

Challenges and Sustainability of Livelihood of the Fishing Community: A Case Study of Digha –Sankarpur, East Medinipur, West Bengal, India

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ABSTRACT

The communities tends to promote sustainable living must be environmental and economic sustainability and to meet current needs ensuring also adequate resources for future generations may be defined as sustainable community. 37% of the world's population live in coastal communities where whole families are often employed in fishing. The main objective of the study is to focus on how the fishing community can cope up their occupational hazards and make their livelihood sustainable through the perception. The study area 'Digha-Sankarpur' is twins' small sea side resort situated on coastal area of East Medinipur in the state of west Bengal, India. The study is based on the primary data collected by field survey. The total number of respondents are 55 fishermen. Maximum of the fishermen are migrated from other districts of West Bengal. They are traditionally engaged in this livelihood. Only men are directly doing this primary economic activity whereas women are doing secondary marine-related activities such as fish processing and marketing. The combination of these leads to the long-term feasibility of commercial sustainable fishing communities.

Keywords: sustainable living, Fishing communities, occupational hazards, livelihood, economic activity, environment.

INTRODUCTION

A sustainable livelihood is a way of living that allows individuals and communities to meet their current needs while ensuring the well-being of future generations, without compromising the environment or social structures. It aims to ensure economic viability and social status while addressing social problems such as lack of employment, underemployment, discrimination, and exploitation. The community tends to promote sustainable living must be environmental and economic sustainability. To meet current needs ensuring also adequate resources for future generations may be defined as sustainable community. Fishery is one of the important livelihoods here. It occupies 493.18 hector or 13.385 of land. Here the fishing port with all moden facilities known as sankarpur harbour which is connected by a metalled road and canal to the Digha-Contai Road. it reaps the fishing in destroy harbour but sea fish market is located in Old Digha for better communication. All sea fish catch are collected in Old Digha dispatched to different consumer. 37% of the world's population live in coastal communities where whole families are often employed in fishing. Fisheries and aquaculture are, directly or indirectly, a source of livelihood for over 500 million people, mostly in developing countries. 90% of fish farmers are small-scale producers from developing countries.

Salient features of Sustainable community

- ▶ vibrant local economy that gives access to satisfying and rewarding work without damage to the local, national or global environment.
- ▶ access to good food, water, housing and fuel at a reasonable cost.
- ▶ Meet up local needs locally

- ▶ maximise everyone's access to the skills and knowledge
- ▶ empower all sections of the community to participate in decision-making.
- ▶ WWF (world wildlife fund) focuses on what we define as community-based management—an approach that empowers communities to take charge of ocean resources in a way that safeguards their supply, well into the future.

Objectives of the study:

The main objectives of the study are:

- ▶ To find the demographic characteristics of the surveyed population
- ▶ To find out the socio-economic condition of the community
- ▶ To focus on how the fishing community can cope up their occupational hazards and make their livelihood sustainable through the perception.

Location of the Study area:

The coastal belt of East Medinipur district represent 27% of West Bengal of coastal tract (60km) extending along the west bank of Hooghly estuary from New Digha and then curving around Junpet, Dadanpartrabharh, Khejuri and Haldia on the east to the further north east up to Tamruk or even on the bank of Rupnarayan.

The study area 'Digha-Sankarpur' is twins' small sea side resort situated on coastal area of East Medinipur in the state of west Bengal, India. This area lies in the coastal tract of adjoining Bay of Bengal and border of West Bengal and Orissa. This Region is a transitional zone in between sea and land.

