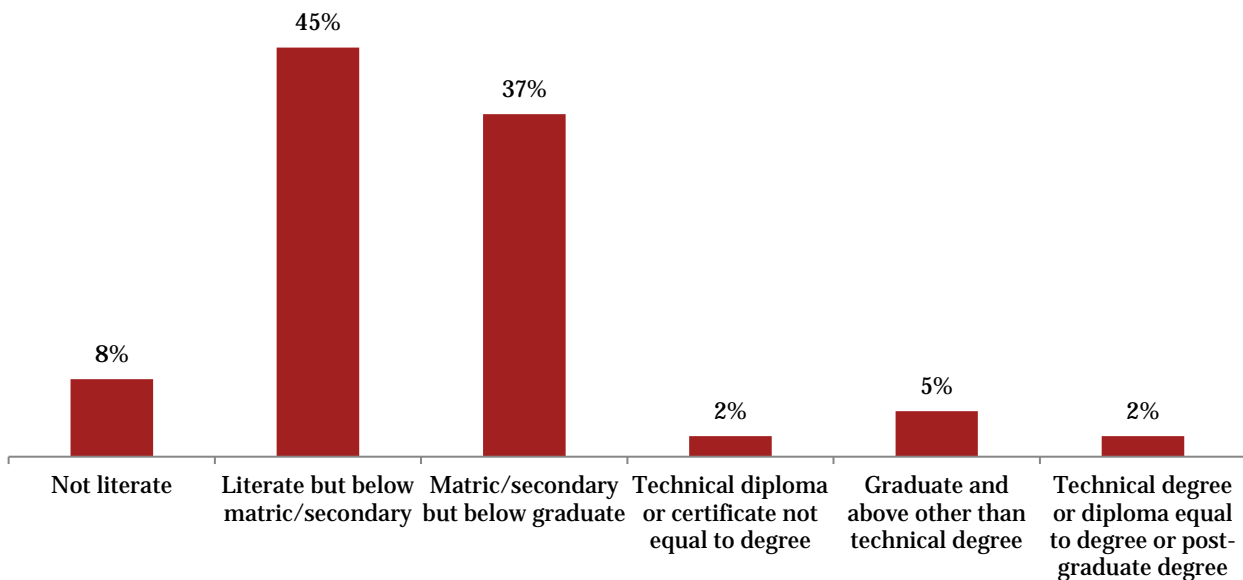
⁵ (Census of India, 2011)
Human Resource and Skill requirement study for 21 Coastal Districts of India

Figure 11: Education level for main workers in Ganjam (15-24 year)



From the census 2011 information depicted in chart given above, we find that the proportion of main workers who are illiterate (*in the age category 15-24 years*) is slightly less than the proportion of marginal workers 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 slightly less (*2 percentage point difference between the two*) than the proportion of marginal workers who are literate but below matric/secondary. The proportion of main workers who are matric/secondary but below graduate (*in the age category 15-24 years*) is slightly more (*3 percentage point difference between the two*) than the proportion of marginal workers who are matric/secondary but below graduate. For the remaining three educational levels, we find that the population shares are more or less the same across the two worker categories.

Figure 12: Education level of non-workers in Ganjam (15-24 year)

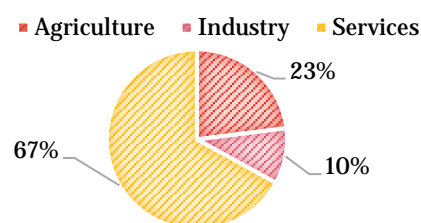


Amongst the 112570 non-workers in the age group of 15-24 years, only 2% of the population hold a technical degree or diploma equal to degree holder and 5% is graduate and above other than the technical degree. Only 2% have a diploma or a certificate (not equal to degree). 37% is educated up to the matric/secondary level and around 45% is literate but have attained an educational qualification of below matric/secondary level. 8% of the non-workers in this age group are not literate.

1.1.2. Key Economic Drivers

According to District Economy Survey of Ganjam, the Gross Domestic Product of the district (at constant prices- 2004-05) was INR 13,753 Crores in 2010-11 and has steadily grown at a CAGR of 8% over the period 2004-05 to 2010-11. The sectoral break up suggests that services sector contribution to district GDP is more than half (67%) followed by agriculture sector (23%).

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



The key economic drivers of the district are illustrated below:

Port and Maritime	<ul style="list-style-type: none"> • 2 cargo Berths to be constructed in December, 2017
Infrastructure Development	<ul style="list-style-type: none"> • Construction of Textile Parks at an investment of INR 300 Cr
Industrial Development	<ul style="list-style-type: none"> • TATA Steel SEZ at an investment of INR 800 Crores • Multimodal Logistics Park at an investment of INR 250 Crores
Tourism	<ul style="list-style-type: none"> • Coastal Circuit Project at an investment of INR 78 Crores

1.1.3. Priority Sectors

In Ganjam, the priority sectors that have been identified are **Port and Maritime sector** and other allied sectors: **fisheries, construction, tourism and manufacturing**. Other sectors that have been identified as priority sectors from the point of view of their contribution to district GDP are **healthcare, apparel and logistics**.

1.1.4. About Port

Ports & Maritime			
Major Ports: Nil	Minor Ports: 1	Shipyards: Nil	
Details			
Gopalpur Port			
<i>Operations:</i>	PPP	<i>Capacity</i>	1 Mn tonnes P.A.
<i>Key Cargo</i>	Urea, Anthracite Coal, Industrial Salt, Calcined Petroleum, Coke	<i>No of berths:</i>	3
		<i>Draft</i>	12 mtrs
<i>Description and key Trend</i>	The Gopalpur Port is a private port owned by Odisha Stevedores Limited. The Port aims at serving the mineral rich hinterland of Odisha, Jharkhand and Chhattisgarh. The first phase of developing three deep water berths are in process and the master		

	plan envisages 15-20 berths with three separate harbors to enable segregation of cargo as needed.		
Terminal Operations			
	Terminal Operator (1)	Terminal Operator (2)	Terminal Operator (3)
<i>Annual Capacity</i>	5 MTPA	NA	NA
<i>Type of Cargo handled</i>	Urea, Anthracite Coal, Industrial Salt, Calcined Petroleum, and Coke		
<i>Manpower</i>	350 nos.		
<i>High Demand Job Roles</i>	Forklift Operator, Reach Stacker Operator, Crane Mechanic, Painter, Blaster, Marine Engine Fitter, Vessel Navigator		
Shipyards			
<i>Description and key Trend</i>	Nil		

1.1.5. Investments

The table below provides an overview of the investments that are in pipeline in next few years:

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

Sector	Proposed Investment (INR Cr)	Number of Projects	Expected Employment	Key Players
Port & Maritime	-	2	150 persons	Gopalpur Port, Odisha Stevedores Limited
Infrastructure	1,860	6	18,550 persons	TATA Steel, IDCO, IPICOL
Food Processing	300 {approx.}	3	7,000 persons {approx.}	Department of MSME, IPICOL, Department of Agriculture
Basic infrastructure, Transportation, Port City & Affordable Housing	0.6	1	250 persons	-
Tourism	91	1	500 persons	Department of Tourism

In the port and maritime sector, Gopalpur Port has proposed investment of setting up 2 cargo berths in December 2017.

In Ganjam, the manufacturing industry is diverse with proposed investments in a variety of products such as paper, petroleum, kitchen and wooden furniture chemical manufacturing, plastic etc. Details of some of the key investments proposed in the manufacturing space are:

Figure 14: Details of proposed investments in Ganjam, IDCO

Food Processing	Manufacturing	Healthcare	Construction	Tourism
<ul style="list-style-type: none"> ❑ Mega and Medium Food Park at INR 100 Crores; Key Player: Yet to be Identified; Employment: 5,000 nos. ❑ Commodity Value Chain based Cluster development at 10-15 Crores per cluster; Key Player: Yet to be identified ❑ Agri Export Zones ❑ Fishery Harbour at INR 160 Crores-Total Direct Employment: 2000; Key Player: Ministry of Agriculture and Farmers welfare, Department of Fisheries and Animal Resources Development, IDCO Employment: 50 nos. 	<ul style="list-style-type: none"> ❑ Private Industrial Estate at INR 200 Crores; Key Player: IDCO in coordination with Private Industries; Employment: 500 ❑ TATA Steel Special Economic Zone at INR 800 Crores; Key Player: TATA Steel; Employment: 3,000 nos. 	<ul style="list-style-type: none"> ❑ Odisha Affordable Healthcare Project at INR 60 Lakhs; Key Player: Project Development underway 	<ul style="list-style-type: none"> ❑ Multi Modal Logistics Park at INR 200-250 Crores; Key Player: IDCO; Employment: 5,000 nos. ❑ Development of Chemical and Pharmaceutical Cluster at INR 10 Crores ; Key Player: Yet to be Identified; Employment: 1,000-5,000 nos ❑ Integrated textile Park at INR 300 Crores-Total; Key Player: IDCO; Employment: 5,000 nos. 	<ul style="list-style-type: none"> ❑ Aranya Eco Village at INR 13 Crores; Key Player: Master Plan under Final Phase; Employment: 200 nos. ❑ Coastal Circuit project at INR 78 Crore1; Key Player: Department of Tourism, Government of Odisha; Employment: 250 nos.

1.1.6. 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	399
Gender Profile	Male- 48.1% Female- 51.9%
Age Group	15-24 years
Education Level (top 3)	Senior Secondary schooling(Class 9 to 10)-42.8% Higher secondary schooling with science (Class 11 to 12)- 56.1% Higher secondary schooling with commerce (Class 11 to 12)- 85.9%
APL/BPL/AAY/Don't know (118)	APL-49.1% BPL- 46.9% AAY- 2.5% Don't know- 1.5%
Occupational Profile (top 3)	Salary from employment (19.5%), Self Employed (12.8%), Own Business (6%)

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).

Of the total respondents who underwent vocational training (which is ~4%), majority were from Short term courses offered by Government (38%) and polytechnic (31%). Figure 16 exhibits the percentage of respondents who completed different types of courses as part of their vocational training.

Figure 15: Percentage of respondents who completed vocational training courses - Ganjam

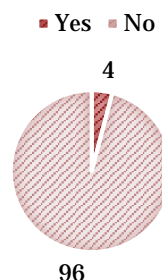
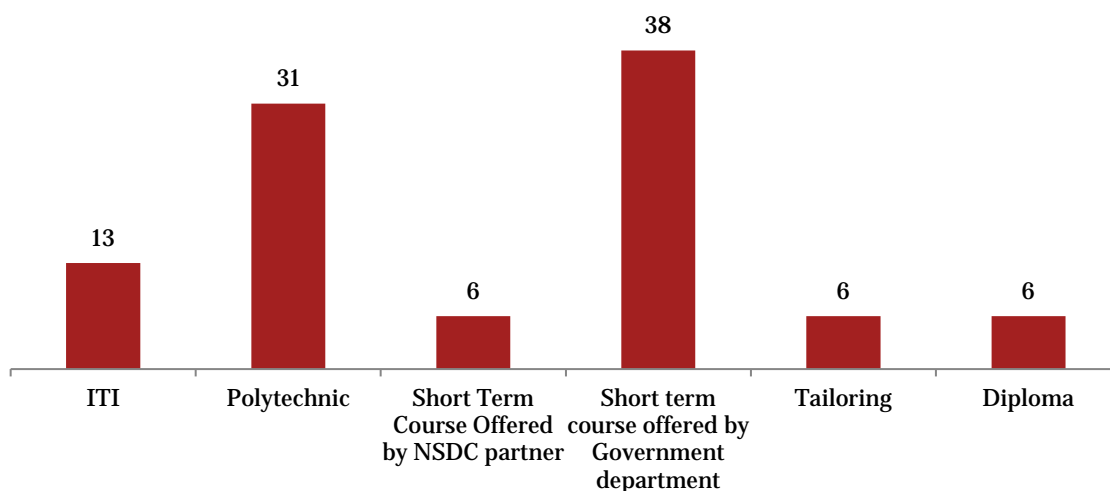
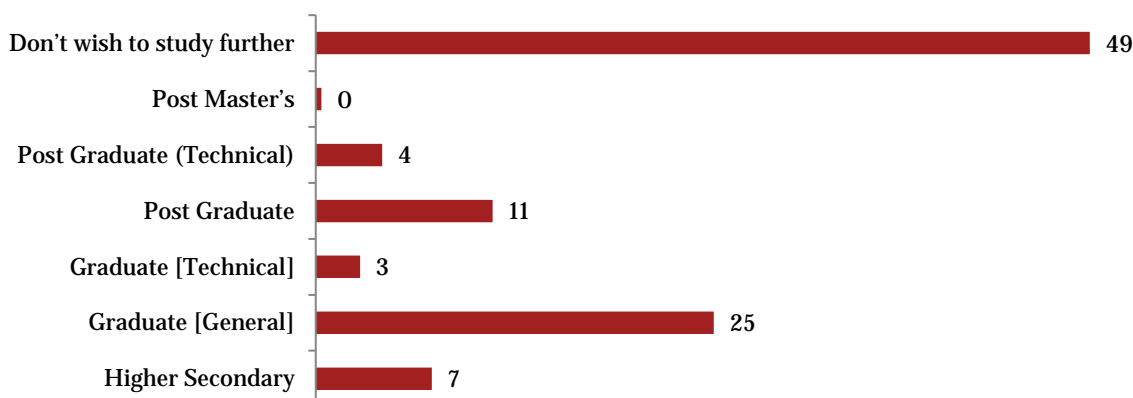


Figure 16: Percentage of respondents completed courses in vocational training - Ganjam



Further, the respondents were asked level about the level of education they wished to attain. 25% of the respondents aspired to attain graduation and post-graduation level of education. The desire to attain technical education is relatively low with only 7% aspiring for graduation or post-graduation in technical fields (Figure 17) whereas 49% of the respondents didn't wished to study further.

Figure 17: Desired level of education - Ganjam



Job Aspiration

One of the important findings of the survey has been the high preference for wage employment over self-employment amongst the youth of the district. About 98% of the respondents reported to have preferred wage employment over self-employment (Figure 18).

The respondents were further asked to identify the factors important for securing employment in the area of interest. 88% of the respondents identified computer skills as the most important factor for securing employment followed by English speaking skills (56.5%) and good personality (48.2%) (Figure 19).

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

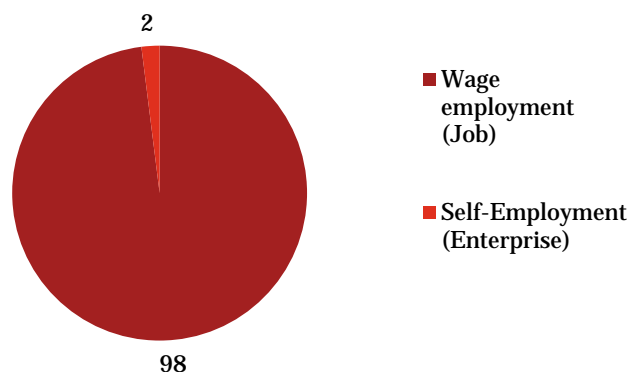
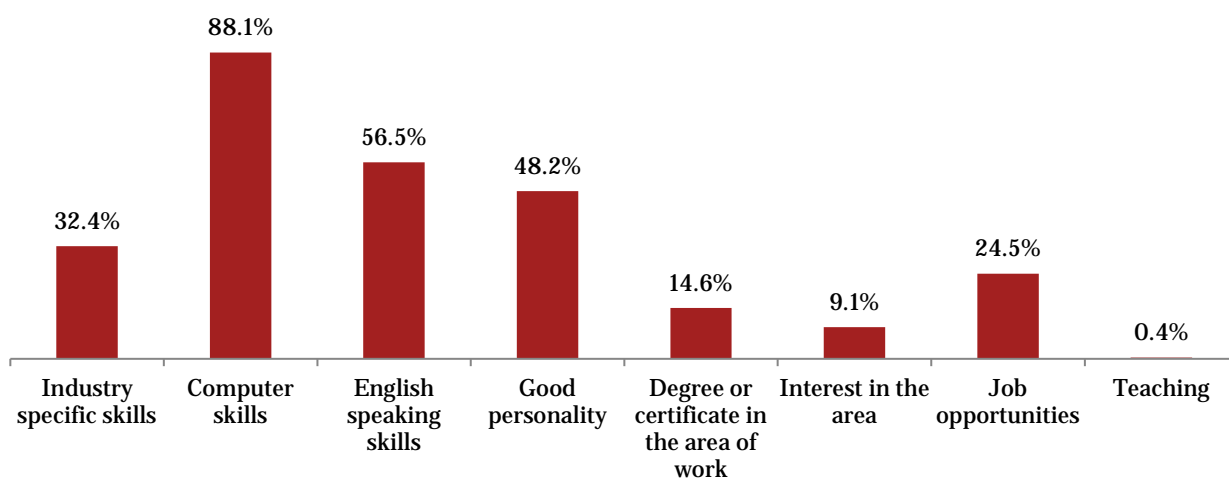
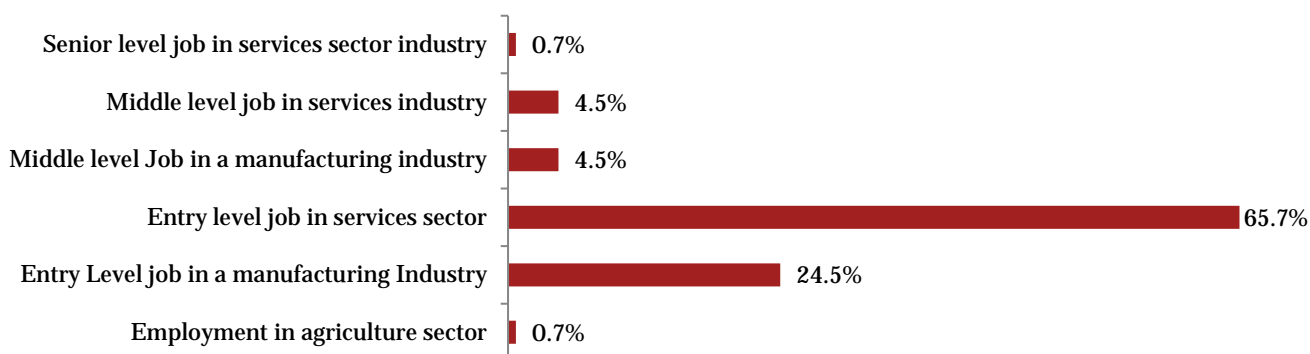


