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SCIENTIFIC LITERACY AMONG FISHERFOLK IN RAMANATHAPURAM COASTAL AREA

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Abstract

Fishing is probably the most dangerous occupation in the world. The people affected by accidents at sea are often among the poorest in society. In 2006, FAO launched a "Project Global Safety at Sea" for small-scale fisheries in developing countries. Its overall objective is to improve the livelihoods of small-scale fishing communities by decreasing the number of accidents at sea and their effects. In order to avoid these natural catastrophes and adopt suitable measures to prevent them, there arises the need for scientific literacy among the fisher folk. The investigator He studied about different stages of fishing activities, and fishing practices. He has observed that the fishing people have very poor scientific literacy regarding fishing. Even though they have deep knowledge in fishing practices, processing and technology. It was gained by real experience in this field. But they don't known about the scientific principles involved in the process of fishing.

Introduction

India has an extensive coastline lengthof7150 km. The Gulf of Mannar region occupies the southeast coast of India (Latitude - 8° 55' 9°15' N Longitude - 78° 79°16' E). The entire, Coastline of Gulf of Mannar from Thoothukudito Dhanushkodi is sheltered from the fury of wind and waves by the existence ofa chain of Islands. The Island system and coral reefs spread over this region offer shelter for a variety of marine fauna and flora. Both mechanised trawlers and non-mechanized vessels carry out the fishing throughout the year. But the year shore seine fishing is seasonal in certain areas particularly in the southern region, When the Gulf of Mannar covering its southern portion becomes rough during April to September, the shore seine operations shift to Palk Bay and when the Palk Bay becomes rough during October to March, the units migrate to Gulf of Mannar. There are eight trawl fish landing centres such as Pamban (Therkuvadi), Mandapam(boatbuilding yardside) Kilakarai, Ervadi, Valinokkam, Mundal, Vembar and Thoothukudi. Hence arises the need for the study.

Objectives of the Study

1. To find out the level of Scientific Literacy among Fisher folk.
2. To find out the significant difference between Below 40 and Above 40 Fisher folk towards Scientific Literacy.
3. To find out the significant difference between Hindu and Christian Fisher folk towards Scientific Literacy.
4. To find out the significant difference between BC and MBC Fisher folk towards Scientific Literacy.

5. To find out the significant difference between Educated and Uneducated Fisher folk towards Scientific Literacy.
6. To find out the significant difference between Married and Unmarried Fisher folk towards Scientific Literacy.
7. To find out the significant difference between Fishing and non-Fishing Fisher folk towards Scientific Literacy.
8. To find out the significant difference between Watching and Not Watching Fisher folk towards Scientific Literacy.

Hypotheses of the Study

The hypotheses formulated in this study are as follows

1. The level of Scientific Literacy among Fisher folk.
2. There is no significant difference between Below 40 and Above 40Fisherfolk towards Scientific Literacy.
3. There is no significant difference between Hindu and Christian Fisher folk towards Scientific Literacy.
4. There is no significant difference between BC and MBC Fisher folk towards Scientific Literacy.
5. There is no significant difference between Educated and Uneducated Fisher folk towards Scientific Literacy.
6. There is no significant difference between Married and Unmarried towards Scientific Literacy.
7. There is no significant difference between Fishing and non-Fishing Fisher folk towards Scientific Literacy.
8. There is no significant difference between Watching and Not watching Fisher folk towards Scientific Literacy.

Methodology – in- Brief

Design : Descriptive
Method : Normative
Technique : Survey

Sample

A stratified representative sample of 100 fishermen collected from the Ramanathapuram Coastal area with due representation given to the variables, viz. Age, community, etc.

Tool

Scale on Scientific Literacy among fisher folk developed and validated by A.Arumugam and Shirley Moral.C (2013).

Statistical Techniques Used

The following statistical technique was used for analysis. Test of significance of difference between the means of large independent samples.

Delimitation of the Study

Though Ramanathapuram Coastal Area covers many villages, only five villages have been covered for want of time. This is a delimitation of the study.

The study involves only eight independent variables though many more may be involved. This is yet another delimitation of study.

The present study is specifically designed for the measurement of scientific literacy among fisher folk. It is expected that the results obtained would be helpful in organizing effective scientific literacy campaigns among the fisher folk. It is hoped that the findings of the study would yield fruitful results as expected.

Analysis and Interpretation

Table 1

Variable	Sub-Variable	N	Mean	SD	't' Value	Level of Significant at 0.05
Age	Below 40	25	21.8	0.71	1.94	NS
	Above 40	75	20.45	0.36		
Religion	Hindu	23	19.95	2.97	1.36	NS
	Chirstian	77	21.03	3.36		
Community	BC	10	23.7	1.12	2.77	S
	MBC	90	20.46	0.32		
Educational Qualification	Educated	72	20.33	0.39	2.67	S
	Uneducated	28	21.96	0.56		
Marital status	Married	95	20.67	0.33	3.1	NS
	Unmarried	5	23	1.76		
Elementry Educational Status of Children	Educated	89	20.60	0.34	2.1	NS
	Uneducated	11	22.27	1.04		
Professional Status	Fishing	95	20.75	0.33	0.66	NS
	Non-fishing	5	21.4	1.50		
Watching Television	Watching	55	22.69	0.39	9.0	S
	Not watching	45	18.46	0.29		

Important Findings

The following are the important findings of the present investigation

1. The level of Scientific Literacy among Fisher folk is low.
2. There is no significant difference between Below 40 and Above 40 Fisher folk towards Scientific Literacy.
3. There is no significant difference between Hindu and Christian Fisher folk towards Scientific Literacy.
4. There is significant difference between BC and MBC Fisher folk towards Scientific Literacy.
5. There is significant difference between Educated and Uneducated Fisher folk towards Scientific Literacy.
6. There is no significant difference between Married and Unmarried towards Scientific Literacy.
7. There is no significant difference between Educated and Uneducated Fisher folk towards Scientific Literacy.
8. There is no significant difference between Fishing and non-Fishing Fisher folk towards Scientific Literacy.
9. There is significant difference between Watching and not watching Fisher folk towards Scientific Literacy.

Conclusion

Literacy can become a tangible and sustaining process only when the neo-literate materials are based on the needs and problems of the neo-literates. In this connection it is recommended to prepare need based materials. Books/Journals/ Audio-video packages on the following topics can be prepared exhibited for the benefit of the fisher folk.

Neo-literate materials could be produced on the following

- Innovation in fishing techniques
- Processing of fish
- Storage and marketing fishes
- Formation co-operative organization for women for establishing viable units related to processing of fish and other marine products
- Books on Government Welfare Scheme for fishermen
- Books on fishing mechanism
- Books on family values, women rights, small families etc
- Health and Hygiene.

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