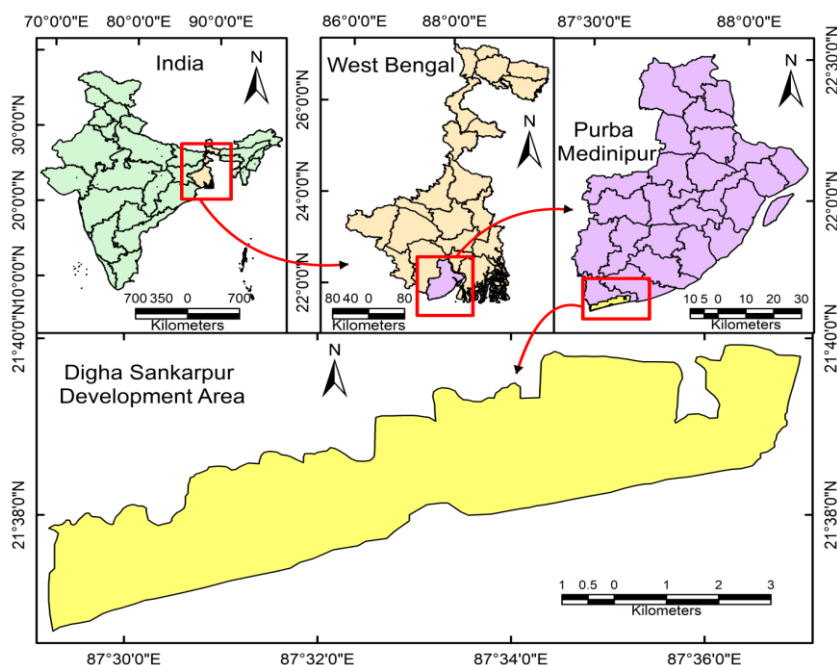


Fig No. 1

METHODOLOGY

The study is based on the primary data collected by field survey by in-depth interviews of the fishermen. The total numbers of respondents are 55 fishermen. Maximum of the fishermen are migrated from other districts of West Bengal. They are traditionally engaged in this livelihood. The surveyed fishermen comprise 300 total population among which 159 males and 141 females.



Survey Team

Analysis:

Fig no. 2 shows that demographically the population of the study area is rising gradually from 1951 when it was 7190 persons to 46532 persons in 2011 census. Fig no. 3 shows that male population is higher i.e. 159 than female i.e. 141. So the sex ratio is 887 and Dependency ratio is 43%

