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# The Use and Access of Modern Communication Technology and the Fishing Community in South India Dr.S.Janet Mary<sup>1</sup>, E.Senthil Kumaran<sup>2</sup>

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### **ABSTRACT**

The Information Revolution is producing astonishing transformation in virtually all spheres of human activity. But how can these technologies help to balance the scales of development among particular communities of a developing country like India is a big question. This article is an earnest effort to understand the role and use of communication among the fishing community of Muttom one of the most affected coastal areas of Tamil Nadu, India. The aim of this paper is to argue and anayse how the role and significance of the tools of communication is effective among the fishing folk of Muttom taking into consideration of both traditional and modern methods of communications today. This essay will seek to conclude with the findings of how the use of tools of communications such as: mobile phone, radio, television, newspaper, internet, GPS/Navigator and eco-system help the fishing community to further develop and raise the quality of life in an increasingly fast developing India.

Keywords: Fishing Community, modern Technology, Mechanised boat, Development, Media, .

### I. INTRODUCTION

All over the world, new information and communication technologies are steadily affecting societies and their governments, industries, communities, and individuals. This attempt holds the central stage in the world of communication boom and traditional industry like fishing. This endeavour is an outcome of the research carried out among the above mentioned target group with a scientific questionnaire following the method of participant observation. However, attempt has been taken to describe the respondents' views accurately and eliminate in a meaningful way the subjective elements as prescribed by the interpretive paradigm. The fishing communities largely are considered to be under the category of marginalized society that does not interact very much with the mainstream of the society. In the past two decades, the life-pattern of the fishing community has undergone a rapid change. Traditional fishermen have taken up to modern methods of fishing like mechanized boats, usage of devices for spinning potential fish zones, and other tools of communication for the effective methods of fishing. Keeping this scenario of the progress of the modern communication technology as a backdrop, this paper attempts to find out the use and eventual impact of modern communication tools by the fishing community of Muttom in Kanyakumari District, Tamil Nadu.

### 1.1 The main objective of this article:

• To find how communication tools (Radio, Television, Mobile Phone, Newspaper, GPS, Eco Sound) help to improve the livelihood of fisher folk.

## International Journal of Advance Research in Science and Engineering 🔑 Volume No.06, Issue No. 10, October 2017 www.ijarse.com

ISSN: 2319-8354

- To analyze how media help to find out local specific weather forecasts, the market prices and safety
- To know how the uses of communication tools help in fishing community for earning their livelihood, developing their culture, preventing the risk involved in fishing and alternatives to be adopted in fishing through the ethnographic analysis.
- To understand about the uses of media for information on fisheries extension, such as government scheme, credit, insurance and welfare marketing, employment and processing of fish.

The scope of this paper is to capture the effectiveness and the powerful role of communication media among the fishing community of Muttom in Kanyakumari district. Retaining a special focus on the relevance and uses of media this study documents how the fishers make use of the modern media in their profession and eventually benefit by them. This scientific study draws material from the fishing communities of Kanyakumari district, concentrating the village of Muttom by direct questionnaire method. The findings and the framework suggested here can be evolved in to a useful tool in planning and implementing the use of media, which will enhance the fisher-folk in other parts of Tamil Nadu as well. Useful and practical suggestions are formulated to broaden the scope of the study.

Communication tools play a vital role in fishing. Proper communication is highly essential in fishing as it can help in saving a number of lives, improving the livelihood and better integration into the mainstream society. The means to better communication facilities also helps to bridge the gap in knowledge that arises due to the digital divide.

A good balance is needed between hardware and software technologies of communication. At present, the cost of safe communication equipment is prohibitive for small-scale fishers. While very high frequency (VHF) devices are inexpensive sea-safety tools, their range needs to be extended. At present most of the deep-sea fishing, vessels carry VHF devices on board. These devices have a range of a maximum of 20 kms under favorable conditions. This range is not sufficient for the fishermen to contact people on shore. If the need arises for fishermen to communicate with people on shore, when they are in deep sea, the procedure followed is that they communicate the message to the nearest boat through their VHF, from there it goes to another boat and thus a relay like process takes place.

