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Current Trends of Information Seeking Behaviour of Fishermen of Indian Coastal Area

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Abstract

This present study observes the needs of information and searches for fishermen's behavior. This study was done as pilot study on the fisherman living in the coastal area of Ghogha located in the western part of India. The questionnaire was distributed to 100 fishermen. Out of that 80 set of questionnaires were returned with the required information and taken for analysis. This research was done using a survey methodology with structured set of questionnaire on information seeking behavior and data was collected. The results are accomplished based on questions asked to the fishermen of this area. The main aim of research work is to find out the current ways of information seeking behavior of fishermen and overall current scenario of fishermen. Study finding revealed that with the help of information technology and mobile technology, the fishermen uses this information and does there work. The efforts are being made to know what role does the internet and library play in fetching such information. Efforts were also made to know about the facilities provided and the problems faced for fishing in this area. Here the information is sought about the education and provision of government facilities provided to them.

(Key words: Information needs, Information seeking behavior, Fishermen, Coastal area, India.

Introduction

The mainland coast of India is divided into east coast and west coast. India has a coastline of 7516.6 km along the Arabian Sea through the Bay of Bengal. The Coromandel Coast of Eastern India, Puducherry, has a maritime boundary from Utkal to the Sundarbans to the Bay of Bengal. The Indian coastline touches nine states and four union territories. The nine states are Gujarat, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Odisha and West Bengal. Union Territories include Daman and Diu, Puducherry, Andaman and Nicobar Islands and Lakshadweep Islands. The length of coastline of these states of India is as follows: Gujarat - 1,600 km, Andhra Pradesh - 974 Km (Coastal Andhra), Tamil Nadu - 940 Km (Coromandel Coast), Maharashtra - 720 Km (Konkan Coast), Kerala - 580 Km (Malabar) Coast), Odisha - 485 km (Utkal Plains), Karnataka - 320 Km (Kanara Coast), Goa - 160 Km, West Bengal - 157 km India is connected to water by a major part of its land, so the development of ports, maritime connectivity, shipping industry and maritime economic zones are some of the crucial areas. Most of the coastal plains of India are covered by fertile soil, on which various crops are grown. Rice

is the main crop of these areas. Fishing is an important occupation of the people living in the coastal areas of India. The eastern coastline includes the Eastern Ghats and the Bay of Bengal and extends from the Ganges Delta in the north to Kanyakumari in the south. According to the Eastern Coastal States, the Orissa Coastal Plain, the Andhra Coastal Plain and the Tamil Nadu Coastal Plain can be divided into three parts. The eastern coast of India includes rivers like Mahanadi, Godavari, Krishna and Kaveri. The west coast, on the other hand, extends from the desert of Kutch in the north to Kanyakumari in the south. It is divided into three parts, the Konkan coast, the coast of Karnataka and the coast of Kerala. The west coast covers the Indian Ocean, the only ocean in the country's name. Coconut trees grow all along the west coast. Kerala coastal sand contains a large amount of monazite, which is used for nuclear power. The low lying areas of Gujarat are famous for salt production. As well as due to the long coastline in the state of Gujarat, the main business is the port industry and the fishing industry in large numbers. Bhavnagar is a coastal city in the state of Gujarat. Ghogha is a taluka in Bhavnagar where fishing business has developed over the years. (Cunningham, 1971)

Coastline of Gujarat State:

On the 1600 km. The long coastline of Gujarat, the main ports is Kandla, Hajira, and Pipavav ports. In addition to this, there are various small ports located in small and big talukas and villages. As each taluka and village is located on the coastline here the main occupation is fishing. As the Indian Ocean and the Arabian Sea are on both sides of Gujarat State, it is said that there is a vast coastline. The Bhavnagar district of Gujarat is located near the coastline. Here various small and big industries, as well as agriculture and fishing, are the main occupations. Ghogha was once known as a port but as the sea has gone far away it is no more used as a port instead fishing is still the occupation of people. Here more than 500 fishermen live. Various small and big boats are also used here. So here fishing has been done for many years. The population consists of Muslims, fishermen, and Kolis. As various species of fish are available, fishing is done. The population in this area is more than 12,000 and the literacy rate is 77 %. Various researches are conducted on fishing and information-seeking behavior of fishermen. Based on this research, the correct decision on the development of the fishing industry is taken. This type of survey on fishermen community residing near Ghogha coastal area and their behavior has never been undertaken before. So this survey is done out of curiosity keeping in mind some particular fishermen. (Solanki et al., 2016; Marine Fisheries Census, 2010)