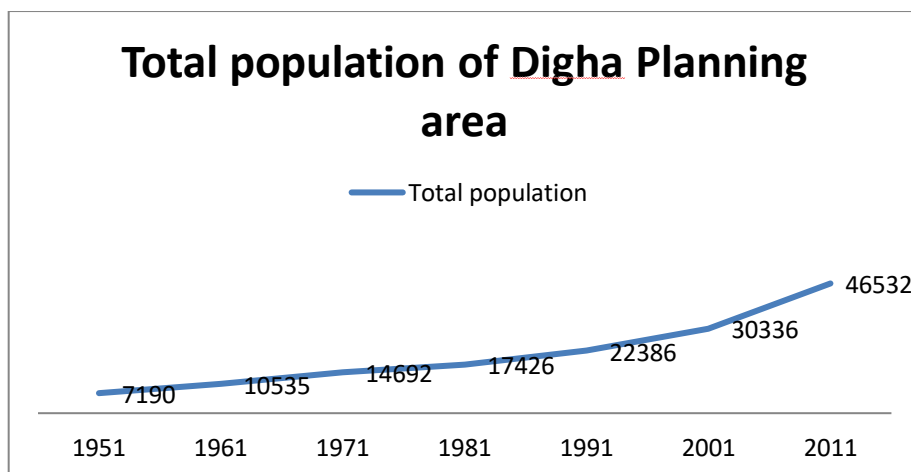


Fig. no. 2

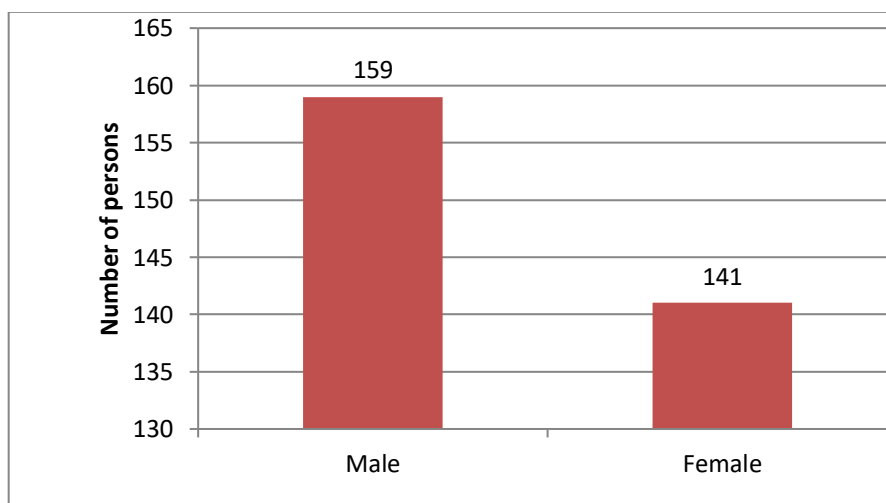


Fig no. 3 Distribution of Male –Female surveyed population

From fig. no. 4 it is found that population in the 15-59 age group is much higher than young and older group. It is a good demographic structure as demographic dividend is high. From fig. no. 5 it is seen that literates percentage is higher than illiterates. But female literates are lower in number than male which can be seen from fig. no.6. female should be aware to get education. From fig. no.7 it can be said that educational levels are very poor of the surveyed people. Very few are got higher education. Majority of people have their education upto class VIII. People of the study area should be aware to take higher education.

From fig no.8 & 9 it can be stated that workers percentage is very low i.e 38% and among workers female percentage is very low i.e.20%. Shankarpur is a major fishing harbor and a breeding ground for fish. The local fishermen play a crucial role in supplying seafood to the region. From fig no. 11 it is understand that most of the male population are engaged in primary economic activities mainly fishing. Very few are cultivated land near the coast which is fertile, enabling the cultivation of crops like rice and vegetables. 92% of males are engaged in this occupation. This is their indigenous occupation as they are living besides Bay of Bengal. They are leaving their house for one month to catch fish in the deep ocean and returned home to sale the sea fish. Peoples of the study area face a range of occupational hazards, including physical injuries from handling fish and equipment, exposure to the natural hazards, and potential health issues related to long hours staying in the ocean and mental stress monotony. Furthermore, they are vulnerable to the impacts of climate change, such as coastal erosion and storms, which can disrupt their livelihoods. Some females and males are engaged in secondary activity like preparation of dried fish, making ornaments or various craft work with oyster. 5% of the people are engaged in secondary occupation and 3% are engaged in tertiary occupation mostly tourism industry. The Digha Sankarpur Development Authority (DSDA) has been working to develop tourism infrastructure and strengthen the existing infrastructure in the area, which further supports various occupations Moreover small-scale businesses, such as salt manufacturing and vegetable gardening, also contribute to the local economy.