Radio plays a vital role in the fishing industry. A coastal radio network can be very useful for fishermen. The benefits of satellite weather prediction and of simple devices like hand-held radios can be made available widely to artisan and subsistence fishermen. Radios are easily affordable and compact in size. It offers both entertainment and information to the people at large (www.oneindia.in).

Apart from radio and mobile, some vital communication devices used by a large number of deep-sea fishermen are Global Positioning System (GPS) and fish finding equipment like Eco-sounder. However, not all fishermen are in a financial position to equip themselves with these devices. Fishermen who venture into the sea on Catamarans and Fiber boats rely on traditional knowledge of potential fish zones.

#### II. THE CONTEXT

# International Journal of Advance Research in Science and Engineering Volume No.06, Issue No. 10, October 2017 IJARSE www.ijarse.com ISSN: 2319-8354

The study was carried out in Muttom village in the District of Kanyakumari in Tamil Nadu. Muttom is one of the most popular coastal villages of this district. Boasting Kanyakumari's most sought after coastal village, Muttom is a fishing paradise. Culturally significant and historically breathtaking is the village of Muttom. The geographical location helps the fishers to be fully immersed in their fishing business. The fishing business is very strong at the moment despite the misfortune of tsunami. The fishing industry has a significant place in the Indian economy as dollar-spinner. It is sustained largely by life-risking, hardworking and socially ill-placed fisherfolk. Their fishing techniques are not very modern and their standard of living is poor. The fishing community in Muttom is one among the many groups of fisher-folk in the country. Scanty ethnographic and allied information on this group is available in travelogues and in district gazetteers. However, scholars like Nirmala Bai (1980), and Stephen Sam (1982, 1983-84, 1986-87) have undertaken some research on the Mukkuvar community who live in Muttom. Unfortunately, there has been no research on their lifestyle using an integrated approach.

#### III. THE ANALYSIS

This article is the outcome of the study done with 250 respondents in the coastal village of Muttom. The age group considered for this research was from 10 - 61. Among them 105 have completed primary education and very few have done higher education. It was proved in the survey that the fishing community is satisfied with the primary level of education as the higher education does not fetch any lucrative benefit. The income varies according to the fishing and their socio-economic background.

In the following analysis let us see the use of media tools and its accessibility in the above said community. As we analyse the accessibility of media with the frequency rate the results are as below.

Table: 1. Accessibility of media with the frequency rate

Accessibility of Media	Frequency	Per cent
Radio	68	27.2
TV	76	30.4
Mobile/wireless	54	21.6
Newspaper	45	18.0
DVD,VCD	7	2.8
Total	250	100.0

One third of the total respondents use TV and 27.2 per cent of respondents use radio. Interestingly 21.6 per cent of respondents use mobile/wireless during fishing. From the above table we understand that the new media mobile phone, wireless are very helpful, and the respondents make use media often.

In Modern Technology and Effective Communications, Prof. Cherian makes a clear reference to the use of Television among the coastal people of Andhra Pradesh and Tamil Nadu (Coramandal coast). According to him, though Television is not very modern with relation to internet or mobile yet many prefer to use Television at home for their use and information. He further states that radio is not very effective among them for their business and entertainment ("Modern Technologies and Rural Development" vol. II, March-April. 1998, p. 38).

