

# Imprints made by Technology in Work Life of Fishermen for Advancement in Fishing Methods along the East Coast of Chennai

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## Abstract

Fishermen community is one of the oldest and cultured group of people involving in fishing and other related activity. They are not only doing their job but also unofficial defence community in sea shore. Their quality work life progress is very slow due to various hurdles and natural disasters. The technology plays a vital role in their work. Education level of this community improved compared to previous generation. But awareness of new technology and implementation wise still they are lacking even though they had much fishing experience. This study try to understand the level of impact created by technology and change in their life.

**Keywords:** Fishermen, Work Life, Fishing Experience, ICT

## I. INTRODUCTION

Satisfactory or unsatisfactory job environment decides the work life quality of worker or employees. Information Technology and Communication (ICT) plays a vital role in giving proper and rightful environment to many worker or employees. This world is a data world which decides the quality and quantity of work life. This work life is also decided by the co-workers in skill based working condition.

The actual work life of a person carries various dimension in satisfaction level in any profession. Work may not be confined to our job, it may be business or profession which we are doing regularly. We are doing it regularly for our existence which almost takes one third of our life cycle. It may vary from person to person. In fishermen community it is little bit different. Their work is continue for 2 to 3 days in a stretch. Some fish reproduction duration, they don't have any work. Their professional is very difficult due to natural force. The sea environment is

challenge even for travel. Working in that open environment is great challenge and needs courage.

Life of a Fishermen

### 1.1 Indian Scenario

Even though uncertainty occur in seafood global trade, India a leading supplier of shrimp and frozen fish in universal market has been cling on to its position. The export fetched \$7.08 billion in 2018 increased from \$5.77 billion a year ago leads to continuing domination in export basket. The target is \$10 billion by 2022. Frozen fish is 2<sup>nd</sup> largest export item which contributed 25.64% in quantity (10.35% in earnings).

### 1.2 Background of Kanathur to Kovalam

East Coast road is one of the beautiful stretch between Chennai to Pandicheri. After the toll gate the first fishermen village is KanathurReddykuppam, which is in Thiruporur Block in Chengalpattu District of Tamil Nadu State, India. As per 2011 census details of 2011 Reddikuppam Village has number of houses are 99

and total population is 396, Village literacy rate is 71.5%, Female Population is 50.0% and the Female Literacy rate is 31.8%.

When we look at the literacy rate, the people of this village mostly depends on their native work of fishing. Because of the illiteracy fishing community is not aware of government policies, latest technology implementation, training programme and modern techniques etc.

Muthukadu is one of the attractive fishermen Village in Thiruporur Block of Chengalpattu district, which is near to Bay of Bengal with a chance of humidity in the weather.

One of the beautiful fishing village near Chennai is Kovalam (Covelong). It is 40 km south to Chennai city on East Coast Road (ECR) enrooted to Pandicheri. It was developed by Nawab of Carnatic, Saadat Ali which was occupied by French and then by British. It a quaint fishing village which has retained its ancient charm and offers a glimpse of a fishing village lifestyle.

A survey was conducted among fishermen community in these major villages and nearby colonies to assess the today's life style of fishermen and due to new technologies, awareness programs and government initiative etc.

Most of the population outside of the fishermen colony are migrants due development of small business near main roads. But the native people still depends on their fishing life. The educational qualification of young people improved little bit, but not to the extent of reading newspaper and visiting websites to lookout for the news to improve their life style.

## II. LITERATURE REVIEW

Jairam Ramesh (Conservation and Management of Aquatic EcoSystems, 1994) holds that sea shore developmental programme around the sea should be carried out without any prejudgment to the material and social well-being of the fishermen community.

Arnold (Water of India- Quality and Quantity, 1991) has made very robust exemptions to the erection of stones at various strategic points along the coast for supporting the National Highways running along the coast.

Jacob Arun suggested that (Fish Marketing and Management, 1978) self-help groups should come forward to promote fish marketing centres in villages, using the invaluable services of the women population in the fishing villages

Sankaran Pillai acknowledged that (Fisheries in Kanyakumari District, 1992) the economic and rural backwardness of the fishermen are the result of their lack of skill and their non-migratory nature. They do not have the means to try any of the modern techniques of fishing.

This paper focuses on identifying the quality of work life in fishermen community, impact of new technologies in their sea life in coastal area between Kanathur to Kovalm. The scope of the study is the interacting with fishing village people through interview, Questionnaire and one to one communication to identify their life style, economic level and their problem at sea, then giving suggestion to improve their life.

## III. RESEARCH OBJECTIVES

- To find the Education level of fishermen community
- To detect the navigation knowledge in sea life
- To ascertain the fishing experience in the community of identified area
- To identify few new technologies impact in their sea life
- Suggest few solution for that problem pertaining to the covered area.

## IV. RESEARCH METHODOLOGY

The study pertains to the analysis of the opinion obtained from fishermen. The study uses the descriptive research design by collecting primary

data. In this regard, a structured questionnaire has been designed by using a technique of scaling from one to five. The size of the sample that was administered in the current study is 150 with the usage of quota sampling.