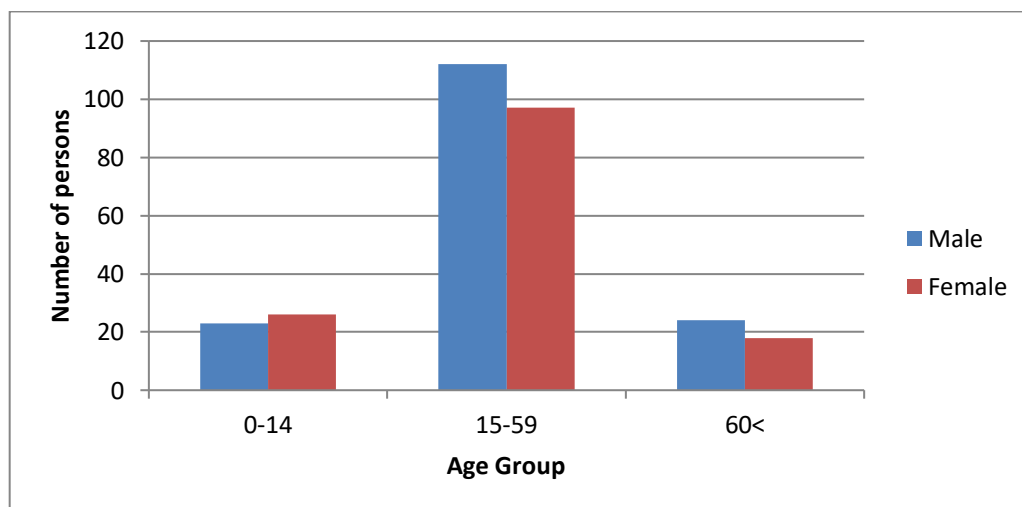


Fig. no. 4 Age sex wise distribution of surveyed population

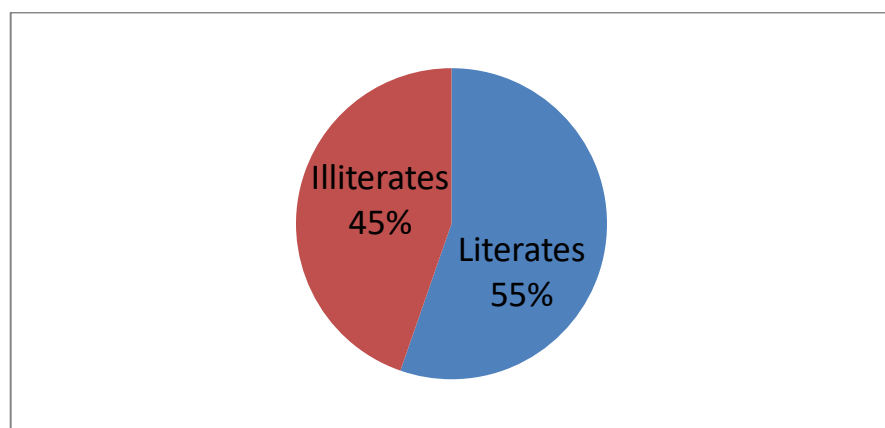


Fig. no. 5 Percentages of literate and illiterate people

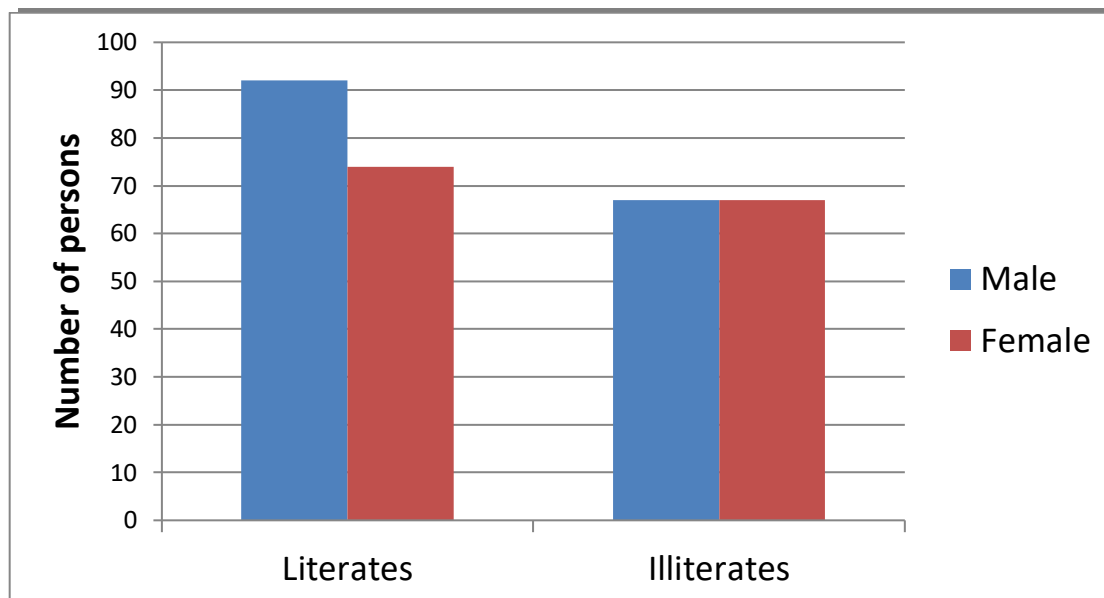


Fig. no. 6 Sex-wise distribution of literates and illiterates

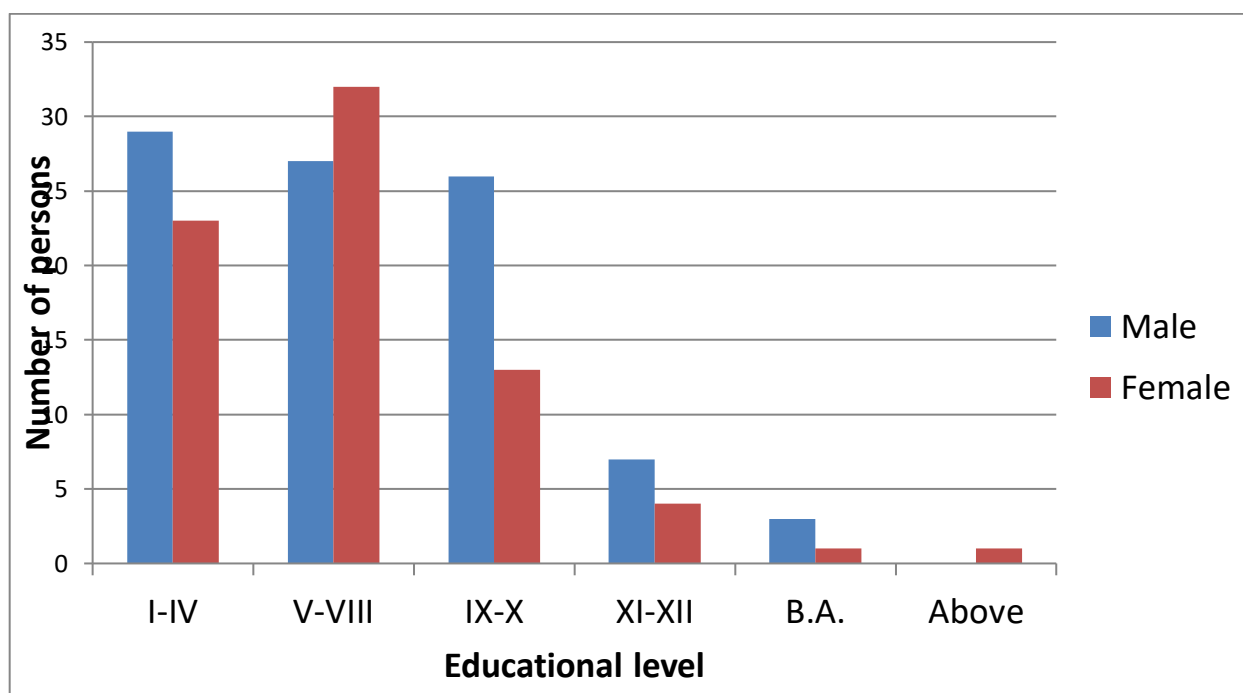


Fig. no. 7 Educational levels of surveyed population

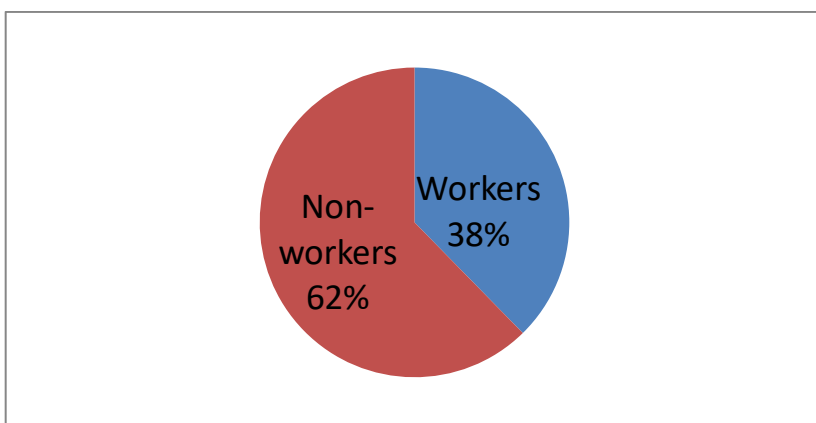


Fig. no. 8 Percentage distribution of workers and non workers

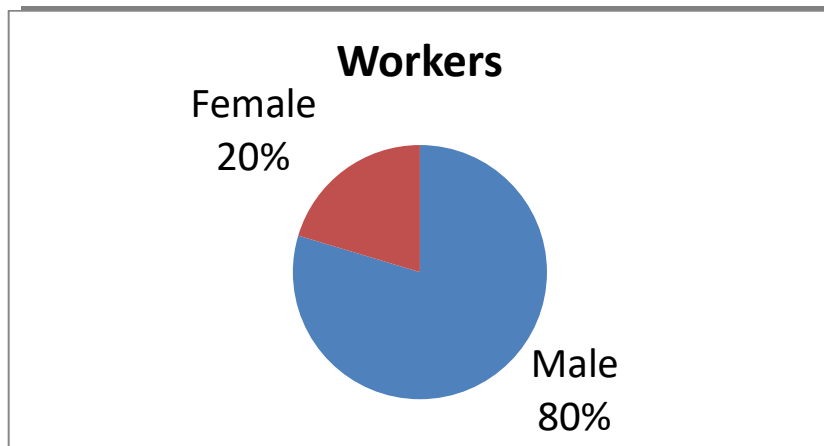


Fig. no. 9 Gender wise working status

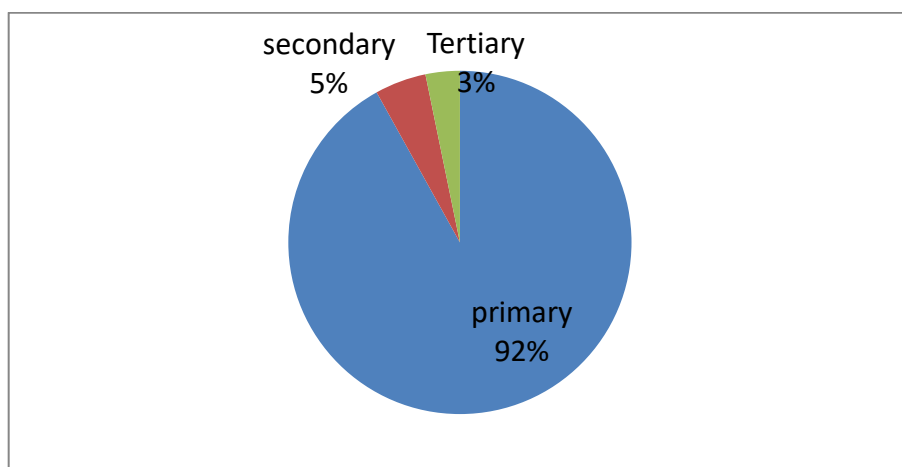


Fig. no. 11 Types of Occupation

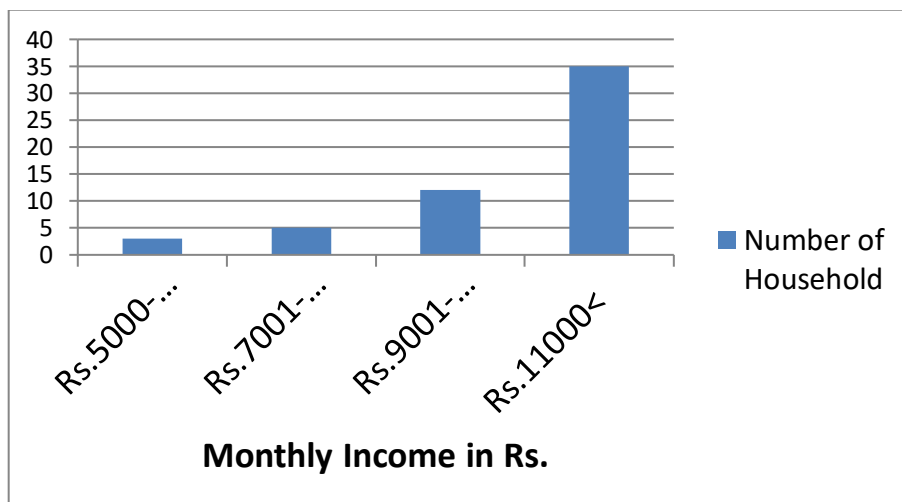


Fig. no. 12 Distribution of monthly income of households

- Only men are directly doing this primary economic activity whereas women are doing secondary marine-related activities such as fish processing and marketing. The combination of these leads to the long-term feasibility of commercial sustainable fishing communities. From fig. no.12 it is obvious that most of the households have monthly income above rs.1100.