Table: 2. Reliability of weather forecast information by Radio, TV

# International Journal of Advance Research in Science and Engineering Volume No.06, Issue No. 10, October 2017 Www.ijarse.com IJARSE ISSN: 2319-8354

Reliability	Frequency	Per cent
Totally Reliable	41	16.4
Reliable	59	23.6
Partially Reliable	113	45.2
Un reliable	21	8.4
Totally unreliable	16	5.4
Total	250	100.0

A vast majority of population partially rely on the weather forecast relayed by Radio and TV. The study reveals that 45.2 per cent of respondents partially trust the weather forecast by Radio and TV, 24 per cent of respondents believe in weather forecast. It is to be noted that little per cent of 5.4 do not rely or believe in the total weather forecast of Radio and Television. This is to state that Radio and television are not fully helpful for fishermen for weather forecast. Unfortunately, many are dejected and have given up the habit of listening to radio because programmes are not attractive and relevant. Maybe due to poor technological system in our country the weather forecast has been very unpredictable and inaccurate, and so, hardly helps the fishermen. Hence, many do not fully rely on Radio and TV. Many fishermen believe in their own experience in predicting the correct weather forecast.

Table: 3. Immediate information about the calamities happening in the sea.

Media	Immediately	Slowly	No use
Radio	43.6	32.4	24.0
TV	23.2	43.6	33.2
Mobile phone/wireless	55.2	9.2	35.6
Computer(internet)	11.2	14.8	74.0

Mobile phone/wireless serves the purpose of communicating the calamities happening in the sea very faster than any other media. As it is stated in the table, 55.2 per cent state that they are helped more by mobile phones/wireless Due to effective signal method the fishermen could get the information quickly by mobile. As there are as many mobile companies as possible, so it is easy to get signal for faster information to avert any calamities. Fishermen while on-shore could communicate easily to each other of this calamity when noted in their mobile. Mobile undoubtedly plays a major role in providing immediate information about calamities happening in the sea. About 43.6 per cent of the respondents' opinion that Radio gives immediate information about natural calamities, about one forth of total respondent says it is no use. Since Radio is instant, medium it is widely covered both off shore and on shore. Radio programme inform the fishermen about natural calamities. Television programmes give information slowly 43.6 percent 33.2 per cent says no use and 23.2 percent say immediately they get information. TV is an audio visual medium. It is connected with wire/cable. Fishermen cannot carry TV inside the sea while fishing. So fishermen getting information through TV programmes are slow in process. Also majority of the TV channels do not have separate programmes on weather or any other natural calamities. The mobile phones play a vital role, to inform natural calamities to the respondent. About 55.2 per cent say mobile gives immediate information while 35.6 per cent opinion it gives information slowly.

### International Journal of Advance Research in Science and Engineering 4 Volume No.06, Issue No. 10, October 2017 www.ijarse.com

Mobile is two-way communication. It could easily be reached in all the directions. With the use of free hand mobile phone, dissemination of information about natural calamities through it EMS/MMS/SMS is done.

Table: 4. Media information helps in a day -to- day life

Media	To a great extend	More or less	No use
Radio	17.6	56.0	26.4
TV	34.8	51.6	13.6
Mobile phone/wireless	36.4	32.0	31.6
Computer(internet)	14.8	10.4	74.8
GPS/Navigator	29.2	14.8	56.0
Eco sound	24.0	22.4	53.6
News paper	32.0	44.4	23.6

The significance of the study is that mobile phone/wireless helps the fishermen to gather more information that is supported with 36.4 per cent as highest in relation to other media. Mobile phone has become a domestic instrument for many of the fisherman. Every fisherman carries with him a mobile phone for various purposes. The information collected on the usage of radio and computer to a greater extend are 17.6 per cent and 14.8 per cent. It is observed that 75 per cent are finding it useless with the computer (internet) for fishing.

As for as the usage of GPS and ECO system 56 per cent of the respondents and 54 per cent of the respondents do not find any benefit in the usage of GPS and ECO system in their day today life. Moreover, many fishermen find it very difficult to use GPS and Eco system because it is very expensive and not affordable for an ordinary fisherman. Also 44.4 per cent of respondents answered that newspaper help them more or less for their day-today life. It goes to prove that many fishermen subscribe for daily newspapers for gathering information, as it is very cheap and reader-friendly.

