SOCIO-ECONOMIC CONDITIONS OF MARINE FISHERMAN IN VISAKHAPATNAM DISTRICT OF ANDHRA PRADESH

Dr. R. Santha Kumari, M.A., M.Phil. PhD.

Post Scholar Department of Economics, Andhra University, Visakhapatnam.

Abstract:
Fish play a vital role in the food security of the country and the world as a whole fish is the major source of protein. Protein deficiency leads to chronic diseases like anemia which is dominant in developing countries like India. In addition to supplementation of protein, fish also supplies essential amino acids, fatty acids, water soluble and soluble vitamins. In other words fish meat is an essential component of human and animal nutrition. The demand of fish is continuously increasing based on the nutritional value and increasing population of the world and Food And Agricultural Organization (FAO) has estimated the demand for fish as 180 million tons by 2015 from the existing 145 million tons. Augmentation in fish production is possible by proper management of water bodies is the main concept of “BLUE REVOLUTION”.

Key Words: Anemia, Protein, Nutritional, Water bodies.

I. INTRODUCTION:
Nine out of thirteen districts of Andhra Pradesh are along the coastline and the total length of the coast is around 974 KM. The total continental shelf is more than 33,227 Sq.km. The total marine fishermen population in the state is around 6.05 lakh and sea going fishermen are around 1.5 lakh. The total fishing crafts in the state are around 29,195 with around 12,747 motorized crafts, 1771 Mechanized and 14,677 traditional crafts. There are 4 fishing harbors 353 fish landing centers and 555 fishing villages.

Fishermen contribution to the development of small-scale fisheries is not recognized and compensated properly due to the social and cultural discrimination against them. They have acquired a secondary status in social life, economic activities
and decision-making. A number of socio-economic constraints limit their work productivity and role in employment and income generating activities. They have the potential to play an active and sometimes dominant role in fishing related activities.

Visakhapatnam district is one of the important maritime districts of Andhra Pradesh, the fishing households are busily engaged in all the sea shore-based activities like sorting, weighing, salting, drying, marketing, etc. However, their economic activities go unnoticed. There is no scientific and extensive study on the economic activities of fishing households. Hence, a research is required inevitably to weed out the exploitation of the weaker section with total illiteracy living along the coastal line. It will throw light on their real contribution for economic development. This will also pave the way for providing proper compensation for their activities through suitable policy measures. The present research aims at studying the fisheries households conditions of Marine Fishing in Visakhapatnam District.

II. Objectives and Hypothesis:

The following are the important objectives of the present research study:

- To assess the importance of marine fisheries in Andhra Pradesh and to prepare the profile of marine fisheries in Visakhapatnam district specifically;
- To determine the extent to which socio-demographic conditions that have an impact to promote the living status of fishing households;
- To analyze the various fish marketing of the marine fishing households;
- To bring out the different sources of income, per capita income and the pattern of expenditure and the marine fishing households; and
- To find out the problem of fishing households and to offer suitable policy suggestions to strengthen the fisheries conditions of marine fishing households.

III. Methodology Adopted in the Study:

The present study has considered Visakhapatnam district as the study area since it has the lengthiest coast of Andhra Pradesh. In addition, fishery is the major source of employment in the coastal economy and it also consists of different types of activities in
fisheries ranging from production, marketing of fishes and dried fishes, fish processing, exporting etc.

Marine fishermen population in the coastal villages in each zone of the district and active fishermen in the coastal villages form the universe. The researcher has selected two mandals one is Nakkapallimandal and another mandal is Visakhapatnam urban. From these two mandals 6 villages out of the 63 coastal villages in the districts of Visakhapatnam are selected, they are: Rajayyapeta, Bangarammapeta and D.L.Puram villages from selected Nakkapallimandal and Pedejalaripeta, Kottajalaripeta and Mangamaripeta villages are selected from Visakhapatnam (U). The selected marine fishermen villages are Rajayyapeta, Bangarammapeta, D.L.Puram, Pedejalaripeta, Kottajalaripeta and Mangamaripeta. As far as the present study is concerned, the investigator proposed to collect the data required by adopting stratified percentage sampling technique. The total respondents are belonging to traditional craft fishing households and traditional motorized boat fishing households.

From each mandal 75 fishing households from traditional craft, 75 fishing households from traditional motorized boat fishing households the total of 300 sample respondents was selected two mandals. Among them 150 respondents were traditional craft fishing households and 150 were traditional motorized boat fishing households.

This study is based on both primary and secondary data. Analyzing the about conditions of marine fishing households in the study area, primary data have been used. An interview schedule was used to collect primary data required for the study, while electing the fishing households for collecting primary data, stratified percentage random sampling technique was used. The requires secondary data have been used for analyzing the growth of fish production and employment potential of fisheries in India, Andhra Pradesh and Visakhapatnam district from various published and unpublished literature. The required primary data were collected from the selected households with the help of a comprehensive pretested interview schedule through personal interview method. The data were collected over a period of one year commencing from May 2014 to March 2015. This study tries to identify the most important economic determinants of the various
economic and social elements of the fishing households. The study has adopted Chi-square test, Regression and other descriptive statistics. Various trend models are also adopted to forecast fish production and export of various fishery products. In this an overview of the statistical techniques are also presented.