Problem of Statement

Various studies have been undertaken to search about Contemporary trends of Information Seeking Behavior of Fisherman of Ghogha Coastal Area and that study is utilized for literature related to reference and research. In these studies the main focus was given on the need for information and behavior of fishermen of this area so that the fishermen community gets a noticeable profit due to the conduction of such studies. 20% of inhabitants residing in this area earn their livelihood by fishing and as this area is located on the seacoast so fishing is considered as their main occupation. Farming is the occupation in the nearby surrounding areas and the areas where farm and sea coast both are available there both farming and agriculture are considered as occupations by the inhabitants of such areas. The questionnaire prepared for

organizing such study consisted of 7 questions approximately and through such questions, data related to information and conduct of fisherman was collected and 100 such questionnaires were distributed among the fishermen out of whom 80 questionnaires were returned by fishermen after filling the required data asked for from them in questionnaires. These questionnaires were analyzed and segregated and after that the information related to the fishermen community was collected based on analysis and segregation. As a result of this survey, the below-mentioned information's regarding the fishermen community were collected 1. Information about the education of fishermen 2. Information related to the caste system of fishermen 3. Information of fishermen collected age wise 4. Information on weather conditions in the area where fishermen inhabit 5. Problems encountered while seeking information from fishermen 6. Information about various aids provided by the government to fishermen 7. Information related to general or basic requirements of the Fisher community

Review of Related Literature

Shuva (2017), this study has been an attempt to study and identify the requirements and behavior of the fishermen residing in various villages of Bangladesh. This study helps to give importance to the appropriate requirements of the fishermen community. In addition to this, various government information agencies and public libraries are providing services to rural communities, and this service is provided through "Information Service " While providing such information, it was noticed that only the literates were more aware of this. It was also observed that the Bangladesh Government should make such policies that let the use of government services along with other services parallelly. The community inhabiting in marginal rural areas should receive appropriate information about services based on friendly requirements. For this the Bangladesh Government should form Information Society and that society should have the right to give this formal information through an appropriate network.

Ifejika (2016), This study provides experiential proof that to undertake fishing as an occupation various types of information are very much required. It was observed that the fishermen communities residing near river banks use information about activities related to fishing as an occupation and that information is provided through mobiles digitally. The fishermen community connected with other fishing communities acquire information related to every fishing work through mobiles and they also acquire such information from other than their community's means by experts in their respective fields. It was noticed that there were many opportunities available to collect information about behavior by mobile and in various aspects of acquiring information mobile services might prove very useful so that it helps to prepare an effective design for the fishing industry and thereby make profits in this occupation.

Turner (2014), to collect information and to manage the fishing industry through sharing networks and this can also be used affirmatively / positively. To get success in fishing business the services of the manager for sharing information are required. To make information available online and to get access to such information through networks the fishermen should be made aware of such shared information online by sharing it with those connected with the fishing business. By accessing information they get informed about climatic conditions and celestial activities. Fishing behaviors provide information about how to adapt to the changes in resources

and environment and accessing online information helps the Central Fishers Managers to fulfill expectations. The managers design accurate managerial mediations to provide solutions to various queries of the Fisher community. Information is sought by the distribution of information through network framework and social issues Networks encourage the flow of other information or become useful for the development of standards and values. More and more researches provide facilities for the development of Information sharing networks frameworks and provide a facility for the development of distributed standards of work done.

Sharma (2013), this study provides information related to the percentage ratio of age of men and women and also helps to get information about literacy and illiteracy rates of Fisher Communities. The women assist their husbands in the fishing business after they get an education and additional information is sought through this percentage. The percentage of illiteracy in women of the Fisher community is approximately 29%. Every community and human beings have their mindsets and it is very much necessary to cure such mindsets with certain protocols and it becomes necessary to consider such protocols. As Fisher community is fully engrossed in their work, they don't give more attention towards general issues and therefore the percentage of women of Fisher community aware about various symptoms of different diseases prevalent in their children and without identifying symptoms and providing them medical services by visiting hospitals is not prevalent in Fisher community. Even if they seek medical help, the fishermen visit government hospital and the number of fishermen visiting private hospitals in case of medical emergency is very low as compared to preferring to seek government hospitals for help. Most of the time during medical facility requirements they tend to follow their traditional methods to cure any illness.

