

A STUDY ABOUT THE CRAB FISHING ENVIRONMENT IN ANDAMAN AND NICOBAR ISLANDS

Nabakumar Halder and Dr. Gaurav Rathore

Department of Commerce, Dr. A.P.J. Abdul Kalam University, Indore (M.P.) - 452016, India

Corresponding Author Email : nkumar897802@gmail.com

Abstract:

Andaman and Nicobar Islands (ANI) in India is a tropical archipelago cited as an example where marine fishery resources were considered to be highly underutilized vis-a-vis the harvestable potential. Developmental plans often envisage the enormous scope to harness the oceanic fishery resources however, the overriding issues which affect the sustainable fishery management were least understood or addressed.

Key words: Tropical Archipelago, Sustainable Fishery Management

1. Introduction

India is the third largest fish producing country and the second largest aquaculture fish producer in the world. India contributes about 7% to the global fish production. The country is also home to more than 10% of the global fish biodiversity and is one of the 17-mega biodiversity rich countries. Around 14 million people are engaged in fisheries and its allied activities.

Marine crabs are fished throughout the year in India except in the ban period pertinent with respective states. However, considerable variations were observed in peak fishing season between the states/region during the reporting period. During the past five years, it is more evident due to climate change as happening elsewhere in the world. In spawning season also, similar differences were noticed between the states and among the major three species.

2. Review of Literature

R Kiruba-Sankar and P Krishnan and Grinson George and K Lohith Kumar and J Raymond Jani Angel and K Saravanan and S Dam Roy (2021), Globally, marine fisheries sector provides livelihood, food security and employment to the fishers engaged in subsistence, artisanal and industrial fishing activities. The dependency on marine fish supplies keeps rising globally leading to intense competition, fishery conflicts and unsustainable fishing practices which threatens the sustainability and leading to the depletion of marine fishery resources. Andaman and Nicobar Islands (ANI) in India is a tropical archipelago cited as an example where marine fishery resources were considered to be highly underutilized vis-a-vis the harvestable potential. Developmental plans often envisage the enormous scope to harness the oceanic fishery resources however, the overriding issues which affect the sustainable fishery management were least understood or addressed. Offshore fisheries were trade and economy based whereas small scale fisheries are livelihood and food security-based, operating with small to medium scale commercial prospects. Radical management approaches in artisanal and industrial fisheries is essential to foster community resilience and sustainable fishery

management. The emerging body of evidence suggests the critical need to reliably estimate the fish catches and population dynamics for sustainable fisheries management. Comprehensive opinions on prevailing issues, complexities in governance, challenges faced and the management strategies that need to be adopted were discussed to ensure the robust governance and sustainability of marine fisheries sector. [1]

Mohammed Tahir (1988), The sea-locked Andaman and Nicobar Islands are in a tropical rain forest zone, situated within 6° - 13' to 13° - 34'N Latitude and 92° - 94° E latitude. The coastal area of about 2000 km and the waterbodies in between the islands are rich in fishery potential which ranges from 0.012 to 0.47 million tonnes. The fishery is dominated by the catches of sardines, perches, carangids, mackerels, *Leioquathus elasmobranchs*, seerfish, mullets and tunas. About 2050 fishermen, with 1150 country craft, 113 mechanised boats and 1367 different kinds of nets and lines are engaged in active fishing in the island. Numerous bays, lagoons and creeks of varying morphometric characters are available among the group of islands for mariculture activities. The mangroves of these islands provide feeding and nursery grounds for juveniles of penaeid prawns, crabs and finfishes which enhance the chances of an economically viable mariculture activity in the Andaman group of islands. [2]

3. Research Objectives

1. To understand about the crab fishing environment in Andaman and Nicobar Islands

4. Research Methodology

A detailed review of available literature and material has been done to design and develop the questionnaire to achieve the established objectives of the research. This chapter briefly presents an outline of the research process and various research tools adopted to complete the research.

The Study: The study is descriptive in nature; the piece research is trying to find out which issues are considered important by the fishing agencies and other those who are directly or indirectly involved into the process of crab production and their further process to sale it ends users. The study has also undertaken a detailed analysis like comparison of perception of skills among the fisherman belong to different farming places, processors and sellers as well as government institution. For the purpose of study statistical tools used.

Primary Data - A questionnaire survey was conducted for the purpose of the study.

Secondary Data - Secondary data is the data, which already exists. Secondary data was collected mainly through the internet, websites and some are taken from books and articles.

Sampling Design – Purposive sampling method was used.

Sample Size – Target to 500, actual receive 482 filled questionnaires

Statistical tools – Different aspects were measured by using of Likert scale.

5. Statistical Analysis

1. Out of 500 sample size, 482 numbers of respondents were participated, 100% response received for crab fishing growth.

S. No	Category	Respondents	Percentage
1	Yes	482	100
2	No	0	0
	Total	482	100.00

Numeric value is the highest for the “yes” and zero response for “No” category. It is proved that there is no chance of error during survey and hence highest value considered as significant value.

2. Out of 500 sample size, 482 numbers of respondents were participated for the opinion about Government support to crab fisherman, 100% response received for “Yes”.

S. No	Category	Respondents	Percentage
1	Yes	482	100
2	No	0	0
	Total	482	100.00

Highest for the “yes” and zero response for “No” category.

3. Out of 500 sample size, 482 numbers of respondents were participated for change the standard of living of crab fisherman, out of that 91.3% are “Yes”, and 8.7% for “No”

S. No	Category	Respondents	Percentage
1	Yes	440	91.3
2	No	42	8.7
	Total	482	100.00
		Z - Test	0.841344746

To test significance of dominating income group, we applied Z – test.

H₀₁: Change the standard of living of crab fisherman.

H_{a1}: Do not change the standard of living of crab fisherman.

Null hypothesis is accepted and alternated hypothesis is rejected, that change the standard of living of crab fisherman.

6. CONCLUSION

To understand crab fishing environment, the opinion of 482 fisherman about factors like crab fishing growth, Government support to crab fisherman, change the standard of living of crab fisherman, was collected and analysis with the help hypothesis as below. It was found that, fishermen are in supportive of crab fishing environment in Andaman and Nicobar Islands.

7. LIMITATIONS

1. Inaccurate responses – It was critical to reach rural areas and crab fisherman again to provide the incomplete information due to distance, non-connectivity and bad climatic condition.
2. Covid – It was risky and unable to reach remote parts of Andaman and Nicobar Islands.

REFERENCE

1. R Kiruba-Sankar and P Krishnan and Grinson George and K Lohith Kumar and J Raymond Jani Angel and K Saravanan and S Dam Roy (2021), Fisheries governance in the tropical archipelago of Andaman and Nicobar – opinions and strategies for sustainable management, *Journal of Coastal Conservation* (2021) 25:16.
2. Mohammed Tahir (1988), Central institute of fisheries education, Bombay, present status and future scope of fisheries in the Andaman group of islands, *journal of the Indian fisheries association* 18. 1988. 189-195.