Figure 19: Factors important for securing employment in area of interest (%) - Ganjam



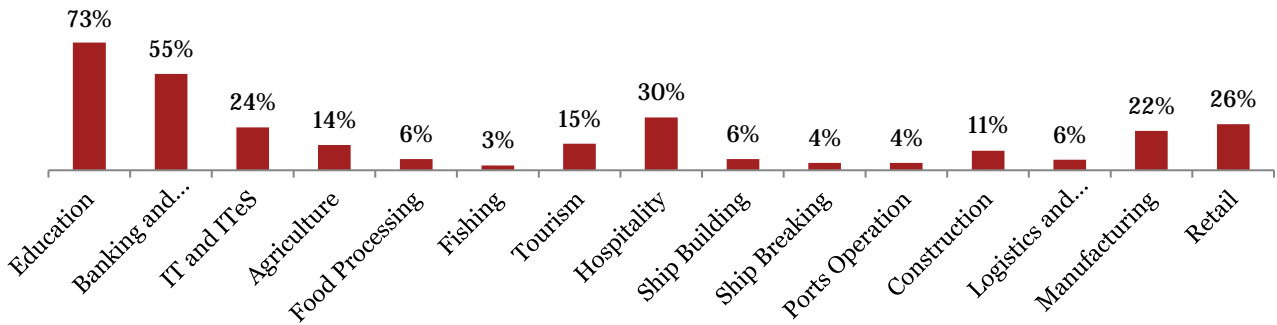
Regarding job aspiration of the respondents after completion of education or training, it can be observed that there is a demand for services sector with 65% aspiring for entry level jobs in service sector and 24.5% aspiring for entry level jobs in manufacturing sector. This is followed by middle level jobs (11%), and entry level jobs in manufacturing industry (8%) (Figure 20).

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



Further, Education (73%) and BFSI (55%) have been identified as sectors in which the respondents feel that they are mostly likely to get job which is in alignment with their aspiration for a job in the service sector space. The details of other sectors are mentioned in Figure 22.

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



Out of total respondents, only 3% preferred to work outside the State. It is important to note that 82% preferred to work in the same district and 15% expressed willingness to migrate to other districts in the same state suggesting lack of flexibility among the youth of the district (Figure 22).

For majority of the respondents, (32%) the monthly salary expectation was INR 5,000-10,000; and for 65% of respondents the expected salary is reported to be in the range of 10,000-20,000 per month (Figure 23).

Figure 22: Preferred work location of candidate - Ganjam

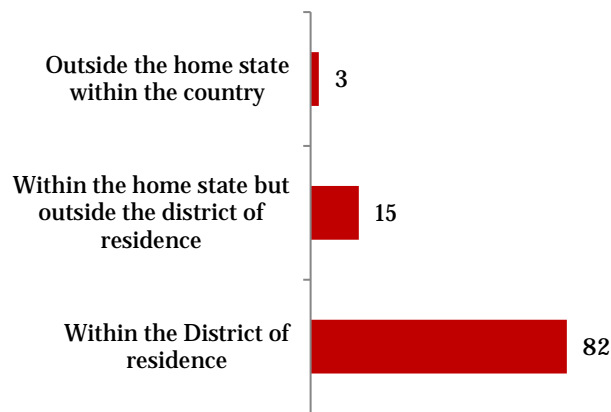
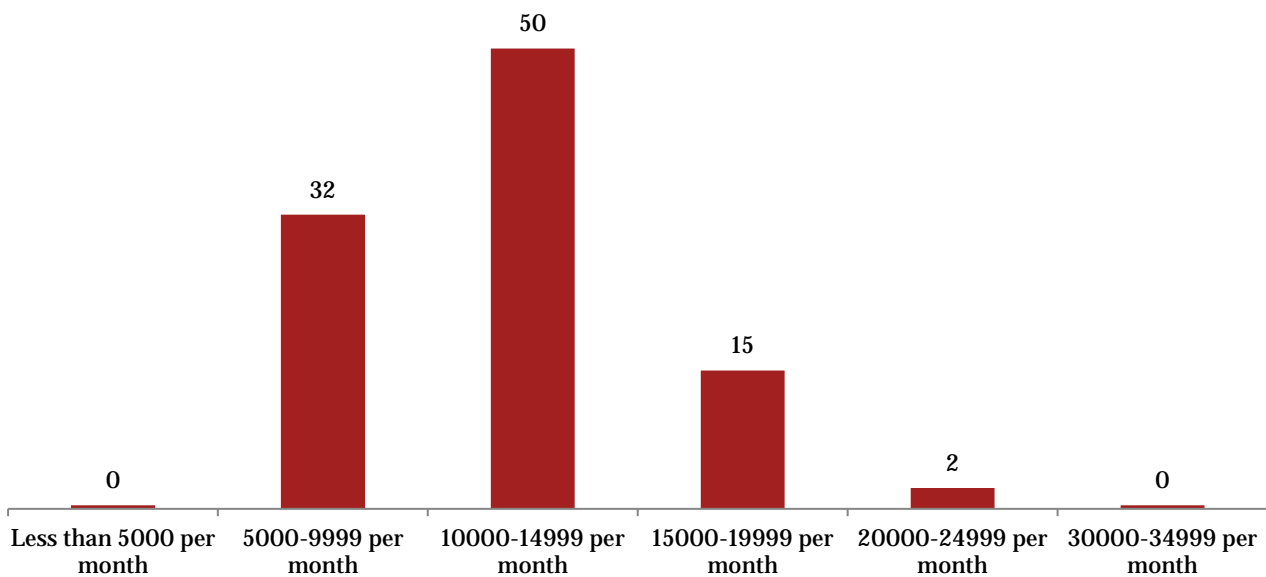


Figure 23: Monthly salary expectation of respondents - Ganjam



Training Aspiration

Regarding willingness of the respondents to participate in the training programme in next one year, 85% expressed interest whereas 14% expressed dis-interest (Figure 24).

Further, when enquired about the key focus areas of skill training, 50% of respondents reported that emphasis must be laid on technical skills followed by proficiency in English (36%), and proficiency in IT skills (10%) (Figure 25).

Figure 24: Willingness to participate in trainings (%) - Ganjam

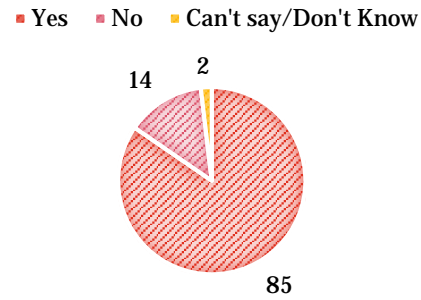
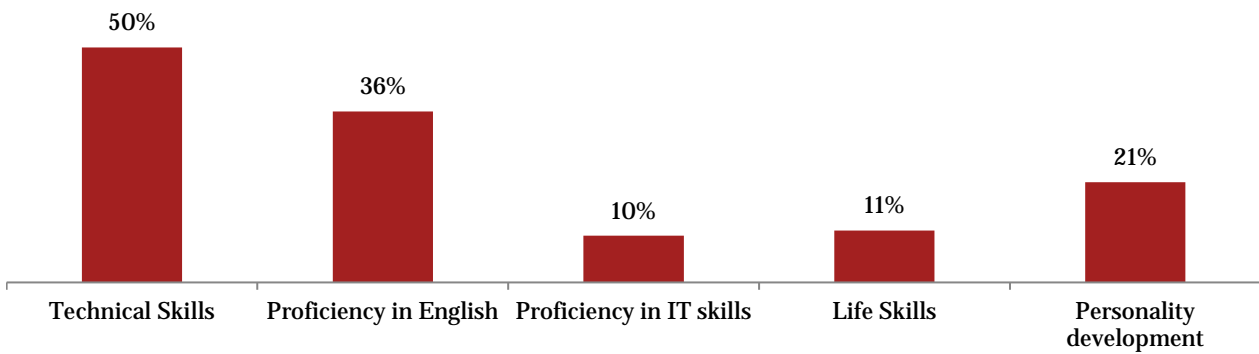
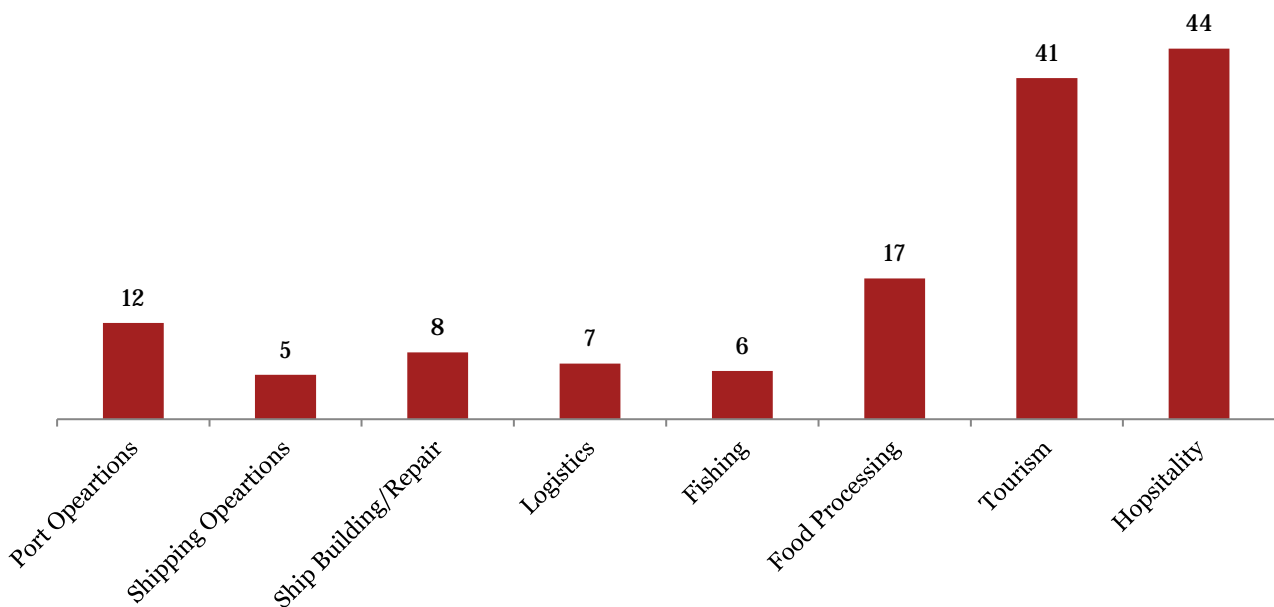


Figure 25: Focus area on skills training - Ganjam



Overall there is demand for training in hospitality (44%), tourism (41%), food processing (17%), shipping operations (5%) and port operations (12%) (Figure 26).

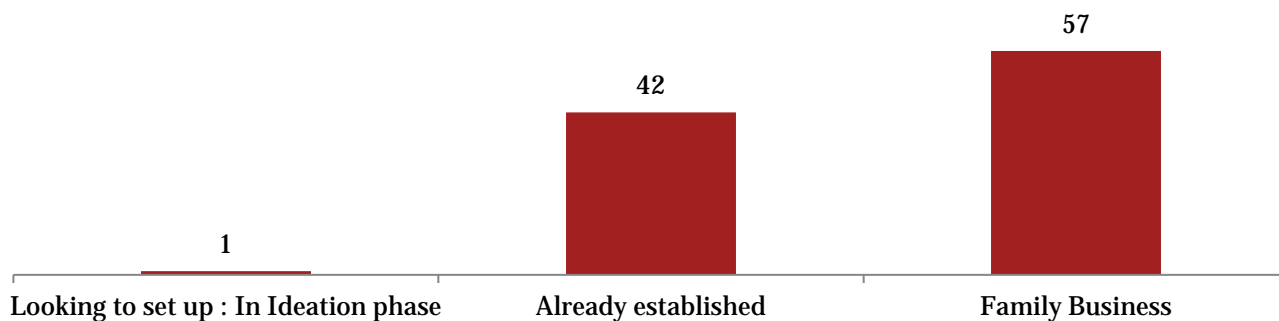
Figure 26: Willingness of respondents to participate in trainings of different sectors - Ganjam



Self-Employment

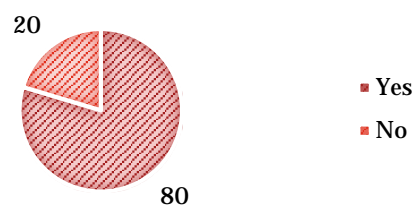
Regarding current status of the Entrepreneurial Venture of the respondents who aspired for self-employment, 57% were in family business and 42% were already established. (Figure 27).

Figure 27: Current Status of Entrepreneurial Venture (%) - Ganjam



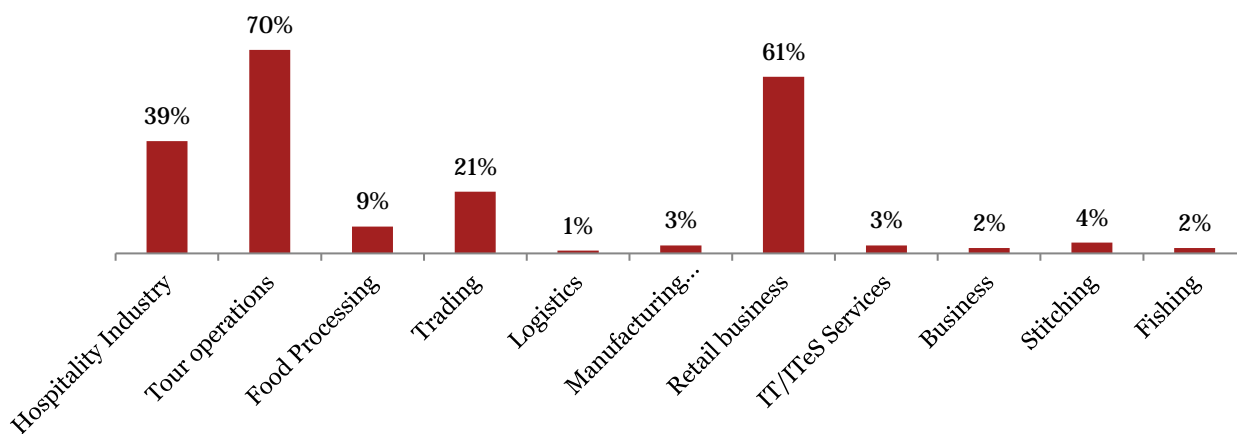
Further, 80% of the respondents expressed a desire to undergo a training programme for enhancing their entrepreneurial skills (Figure 28).

Figure 28: Interested in skill development for enhancing entrepreneurial skills (%) - Ganjam



Tour Operations (70%), Retail Business (61%) and Hospitality Industry (39%), Trading (21%) have been identified as most preferred sectors for setting own enterprise (Figure 29).

Figure 29: Sectors for establishing enterprise (%) - Ganjam



1.1.7. Training Infrastructure

Type of training infrastructure	Total number of institutions	No of trades	Top 5 trades based on enrolment and seat capacity
ITI	38	20	Fitter, Electrician, Industrial Painter, IT & ESM, DEO
Polytechnic	12	9	Mechanical, Electrical, Civil, Chemical
PMKK Training Centre	1	8	Quality assessor, Handset Repair Technician, Business Correspondent, Business Facilitator, Paddy farmer, Quality seed grower
DDU GKY	4	6	BFSI, Electrical, Hospitality, Data Entry Operator, Sewing Machine Operator

Ganjam has 1 government ITI and 37 Private ITIs which offer close to 20 trades. The most common trades are fitter, electrician, Industrial Painter, IT&ESM and DEO. Apart from these trades the Government ITI has introduced three new port related trades like Marine Engine fitter, vessel navigator and industrial painter. Apart from the ITI there are 11 private diploma colleges along with a government polytechnic which widely offers trades in mechanical, electrical, civil and chemical. The Government schemes such as PMKK and DDU-GKY are also implemented in the district. Though PMKK is still in the construction phase, however DDU-GKY has 4 Private implementing partners which have trained close to 1300 candidates in the current financial year and out of them placed 1,097 candidates.