IV. Overview of Marine Fisher Sector in India:

All the marine fishing states only Karnataka and Andhra Pradesh states are above 5.00 per cent growth rates from 2000-01 to 2013-14. West Bengal, Kerala and Puduchery states are negative growth rates are same period. During the last 25 years, the Indian seafood export increased from 75,591 tonnes in 1980-81 to 983756 tonnes in 2013-14 (Table 4.4). During the same period, the value of seafood trade also increased from Rs.234.84 crores to Rs.30213.26 crores. The unit value has increased from Rs.31.07 to Rs.307.12 per kg during the same period.

The marine fisher population is concentrated in the East coast of India (59 per cent) constituting West Bengal, Orissa, Andhra Pradesh and Tamil Nadu (17, 50,790). Among the maritime states, Goa ranks first in literacy of marine fisher folk with 79.33 per cent which is found lower than State literacy rate of 82.01 per cent. In Andhra Pradesh rank is last all the marine states.

In India, marine fisheries sector employs around 2.9 million people of which 12.47 lakh people are in active fishing, 14.97 lakh in secondary sector avocations and 2 lakhs in tertiary sector. Occupational activities like marketing is dominated by females (MF ratio (male female ratio) of 4.5), labour in the secondary sector is done by men (MF ratio of 1.0). Curing /processing and peeling are undertaken by women role is very high (MF ratio of 7.4 and 8.6 respectively). All the marine states, Goa state 96.85 per cent highest members in fisheries co-operatives. The lowest fisheries co-operative members in Andhra Pradesh state only 31.43 percent.

In Andhra Pradesh, Srikakulam district has maximum fishing villages (128) and West Godavari with minimum (7). Average fisher households per village in the state is 1091 while the highest is in East Godavari district (1703) and lowest is in Nellor district (684). Maximum fisher population was observed in East Godavari district (27.29 per cent) followed by Visakhapatnam (18.77 per cent) and Srikakulam (16.26 per cent).
Occupational activities like, marketing is dominated by females (MF ratio (male female ratio) of 8.2), labour in the secondary sector is done by men (MF ratio of 2.9). Curing /processing and peeling are undertaken by women role is very high (MF ratio of 12.5 and 8.4 respectively). women accounted for 74.59 per cent of the work force in marketing, curing/processing and peeling sectors.

V. **Socio-Demographic Characteristics of the Selected Marine Fishermen households:**

This study indicates that the fishermen community is traditional bound and that it prevents the men in the most productive age from work participation. After the age of 65, the male members keep away from fishing and they are cared by their children. The study indicates that the youth in the fishermen community do not like the fishing activities. The study shows that all the respondent fishing households in the study area are married and have a wife and children. The study reveals that 73.00 per cent of the fishermen in the study area belong to Hindus. 25.33 per cent of the households Christians The present survey reveals that the spread of education among the fishing households community is 51.00 per cent.

Apart from fishing which is the main occupation of majority of fishermen, a sizeable number of fishermen and fisherwomen are engaged in fishing allied activities like fish-vending, wholesale trade in dried fish and fresh fish, net making, fish processing and coir making. 45.00 per cent are not 134 having any subsidiary work and they do not earn any income to their households. The present study indicates 89.67 per cent of the fishing households families are nuclear families. More than 90 per cent of the households have big families. The average number of the family members in the study area is 4.8. This accounts for overpopulation in the coastal villages and the consequent socio-economic backwardness of the population.

The study reveals that 69.25 per cent of the fishermen are living in houses of their own. Among the 300 samples, Most of the houses have a living room, a bed room and a kitchen. This study reveals that 77.33 per cent of fishermen villages have poor water facilities. Most of the houses are devoid of sanitary facilities. Two-fifths of the respondents appreciated the system of family planning. 41.00 per cent of the fishermen
respondents received medical aid from private hospital. A majority of the respondents have not taken life insurance policy.

This study further reveals that the average dependency ratio varies from a minimum of 1:2 on traditional motorized boat and to a maximum of 1:3 on traditional craft. On an average the dependency ratio is 1:2.5 in the study area. Among 300 sample households, 22.05% marine fishing households have borrowed mainly to meet family expenditure, 21.26% for marriage and repairing their houses, 19.69% persons for religious functions, and 15.75% sample fishing households have borrowed for buying crafts or gears. The borrowing habit is more prevalent among the traditional motorized boat fishing households.

VI. Fish Marketing Problems:

It is inferred from the study that, among the various problems by marine fishing workers, long travel in the sea is the main reason which constitutes 51.38 per cent. Next 49.45 per cent of the respondents have opined that a higher profit fishing activity is seasonal in character. 49.15 per cent of the respondents said they are affected by the natural calamities like cyclone, heavy rains and other low depression in the Bay and 48.66 per cent of the respondents pronounce the low income due to poor catch and low storage facilities.