Premapriya (2018), this study aimed to collect data about health care and search for the health of information behavior of Fisher community ladies and this study was divided into two groups as this: the first group consisted of selection method relate to health care services and the second group consisted information behavior related to health search. To understand the circumstances or conditions of illness one should possess the good qualities required to be a good doctor and generally the selection of health care services is done based on its easy availability and existing financial conditions. Sometimes or other Ayurvedic medicines are given priority depending on the financial conditions whereas private hospital services are slaked for a medical emergency to get cured in short duration at high speed whereas government hospitals are chosen based on financial conditions and considering the seriousness of the illness.

Hossein (2015), this study was conducted to collect data about the treatment of pregnant women in three villages of Bangladesh. The womenfolk in urban areas are aware of their conditions and requirements whereas the womenfolk in rural areas are not aware of the modern medical amenities available during their needs. On account of this weak awareness these women are at higher risks of their lives in rural areas. The risk factor is higher as during pregnancy they depend on traditional methods of treatment instead of modern medical amenities they stick to age-old traditional methods and thereby risking their lives. Once when all the traditional methods don't work out then at last they visit hospitals for help and that is the reason that they have to face serious health problems due to their unawareness. The rate of seeking medical help during illness is found to be quite low as compared to the number given by states in Bangladesh.

Various factors as poverty, social-cultural standards, and religious beliefs affected our research work on the health conditions of pregnant women. It was also noticed during this study that some of the population gave priority to the quality of services and that priority helped to bring effective and accurate results. The government with their awareness for the development of a nation can reach their Millennium Development Goal as required for any nation.

Uzezi (2015), The results of this study lead to the conclusion that in the community that resides on the banks of Isoko River is men and women both are engrossed in the fishing industry actively and both men and women are required to work this fishing industry as it is the need of the industry and this data was collected during the study. The fishing industry is improving day by day due to the use of new technologies and using Fishing Gears fishing industry can bring expected revenue returns. The fishermen should have correct information about the storage and other amenities required for their fishing industry. The fishermen move from place to place and their personal experiences during movements to different places add more to the information required for developing the fishing industry. To avail and utilize modern technologies for the breeding of fish various information are collected and this data is utilized to increase productivity and thereby production. The availability of libraries in such areas is very much required and the officer in charge should be informed about the requirement of the library to keep people aware of modern technologies and update them. The problem arises when it is the right time to inform officers about the requirement of a library in some particular area at that time only people shift to other places leading to low population ratio required to open a new library the headcount decreases due to migration of people and this creates problem to reach to a minimum count of the population as mentioned and required by law to open a library.

Information seeking behavior and models

There is always a need for information-seeking behavior in the education field, research work, business, commerce, industry, entertainment, and service-related units. Information is related to any issue of the world that is why in this study for gathering the information related to the Fisher community and their behavior informative models are very useful and it becomes inevitable to think about it. The informative models are provided by the experts and by the information is collected. Definitions: The model behavior information sought during the research of behavior and behavioral information attitudes and their utilization decide the level of information. When information is searched for by the Wilson Model at that time the relation of searched information with sources and channels and creative and noncreative information human behavior and also to take both information's into use and by communicating with people face to face or in debate discussion and thereby information can be collected and it can also be known whether the information is useful or not useful. For example, it can be seen that various information is provided through television and out of all some information may be useful if it is needed and if it is not needed it become unusual. (Wilson, 1990)

Case (2002) for the information, search for defined information, and behavior seeking information is added along with other information. For example, whenever any information is required and that information is related to the aims at that time the information cannot be ignored, and not only that such information is used in the research process. The information

models are provided by the experts and below is the list of information models here only the names are given no additional information is provided

As cited by Trivedi and Bhatt (2018) many renowned experts like Ellis, Wilson, Meho & Tibbo, Kuhlthau and Foster has given ISB dimensions and its models and Ellis model has widely applied in information seeking behavior research.

Core Objectives of the Study:

The following objectives were identified in the present study.

1. To know the demographic details of fishing community in terms of age, education and community category.
2. To understand the sources of climate information and its utilization by fishermen
3. To identify the problems encountered while seeking fishermen information
4. To know about what facility or guidelines are provided by the federal government for the fishing industry
5. To discover additional information required by the fishing community

Methodology

This study uses the narrative survey research methodology the study is related to "Contemporary trends of Information Seeking Behaviour of Fishermen of Ghogha Coastal Area". There is a vast coastline in this area i.e. the area is covered by a long coastline therefore here fishing is the main industry as this is found during the survey. To conduct the survey for the research the questionnaire consisting of 100 questions was distributed among people related to Fisher community and the filled questionnaires are collected back from the people under survey and out of 100 questionnaires distributed only 80 questionnaires were filled and returned to us and it means that only 80% of the information was collected. Whatever data is collected, that data is analyzed by preparing tables and graphical presentations on the software of the database on computer and through the analysis the exact percentage of any information is given whenever it is needed.