1.2. Jagatsinghpur

About Jagatsinghpur

Jagatsinghpur houses one major port, Paradip Port Trust (PPT). The major exportable items produced in the district are iron ore, Ferro alloys, coal, prawns, frozen fish and rice⁶. Service sector (40%) and industry (33%) and have the largest share in the overall district economy.

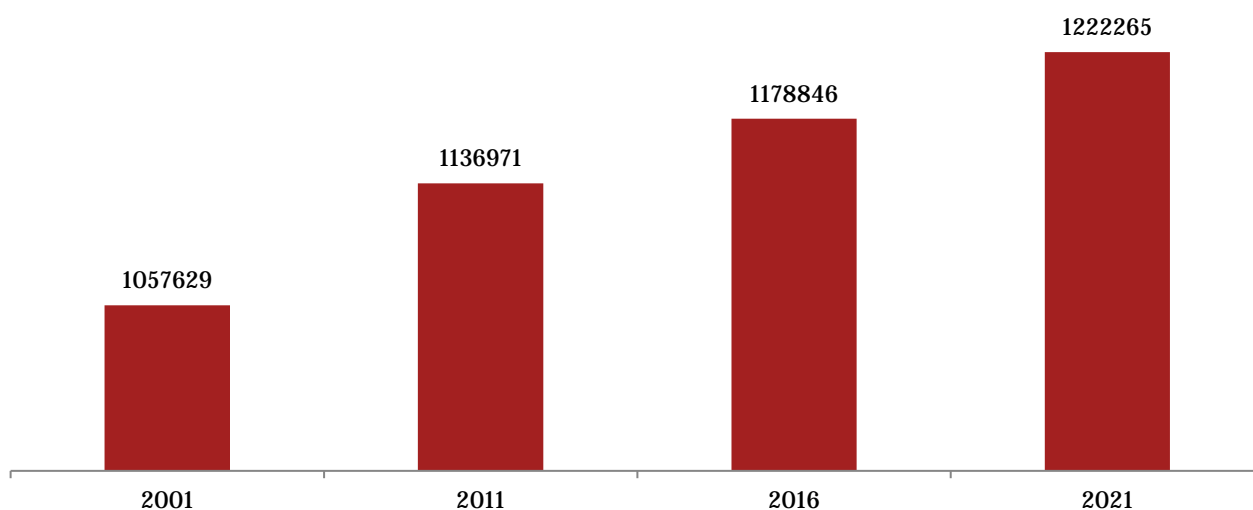
1.2.1. Demographic Profile

Indicator	Value
Total population	1,136,971
Decadal rate of growth of population (2001-11)	7.48%
Rural population	89.8%
Female	49.2%
SC population	21.83%
ST population	0.69%
Workforce participation (as % of total population)	35.50%
Main Workers (As % of total population)	25.52%
Marginal (As % of total population)	9.98%
Non-workers (As % of total population)	64.49%
Number of people with vocational training in the age group of 15+ in the state	36 per 1000

Population trends

The population growth of Jagatsinghpur has almost been steady for last 10 years and is expected to grow at the same rate in the near future. The projected population of Jagatsinghpur will be 12.22 lakhs by 2021.

Figure 30: Population trend - Jagatsinghpur (2001 - 2021)



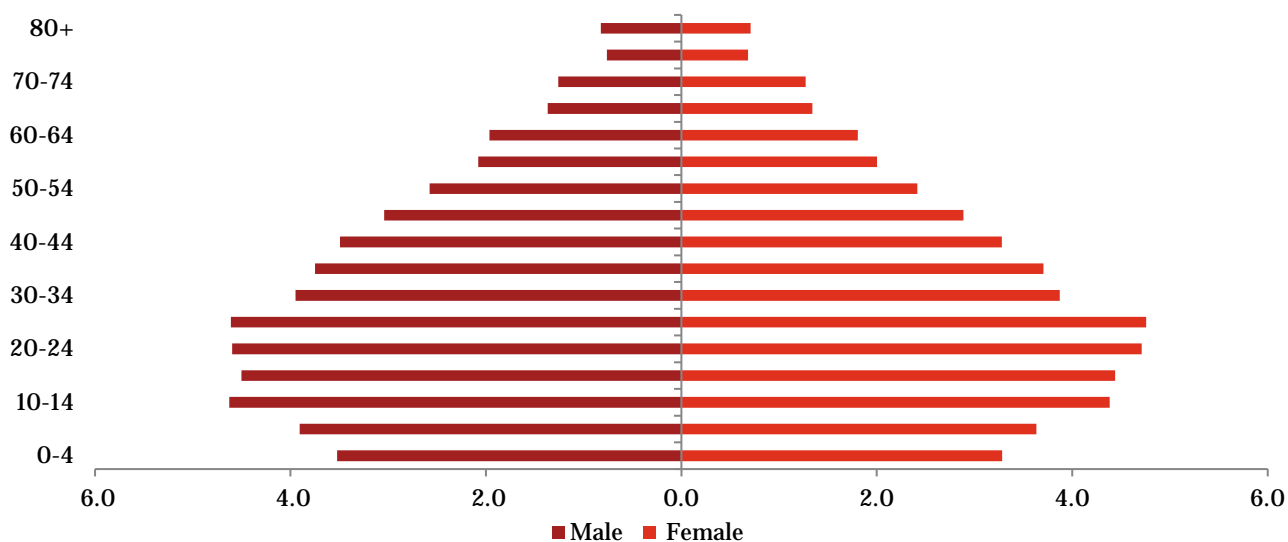
The demographic dividend bulge in Jagatsinghpur will remain intact for the next 10 years. Using proportional⁷ method for estimating the population for the period 2011-21 (10 years)⁸, the population is estimated to be 1,178,846 and 1,222,265 in 2016 and 2021 respectively. The projected absolute growth in the population from 2016 to 2021 is 4%.

⁶ (Brief Industrial Profile of Jagatsinghpur District,)

⁷ The proportion of district and state population in 2011, and the estimated population of state in 2016 and 2021 that is reported in the population projections for India and state 2001-2026 estimates, are taken into account in estimating the district level population in 2016 and 2021.

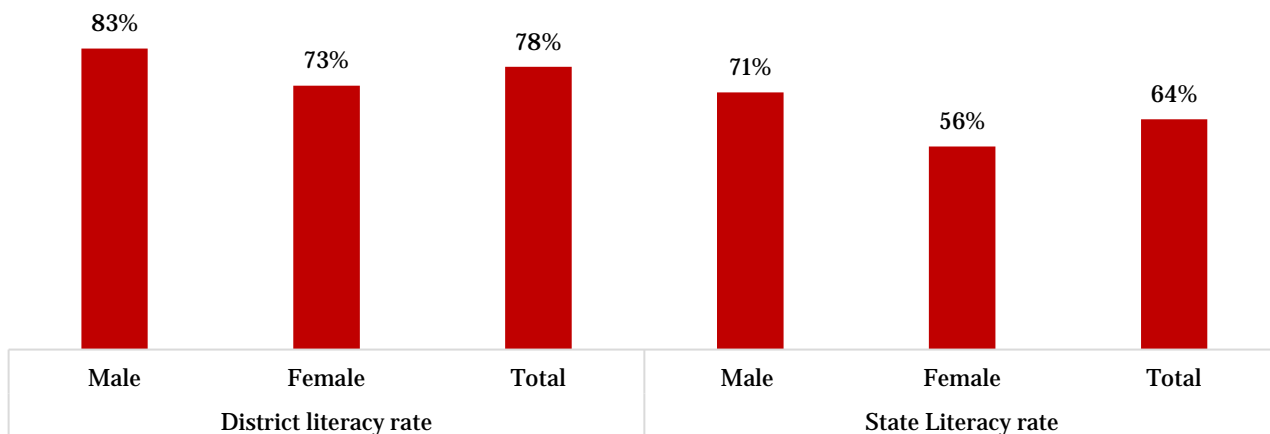
⁸ (Census of India, 2001 and 2011)

Figure 31: Population pyramid - Jagatsinghpur (2011)



Literacy rates⁹

Figure 32: Jagatsinghpur vs Odisha literacy rates (2011)



Total literacy rate of Jagatsinghpur, as per Census 2011, is approximately 78%, which is much above the State's literacy rate of around 64%). Also, the female literacy rate of Jagatsinghpur is 73% which is substantially lower than the male literacy rate of 83% in 2011.

Age specific population trends and education levels for 2011

As per the Census 2011, the population in the age-group of 15 to 24 years was 206,893 (18.20% of the overall population). Using proportional method, the population in the age group of 15-59 years is estimated to be 787,487 and 845,902 in 2016 and 2021. The projected absolute growth in the population from 2016 to 2021 is 7.41%.

⁹ (Census of India, 2011)
Human Resource and Skill requirement study for 21 Coastal Districts of India

Figure 33: Growth trend of population in the age group 15-59 year Jagatsinghpur in (2001-2021)

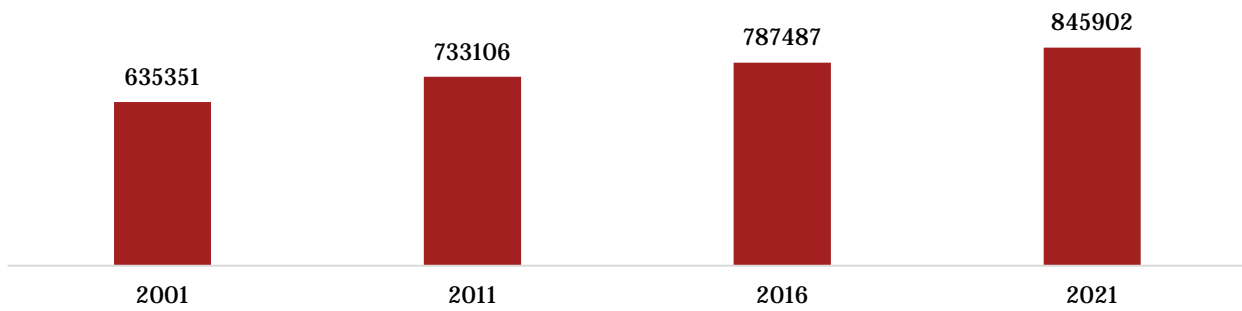


Figure 34: Age specific population in Jagatsinghpur (15-24 year)

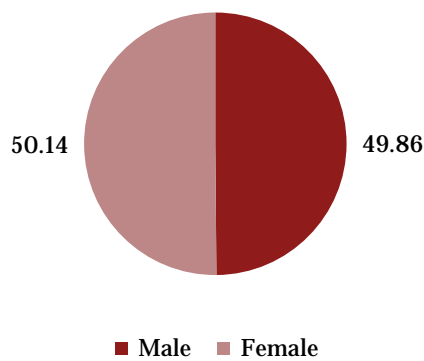
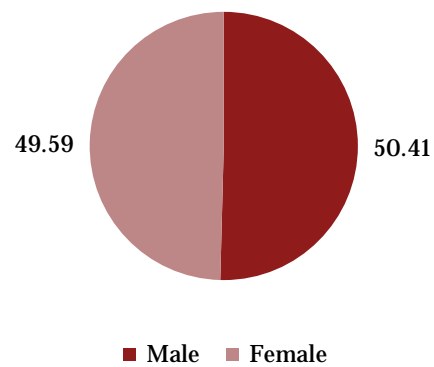


Figure 35: Age Specific Population in Jagatsinghpur (15-59 year)



In the age group of 15-59 years the share of population of males and females in total population of Jagatsinghpur is around 50.41% and 49.59% respectively. Similarly the share of population of males and females in the age group of 15-24 years is 49.86% and 50.14% respectively.

The chart indicates that for the age category of 15-59 years, 10% of the population of Jagatsinghpur is illiterate. 2% of the population in the age category are literate without any educational qualification, 9% have attended school till below primary level and 19% have completed schooling only up to primary level. Roughly, 21% of the literate population have completed schooling up to the middle level and 21% of the literate population have been educated till secondary. Only 1% of the population of this district have done a certificate/diploma course and 8% have at least graduated, indicating that a graduate/post-graduate degree is more sought after than a certificate/diploma.

Figure 36: Age specific education level in Jagatsinghpur (15-59 year)

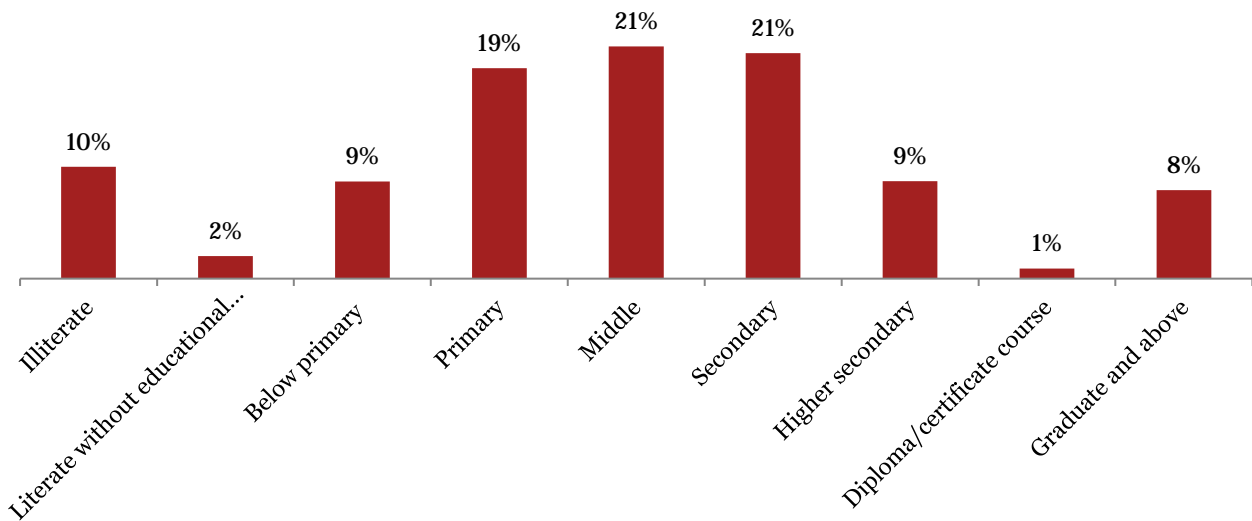
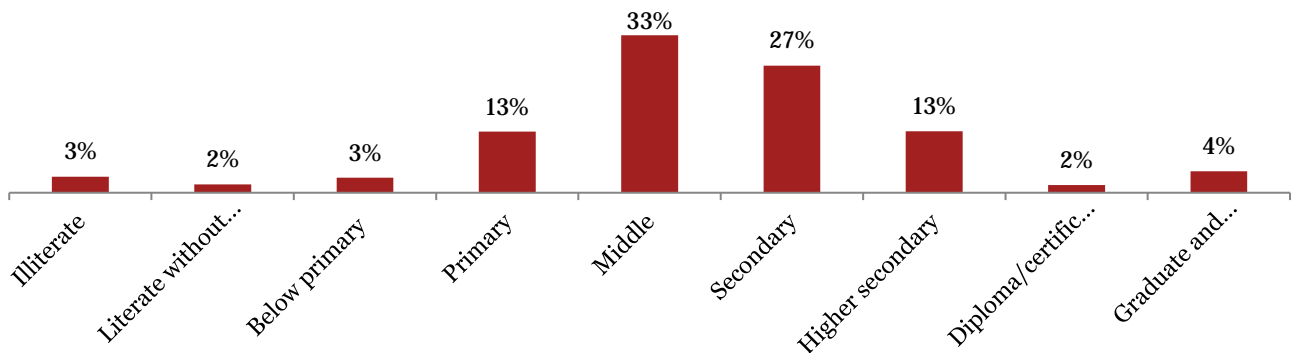


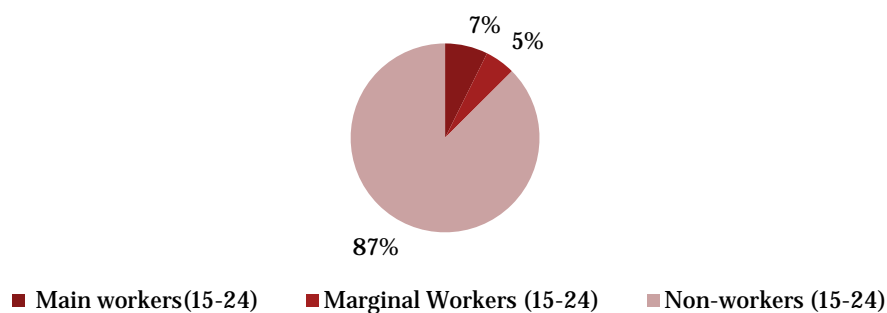
Figure 37: Age specific education level in Jagatsinghpur (15-24 year)



For the age category of 15-24 years, 3% of the population of Jagatsinghpur is illiterate. 2% is literate without any educational qualification, 3% have attended school till below primary level and 13% have completed schooling only up to primary level. Roughly 33% of the literate population has done schooling up to the middle level, whereas, around 27% of the literate population has been educated till secondary. Only 2% of the population of this district has done a certificate/diploma course and 4% have at least completed graduation.