Fishing community is dependent on infrastructure to function and obtain landings at the port. Basic infrastructure is needed such as working vessels, docks to store boats, dredged channels, boat launches, hoists, ice, and fuel. Without these basic infrastructures fishermen cannot catch fish. But younger generation in

Digha-Sankarpur is increasingly less involved in fishing as a primary livelihood. Tourism development and other economic opportunities are drawing them away from the traditional fishing activities. Families of fishermen and others are now involved in tourism-related businesses, with some even migrating to other areas for better opportunities. There are significant drop in the number of fishing boats, as younger generations choose different career paths.

CONCLUSION

One of the most dangerous and life-threatening professions all over the world is livelihood of fishermen. There are some common Hazards of the fishing occupation are: exposure to cold, wind, rough seas, substantial participation of physical effort, frequency of injuries during work, unpredictability and abruptness of threats, equipment failure, everyday psychological stress, and constant economic pressure. A lost vessel and a lost fisherman have a vital impact on the coastal community. Fishing activity, a major source of income sometimes become unstable as because various factors like fluctuating fish prices, middlemen dominance, and the risks associated with the profession. The training package covers general safety, personal safety, vessel stability, radio communication, survival at sea, emergency first aid, outboard engine repair and maintenance, boat handling, safety risk management, international conventions and agreements on safety of vessels and fishers, and effective training techniques. The participating trainers obtained a full package of training materials to use for their own trainings on fishers safety at sea. Environmental perception is a tool to measure and evaluate the environment in which an individual works, in addition to directing their activities and way of life. Therefore, using this knowledge to develop community awareness measures and providing the information needed to implement sustainable fisheries and care for the environment. Fishers' local knowledge and their perceptions of climate change are increasingly recognized by researchers and international institutions. But now a day's traditional fishing industry is facing challenges due to erosion and coastal development projects, like the Digha-Mandarmoni marine drive that potentially pushing people towards other options.



Trawler: Fishing Vessels



Fishing materials in the Trawler



Worshiped vessels before starting