Data Analysis and interpretation

Demographic Details of Fisherman: Education

The information received regarding the response to the question asked for the educational information of the fishing community in the area is presented in tabular & graphical form at below.

Table 1: Details of Fisherman educational Information

Educational Information	No. of Responses
Primary	25
High School	28
Graduate	11
Non-Literate	16

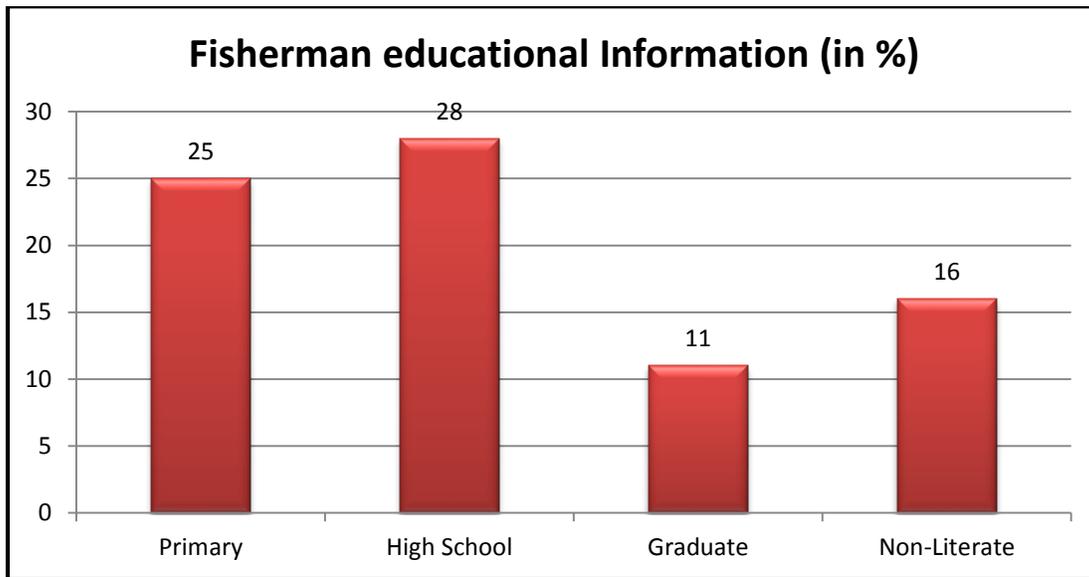


Fig.1: Details of Fisherman educational Information

This table has been analyzed and interpreted so that the information found here is that the number of fishermen in the area who have received primary education is 25. And its percentage is achieved by 31%. The number of fishermen educated up to high school is 28. And its percentage is achieved at 35%. The number of fishermen educated till Graduate is 11. And its percentage is achieved at 14%. While the number of non-literate fishermen is 16. And its percentage is achieved by 20%.

Demographic Details of Fisherman: Religion

The information received in response to a query for information on the religion of the fishing community in the area is presented in table no.2 below.