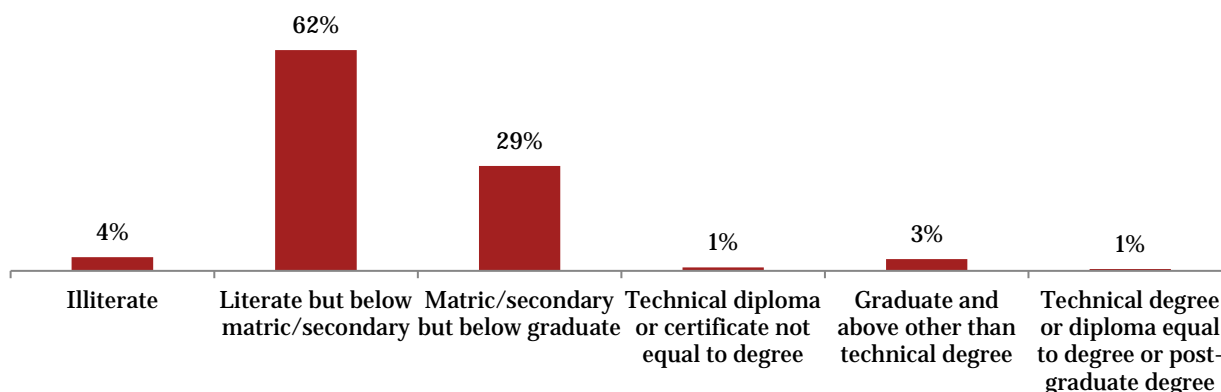
Age specific distribution of workers and educational level

Figure 38: Age specific distribution of workers in Jagatsinghpur (15-24 year)



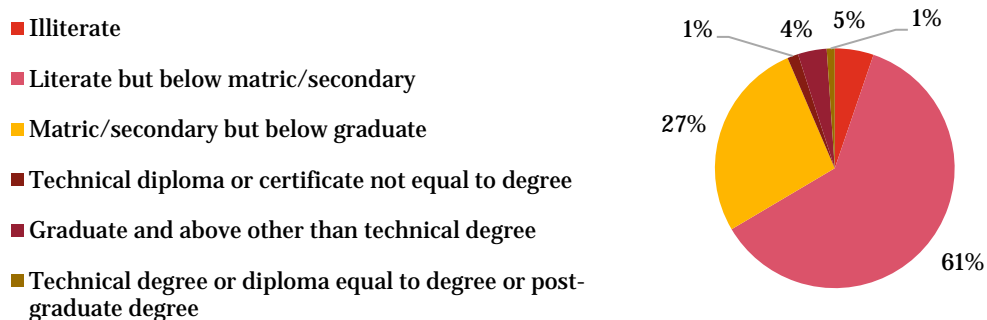
87% of the population in the age group of 15-24 years are non-workers. 7% of the population are main-workers, whereas 5% are engaged in marginal work i.e. work for 3-6 months during the year.

Figure 39: Education level of marginal workers in Jagatsinghpur (15-24 year)



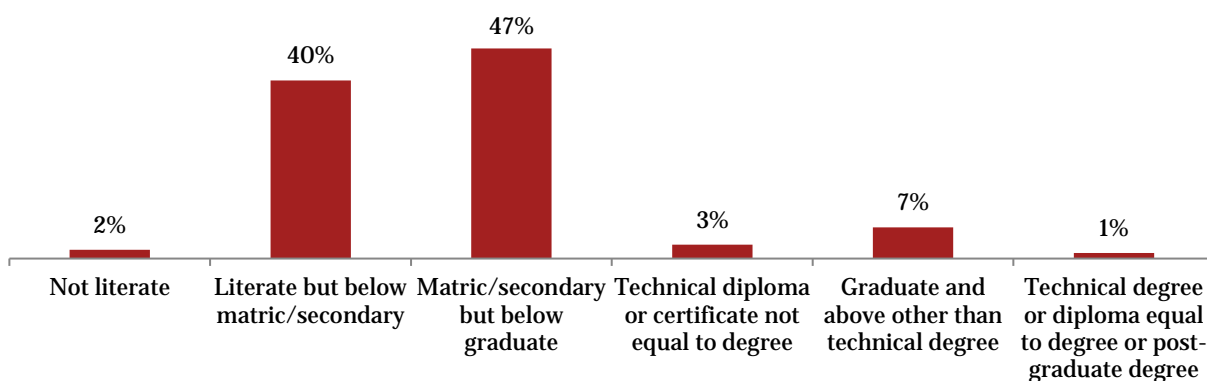
Amongst the 14,619 marginal workers in the age group of 15-24 years, only 1% hold a technical degree or diploma equal to degree and 3% are graduate and above other than technical degree. 1% have a diploma or a certificate (not equal to degree). 29% are educated up to the matric/secondary level and around 62% are literate with an educational qualification of below matric/secondary level. 4% of the marginal workers in this age group are illiterate.

Figure 40: Education level for main workers in Jagatsinghpur (15-24 year)



From the Census 2011, depicted above, it is seen that, the proportion of main workers who are illiterate (*in the age category 15-24 years*) is slightly more (*1 percentage difference point between the two*) than the proportion of marginal workers 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 less than (*1 percentage difference point between the two*) the proportion of marginal workers who 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 slightly less than (*2 percentage difference point between the two*) the proportion of marginal workers who are matric/secondary level but below graduate. The proportion of main workers who are graduate and above other than technical degree (*in the age category 15-24 years*) is same as that of marginal workers who are graduate and above other than technical degree. The proportion of main workers who have attained an technical degree or diploma equal to degree or post-graduate degree (*in the age category 15-24 years*) is slightly more than (*1 percentage difference point between the two*) the proportion of marginal workers who have attained an technical degree or diploma equal to degree or post-graduate degree. For the remaining one educational level, we find that the population share is the same across the two worker categories.

Figure 41: Education level of non-workers in Jagatsinghpur (15-24 year)

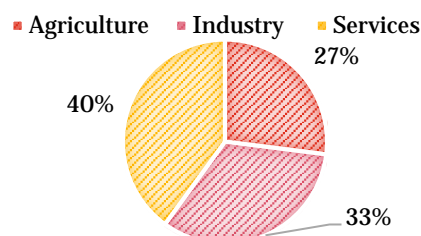


Amongst the 50417 non-workers in the age group of 15-24 years, only 1% hold a technical degree or diploma equal to degree and 7% are graduate and above other than technical degree. 3% have a diploma or a certificate (not equal to degree). 47% are educated up to the matric/secondary level and around 40% are literate but have attained an educational qualification of below matric/secondary level. 2% non-workers in this age group are not literate.

1.2.2. Key Economic Drivers

According to District Economy Survey, Jagatsinghpur, the Gross Domestic Product of the district (at constant prices- 2004-05) was INR 5,944 crore in 2010-11 and it has steadily grown at a CAGR of 8% over the period 2004-05 to 2010-11. The sectoral break up suggests that services sector contribution to district GDP is highest (40%) followed by industry sector (33%).

Figure 42: Sectoral breakup of Jagatsinghpur at constant prices (2004-05)



The key economic drivers of the district are illustrated below:

Port, Maritime and Logistics	<ul style="list-style-type: none"> Develop Outer Harbour under Project Sagarmala at INR 4,179 Crores. Multi Modal Logistics Park at INR 200 Crores.
Infrastructure Development	<ul style="list-style-type: none"> Steel Based Downstream Parks at INR 1,200 Crores. Private Industrial Estate at INR 100 Crores. Paradip Plastic Park at INR 107 Crores
Industrial Development	<ul style="list-style-type: none"> Development of Low Cost Hospital at INR 60 lakhs
Urbanisation	<ul style="list-style-type: none"> Smart Industrial Port City spread over 6,727.17 acres

1.2.3. Priority Sectors

In Jagatsinghpur, the priority sectors that have been identified are **Ports and Maritime sector** and other sectors: **fisheries, construction, agriculture and manufacturing.**

1.2.4. About Ports

Ports & Maritime				
Major Ports: 1	Minor Ports: Nil		Shipyards: Nil	
Details				
Paradeep Port				
<i>Operations:</i>	Paradeep Port Trust	<i>Capacity</i>	79 Million Tonnes	
<i>Key Cargo</i>	Coal, Gasoline, Diesel	<i>No of berths:</i>	20	
		<i>Draft</i>	13 mtrs (43 ft.)	
<i>Description and key Trend</i>	The Gopalpur Port is a private port owned by Odisha Stevedores Limited. The Port aims at serving the mineral rich hinterland of Odisha, Jharkhand and Chhattisgarh. The first phase of developing three deep water berths are in process and the master plan envisages 15-20 berths with three separate harbors to enable segregation of cargo as needed.			
Terminal Operations				
	Terminal Operator (1)	Terminal Operator (2)	Terminal Operator (3)	Terminal Operator (4)
<i>Annual Capacity</i>	IOCL 37 mn tonnes	ESSAR 6.55 mn tonnes	IFFCO 4.03 mn tonnes	PPL 3.47 mn tonnes
<i>Type of Cargo handled</i>	Gasoline, Diesel, Petroleum, Crude Oil	Dry bulk cargo	Containers	Petroleum products, crudes, and chemicals
<i>Manpower</i>	-	-	-	-
<i>High Demand Job Roles</i>	Technicians (Fitter, Welder, Electrician etc.), Pump Operators	Cleaner, Carpenter, Mechanic, Loco Driver, BMH OPERATOR	Pay loaders, Excavators, Heavy Earth Moving vehicle Operator	Maintenance Staff
Shipyards				
<i>Description and key Trend</i>	Nil			

1.2.5. Investments

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

Table 2: Proposed Key Investments for the year 2016-22 in Jagatsinghpur

Sector	Proposed Investment (INR Cr)	Number of Projects	Expected Employment	Key Players
Port & Maritime	5,349.97	5	200-300 persons	Paradeep Port Trust
Infrastructure	15,380	9	459,800 persons	MSME, IDCO, Container Corporation of India Limited

Smart Port City	1,500 {Approx.}	2	32,000 persons	Paradeep Port Trust, MSME, Private Partners
Basic infrastructure, Transportation, Port City & Affordable Housing	860	2	700 persons	Rural Water Supply & Sanitation, L&T, Department of Health & Family Welfare, Private partners

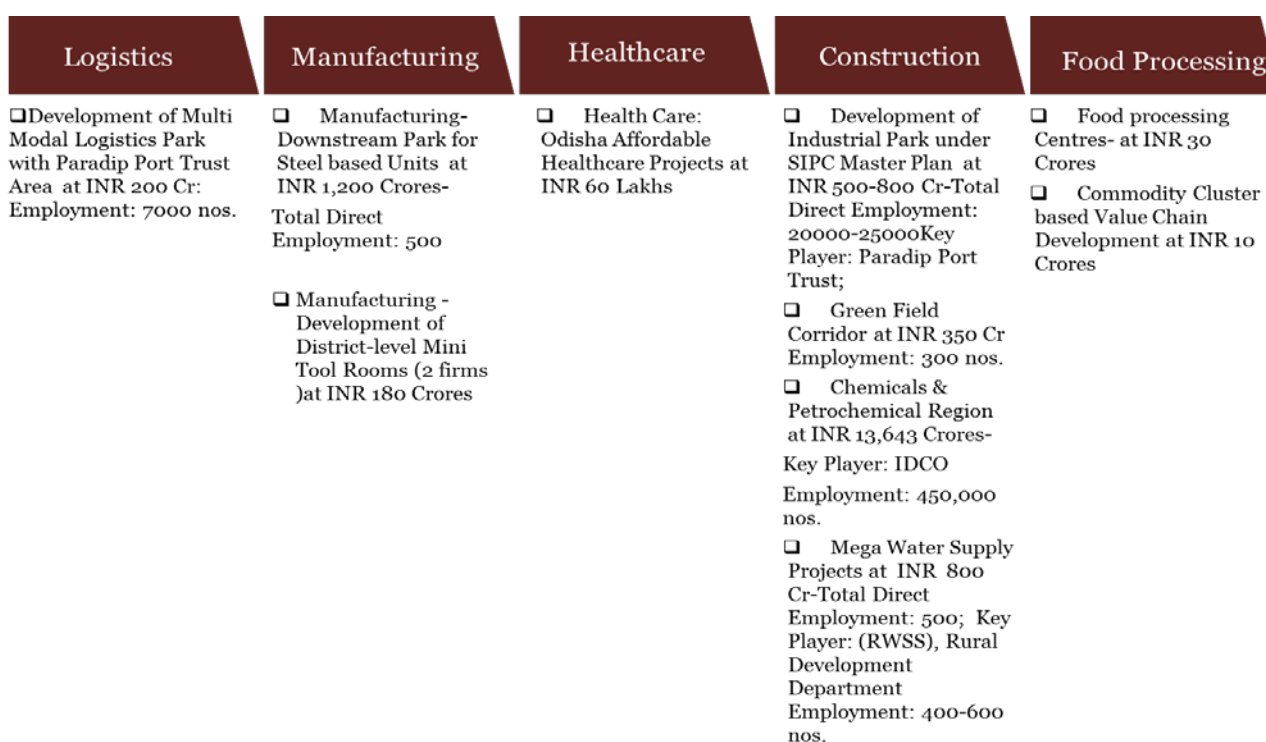
In the port and maritime sector, upgradation and repair work in the existing Paradip port, development of port-based SEZ and initiation of shipyard projects have been identified as key focus areas for future investments. Details of proposed investments in this sector are given below:

Table 3: Details of Investments in Port and Maritime sector in Jagatsinghpur

Project	Proposed Investment (INR cr)	Expected Employment	Key Players
Paradip International Cargo Terminal	430.78	-	Paradip Port
Paradip Terminal for Export of Iron Ore	740.19 Cr	-	JSW
Mechanisation of EQ 1,2 and 3	-	-	JSW
Coal Import Berth	50	Information not available	Paradip Port Trust
Outer Harbour under Project Sagarmala	21	200-700 Nos	Paradip Port Trust

In Jagatsinghpur, with the MSME sectors, manufacturing, tourism, logistics, food processing, health care, construction are upcoming areas with proposed investments to the tune of INR 1,110 Cr and is expected to create employment for approximately 450,000 persons. The details of proposed investments across these sectors are given below:

Figure 43: Details of proposed investments across different sectors, IDCO



1.2.6. Training Infrastructure

Type of training infrastructure	Total number of institutions	No of trades	Top 5 trades based on enrolment and seat capacity
ITI	22	15	Fitter, Electrician, Welder, DEO, Plumber
Polytechnic	-	-	-
PMKK Training Centre	1	5	LMV driver-Level 3, Welding technician Level- 3, Business correspondent, Business Facilitator, Trainee associate
DDU GKY	1	1	Retail, BPO Voice, BPO Non Voice

Jagatsinghpur has no Government ITI but there are 22 Private ITIs which offers close to 22 trades, the most common trades being fitter, electrician, welder, DEO and Plumber. The Government schemes such as PMKK and DDU-GKY are also implemented in the district. Though PMKK is still in the construction phase, however DDU-GKY has 1 Private implementing Partner which has trained close to 1163 candidates in the current financial year and placed 774 candidates of them.

There are a number of training programmes initiated by various State Government departments which is tabulated as follows:

Department	Programme	Trades
Panchayati Raj Department	RSETI	Food Processing, Mushroom Cultivation etc.
MSME Department	Entrepreneur Development programme; Coir Development Training programme, Handicraft Sector	Wood Carving, Terracotta, Straw Craft
Department of Agriculture	National Food Security Mission, Rashtriya Krishi Vikas Yojana, National Mission of Oil Seed Project	Extension training in improving output
ST& SC Department	OSFDC	Electrician, Welding,
Panchayati Raj Department	Sagarmala-DDUGKY	Welding, Ship Fitter, Structural fabricator
Housing & Urban Development department	State Urban Development Agency	Data Entry Operator, Beauty & Wellness, Plumbing, Sewing Machine Operator
Department of Agriculture	RKVY, State Employment Mission	Orchard Business Management, Nursery Business Management, Coconut Cultivation
Department of Skill Development & Technical Education	Skill Upgradation Training, Placement Linked Training programme	Electrician, Hospitality, Plumbing etc.