### V. HYPOTHESIS

- $H_{0A}$ : Association testing of Education level of the fishermen and their basic navigation knowledge, ill legal fishing technology, new technology in fishing, training offered by government in fishing technique and communication technology.
- $H_{1A}$ : Association testing of Education level of the fishermen and their basic navigation knowledge, ill legal fishing technology, new technology in fishing, training offered by government in fishing technique and communication technology.
- $H_{0B}$ : Association testing of Fishing Experience of the fishermen and their basic navigation knowledge, ill legal fishing technology, new technology in fishing, training offered by government in fishing technique and communication technology.
- $H_{1B}$ : Association testing of Fishing Experience of the fishermen and their basic navigation knowledge, ill legal fishing technology, new technology in fishing, training offered by government in fishing technique and communication technology.

### VI. DATA ANALYSIS AND INTERPRETATIONS

The respondents opinion were analysed by using the appropriate statistical measures in order to fulfil the requirements of research objectives. The  $\chi^2$  test tables are as follows:

**Table-1:**  $\chi^2$  analysis

	$\chi^2$ value	p-value
$\chi^2$ test results	55.653	0.000

**Table-2:**  $\chi^2$  analysis

	$\chi^2$ value	p-value
$\chi^2$ test results	50.750	0.000

**Table-3:**  $\chi^2$  analysis

	$\chi^2$ value	p-value
$\chi^2$ test results	39.917	0.001

**Table-4:**  $\chi^2$  analysis

	$\chi^2$ value	p-value
$\chi^2$ test results	33.935	0.006

**Table-5:**  $\chi^2$  analysis

	$\chi^2$ value	p-value
$\chi^2$ test results	41.761	0.000

From table 1 it can be inferred that the  $\chi^2$  critical value of utilization of navigation technology is 55.653 and the p-value is 0. If the critical probability value  $< 0.05$ , the hypothesis will be accepted. It means that there is an association between educational level and utilization of navigation technology.

From table 2 it can be inferred that the  $\chi^2$  critical value of ill legal fishing technology is 50.750 and the p-value is 0.000. If the critical probability value  $< 0.05$ , the hypothesis will be accepted. It means that there is an association between educational level and utilization of ill legal fishing technology.

From table 3 it can be inferred that the  $\chi^2$  critical value of awareness of new technology in fishing is 39.917 and the p-value is 0.001. If the critical

probability value  $< 0.05$ , the hypothesis will be accepted. It means that there is an association between educational level and of awareness of new technology in fishing.

From table 4 it can be inferred that the  $\chi^2$  critical value of training offered by government in fishing technique is 33.935 and the p-value is 0.006. If the critical probability value  $< 0.05$ , the hypothesis will be accepted. It means that an association between educational level and training offered by government in fishing technique.

From table 5 it can be inferred that the  $\chi^2$  critical value of utilization of communication technology is 41.761 and the p-value is 0.000. If the critical probability value  $< 0.05$ , the hypothesis will be accepted. It means that an association between educational level and utilization of communication technology.

**Table-6:**  $\chi^2$  analysis

	$\chi^2$ value	p-value
$\chi^2$ test results	22.257	0.135

**Table-7:**  $\chi^2$  analysis

	$\chi^2$ value	p-value
$\chi^2$ test results	58.690	0.000

**Table-8:**  $\chi^2$  analysis

	$\chi^2$ value	p-value
$\chi^2$ test results	20.770	0.188

**Table-9:**  $\chi^2$  analysis

	$\chi^2$ value	p-value
$\chi^2$ test results	69.264	0.000

**Table-10:**  $\chi^2$  analysis

	$\chi^2$ value	p-value
$\chi^2$ test results	37.050	0.002

From table 6 it can be inferred that the  $\chi^2$  critical value of utilization of navigation technology is 22.257 and the p-value is 0.135. If the critical probability value  $> 0.05$ , the hypothesis will be rejected. It means that there is no association

between fishing experience level and utilization of navigation technology.

From table 7 it can be inferred that the  $\chi^2$  critical value of ill legal fishing technology is 58.690 and the p-value is 0.000. If the critical probability value  $< 0.05$ , the hypothesis will be accepted. It means that there is an association between fishing experience level and utilization of ill legal fishing technology.

From table 8 it can be inferred that the  $\chi^2$  critical value of awareness of new technology in fishing is 20.770 and the p-value is 0.188. If the critical probability value  $> 0.05$ , the hypothesis will be rejected. It means that there is no association between fishing experience level and of awareness of new technology in fishing

From table 9 it can be inferred that the  $\chi^2$  critical value of training offered by government in fishing technique is 69.264 and the p-value is 0.000. If the critical probability value  $< 0.05$ , the hypothesis will be accepted. It means that there is an association between fishing experience level and training offered by government in fishing technique

From table 10 it can be inferred that the  $\chi^2$  critical value of utilization of communication technology is 37.050 and the p-value is 0.002. If the critical probability value  $< 0.05$ , the hypothesis will be accepted. It means that there is an association between fishing experience level and utilization of communication technology.

## VII. CONCLUSION

Based on the above analysis there is a good association between Education level of fishermen and their basic navigation knowledge, ill legal fishing technology, new technology in fishing, training offered by government in fishing technique and communication technology and There is significant relationship between Fishing Experience of the fishermen and their ill legal fishing technology, training offered by government in fishing technique and communication technology.

But there is no significant relationship between Fishing Experience of the fishermen and their basic navigation knowledge and new technology in fishing. Fisher man should be encouraged to have better education to understand and implement new technologies. Fishing experience does not have any impact on new methods of fishing and adoption of new technologies except few. The Government should also encourage them to train in new fishing technologies by conducting free workshops and training.

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