Table 2: Details of Fishermen Religion

Religion Information	No. of Responses
Hindu	41
Muslim	35
Others	04

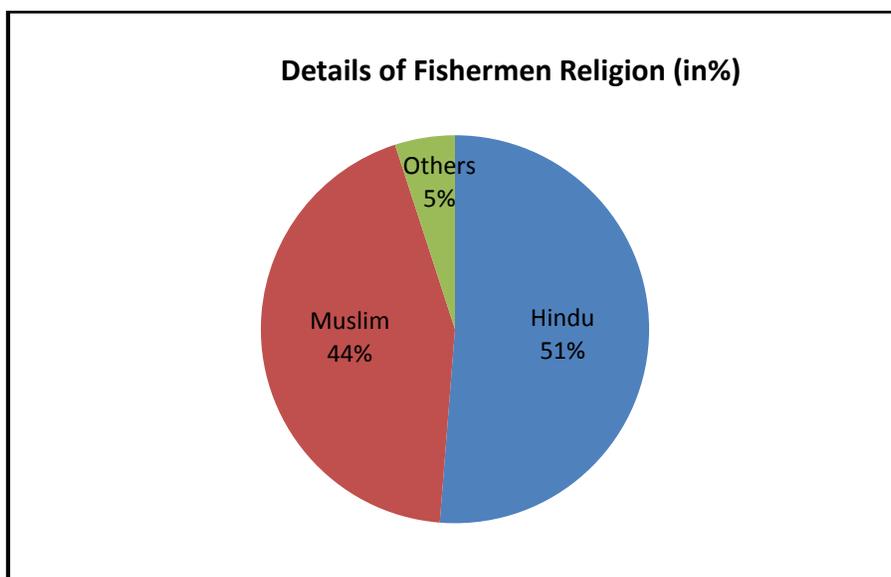


Fig.2: Details of Fishermen Religion

This table has been analyzed and interpreted so that the information found here is that the number of Hindu people among the fishermen of this area is 41. And its percentage is achieved by 51%. The number of people with Muslim religion is 35. And its percentage is achieved by 44%. While the number of people with other religions is 04. And its percentage is achieved with 5%.

Demographic Details of Fisherman: Age Group

The information received in response to a query for age information in the fishing community in the area is presented in table no.3 below.

Table 3: Information consulted by Age of fishermen

Age-related Information	No. of Responses
20- 25 Years	16
26- 30 Years	28
31-35 Years	38
36- above	08

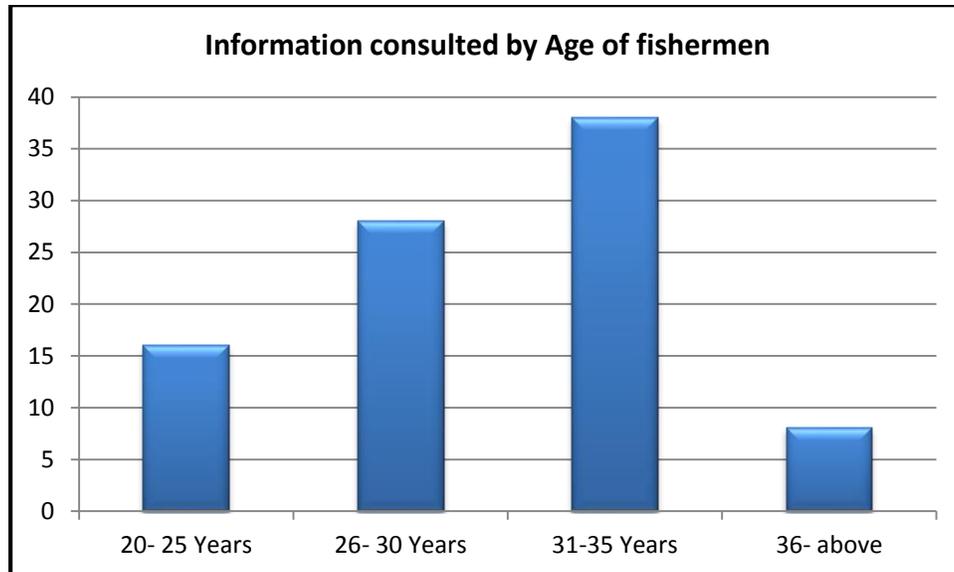


Fig.3: Information consulted by Age of fishermen

This table has been analyzed and interpreted so that the information found here is that the age-related information of the fishermen of this area gives the number of fishermen of 20-25 Years as 16. And its percentage is achieved by 20%. The number of fishermen of 26-30 years is 28. And its percentage is achieved at 35%. And its percentage is achieved at 35%. The number of fishermen of 31-35 Years is 38. And its percentage is achieved by 48%. While the number of fishermen from 36-above is 08. And its percentage is achieved by 10%.

Source of Climate Information Consulted by fisherman

The information received in response to a query for information on the Source of weather in the fishing community in the area is presented in table no.4 below.

Table 4: Source of Climate Information Consulted by fisherman

Source of weather Information	No. of Responses
Personal Experience	07
Extension Officers	22
Television	12
Radio	06
Newspaper	11
Neighbors / Friends	06
Fishing Department	16
Library	02