1.2.7. Youth Aspiration

Respondent Profile

The table below provides an overview of the respondent profile:

Profile	Details
Total Sample Size	400
Gender Profile	Male- 46% Female- 54%
Age Group	15-24 years
Education Level (top 3)	Senior Secondary schooling(Class 9 to 10)- 39.9 Higher secondary schooling with science (Class 11 to 12)- 6.2%

	Higher secondary schooling with commerce (Class 11 to 12)- 3.6%
APL/BPL/AAV/Don't know	APL-43.5% BPL- 48.8% AAV- 7.3% Don't know- 0.5%
Occupational Profile (top 3)	Own Business (14.3%), Salary from employment (9.8%), and Labourer (6.3%)

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, ~91% of the respondents had not enrolled in vocational training course

Of the total respondents who underwent vocational training (which is ~9%), majority were from Polytechnic (50%) and ITI (41%). Figure 45 exhibits the percentage of respondents who completed different types of courses as part of their vocational training.

Figure 44: Percentage of respondents who completed vocational training courses - Jagatsinghpur

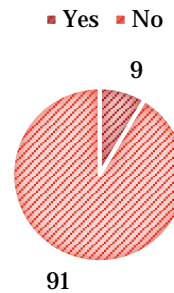
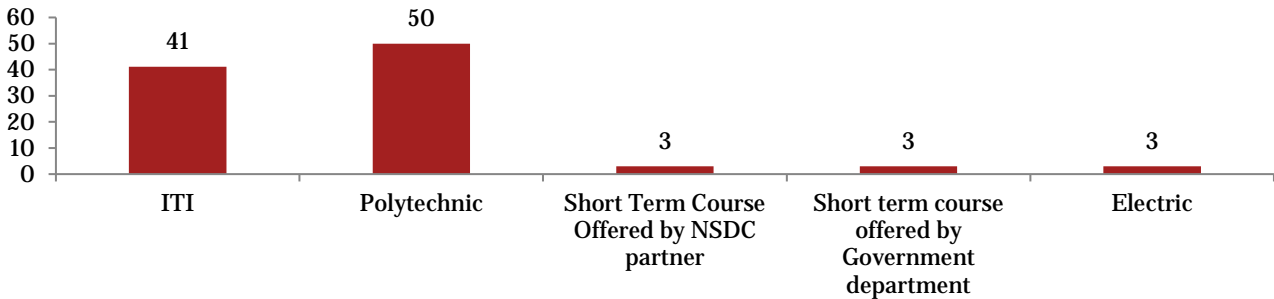
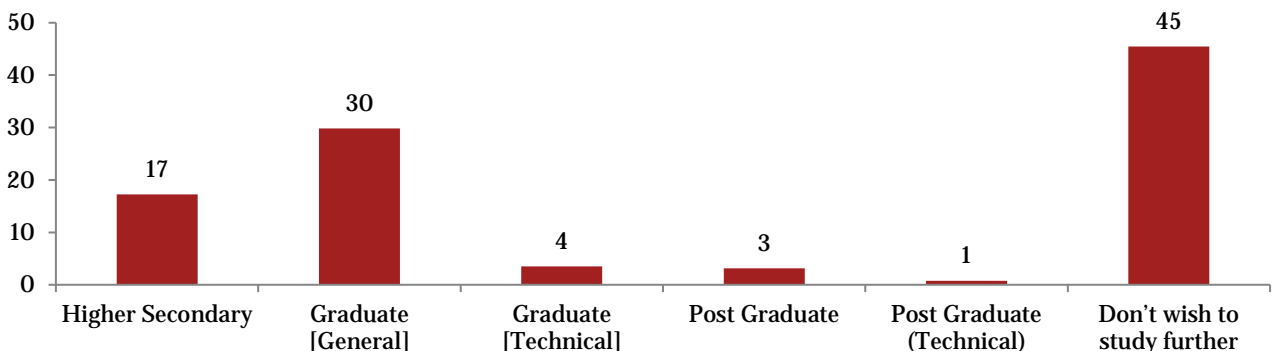


Figure 45: Percentage of respondents completed courses in vocational training - Jagatsinghpur



Further, the respondents were asked level about the level education they wished to attain. 30% of the respondents aspired to attain graduation. The desire to attain technical education is extremely low with only 1% & 3% aspiring for graduation or post-graduation in technical fields respectively whereas 45% of the respondents didn't wished to study further. (Figure 46)

Figure 46: Desired level of education - Jagatsinghpur



Job Aspiration

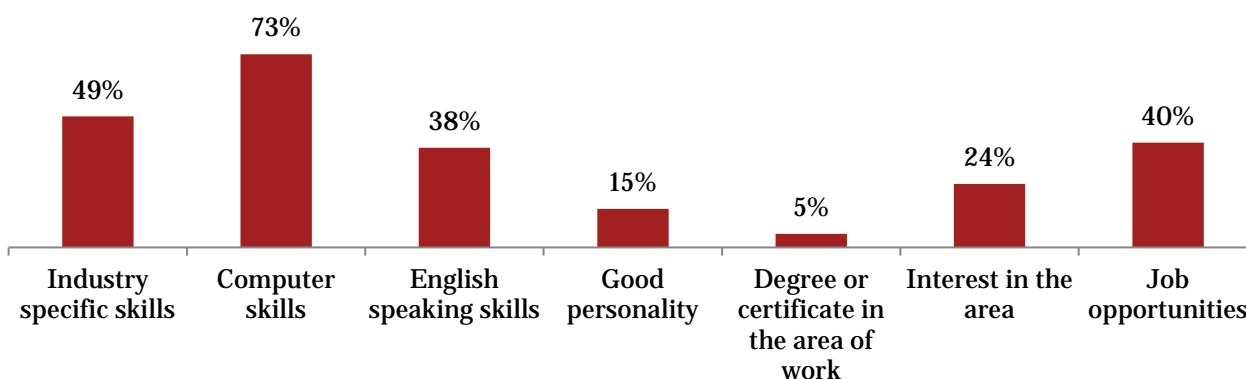
One of the important findings of the survey has been the high preference for wage employment over self-employment among the youth of the district. About 89% of the respondents reported to have preferred wage employment over self-employment. (Figure 47)

The respondents were further asked to identify the factors important for securing employment in the area of interest. 73% of the respondents identified computer skills as the most important factor for securing employment followed by Industry specific skills (49%) and job opportunities (40%) (Figure 48)

Figure 47: Percentage of respondents aspiring for wage and self-employment - Jagatsinghpur



Figure 48: Factors important for securing employment in area of interest (%) - Jagatsinghpur



Regarding job aspiration of the respondents after completion of education or training, it can be observed that there is a demand for services sector with 37% aspiring for entry level jobs in service sector and 35% aspirin for entry level jobs in manufacturing sector. This is followed by middle level jobs in manufacturing and services industry (11%). (Figure 49).

Further, Education (43%) and BFSI (45%) have been identified as sectors in which the respondents feel that they are mostly likely to get job which is in alignment with their aspiration for a job in the service sector space. The details of other sectors are mentioned in Figure 52.

Figure 49: Desired job profile after completion of education/training - Jagatsinghpur

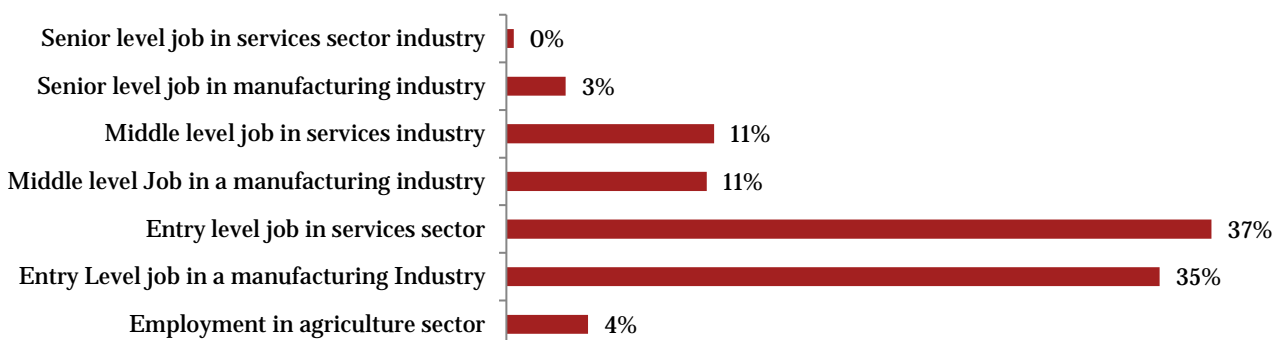
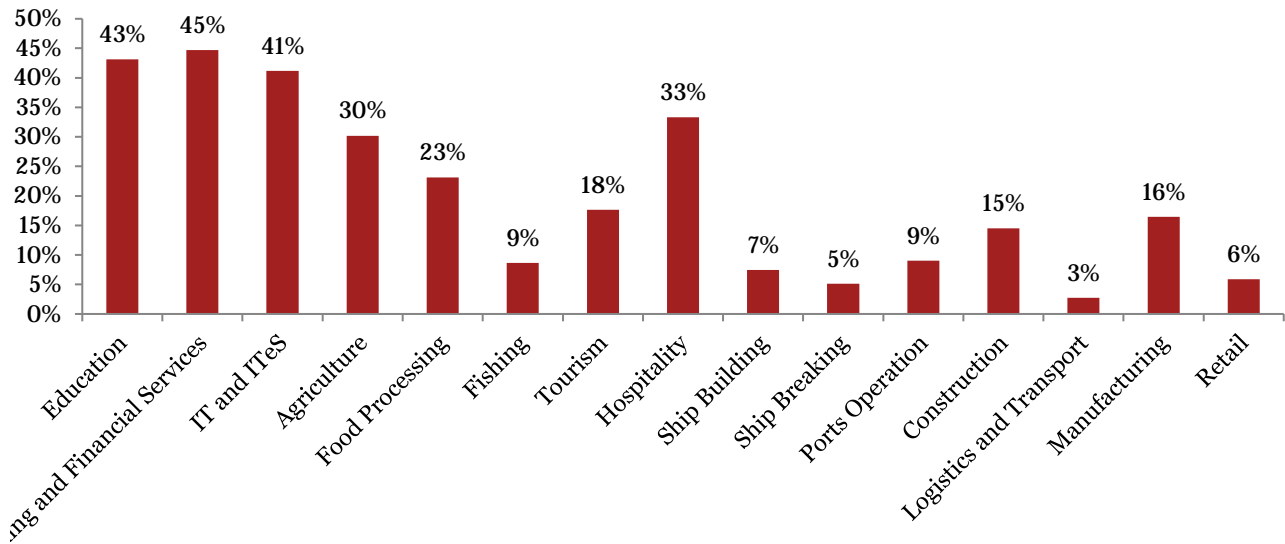
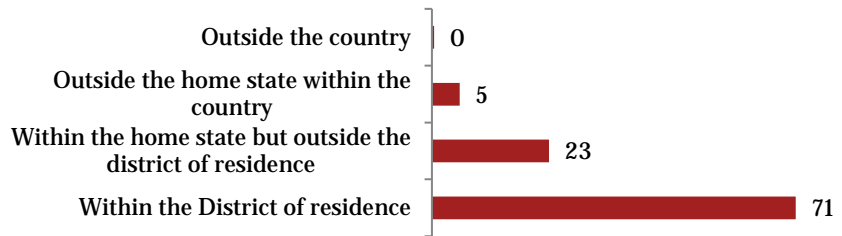


Figure 50: Sectors in which respondents' foresee getting a desired job (%) - Jagatsinghpur



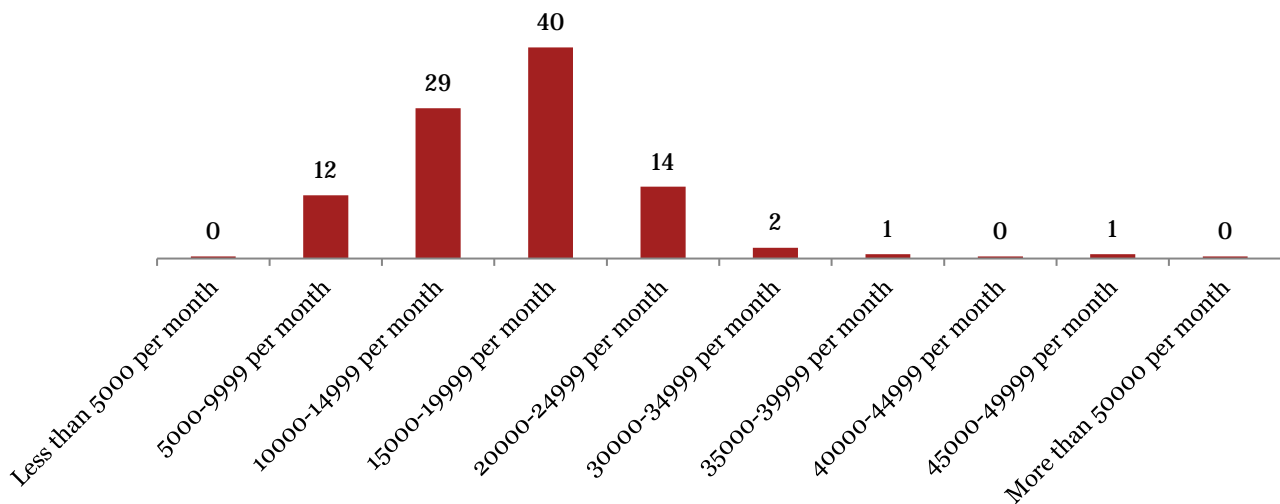
Out of total respondents, only 5% preferred to work in outside state. It is important to note that 71% preferred to work in the same district and 23% expressed willingness to migrate to other districts in the same state suggesting lack of flexibility among the youth of the district (Figure 51)

Figure 51: Preferred work location of candidate - Jagatsinghpur



For majority of the respondents (40%) the monthly salary expectation was INR 15,000-20,000; and for 29% of the respondents expected salary is reported to be in the range of 10,000-15,000 per month (Figure 52).

Figure 52: Monthly salary expectation of respondents - Jagatsinghpur



Training Aspiration

Regarding willingness of the respondents to participate in the training programme in next one year, 79% expressed interest whereas 21% expressed dis-interest (Figure 53).

Further, when enquired about the key focus areas of skill training, 53% of respondents reported that emphasis must be laid on technical skills followed by proficiency in English (26%), and proficiency in Life skills (19%) (Figure 54).

Figure 53: Willingness to participate in trainings (%) - Jagatsinghpur

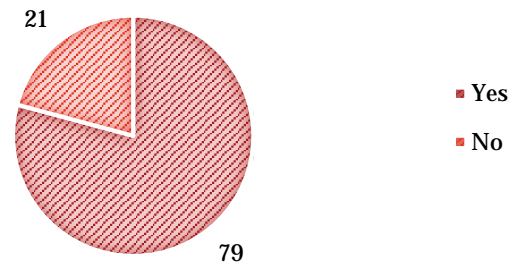
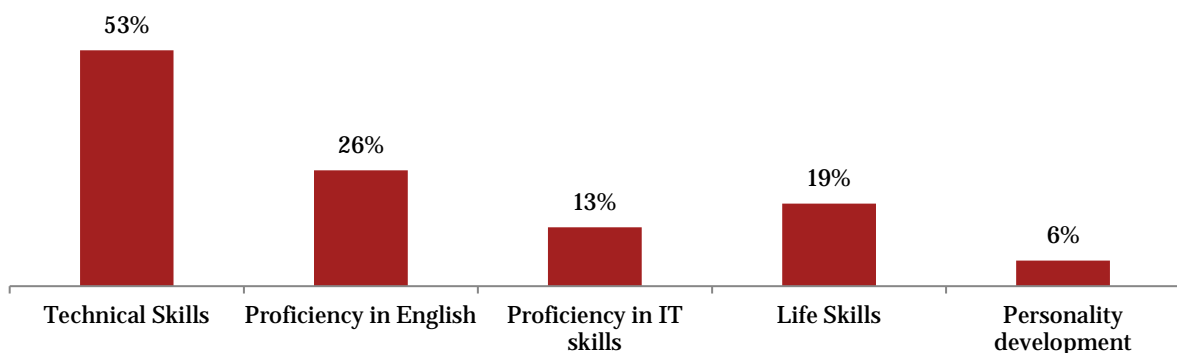


Figure 54: Focus area on skills training - Jagatsinghpur



Overall there is demand for training in hospitality (70%), food processing (64%), tourism (42%), shipping operations (10%) and port operations (24%) (Figure 26).

Self-Employment

Regarding current status of the Entrepreneurial Venture of the respondents who aspired for self-employment, 52% were already established and 32% were in family business. Further, 66% of the respondents expressed a desire to undergo a training programme for enhancing their entrepreneurial skills.

