DIVERSITY OF FISH SPECIES FROM RATANAGIRI DIST, WESTCOAST OF (MS). INDIA

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ABSTRACT:

The current study deals with fish diversity undertaken during period Jan 2021 to December 2021 to demographic and marketable inessential fishes in the west coast in RatnagiriDist. The present paper deals with the variety and abundance of marine water fishes in west coast in RatnagiriDist. (M.S) India. The outcome of present examination reveals the event of 14 fish species belonging to 7 orders, 10 families. The prominent group wise landfall include A. indicus, A.japonious, P.monodon, H.nephereus , R. kanagurta, R.brachysoma, N. japonicas , N. hexodon, D. polystictum, S. indicus , T. trachurus, S. officipalis, P.argenteus.

Key Words: Fish species, Economic value, Nutritive Value, West coast in Ratnagiri Dist.

INTRODUCTION

Fishes are mostimportant part in the providence of severalnations as they have been a secure thing in the nutrient diet of many people. Biodiversity is necessary for regulate of ecosystem, conservation of overall habitat quality for understanding inherent significance of all species on the earth [2]. Fish diversity of costal actually represents the fish fauna diversity and their liberty. Seaboard conserves a cash rich variety species of fish. Which upright to the profitable fisheries. In India possible of pisciculture is yet to be fully utilize. Fishes being well off source of proteins and have high nutritive value. Large scale evolution f aquaculture to be receive given preference after revolution to nourish ever growing population. Agreeable profit of aquaculture carries out on apart from other component, on selection of suitable species., Secondly important group of animals. Further, there is a required of a examine of diversity of fishes in different types of habitation of all over the country. There are several studies and announce in the long ago to fisheries, diversity, morphology of fish, resource, and aquaculture (Bhat and Vivekanandan 2013, Adiga et al. 2016, Kulkarni et al. 2017, Pawse et al. 2017, Bhendarker et al. 2020).

Ratnagiri is coastal district of Maharashtra state, situated in the western coast of India .It has northsouth length of about 180 km and average east - west extension of about 64 km. This district comes between 16.30 north latitudes and 73.02 to 73.53 east longitude. This coastal area extends to about 10-15 km from seacoast and generally has low altitude and about 2500 mm rainfall. Most of the activities in this area are connected with sea.(Nelson, J.S. Fishes of the world (2006), 4th ed. Hoboken, NJ: Wiley.601 p.)

Marine diversity is worldwide measure and need new region due to environmental and human related changes. Major warning to marine diversity of the world is environmental degradation and overexploitation (Upton 1992). The marine ecosystem in Maharashtra consists of coastal belts such as mangroves, mudflats, estuaries and seashores, and offshore ecosystems. The biodiversity is affected by human related impacts in terms of habitation destruction, bottom trawling, use of purse seine and other non-permitted nets, poaching of protected species, and lack of awareness about the conservation significance of marine biodiversity in general and endangered and protected species in particular. There are several organizations involved in research and management activities related to marine diversity and ecosystem of Maharashtra. The ICAR Institutes (CMFRI, CIFE, CIFT and NBFGR) have been carrying out studies related to stock assessment, fishery , and traditional and molecular taxonomy studies of the marine aquatic fauna and flora, marine ornamental fish genetic resources utilization and development.(

Table 1. Marine fishery resources and profile of Maharashtra

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| Sr.no | Property | measurement |
|-------|---------------------------------------|-------------|
| 1 | Coastland | 720 km |
| 2 | Coastal districts | 06 |
| 3 | Continental platform | 112,000 km2 |
| 4 | Major fish harbours | 03 |
| 5 | Fish landing centres Fishing villages | 456 |
| 6 | Families of Fishermen | 81,492 |
| 7 | Fisherfolk population | 4.50 lakhs |

MATERIAL AND METHOD

Fishes were collected from west coastal area at Ratnagiri Dist. (M.S) India with the help of local fishermen using different type of nets namely gill nets, cast nets, dragnets and Bhorjal. Immediately photographs were taken with help of digital camera. Fishes were brought to laboratory and preserved in 10% formalin solution in separate specimen jars accordingto the size of species. Small fishes were directly placed inthe 10% formalin solution, while large fishes were given an incision in their abdomen and preserved. (Shinde,S.E., 2009. Fish biodiversity of pravara river at pravarasangam Dist. Ahemdnagar, (M.S) India. world journal of zoology 4(3): 176-179.)