The study reveals that, 57.67 per cent of the sample fishing households opinion that during off season alternative employment opportunities may be created which would improve their living conditions. Others feel that better wages for their work, a helping hand to buy a boat or net, provision of better working facilities and more catch lead to a better living spectrum. It is clear from the study that the marine fishing households are affected by more than one disease at a particular time. Majority of the marine fishing households are reported to be affected by seasonal fever and headache. The reason is that they have journey for long hours in the sea and get sea shower air. Majority of the respondents have fishing license, which is enrolled in the fishermen accident group insurance scheme, for which the Government is contributing the whole premium for fishermen. Other schemes are yet to reach them.
This study also reveals that the expenditure on food items, entertainment, education, establishment, religious festivals and social functions are the major constituents of the sample households expenditure. The mean annual households expenditure of the traditional craft and traditional motorized boat per family is 41,212.50 and 49,987.50 respectively. The analysis of data discloses that the fishing households family spends 49,409.28 on household expenses. The average amount spent on food is more which is 31,154.50 (63.50%).

The study shows that the co-efficient of annual per capita income variable is positive and statistically significant with a value of 0.778. As the function is linear, the co-efficient of per capita income variable straight away indicates the Marginal Propensity to Consume (MPC). This analysis inferred that with every increase in the annual per capita income from the existing mean level by one rupee, the annual per capita consumption would increase marginally by 0.78 rupee in the sample households.

As indicated in the study, the Marginal Propensity to Save could be derived from Marginal Propensity to Consume by the relationship \( MPS = (1 - MPC) \). Using this relationship the MPS in the sample households is derived and it is (1-0.78) 0.22, which implies that every increase in income by one rupee, the household might have the capacity to save 0.22. This analysis evident that a little to the tune of 0.22 is available for savings. Therefore the fifth hypothesis is that ‘There is no significant relationship between consumption expenditure of fishing households and savings in the study area’ is proved. Hence, the increase in the income of the fishing households leads to increase the consumption expenditure and savings but the savings is not proportionate.

The average annual per capita savings in house and jewels have been found to constitute a major portion of the average per capita savings of the total samples. Debt of fishing households consists of borrowing money from commercial banks, fishermen society, self help groups, money lenders, friends and relatives. A majority of the fishing households have borrowed from self help groups. The fund borrowing from SHG is easier as they provide credit by membership fee and pawning the ration card. In this regard, there is a significant association between the income of the marine fishing households and source of borrowing.
The study indicated that the result of chi-square test shows a significant association between the income of the marine fishing households and source of borrowing. Therefore the sixth hypothesis is that ‘There is no significant association between the income of the marine fishing households and source of borrowing’ is disproved.

VII. Major Conclusion:

Marine fishing households are a section of people in the lowest rung of the social ladder inhabiting the rural coastal areas. The fishermen work hard and take much effort with the available instruments to harvest the maximum fish from these so as to raise their family income. They are unable to relish the fruits of their strenuous work, while they are exploited during the realization of their catch by middlemen and money lenders. The level of income of fishing households is not sufficient to nourish their family with nutritious food and to meet other requirements. So, they spend whatever they earn and borrow from various sources. The various Fishermen Welfare Schemes of the Government and the measures taken by other Non-Governmental Organizations to uplift the fishermen communities do not reach them properly due to difficult formalities. The marine fishing households are not better off in all aspects of the economic and social life.

VIII. Suggestions and policy implications

The followings are the suggestions for the betterment of fishing households in Visakhapatnam district in particular. It is also applicable to Andhra Pradesh and India in general.

The minimum responsibility of the government is to bring about the desired changes in the economic well-being of the fisherman at least to uplift them on par with the rest of the society it should consist of provision of minimum housing with necessary facilities. The house built for the fisherman should be able to withstand any cyclone weather conditions. Other types of improvements should include the provision of education, medical, sanitary and other infrastructure facilities.

Necessary administrative and legal measures should be evolved to control the activities of the money lenders who often combine fish trade with money lending. The fisherman are groaning under heavy debt and it is passed on from generation to generation.
The fisherman cooperatives are dormant and the commercial banks are very much reluctant to understand their problems.

It is observed that most of the fisherman colonies are isolated and cutoff from the nearby cities and towns because of inadequate road and transportation facilities. As a result the fisherman is unable to take the advantages of the price paid by the consumers in the urban areas. Therefore high priority should be given for the development of suitable infrastructure facilities for effectively linking up the fishing colonies with the urban centers.

The fisherman is facing several problems in obtaining the necessary fishing equipment. The average fish catch will go up several times if they use the most and sophisticated fishing boats and nuts. It is necessary to set up boat building yards for every 10 fishing villages and supplies the fishing boats through the local fisherman cooperatives, the cost of which may be covered partly by a long term loan and partly by the government subsidy.

The Government shall provide the most essential life-saving devices like the floating ring, life jacket and mask to all fishing households at free of cost to take with them in the boat while fishing in order to avert accidents in the sea.