Figure 56: Current Status of Entrepreneurial Venture (%) - Jagatsinghpur

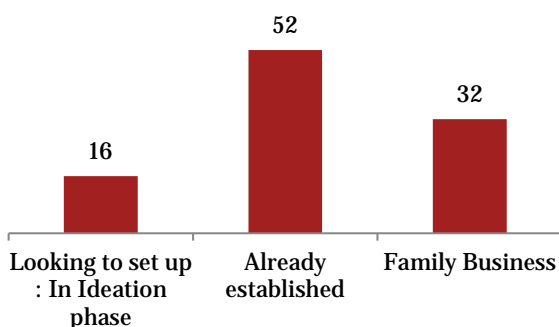
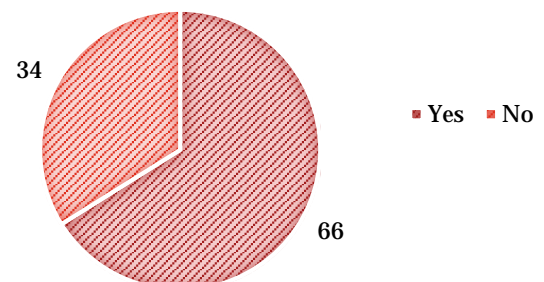
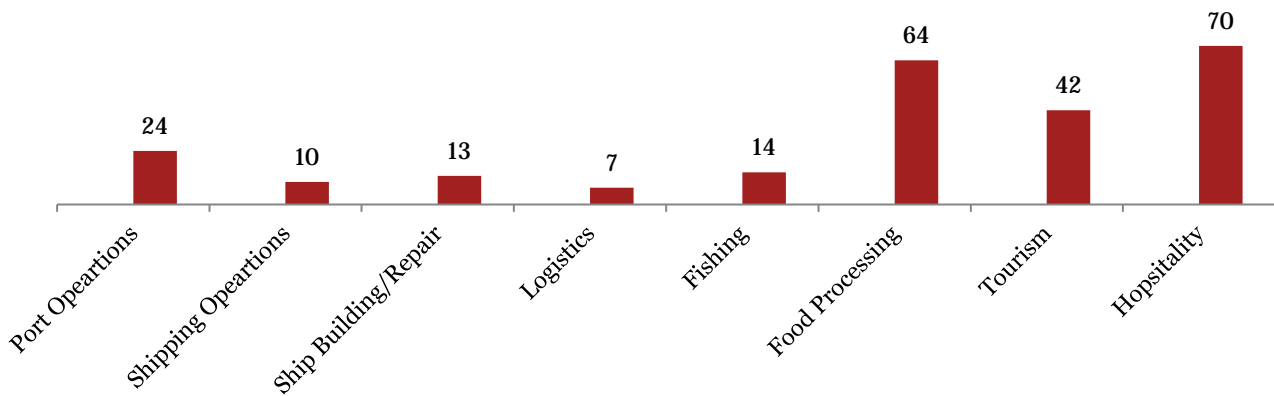


Figure 55: Interested in skill development for enhancing entrepreneurial skills (%) - Jagatsinghpur



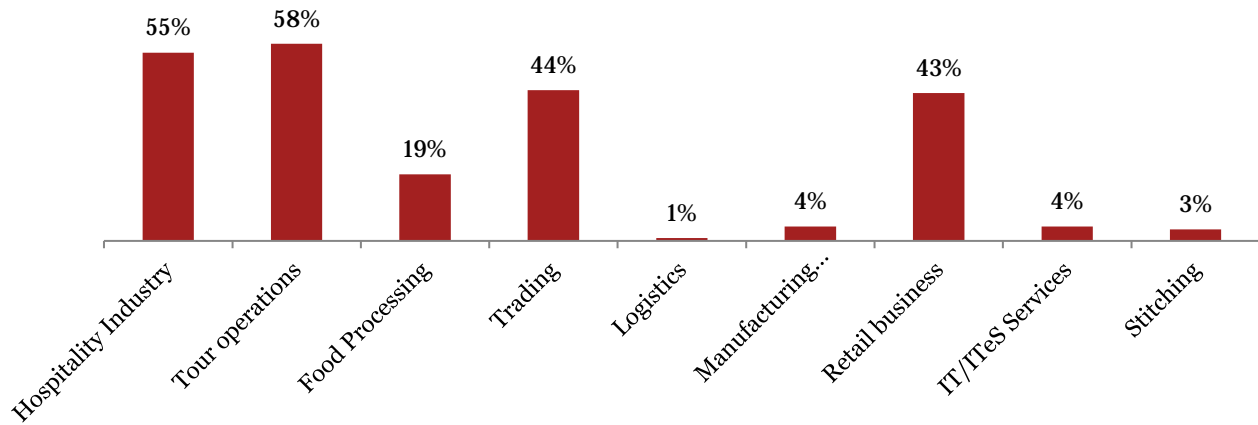
Hospitality (70%), Food processing (64%), Tourism (42%) and Port operations (24%) emerged as prominent areas where respondents were have expressed willingness to participate in trainings.

Figure 57: Willingness of respondents to participate in trainings of different sectors - Jagatsinghpur



Tour Operations (58%), Hospitality Industry (55%), Trading (21%) and Retail Business (43%) have been identified as most preferred sectors for setting own enterprise (Figure 58)

Figure 58: Sectors for establishing enterprise (%) - Jagatsinghpur



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

2.1. Incremental Demand¹⁰ for Skilled & Semi Skilled Manpower

The state of Odisha is witnessing increased industrialization and urbanization. These are affecting the incremental demand of skilled workforce in the district where as per our methodology Port & Allied, Logistics, Tourism, Construction & Fisheries are going to generate the maximum demand for skilled and semi-skilled workers after factoring in future investments and technological changes.

Table 4: Incremental demand for skilled & semi-skilled workers

Sector	2017	2018	2019	2020	2021	2022	Total
Core Sectors							
Agriculture Sector	-22,739	-22,662	-22,582	-22,506	-22,425	-22,350	-135,264
Manufacturing	39,560	41,218	42,943	44,741	46,614	48,566	263,642
Construction	43,624	45,103	46,633	48,214	49,849	51,540	284,963
Logistics	16,335	17,443	18,624	19,885	21,235	22,672	116,194
Communications	93,518	22,936	25,888	29,224	32,987	37,234	241,787
Trade	25,542	26,981	28,501	30,107	31,803	33,597	176,531
Tourism	16,301	17,220	18,190	19,215	20,297	21,441	112,664
Total							1,060,517

2.2. Job roles in High Demand

2.2.1. Ganjam

Key trends in Core Sectors

- **Agriculture:** Ganjam has a strong agrarian economy given its fertility of soil and favorable climatic condition. Paddy is the main crop grown in the district along with pulses, groundnut, and sugarcane. Kewda and Cashew are the two such crops which are unique to the district. Though agriculture has still prominence in the district, however the rate workforce engaged as farmers is decreasing due to growing urbanization.
- **Manufacturing:** Key drivers of employment in the district are expected in units in the Automobile and Ancillary Industries, Electronics etc.
- **Construction:** With the proposal of Special Economic Zones like the one being set up in Gopalpur huge number of construction activities are expected to start in the district. This will increase the demand for construction workers.
- **Logistics:** The upcoming industries in the next five years which will industrialize the Ganjam belt will require huge demand for workforce in the logistics sector.

¹⁰ 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. Since District level GDP is not available in Odisha. A statewide estimation is calculated.
Human Resource and Skill requirement study for 21 Coastal Districts of India

- **Trade:** Though trade is a dominant sector in the district, there is low potential for “New Jobs” due to the existing saturation and high share of unskilled workforce. Collaboration with industry partners and increased formalization can create a demand of reorganization and up-skilling of existing workforce.
- **Tourism & Hospitality:** The State Government has proposed huge investments to promote tourism in and around Ganjam. The present tourist spots attracts people from all over the state as well as the neighbouring states like Andhra Pradesh. Thus with the increasing focus in this sector, the demand for skilled workforce will also increase in due course. Gopalpur Beach, Tara Tarini Hill Shrine, Chilka Lake are some of the most sought after tourist destinations in Ganjam.
- **Communications:** Information and Communication will have high demand for skilled workforce in the district due to upcoming industries

This sections captures the jobs that have been reported to be high in demand in Ganjam. 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.

Ports and Maritime Sector

The ports and maritime sector has reported high demand for crane operators and other skilled workers such as welders, electricians, and blaster. The Gopalpur Port is expected to become automated and required of highly skilled manpower will be restricted crane operators , heavy machine operators etc.

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

Port operations & Ship Building	Findings
<ul style="list-style-type: none"> • Forklift Operator • Reach Stacker Operator • Crane Mechanic • Painter • Blaster • Marine Engine Fitter • Vessel Navigator 	<ul style="list-style-type: none"> • Port operators and CFSs have to train the crane operators for at least three months • Trainings required on safety issues especially in handling crane operations • Port & maritime sector demands skilled workforce; the shortfall is being met with migrant labour • Acute shortage of technicians for ship repair

Other Priority Sectors

Manufacturing

Ganjam is emerging as an industrial and manufacturing hub¹¹ that will cater to various industries such as Chemicals, Pharmaceuticals, Petrochemicals, Dyes and Plastics. These sectors demand skilled workforce that could work in manufacturing processes.

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

Manufacturing	Findings
<ul style="list-style-type: none"> • Production Assistants • Welder • Fitter • Mechanic • Plumber • Electrician • Turner • Motor Winding 	<ul style="list-style-type: none"> • Upcoming SEZs such as Gopalpur SEZ • Supervisory skills are also needed in the roles of foremen, leading hands and supervisors • Limited apprenticeship arrangement exists, combining formal training off-the-job with on-the-job training • Stakeholders indicated preference for hiring ITI graduates • Skill Training in some of the high demand trades unavailable in local ITIs and training institutes

¹¹ http://www.business-standard.com/article/pti-stories/odisha-cm-inaugurates-2-big-industrial-projects-in-ganjam-116113001182_1.html

Tourism

Ganjam is a hub of tourists due to presence of beaches, temples, largest brackish water lake Chilika Lake and presence of Olive Ridley turtles which attracts a large of tourists to the district. Also a number of State initiatives to promote tourism in the district will raise the demand for skilled workforce in the tourism and hospitality sector.

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

Manufacturing	Findings
<ul style="list-style-type: none">• Front Office Executive• Chef• Kitchen Steward• Housekeeping Supervisor• Tour guide• Facility Store Keeper• Billing Executive• Cruise/Boat/Jetty in charge• Solar Panel Assistant• Plumber	<ul style="list-style-type: none">• High demand Job Roles: Ferry Operators; Speed Boat Driver; Solar Panel Assistant; Solid Waste Management; and Sewerage Treatment Plant Operator• Very less number of institutes to provide quality training in tourism and hospitality sector• Huge Investments are proposed to be made in Ganjam in tourism and hospitality sectors as part of the coastal circuit program

Fisheries

Ganjam is one of the major source of marine fishing in the State. The district has a number of waterlogged areas which are proposed to be developed for fish farming both for fresh water as well as shrimp farming. Thus upscaling the skilling requirements of the fishermen and local community is the need of the hour.

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

Fisheries	Findings
<ul style="list-style-type: none">• Cold Storage Technician• Warehouse Manager• Mechanic• Glass/Tunnel/ Trolley Freezer Operator• Grading supervisor• De-heading supervisor	<ul style="list-style-type: none">• New technology needs to be explored to increase the potential of employment in the sector: (i) Deep sea fishing; (ii) Cage culture; (iii) Ornamental fish rearing; and (iv) Mariculture.• Gopalpur is one of the major sources in the state for marine fishing and can complement coastal circuit investments in tourism• Fishing is largely a traditional occupation, thus there is a need for upskilling in the sector.

Construction

In a period of next five years there will be a number of construction as a result of upcoming industries which would require skilled workers in the sector. Apart from this the existing industries require a number of skilled workers in various trades like cable jointing, lab assistant etc. which are currently unavailable in any of the local training institutes.

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

Construction	Findings
<ul style="list-style-type: none">• Mason• Bar bender• Supervisor• Carpenter• Painter• Electrician• Plumber• Fabricator	<ul style="list-style-type: none">• Large number of upcoming Industries in the district• Limited number of skilled workers in the district• Currently Building contractors hire workers from neighbouring states• RPL for construction workers kick started by the State

2.2.2. Jagatsinghpur

Key trends in Core Sectors

- **Agriculture Sector:** Though Jagatsinghpur is prominently known for most of its population dependent on agriculture, however increasing urbanization and decreasing rate of return on agriculture has resulted in decreasing trend in the demand workforce.
- **Manufacturing:** The city continues to be a hub for trade activities and manufacturing and will continue to grow in this sector due to upcoming industries like plastic processing industries, expansion of IOCL etc. There will be high demand for workforce in this sector.
- **Construction:** With the upcoming Smart Port city project, Plastic Parks etc. the demand for construction related job roles will increase in the district. Also the port's expansion will require high number of workforce in various job roles in this sector.
- **Logistics:** Logistics sector is ancillary to the Port activities. As the cargo movement in the port maximizes the logistics requirement in terms of movement of trucks, dumpers increases accordingly.
- **Communication:** The communication industry is set to boost in the immediate future, due to the increased focus on Digital India. The industries will require operators for their call centres, front desk managers etc.
- **Tourism:** Jagatsinghpur has potential to become one of the tourist destinations in the State. The sector is taking up in a gradual manner and will require skilled workforce in this sector. Jagatsinghpur is famous for Ma Sarala Temple and Paradeep sea beach.
- **Fisheries:** Paradeep is famous for all varieties of sea fish like Pomphret, Prawns etc.

This sections captures the jobs that have been reported to be high in demand in Jagatsinghpur. 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.

Ports and Maritime Sector

The ports and maritime sector has reported high demand for crane operators and other skilled workers such as fork lift operators and electricians. Paradip Port being the only major port handles all the major exports and imports of cargo of the State. Technological advancements in the sector will impact jobs in this sector, however the port will be requiring a number of workforce at the entry level.

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

Port operations	Findings
<ul style="list-style-type: none">• Rail Mounted Quay Crane Operator• Forklift Operator• Crane Mechanic• Electrician• Welder• Pay loader Operator• Dumper Operator• Excavators• Traffic Inspector(On shore & Off Shore)• Traffic Foreman• Deck Foreman• Tally Clerk• Seal Checker• Signal Man• Marine Foreman• Marine Driver	<ul style="list-style-type: none">• High demand job roles: Fitter; Electrician; Welder; Diesel Mechanic Helper; Traffic Foreman; Outdoor Clerk; Supervisor; Tally Clerk; and Signal Man.• Training on attitudinal aspects and safety required to improve efficiency at ports• Training currently imparted by employers or by suppliers of machinery.• Large number of jobs outsourced by port authorities: (i) Terminal operations; (ii) Crane operators; (iii) Maintenance; and (iv) Truck drivers.

- Greaser
- Cleaner

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 ports and maritime sector, sectors such as agriculture, fisheries, manufacturing, and construction will also be susceptible to technological disruptions and automation, which will negatively impact jobs of manual nature.

Agriculture

Jagatsinghpur is a district which is an agriculturally rich district. The fertility of the soil makes it suitable to grow one of the high quality paddy in the State. The population though is largely dependent upon agriculture but the workforce in this sector is declining due to decrease in output, Thus augmenting the skill in this sector is would enhance the productivity and hence the economy of the district.

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

Agriculture	Findings
<ul style="list-style-type: none"> • Paddy Cultivator • Dairy farmer • Agriculture Extension Service Provider • Repair, Maintenance & field operation of tillage equipment • Repair & Maintenance of Spraying & Dusting 	<ul style="list-style-type: none"> • Agriculture employs more than half of the workforce of the district. • There has been a steady growth in cultivation of commercial crops, however marketing channels are still underdeveloped. • Training Requirements in following areas: (i) Training in improved Agricultural Techniques; and (ii) Food Processing Technicians.

Fisheries

Paradeep is famous for export of marine products and has the largest number of fish processing industries concentrated in this district. There is a demand for a large number of workers in this sector.

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

Fisheries	Findings
<ul style="list-style-type: none"> • Cold Storage Technician • Warehouse Manager • Mechanic • Glass/ Tunnel/ Trolley Freezer Operator • Grading supervisor • Be-heading supervisor 	<ul style="list-style-type: none"> • Fishing is largely a traditional occupation, therefore mostly upskilling is required. • New technology needs to be explored to increase the potential of employment in the sector: Deep sea fishing; Pisciculture; and Export Quality fish rearing. • Training requirements for Fishermen in the areas of sustainable fishing and value addition.

Manufacturing

Emerging technology will shape the manufacturing sector in next few years and the workforce engaged in manufacturing will have to upgrade its skills to be in tune with the emerging market requirements. This sector will also require technological literacy among the workers. The matrix below captures the jobs roles that are high in demand:

Manufacturing	Findings
<ul style="list-style-type: none"> • Production Assistants • Welder • Fitter • Mechanic • Plumber • Electrician • Turner • Motor Binding 	<ul style="list-style-type: none"> • Currently there is only small-scale Manufacturing; however, there is commitment of large investments within SEZ's being established in the district. • Even though there are around 22 ITCs in the district, the quality of training provided is unsatisfactory. • High Demand Job-roles: Welder; Fitter; Electrician; Instrumentation; High Pressure Vessel Welder; and Data Entry Operator

Construction

A number of large scale projects such as Plastic Park and Smart Port City which have been proposed by the State will involve a massive amount of work in the construction sector. The existing workforce will be required to upgrade its skills in building hi-tech buildings and there is a requirement of fresh training to meet the huge requirement of workforce in this sector.