Morphometric measurement of fishes was taken by digital caliper to the nearest tenth of a mm and measuring tape with nearest tenth of mm. For proper identification, taxonomic key to species, were followed according to Heemstra& Randall1. The detail measurements of all these 14 species are given in Table 1. (Ray D.2020,Fish report to ten group species from the west Bengal coast ,along the east coast if India.Indian journal of Geo marine science,vol-49(01),January,pp-108-117.)

As most of the grouper species are either in the data deficient category or conservation important species in the IUCN list, so the IUCN categories of all 10 groupers are provided in this paper and distribution is provided in Table 2.(Ray D.2020,Fish report to ten group species from the west Bengal coast ,along the east coast if India.Indian journal of Geo marine science,vol-49(01),January,pp-108-117.)

RESULT

The results of present investigation confirmed the occurrence of seventeen fish species belonging to five orders at Kurikotta Bridge Bennithora river collected over a period of one year, from April 2013 to March-2014. The distribution of fish species is quite variable because of geographical and geological conditions

The present result of investigation confirmed the occurrence of 14 fish species ,belonging to7 order at the area of west coastal area at Ratnagiri Dist. (M.S) India over period year fromJan 2021 to December 2021. The distribution of fish species is quite variable because of geographical and geological condition.

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|---|----|-------|-----------|----------|--------|---------|---------|----------|--------|--------|---------|----------|----------|
| 1 | ab | le 1: | - Measure | ments of | the 14 | grouper | species | recorded | d from | West c | oast in | Ratnagiı | ri dist. |
| | | | | | | | | | | | | | |

| Sr.no | Species name | Length in cm |
|-------|------------------------|--------------|
| 1 | Acetesindicus | 10-12 cm |
| 2 | Acetesjaponious | 14-22 cm |
| 3 | Penaeusmonodon | 32-34 cm |
| 4 | Harpadonnehereus | 20-30 cm |
| 5 | Rastrelligerkanagurta | 28-32 cm |
| 6 | Rastrelligerbrachysoma | 18-20 cm |
| 7 | Nemipterusjaponicas | 18-20 cm |
| 8 | Nemipterushexodon | 14-15 cm |
| 9 | Nemipterusfurcosus | 22-24 cm |
| 10 | Desmodemapolystictum | 107- 110cm |
| 11 | Stolephorusindicus | 6-8 cm |

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| 12 | Tarchurustrachurus | 6 -60 cm |
|----|--------------------|-----------|
| 13 | Sepia officipalis | 15-45 cm |
| 14 | Pampusargenteus | Max 60 cm |

Table 2:- Distribution of species in Family, Order, Scientific Name and common Name of fish

| Sr. no | Name of Family | Order | Scientific name | Common name | |
|--------|----------------|---------------|------------------------|------------------|--|
| 1 | Palammidae | Decapoda | Acetesindicus | Non- penaeid | |
| | | | Acetesjaponious | Akiami shrimp | |
| 2 | Penaeidae | Decapoda | Penaeusmonodon | penaeid | |
| 3 | Synodontidae | Aulopiformes | Harpadonnehereus | Bombay duck | |
| 4 | Scombridae | Scombriformes | Rastrelligerkanagurta | Indian markerel | |
| | | | Rastrelligerbrachysoma | Short markerel | |
| 5 | Nemipteridae | Perciformes | Nemipterusjaponicus | Threadfin bream | |
| | | | Nemipterushexodon | Ornate threadfin | |
| | | | Nemipterusfurcosus | Fork-tail | |
| 6 | Trachipteridae | Lampriformes | Desmodemapolystictum | Ribbon fish | |
| 7 | Engraulidae | Clupeiformes | Stolephorusindicus | Golden fish | |
| 8 | Carangidae | Perifromes | Tarchurustrachurus | Horse markerel | |
| 9 | Sepiidae | Sepiida | Sepia officipalis | Cuttle fish | |
| 10 | Stromateidae | Scombriformes | Pampusargenteus | Sliver pamfert | |





DISCUSSION

It is evident that the diversity of marine fish and shellfish fishes is increasingly threatened and management strategies have to vigorously monitor gears and catches affecting biodiversity and fisheries. The ecosystem approach to management over single species management is imperative for sustainability. Educational and research organizations can play a pivotal role in creating the required awareness in the public besides research that the impacts of human beings on habitat degradation and biodiversity loss are minimized.

The work has been concluded with future strategies for development of fish fauna conservation of west coastat Dist.Ratnagiri(M.S) India Recent data regarding Fish diversity of the west coast river system, aiming to contribute a better knowledge of the fish diversity of Ratnagiri and a tool for conservation planning of aquatic environments in this region. To maintain Fish biodiversity has an immense importance as it is not always possible to identify individual species critically to sustain aquatic ecosystem.

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