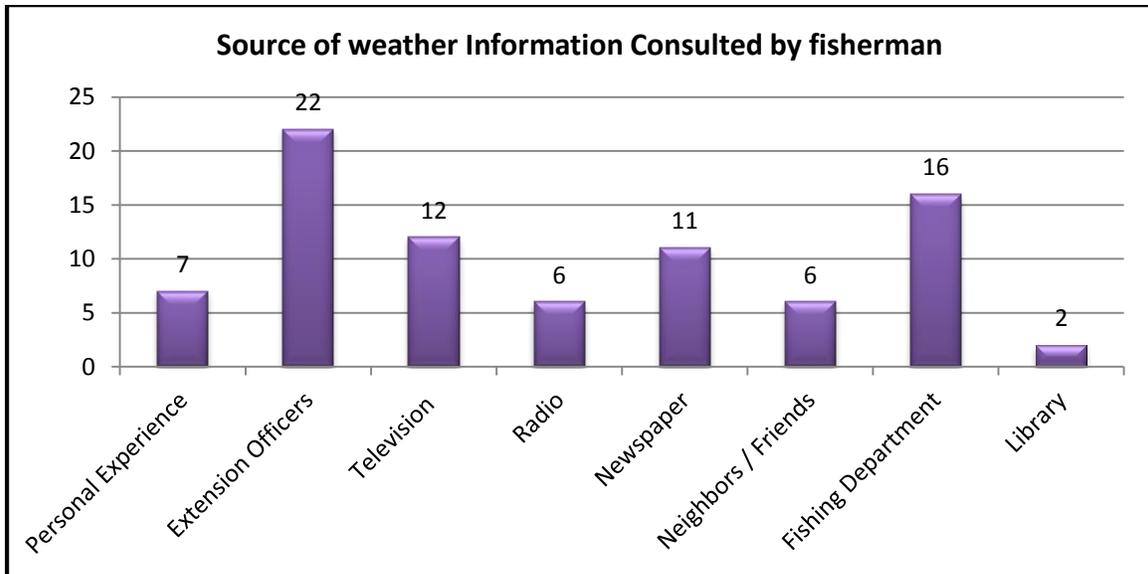


Fig.4: Source of weather Information Consulted by fisherman

This table has been analyzed and interpreted so that the information obtained here is that for the fishermen of this area, the information of Personal Experience in the source of weather information gives the number of fishermen as 07. And its percentage is achieved by 9%. Information about Extension Officers gives the number of fishermen as 22. And its percentage is achieved at 28%. Information about television gives the number of fishermen as 12. And its percentage is achieved at 15%. Information about the radio gives the number of fishermen as 06. And its percentage is achieved by 8%. The number of fishermen in the newspaper is 11. And its percentage is achieved at 14%. Information about Neighbors / Friends gives the number of fishermen as 06. And its percentage is achieved by 8%. Information about the Fishing Department gives the number of fishermen as 16. And its percentage is achieved by 20%. While in the information about the Library, the number of fishermen is 02. And its percentage achieves 03%.

Problems encountered while seeking information of fishermen

The information received in response to a query for information on Problems encountered while Seeking in the fishing community in the area is presented in table no.5 below.

Table 5: Problems encountered while seeking information of fishermen

Problems encountered while Seeking Information	No. of Responses
Lack of visitation by fishing office	18
Lack-literacy	16
Lack of nearby library	12
Lack of educational information	22
Lack of Internet skills	12