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

Construction	Findings
<ul style="list-style-type: none"> • Mason • Supervisor • Bar bender • Carpenter • Electrician 	<ul style="list-style-type: none"> • Upcoming Large Scale Projects • Acute shortage of workforce in the sector • Currently no training institute provides training in this sector

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 consultations¹² 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 programme and duration of training programmes. Wherever, feasible partnership with existing programmes such as DDU-GKY and PMKVY has been suggested in the plan.

¹² Roughly 700 primary consultations informed the development of these plans for 21 districts
Human Resource and Skill requirement study for 21 Coastal Districts of India

3.4. Summary of Ganjam

SN	Project Name	Job Roles	Type of training	No. of people to be trained
1	Manufacturing & Construction	Lab Attendant, Cable Jointer, Motor Winder, Mason, Assistant Fire Operator, Fire & Rescue Operator	Fresh	4,500 persons in next 5 years
2	Agriculture & Fisheries	Gardener, Kewda Producer, Maize Producer, Sea food Processing	RPL Fresh	1,000 persons in next 5 years
3	Tourism	Tour Operator, House Keeping trainee, Tourist Guide	Fresh	1,200 persons in next 5 years
4	Skill Development in Port Operations	Crane Operator, Forklift Operator, Truck Driver, Helper	RPL Fresh	900 Persons next 5 years

3.5. Action Plan of Ganjam

Project 1: Manufacturing and Construction					
Key economic drivers		<ul style="list-style-type: none"> • Presence of chief economic minerals like limestone, manganese, monazite, sand • One Minor Port- Gopalpur Port • Upcoming SEZ • Presence of large Industries manufacturing products like Ferro Chrome, Caustic Soda, Chlorine etc. 			
Rationale for a Training Center		Ganjam has a concentration of large number of big industries and with the plan of development of Gopalpur SEZ, the district would become an industrial belt in the State in upcoming 5-10 years. Currently there are number of industries which consume high voltage Electric power, thus requirement of workforce in power transmission and maintenance is in high demand. Further the construction work for the new industries would soon take up in the district in the area marked for SEZ in Gopalpur which would require a high number of workforce for the same.			
Trainings		Training courses	Target Beneficiaries	Type of Trainings	Total Number of beneficiaries
		Lab Attendant in Chemical Plant	<ul style="list-style-type: none"> • Local Youth with a minimum qualification of Class 12 	Fresh Training	900 persons in next 3 years
		High Tension Cable Jointing	<ul style="list-style-type: none"> • Local Youth with a minimum qualification of Class 12 	Fresh Training	900 persons in next 5 years
		Motor Winding	<ul style="list-style-type: none"> • Local Youth with a minimum qualification of Class 12 	Fresh Training	600 persons in next 5 years
		Masonry	<ul style="list-style-type: none"> • Local Community 	RPL	1500 persons in next 5 years
				Fresh Training	300 persons in next 5 years
		Fire Safety	<ul style="list-style-type: none"> • Local Youth with a minimum qualification of Class 12 	Fresh Training	300 persons in next 5 years
Availability of curriculum	Job Roles	Target Groups	Available QP/NOS	MES	CTS
	Lab Attendant	Local Youth with a minimum qualification of Class 12	<ul style="list-style-type: none"> • No course available 	No course available	No course available
	Cable Jointer	Local Youth with a minimum qualification of Class 12	<ul style="list-style-type: none"> • Installing, repairing, Jointing cables • Basic Health & Safety practices for power related work 	No course available	No course available
	Motor Winder	Local Youth with a minimum qualification of Class 12	<ul style="list-style-type: none"> • No course available 	No course available	No course available
	Mason	Local Community	<ul style="list-style-type: none"> • Layout for foundation, walls, soak-pit & monitor earthwork activities • Build brick/block masonry 	No course available	No course available

			<ul style="list-style-type: none"> • Build structure using random rubble masonry • Carry out IPS flooring • Carry out reinforcement structure for RCC structure 		
	Assistant Fire Operator, Fire & Rescue Operator	Local Youth with a minimum qualification of Class 12	<ul style="list-style-type: none"> • No Course available 	No Course available	No Course available
Investment (INR In lakhs)	Construction				
	Lab Attendant in Chemical Plant				
	Operational Expenditure				263
	High Tension Cable Jointing				
	Operational Expenditure				65
	Motor Winding				
	Operational Expenditure				175
	Mason				
	Operational Expenditure				527
	Fire Safety				
Operational Expenditure				11	
Total Operational Expenditure				1,065	
Capital Expenditure for training centre¹³				-	
Potential Partners	Partner		Areas of Support		
	Industry (Tata Steel)		<ul style="list-style-type: none"> • Space and infrastructure for establishing the training center • Guest faculty • Input for designing curriculum • Input for designing QP • Provision of used equipment for training • Facilitate implementation of RPL for existing work force • Provide guest faculty and facilitate on the job training 		
	Department of Skill Development & Technical Education		<ul style="list-style-type: none"> • Funding & Incentive to Industries for training delivery 		
	Government ITI/ Private Training partners,		<ul style="list-style-type: none"> • Training delivery • Management of the training facility 		
	Construction Sector Skill Council		<ul style="list-style-type: none"> • Development of QPs for the identified job roles • Develop model training programmes for the identified Job Roles • Identification and certification of Trainers • Identification and certification of assessors • Assessment of trainees • Certification of Trainees 		
Training Delivery	Option 1				
	<ul style="list-style-type: none"> • Industry partners creates the training facility/ upgrade the existing facilities • Industry partners to deploy trained professionals for training delivery and mobilize trainees as per their requirement • Training facility to be managed and maintained by the Government 				

- Govt. department to fund or incentivize the industries for the training delivery
- Option 2**
- Private training provider to rent/develop the training facility and deliver the training programme

Work Plan

Construction	in Months								
	1	2	3	4	5	6	7	8	9
Partnership with SSC, Industry Partners and Knowledge partners									
Development of QPs									
Establishment of Training infrastructure and facility									
Furnishing of the training centre									
Purchase and installation of lab equipment									
Appointment of staff members (<i>instructors, counsellors, mobilization in-charge, placement officers, administrative staff etc.</i>)									
Mobilization of prospective trainees									
Enrolment of students									
Roll-out of training programme									

Project 2: Agriculture & Fisheries					
Key economic drivers		<ul style="list-style-type: none"> • Export Quality Rice • Ganjam is highest producer of fish in the state • Ragi, Mung & Biri are the major economic crops grown in Ganjam 			
Rationale		<p>As a number of companies are going to be set up in the district, there will be a need of gardeners/landscapers who could set up the lawns and maintain greenery in premises. It is also taking into consideration the level of pollution that these industries are going to create, extensive plantation would be required to neutralise it. Thus if the local community is trained in a particular horticulture trade, then it would help them to use their own expertise in creating a green cover in the industrial premises. The training can be imparted through Craftsmen Training Scheme being implemented by DGET. Additionally, as per the Odisha Fisheries Policy 2011, it is proposed that the waterlogged area, dead rivers of government, which are lying unused and unproductive needs to be utilised for developing fish ponds and the fishermen can be trained to become entrepreneurs. Thus Ganjam having a large number of area under such category, thus pisciculture would be a revenue generating activity in such area.</p>			
Trainings		Training courses	Target Beneficiaries	Type of Trainings	Total Number of beneficiaries
		Horticulture	• Local Community	RPL	300 persons in next 5 years
				Fresh	200 persons in next 5 years
		Pisciculture	• Local Community	RPL	300 persons in next 5 years
				Fresh	200 persons in next 5 years
Availability of curriculum	Job Roles	Target groups	Available QP/NOS	MES	CTS
	Gardener	Local Community	<ul style="list-style-type: none"> • Nursery Management • Designing of Garden Components • Plantation, care & Maintenance of Garden 	No course available	No course available

			<ul style="list-style-type: none"> • Maintain Health & Safety at Workplace 		
	Fish Farmer, Fish Retailer, aquaculture Technician	Farmers, Fishermen, Coastal Community	<ul style="list-style-type: none"> • Prepare for Retail selling of fish • Maintain health & Safety at workplace • Undertake Pond Preparation activities • Carry out culture operations 	No course available	No course available
	Sea Food Processing Technician	Local Youths	<ul style="list-style-type: none"> • Prepare & Maintain Work Area & Process Machineries • Prepare for execution of fish & sea food processing • Documentation of record keeping related to fish processing • 	No course available	No course available
Investment (INR In lakhs)	Agriculture & Fisheries				
	Training in Horticulture				
	Operational Expenditure				135
	Training in Pisciculture				
	Operational Expenditure				40
Total Operational Expenditure				180	
Capital Expenditure ¹⁴					-
Potential Partners	Partner		Areas of Support		
	Fisheries Department		<ul style="list-style-type: none"> • Space and infrastructure for establishing the incubation and training center • Management of the incubation centre • Guest faculty • Provision of used equipment for training 		
	MPEDA, CIFA		<ul style="list-style-type: none"> • Input for designing curriculum for integrated farming • Training delivery • Co-management of the training facility 		
	Nodal Banks		<ul style="list-style-type: none"> • Promote bank linkages • Introduce youth to various entrepreneurial schemes 		
	Agriculture Sector Skill Council		<ul style="list-style-type: none"> • Develop model training programmes for the identified job roles • Identification and certification of Trainers • Identification and certification of assessors • Assessment of trainees • Certification of trainees 		

¹⁴ Includes the cost of building the incubation centre
Human Resource and Skill requirement study for 21 Coastal Districts of India

Training Delivery	<ul style="list-style-type: none"> MoS to support Fisheries Department of the State in setting up the training centre; the centre will be run by the department
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Work Plan

Agriculture	in Months					
	1	2	3	4	5	6
TSP Affiliation						
Incubation centre setup						
Appointment of additional staff members						
Mobilization of prospective trainees						
Enrolment of trainees						
Roll-out of incubation centre and training programme						

Project 3: Tourism					
Key economic drivers		<ul style="list-style-type: none"> Presence of Gopalpur Beach {Beaches, turtles, lighthouses} Chilka Lake Rushilulya Beach famous for Olive Ridley turtles 			
Rationale		<p>Ganjam is a tourist spot with the presence of Gopalpur Sea Beach, Hot Springs, historical sites and temples makes it a hot spot for tourism. However there is only one polytechnic and very less Private institutes providing certain training in tourism and hospitality. With the upcoming project of Coastal Circuit under the Swadesh Darshan Scheme, there will be number of projects in terms of water sports, eco-tourism etc. Also presence of light houses in the Gopalpur Beach would also promote Lighthouse Tourism. Thus the demand for tourism professionals will rise substantially. Thus training through private partners, specialised courses through polytechnics, vocational education can be taken up and the youth population can be skilled accordingly.</p>			
Trainings		Training courses	Target Beneficiaries	Type of Trainings	Total Number of beneficiaries
		Tourism & Hospitality	Local Youths	Fresh Training	1,200 persons in next 5 years
Availability of curriculum	Job Roles	Target groups	Available QP/NOS	MES	CTS
	Tour Operator	Local Youths	<ul style="list-style-type: none"> Tour Guide 	No course available	No course available
	House Keeping trainee, Chef	Local Youths	<ul style="list-style-type: none"> House Cleaning Chef 		
	Tour Escort	Local Youths	<ul style="list-style-type: none"> Tour Escort 		
	Front office trainee	Local Youths	<ul style="list-style-type: none"> Front Office Trainee 		
Investment (INR In lakhs)		Tourism & Hospitality			
		Training in Tourism			
		Operational Expenditure			228.6
		Total Operational Expenditure			246.6
		Capital Expenditure ¹⁵			-
Potential Partners		Partner	Areas of Support		
		Tourism Department	<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 faculty members 		

¹⁵ The cost of building the residential facility
Human Resource and Skill requirement study for 21 Coastal Districts of India

		<ul style="list-style-type: none"> Integrate the proposed trainings in its training plan
	ITI, Polytechnic, Private Training Partners	<ul style="list-style-type: none"> Imparting Training to youths
	Tourism & Hospitality Skill Council	<ul style="list-style-type: none"> Develop model training programmes 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"> Tourism Department/Government ITI, Polytechnic/Private Training Partners will provide the infrastructure and deliver the training programmes Automotive Tourism & Hospitality Skill Council will certify the training programmes <p>Option 1</p> <ul style="list-style-type: none"> Build the residential facility for the trainees <p>Option 2</p> <ul style="list-style-type: none"> Lease the residential facility for the trainees 	

Work Plan

Tourism	in Months					
	1	2	3	4	5	6
Upgradation of training centre						
Affiliation of Training centre with ASCI						
Initiation of residential facility construction work						
Purchase of consumables						
Appointment of additional staff members						
Mobilization of prospective trainees						
Enrolment of students						
Roll-out of training programme						

Project 4: Skill Development in Port Operations	
Key economic drivers	<ul style="list-style-type: none"> Presence of Gopalpur Port. Presence of Manufacturing Industries. Export of chemicals like Iluminite, Granite block, Iron ore pallets and Iron ore fines, industrial granulated slags.
Rationale	<p>The manufacturing industries concentration in this district generally involves transportation of goods within the industrial area or transportation from the Port. However Operating the specialised heavy vehicles involves substantial amount of risk and lack of specialisation might lead to accidents and fatalities. In the current scenario the drivers having a license are allowed to handle such vehicle after getting basic training by the industry. However, there needs to be a concrete procedure wherein people get a proper training and are assessed by a specialised body and are subsequently certified as crane operators. The training can be initiated in coordination with the industries wherein the on-site training can be facilitated by them support by the government. The training period can stretch from minimum of three months to a six month course. The trainers to be involved in the training also need to have a certification form a recognised institute. Also the people having a substantial experience in operating such equipment can be taken as trainers.</p>

		The drivers and helpers handling the trucks carrying hazardous chemical substances lack in certain skill set wherein they succumb to injuries in due course of their work. In order to avoid such situation Grasim Industries has tied up with Government of Odisha and RTOs to conduct certain training programmes for the drivers and helpers in order to make them capable to handle the vehicles without causing any harm to themselves.			
Trainings		Training courses	Target Beneficiaries	Type of Trainings	Total Number of beneficiaries
		Training in Operating Heavy Earth Moving Vehicles	<ul style="list-style-type: none"> Existing Operators Local Youths 	RPL	200 persons in next 5 years
				Fresh Training	200 persons in next 5 years
		Training in Safe Transportation of Hazardous Chemicals	<ul style="list-style-type: none"> Existing Operators Local Youths 	RPL	300 persons in next 5 years
Fresh Training	200 persons in next 5 years				
Availability of curriculum	Job Roles	Target groups	Available QP/NOS	MES	CTS
	Crane Operator, Forklift Operator	<ul style="list-style-type: none"> Existing Operators Local Youths 	QP available for: <ul style="list-style-type: none"> Crawler crane operator Hydra crane operator Tyre mounted crane operator Junior crane operator Overhead crane operator 	Course available for: Truck Mounted/ Crawler/ Rough Terrain Crane Operator	No course available
	Truck Driver cum Hazardous Material Handler, Helper	<ul style="list-style-type: none"> Existing Operators Local Youths 	<ul style="list-style-type: none"> Course not available 	Course not available	Course not available
Investment (INR In lakhs)		Training centre for skilling in Port related Activities			
		Training in Operating Heavy Earth Moving Vehicles			
		Operational Expenditure			41
		Training in Safe Transportation of Hazardous Chemicals			
		Operational Expenditure			21
		Total Operational Expenditure			67
Potential Partners		Partner	Areas of Support		
		Gopalpur Port	<ul style="list-style-type: none"> Space and infrastructure for establishing the training center Access to port facilities for practical training Guest faculty Input for designing curriculum Provision of used equipment for training Facilitate implementation of RPL for existing work force Provide guest faculty and facilitate on the job training 		
		Industry partner	<ul style="list-style-type: none"> Industry interface On the job training 		

		Facilitate implementation of RPL for existing workforce
	Training Partner (Gopalpur Port)	<ul style="list-style-type: none"> • Training delivery • Co-management of the training facility
	Logistic Sector Skill Council, Automotive Sector Skill Council	<ul style="list-style-type: none"> • Develop model training programmes 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"> • Engage a TSP that is affiliated with DDU-GKY and PMKVY to deliver the training 	

Work Plan

Training in Port Related Activities	in Months					
	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						

3.6. Summary of Jagatsinghpur

SN	Project Name	Job Roles	Type of training	No. of people to be trained
1	Fisheries and Sea Food Processing and Allied activities	Aquaculture/ Mariculture Technicians, Brackish water aquaculture farmer, Ornamental fish culture technician	Fresh and RPL	3,650 persons in next 5 years
2	Agriculture	Agriculture Equipment Technician, Farm Producer	Fresh and RPL	1,900 persons in next 5 years
3	Manufacturing	Plastic Moulding Operator/Technician, Plastic Mould Assistant	Fresh	600 persons in next 5 years