Table: 5. Information about the increase of fish deposits in the sea

Media	Once in a while	Occasionally	Frequently	Never
Radio	22.4	46.8	4.0	26.8
TV	24.0	56.0	6.8	13.2
Mobile phone/wireless	16.4	8.4	26.8	48.4
Computer(internet)	9.6	7.2	11.2	72.0
GPS/Navigator	11.6	8.8	14.4	65.2
Eco sound	10.0	8.4	12.0	69.6

Under normal condition, the deposits are located by the experience of fishermen. This table does not directly relate to the experience of fishermen on fish deposit and media. However once the fishermen locate the fish deposit area then they communicate to others by mobile than any other media. That is the reason the table shows 26.8 per cent of the fishers frequently use mobile phone for this purpose.

The second best media that is very much in use for this purpose is GPS/Navigator system. According to the study, 14.1 per cent make use of this medium for information on fish deposits. Interestingly 72 per cent never

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# International Journal of Advance Research in Science and Engineering Volume No.06, Issue No. 10, October 2017 IJARSE www.ijarse.com ISSN: 2319-8354

use internet to seek information on fish-deposits in the sea. As it is not very useful and fast to make use of this system, they do not take resort to this system.

**Table: 6 Government Schemes on Fishing Industry** 

Media	Once in a while	Occasionally	Frequently	Never
Radio	50.0	17.6	7.2	25.2
TV	41.6	36.0	15.8	6.8
Mobile phone/wireless	7.6	26.4	17.6	48.4
Computer	3.2	6.0	14.8	76.0
News paper	21.6	38.4	16.8	23.2

Government schemes are important for the development of any department in a developing country. According to our study, 50 per cent of people said only once in a while they get information about government schemes through radio. This is because the radio stations do not broadcast programmes on any developmental schemes, or many do not listen to it or the time of broadcasting is not suitable to the fishermen. On the other hand 76 per cent stated that they never use or benefit by the computer for this purpose. Computer/internet does not provide any useful programmes as such in this area. It is found that 38.4 per cent occasionally come to know through newspaper.

Table: 7. Educative Information on Fish Preservation Method

Media	To a great extent	More or less	No use
Radio	33.6	45.2	21.2
TV	33.2	43.2	23.6
Mobile phone/wireless	18.0	17.2	64.8
Computer(internet)	7.6	9.2	83.2
News paper	23.6	36.8	39.6

Through radio and TV equally share two thirds of respondent about educative information on fish – preservation method to a greater degree. Fishermen use radio and TV most the time and listen to it for any relevant programme. The use of mobile phone in this area is only 18 per cent. Computer and internet are used only 8 per cent and 83.2 per cent of respondents do not use internet at all for educative information of fish-preservative methods.

### IV. FINDINGS OF THE RESEARCH

### 1. Radio programmes are insufficient for fishing community

Table No 2 disproves that a vast majority of population partially rely on the weather forecast relayed by Radio and TV. The study reveals that 45.2 per cent of respondents partially trust the weather forecast by Radio.

### International Journal of Advance Research in Science and Engineering Volume No.06, Issue No. 10, October 2017 www.ijarse.com

**IIARSE** ISSN: 2319-8354

Table No 3 states that about 43.6 per cent of the respondents' opinion that Radio gives immediate information about natural calamities. Since Radio is instant, medium it is widely covered both off shore and on shore. Radio programme inform the fishermen about natural calamities.

Table No 7 describes that through radio and TV equally share two thirds of respondent about educative information on fish - preservation method to a greater degree. Fishermen use Radio and TV most of the time and listen to it for any relevant programme.

### 2. The utility of mobile phone by the fishing community is relatively high

Table No 3 describes that the mobile phones play a vital role, to inform natural calamities to the respondent. About 55.2 per cent say mobile gives immediate information. Mobile is two-way communication. It could easily be reached in all the directions. With the use of free hand mobile phone, dissemination of information about natural calamities through it EMS/MMS/SMS is done.

Table No 4 states the significance of the study is that mobile phone/wireless helps the fishermen to gather more information that is supported with 36.4 per cent as highest in related to other media. Mobile phone has become a domestic instrument for many of the fisherman. Every fisherman carries with him a mobile phone for various purposes.