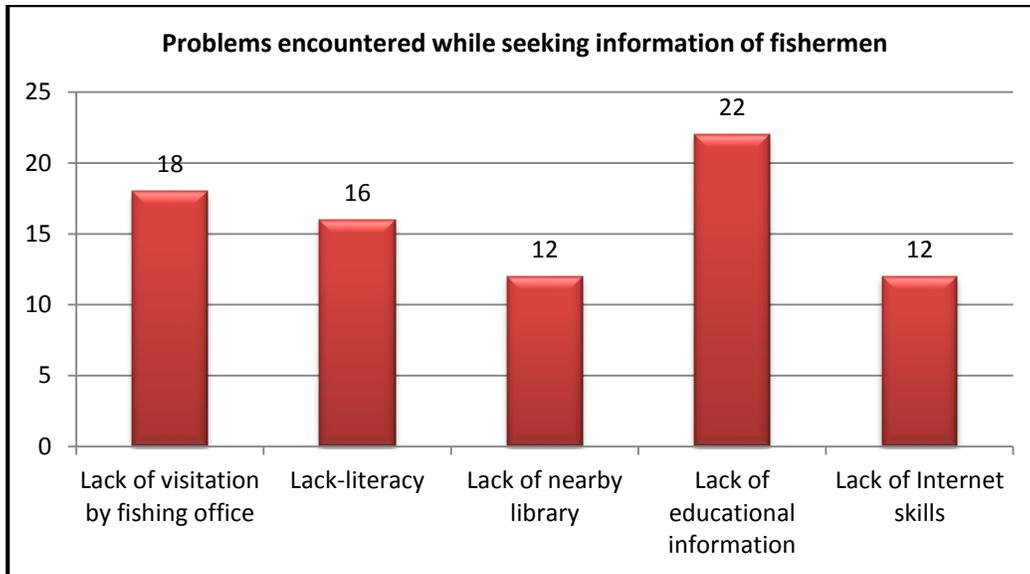


Fig.5: Problems encountered while seeking information of fishermen

This table has been analyzed and interpreted so that the information found here is that for the fishermen of this area encountered Problems encountered while the information on Seeking Information gives the number of fishermen in the information about Lack of visitation by the fishing office. And its percentage is achieved by 23%. Information on lack-literacy finds 16 fishermen. And its percentage is achieved by 20%. Information about the lack of a nearby library gives the number of fishermen as 12. And its percentage is achieved at 15%. The number of fishermen found in the Lack of educational information is 22. And its percentage is achieved at 28%. While in the information about the Lack of Internet skills, the number of fishermen is 12. And its percentage is achieved at 15%.

Facilities or Guidelines provided by Federal Government to fishermen

The information received regarding the response to a query for information on the federal government of Faculties in the fishing community in the area is presented in table no.6 below.

Table 6: Information about facilities provided by the Government to fishermen

Information of Government given facilities by fisherman	No. of Responses
Educational facilities	14
Government fishing department facility	18
Fishing storage facility	15
Government fishing budget and loan facility	18
Library & Internet facility	15

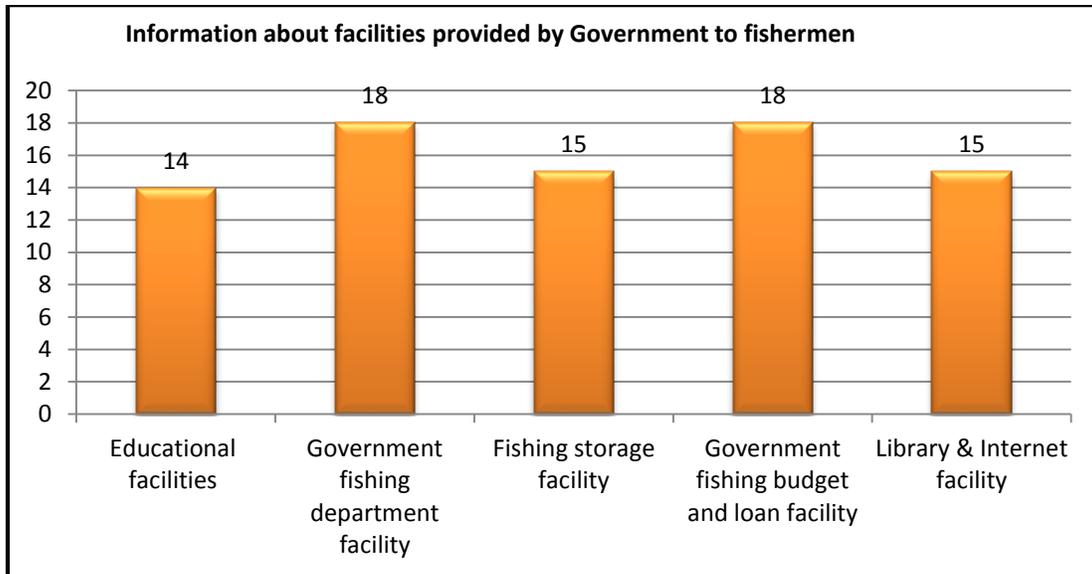


Fig.6: Information about facilities provided by Government to fishermen

This table has been analyzed and interpreted so that the information given here is that the information about Educational facilities for the fishermen of this area gives the number of fishermen as 14, and its percentage is 18%. Information about the government fishing department facility gives the number of fishermen as 18, and its percentage is 23%. Information about the fishing facility shows that the number of fishermen is 15, and its percentage is 19%. Information on government fishing budget and loan facility gives the number of fishermen as 18, and its percentage is 22%. While information about Library & Internet facility gives the number of fishermen as 15, and its percentage is 18%.

Additional Information needs of fishing community

The information received in response to a query for information on General Information Needs in the fishing community in the area is presented in table no.7 below.