Fine nets and course nets for fishing



Preparation of Nets for Fishing



Packed nets for Fishing



Ice Factory



Loading of Ice Blocks



Different Types of Sea Fishes



Loading and unloading centre

Annexure

Descriptive Statistical Tables

Table No. 1 Age sex wise distribution of surveyed population

Age Group	0-14	15-59	60<	Total
Male Population	23	112	24	159
Female Population	26	97	18	141
Total	49	209	42	300

Table No. 2 Total number of literates and illiterates

	Total Population	Literates	Illiterates
Male	159	92	67
Female	141	74	67
Total	300	166	134

Table No. 3 Educational levels of surveyed population

Levels of Education	I-IV	V-VIII	IX-X	XI-XII	B.A.	Above	Total
Male	29	27	26	7	3	nil	92
Female	23	32	13	4	1	1	74
Total	52	59	39	11	4	1	166

Table No. 4 Number of workers and Non workers

Total Population	Males	Females	300
Workers	90	23	113
Non-workers	69	118	187
Total	159	141	300

Table No. 5 Types of Occupation of the surveyed population

Types of occupation	primary	secondary	Tertiary	Total
Number of persons	57	3	2	62

Table No. 6 Distribution of monthly income of households in Rs.

Monthly Income	Rs.5000-Rs.7000	Rs.7001-Rs.9000	Rs.9001-Rs.11000	Rs.11000<	Total
Number of Household	3	5	12	35	55

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