Table No 5 does not directly relate to the experience of fishermen on fish deposit and media. However once the fishermen locate the fish deposit area then they communicate to others by mobile than any other media. That is the reason the table shows 26.8 per cent of the fishers frequently use mobile phone for this purpose.

### 3. The usage of internet by fishing community is low

Table No 4 proves the hypothesis that 75 per cent are finding it useless with the computer (internet) for fishing. Table No 5 describes interestingly 72 per cent never use internet to seek information on fish-deposits in the sea. As it is not very useful and fast to make use of this system, they do not take resort to this system.

Table No 6 states that 76 per cent never use or benefit by the computer for this purpose. Computer/internet does not provide any useful programmes as such in this area.

Table No 7 states that Computer and internet are used only by 8 per cent and 83.2 per cent of respondents do not use internet at all for educative information of fish-preservative methods.

### 4. The fishing community uses TV, DVD, VCD, and Radio programmes mostly for entertainment purpose rather than for information and education on fishing and its allied activities.

Table No 3 proves that Television programmes give information slowly 43.6 per cent, 33.2 per cent say no use and 23.2 per cent say immediately. TV is an audio-visual medium. It is connected with wire/cable. Fishermen cannot carry TV inside the sea while fishing. Therefore, fishermen getting information through TV programmes are slow in process. In addition, majority of the TV channels do not have separate programmes on weather or any other natural calamities

#### V. CONCLUSION

The present study has taken into consideration the uses of modern communication technologies among the fishing community of Muttom.

### International Journal of Advance Research in Science and Engineering Volume No.06, Issue No. 10, October 2017 www.ijarse.com

**IIARSE** ISSN: 2319-8354

According to the study it is clear that mobile phone plays a vital and useful role for the fisher community in Muttom which in many ways go along with the modern understanding of the usage of the common people. This study chose to discover the effectiveness of the mobile phone among the fishing community of Muttom. The study has come to prove that mobile technology holds high in its utility and effectiveness among other tools of comunication among the fishing community. Obviously, the findings further confirmed that most of the respondents use the tool of mobile phones for their development of fishing, market transaction and even for other social reasons.

While analysing about the effectiveness of the tools of the communication among the fishing community, the thesis pre supposed that Radio does not play an effective role. On the contrary, according to the study radio plays a significant role second to mobile phone. This is proved through the research that majority of the fishing community use the traditional medium of Radio. Eventhough, Radio is not an attractive and powerful medium of communication in relation to other modern media yet, according to the fishing community of Muttom the Radio serves as a handy and useful tool for periodical programmes related to fishing and other needs of the community such as entertainment, sports, marketing, weather forecast and many other.

Among the audio visual media, Television play a significant role in our society. The study has proved that the respondents use Television for weather forecast, to assess the marketing situation, entertainment and also to know proper information about the fishing communities around the world. This medium is more useful on-shore than off-shore. No one can deny the fact that this medium has been one of the useful and very accessible one for every common man involved in fishing.

The study took into consideration of the usefulness of GPS and Eco-sound technology among the fishing community of Muttom. According to many respondents eventhough many do not use this technology yet, for those who use it has been a very useful and beneficial communication tools while fishing in deep sea waters and during long hours of fishing.

Computer rules the lives of many people in the modern business world. The study proves that this technology has not yet penetrated into the fishing community effectively. It could be due to its highly developed technological method which is not very much accessible for the ordinary fishing community.

Finally, the reseach is an earnest attempt to find out the use and effectiveness of communication media among the fishing community of Muttom. The findings of the research prove that Mobile Phones, Radio and Television have been powerful media among the fishing community and it could be still effective in future.

#### REFERENCE

- [1] Nirmala Bai (1980), and Stephen Sam (1982, 1983-84, 1986-87)
- [2] ("Modern Technologies and Rural Development" vol. II, March-April. 1998, p. 38).