Table 7: Additional Information Needs of Fishing Community

General Information Needs of fisher Community	No. of Responses
Technical Information	10
Climatologically Information	19
Environment Information	15
Geographical Information	16
Market Information	12
Health Information	08

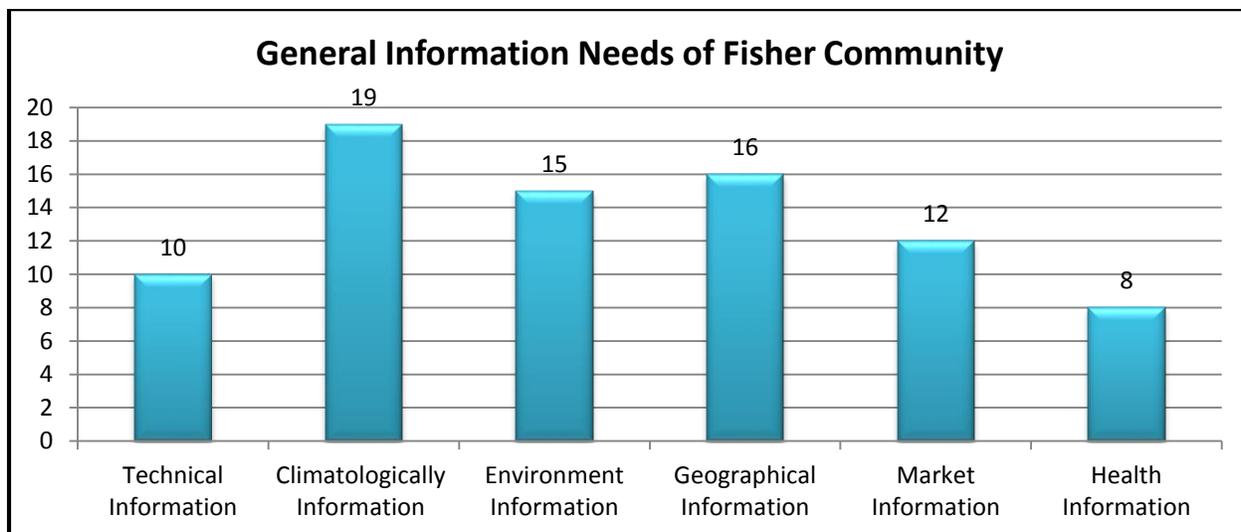


Fig. 7: General Information Needs of Fisher Community

This table has been analyzed and interpreted so that the information obtained here is that the number of fishermen in the General Information Needs of Fisher Community for the fishermen of this area is 10, and its percentage is 12%. Climatologically, the number of fishermen is 19, and the percentage is 24%. Environmental information accounts for 15 fishermen, and a percentage of 19%. Geographical Information accounts for 16 fishermen, and a percentage of 20%. In Market Information, the number of fishermen is found to be 12, and its percentage is 15%. While in Health Information, the number of fishermen is 08, and its percentage is 10%.

Conclusions and Recommendations

In this survey, it was found that as this area is near the city and possesses a long coastline fishing industry is very well developed. The percentage of High School Literacy rate is higher up to 35% whereas the percentages of graduates are low 14% comparative to High School literacy. Based on information collected about the different religions followed by people of the Fisher community, the people following the Hindu religion are about 51 % whereas those following Islam are 44 %. The percentage of people in the age group 31-35 is 48% more compared to the number of people in the age group of 35 and above which is only 10% of the total population. In Sources of weather information category, the percentage of the information available from Extension Officers is 28% whereas from the Library category the percentage is quite low at 3% comparatively. In the information category of Problems encountered while seeking fishermen Information, the percentage of Lack of Educational Information is 28 % whereas the percentage of Lack of Internet Skills category is low at 28% comparatively. In the category of Information of Government aided Facilities, the percentage of Government Fishing Department Facility is 23% whereas the percentage of Educational Facilities and Library and Internet Facilities is almost equal at 18 %. Under the General Information needs of the Fisher community, the percentage rate of Climatologically Information is 24 % whereas the percentage rate of Health Information is 10%

By this study, the interpretation and analysis of information collected from Fisher community on various factors as education, religion, age, sources of weather information, problems encountered while seeking information, information of facilities given by the government and general information needs of Fisher community was conducted and in that the number and percentage rate of every information is displayed in tabular form and graphical representation of the same are also shown as through graphical representation it becomes easy to interpreted the data and also increase or decrease in the number can be quickly visualized. The literacy rate in the Fisher community is quite low so it is highly recommended to the government to do efforts to lift literacy rates. The age factor under study shows that it is not an issue. The sources of collecting data television and radio should be used daily to get equipped with information and it is of vital importance to start a library for the development of the Fisher community. Some of the major problems encountered by the Fisher community are education, collect data from office for the fishing industry, use of the library, internet and use of various gadgets required for using the internet and to overcome these issues, necessary steps should be taken by the government and they demand to increase various facilities. And one more demand as and when there arises the need, the requirement should be fulfilled at that time only and the government should take necessary steps for this demand of Fisher community

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