3.7. Action Plan for Jagatsinghpur

Project 1: Fisheries and Sea Food Processing and Allied activities					
Key economic drivers		<ul style="list-style-type: none"> • Export of High quality Shrimp and Prawn • High demand for sea fish in the State • Export quality packaged sea food products • Growing demand for ornamental fish in the state 			
Rationale for a Training Center		<p>Jagatsinghpur as a district is predominantly an agrarian district wherein the population is mainly dependent on agriculture and fisheries. Though industrialization is picking up in the district but it has not been evident as to what will be the upcoming opportunities in the industrial scenario for the local population. Hence enhancing their core capability by providing them additional training in their core activity in improving their income level and hence open up opportunities for employment. Also Fisheries industry being predominant in ensuring revenue to the district, thus increasing the expertise in fish handling, fish processing, diversification of products such as solar fish drying would add on to the districts potential in the fisheries sector.</p>			
Trainings		Training courses	Target Beneficiaries	Type of Trainings	Total Number of beneficiaries
		Solar Fish Drying	<ul style="list-style-type: none"> • Fishermen • Producers 	RPL	500 persons in next 5 years
				Fresh Training	600 persons in next 5 years
		Sea Food Processing	<ul style="list-style-type: none"> • Coastal communities 	RPL	200 persons in next 5 years
				Fresh Training	300 persons in next 5 years
		Sustainable & Responsive Fishing	<ul style="list-style-type: none"> • Coastal communities 	RPL	300 persons in next 5 years
				Fresh Training	500 persons in next 5 years
		Fish Handling	<ul style="list-style-type: none"> • Workers engaged in Fish Landing Centres, Fishing Harbours 	RPL	450 persons in next 5 years
				Fresh Training	200 persons in next 5 years
		Boat Repair & Net Mending	<ul style="list-style-type: none"> • Allied Fishery Workers 	Fresh Training	200 persons in next 5 years
		Certification of Boat Drivers	<ul style="list-style-type: none"> • Coastal communities 	Fresh Training	200 persons in next 5 years
		Ornamental Fish Culture	<ul style="list-style-type: none"> • Coastal communities 	Fresh Training	200 persons in next 5 years
Availability of curriculum	Job Roles	Target Groups	Available QP/NOS	MES	CTS
	Fishermen, Producers	Coastal Community, Fishermen	No course available	No course available	No course available
	Sea food Processing Technician	Coastal Community, Fishermen	<ul style="list-style-type: none"> • Prepare & Maintain Work Area & Process Machineries • Prepare for execution of fish & sea food processing • Documentation of record keeping related to fish processing 	No course available	No course available

			<ul style="list-style-type: none"> • Food safety, hygiene, sanitation 		
	Fishermen	Coastal Community, Fishermen	<ul style="list-style-type: none"> • Safety, Hygiene, sanitation practices for capture fishing & fishing assistance 	No course available	No course available
	Marine Capture Fishermen	Coastal Community, Fishermen	<ul style="list-style-type: none"> • Perform Pre Fishing Activities • Capture the Fish • Perform Post Fishing Activities 	No course available	No course available
	Fishing Boat maintenance Worker, Carpenter, Net Mender	Coastal Community	<ul style="list-style-type: none"> • Perform Pre Departure Mechanical Activities • Perform Manning of Engines during fishing operations 	No course available	No course available
	Fishing Boat Driver	Coastal Community	<ul style="list-style-type: none"> • Perform Boat Navigation related activities • Carry out maneuvering and navigation of fishing boat 	No course available	No course available
	Ornamental Fish Technician	Fishing Community	<ul style="list-style-type: none"> • Perform Pond & tank preparation activities • Carry out preparation of feed • Carry out breeding, seed production and culture of ornamental fish • Ensure safety, hygiene and sanitation practices or culture fishing 	No course available	No course available
Investment (INR Lakhs)	Fisheries and Sea Food Processing and Allied activities				
	Solar Fish Drying				
	Operational Expenditure				10
	Sea Food Processing				
	Operational Expenditure				60
	Sustainable & Responsive Fishing				
	Operational Expenditure				10
	Fish Handling				
	Operational Expenditure				10
Boat Repair & Net Mending					
Operational Expenditure				95	
Certification of Boat Drivers					

	Operational Expenditure	10
	Ornamental Fish Culture	
	Operational Expenditure	5
	Total Operational Expenditure	200
	Capital Expenditure for training centre¹⁶	-
Potential Partners	Partner	Areas of Support
	Fisheries & Animal Resource Department and MPEDA (Marine Product Export Development Authority)	<ul style="list-style-type: none"> • Space and infrastructure for establishing the training center • Guest faculty • Input for designing curriculum • Provision of used equipment for training • Facilitate implementation of RPL for existing workforce • Provide guest faculty and facilitate on the job training
	Industry Associations (Taloja Industry Association)	<ul style="list-style-type: none"> • Industry interface • On the job training • Facilitate implementation of RPL for existing workforce
	Private Training Partner	<ul style="list-style-type: none"> • Training delivery • Management of the training facility
	Agriculture Sector Skill Council	<ul style="list-style-type: none"> • Development of QPs for the identified job roles • Develop model training programmes for the identified Job Roles • Identification and certification of Trainers • Identification and certification of assessors • Assessment of trainees • Certification of Trainees
Training Delivery	<p>Option 1</p> <ul style="list-style-type: none"> • Fisheries and Animal Resources Department creates the training facility • Training facility to be managed and maintained by the Government • MPEDA or Govt department to deliver the training and provide qualified trainers and mobilize trainees <p>Option 2</p> <ul style="list-style-type: none"> • Private training provider to rent/develop the training facility and deliver the training programme 	

Work Plan

Fisheries and Sea Food Processing and Allied activities	in Months								
	1	2	3	4	5	6	7	8	9
Partnership with SSC, Industry Partners and Knowledge partners									
Development of QPs									
Establishment of Training infrastructure and facility									
Furnishing of the training centre									
Purchase and installation of lab equipment									
Appointment of staff members (instructors, counsellors, mobilization in-charge, placement officers, administrative staff etc.)									

Mobilization of prospective trainees										
Enrolment of students										
Roll-out of training programme										

Project 2: Agriculture					
Key economic drivers		<ul style="list-style-type: none"> • Export Quality Rice • Groundnut, mustard, sugarcane are major crops responsible for revenue generation • Mango is widely grown fruit which has the potential to generate revenue for the district 			
Rationale		<p>Though Odisha has 480 Km long coastline, however 120 Km long coastline is banned for fishing activities for nearly seven months due to the breeding season of the Olive Ridley turtles. Thus the fishermen residing nearby these areas and depending upon this coastline remain idle or without any proper earning due to the aforesaid factor. Thus training them in alternative livelihood options like poultry farming, cottage industries etc. would help them to retain their livelihood in the off season. The training can be done in partnership with Private Training partners which may be worked through the National Rural Livelihood Mission under Ministry of Rural Development in its upcoming DDU-GKY scheme. Also the district being prone to cyclones and floods and also some of the major portion being under the restricted area of Bhitarkanika National Park affects the livelihood of the community here. The sea ingress also results in salinity of soil making it unfit for farming. Thus it is necessary to train the local community to adopt a new methodology of farming called Integrated Rice Fish Culture which would help them secure their livelihood amidst all such hurdles.</p>			
Trainings		Training courses	Target Beneficiaries	Type of Trainings	Total Number of beneficiaries
		Alternative Livelihood Option {Poultry farming, Cottage Industry}	• Farmers, Fishermen, Coastal Community	RPL	500 persons in next 5 years
		Integrated farming	• Farmers, Fishermen, Coastal Community	RPL	500 persons in next 5 years
		Repair & Maintenance of Agriculture Equipment	• Farmers, Fishermen, Coastal Community	RPL	500 persons in next 5 years
				Fresh	400 persons in next 5 years
Availability of curriculum	Job Roles	Target groups	Available QP/NOS	MES	CTS
	Poultry Farm Assistant, Dairy Farm Entrepreneur	Farmers, Fishermen, Coastal Community	<ul style="list-style-type: none"> • Broiler Farm Worker • Chick Grading technician • Poultry feed, Food safety and labelling • Dairy farmer-Entrepreneur 	No course available	No course available
	Farmer	Farmers, Fishermen, Coastal Community	No course available	No course available	No course available

	Agriculture Machinery Repair Entrepreneur, Service & Maintenance Technician	Farmers, Fishermen, Coastal Community	<ul style="list-style-type: none"> Setting up of Repair & Service Centre Operationalize Repair & maintenance centre 	No course available	No course available
Investment (INR Lakhs)	Agriculture				
	Alternative Livelihood Option				
	Operational Expenditure				67
	Integrated farming				
	Operational Expenditure				13
	Repair & Maintenance of Agriculture Equipment				
	Operational Expenditure				105
Total Operational Expenditure				185	
Capital Expenditure ¹⁷				-	
Potential Partners	Partner		Areas of Support		
	Agriculture Department		<ul style="list-style-type: none"> Space and infrastructure for establishing the incubation and training center Management of the incubation centre Guest faculty Provision of used equipment for training 		
	Central Rice Research Institute		<ul style="list-style-type: none"> Input for designing curriculum for integrated farming 		
	Training Partner		<ul style="list-style-type: none"> Training delivery Co-management of the training facility 		
	Nodal Banks		<ul style="list-style-type: none"> Promote bank linkages Introduce youth to various entrepreneurial schemes 		
Agriculture Sector Skill Council		<ul style="list-style-type: none"> Develop model training programmes 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"> MoS to support Agriculture Department of the State in setting up the training centre; the centre will be run by the department The empaneled TSP that could be from DDU-GKY, DDU-GSY, PMKVY or RSETI 				

Work Plan

Agriculture	in Months					
	1	2	3	4	5	6
TSP Affiliation						
Incubation centre setup						
Appointment of additional staff members						

¹⁷ Includes the cost of building the incubation centre
Human Resource and Skill requirement study for 21 Coastal Districts of India

Mobilization of prospective trainees						
Enrolment of trainees						
Roll-out of incubation centre and training programme						

Project 3: Manufacturing					
Key economic drivers		<ul style="list-style-type: none"> • Chemical Industry • Plastic Processing Industry • Presence of Paradip Port 			
Rationale		<p>With the upcoming Plastic Park in Jagatsinghpur near IOCL Refinery wherein all type of plastic industries will develop as downstream industry of IOCL. Various plastic products by process of injection moulding, extrusion, blow moulding and thermoforming will be the main products of the park. Thus creating a skilled workforce in plastic processing will be the need of the hour. The training can be initiated by Ministry of Skill Development and Entrepreneurship/Ministry of Rural development in alignment with the curriculum designed by NSDC.</p>			
Trainings		Training courses	Target Beneficiaries	Type of Trainings	Total Number of beneficiaries
				Fresh Training	600 persons in next 5 years
Availability of curriculum	Job Roles	Target groups	Available QP/NOS	MES	CTS
	Plastic Moulding Operator/ Technician, Plastic Mould Assistant	Local Unemployed youth	QP available for: <ul style="list-style-type: none"> • Plastic Moulding Assistant/Helper 	No course available	No course available
Investment (INR In lakhs)		Manufacturing			
		Training in Plastic Processing			
		Operational Expenditure		50	
		Total Operational Expenditure		50	
		Capital Expenditure ¹⁸		-	
Potential Partners		Partner	Areas of Support		
		Skill Development Department, ITI	<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 faculty members • Integrate the proposed trainings in its training plan 		
		Industry Associations	<ul style="list-style-type: none"> • Industry interface 		
		Automotive Skill Development Council	<ul style="list-style-type: none"> • Develop model training programmes 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"> • Skill Development Department/Government ITI will provide the infrastructure and deliver the training programmes 			

¹⁸ The cost of building the residential facility
Human Resource and Skill requirement study for 21 Coastal Districts of India

- Automotive Skill Development Council will certify the training programmes

Option 1

- Build the residential facility for the trainees

Option 2

- Lease the residential facility for the trainees

Work Plan

Manufacturing	in Months					
	1	2	3	4	5	6
Upgradation of training centre						
Affiliation of Training centre with ASCI						
Initiation of residential facility construction work						
Purchase of consumables						
Appointment of additional staff members						
Mobilization of prospective trainees						
Enrolment of students						
Roll-out of training programme						

4. List of Stakeholders consulted

4.1. State level consultations- Odisha

Sl. No.	Stakeholder	Person	E-mail	Cell/Phone
1	Odisha State Employment Mission	Mr. Rajesh Gopalan Nair, IFS State Mission Director	grajeshifs@gmail.com	9583044400
2	Utkal Chamber of Commerce	Mr. Rajen Padhi Director General	dgucci@utkalchamber.in	9437021347
3	Odisha Livelihood Mission	Mr. Pranabjyoti Nath, IAS, State Mission Director	pjnathias@gmail.com	9937040864
4	Public Health and Engineering Department	Mr. S Laxmi Pati, Chief Engineer	cerwss@nic.in	9437644466
5	Department of Technical Education & Training	Mr. Ajay Kumar Panda, Deputy Director		9437006808
6	Odisha Skill development Authority	Mr. Subroto Bagchi, Chairman	subroto.bagchi@gov.in	06742391320
7	IDCO	Managing Director	cmd@idco.in	0674 2543506
8	Paradeep Phosphated Limited	General Manager	NA	06742391669
9	L&T	Cluster Head	NA	998677299
10	Department of Tourism	Mrs. Majulata Dalai, Deputy Director and Deputy Secretary	oritour@gmail.com	9861128751
11	MPEDA	State Coordinator		
12	State MSME Department	Mr. Ramakant Sahoo, Joint Secretary	Ramakrushna.sahoo3@gmail.com	9438444918

4.3. District level consultations- Jagatsinghpur

Sl. No.	Stakeholder	Person	E-mail	Cell/Phone
1	District Collectorate	Mrs. Yamini Sarangi, IAS Collector Jagatsinghpur	dm-jagatsinghpur@nic.in	06724-220379
2	DRDA Jagatsinghpur	Mr. B K Das	NA	9437088219
3	District Fisheries Office cum FFDA	Mr. Gyanaranjan Samal	NA	9937437495
4	Directorate of Fisheries, Kujang, Jagatsinghpur	Mr. Biraja Prasanna, Asssitant Director	adfmarinek@gmail.com	9437107799
5	Management Society Fishing Harbour	Mr. Bharat Bhushan Sahoo, Manager	NA	9040527810
6	Suryodyog Food Processing Private Limited	Mr. Subrat Das, Manager	NA	9937194929
7	Brackish Water Training Centre	Mr. Pramod Kumar Rout, Principal	NA	9437251699
8	Odisha Maritime Academy	Capt SA Amini, Principal	NA	8457912100
9	Hotel Empires , Paradip	Mr. Manoranjan Rout, Asst F.O Manager	Manoranjan.rout@mpir eshotel.com	9338016540
10	Paradip Port Trust	Mr. Bipin Panigrahy, Deputy Chief Engineer	dcme@paradeeport.gov.in	9937445199
11	Hotel Golden Anchor Private Limited	Manager	NA	9238111222
12	IFFCO	Capt. Mohapatra	NA	NA
13	Indian Oil Corporation Limited	Senior Manager, Refinery Coordination	NA	9437075910
14	DIC Jagatsinghpur	S.N Nayak	dicjspur@nic.in	06724-221707

4.4. District level consultations- Ganjam

Sl. No.	Stakeholder	Person	E-mail	Cell/Phone
1	District Collectorate	Shri Prem Chandra Choudhary	dm-ganjam@nic.in	9437559670
2	DRDA Jagatsinghpur	Shri Vijay Amruta Kulange, IAS, PD-DRDA	ori-dganjam@nic.in	06811-263965
3	Department of Energy, CE cum EI, Ganjam	Mr. Jagdish Prasad Swain, Chief Engineer cum Chief Electrical Inspector, Dept. of Enregy	ceiszbmpr-od@gov.in	9437303510
4	District Fisheries Office cum FFDA	Vishnu Prasad Panigrahy	NA	NA
5	Gopalpur Port	Shri Saroj Misro, Deputy COO, Gopalpur Ports	saroj.misro@gopalpurports.in	7873982221
6	TATA Steel	Mr. RK Singh, Head-Resettlement & Rehabilitation	singh@tatasteel.com	NA
7	District Supply and Marketing Society, ORMAS	Ms. Sanghamitra Nayak, Chief Executive, DSMS	dsmsganjam@gmail.com	NA
8	Saraf Industries	Mr. GR Kar, GM Operations	NA	7381072208
9	Grasim Industries, Aditya Birla Group	GR Sharma, Senior GM {Engineering Services}	NA	977749412
10	ITI Ganjam	Mr. Rajat Panigrahi	NA	9438293909
11	IKYA	Mr. Sumit Kumar	NA	9893195550
12	DIC Ganjam	Mr. Pranab Kumar Nayak	dicgan@nic.in	0680-2290715
13	Mayfair Hotels & Resorts	Mr. Chidananda Mallick	Chidananda.Mallick@mayfairhotels.com	9238413078
14	Government Polytechnic Ganjam	Mr. Sarat Pattnaik, Principal	ucpes@ori.nic.in	06802291826