

Notwithstanding these shortcomings, the usefulness of the book largely remains unchanged.

The price of the book is not men-

tioned. Probably the Government of Kuwait has kept it for free distribution to institutions and fishery biologists.

*National Institute of Oceanography,  
Dona Paula, Goa.*

V. S. BHATT

**PROCEEDINGS OF THE SYMPOSIUM ON LIVING RESOURCES OF  
THE SEAS AROUND INDIA. CMFRI, Cochin India 1973, 748.**

Marine living resources have been the subject of study in India for more than two decades and considerable efforts have been made to increase India's marine fish production. These efforts were discussed in a symposium held in Cochin on "Living Resources of the Seas around India" in 1968. The Proceedings of this symposium have been published as a special publication of the Central Marine Fisheries Research Institute. For better planning, good management and proper exploitation of sea food, it is necessary to know the resources of our waters, and this need, to some extent, has been fulfilled by this volume.

The volume includes 57 scientific papers contributed by the Indian fishery biologists. These papers cover different types of marine resources, individual fishery resources, fishing vessels, fishery technology and quality control etc. However, considerable changes have taken place between the time the symposium was held (1968) and the proceedings were

published (1973). Nevertheless, the informations presented by many authors are of much value. K. V. Rao has described in detail India's exploited marine fishery resources. S. K. Banerjee has given the pelagic fishery resources (mackerel, oil sardine and others) together with their yields. R. Subrahmanyam has mentioned the indicators of fish resources. Similarly, forecasting of fishery is also an important aspect of the resources study and this has been attempted by D. Chakraborty by theoretical calculations using the existing data. P. Sam Bennet has tried to explain the fluctuations in the catches of oil sardine. Such forecasting of fisheries and predictions in their fluctuations are very necessary and should be continued for a better management of resources. P. V. Ramachandran Nair and his colleagues have estimated the potential fish resources of the east and west coasts of India, on the basis of measurements made by  $^{14}\text{C}$  technique, as  $2\frac{1}{2}$  to 3 times of the present yield.

### Book Review

There are also a series of papers dealing with other types of resources. K. H. Mohmad, M. J. George, Virabhadra Rao and others have evaluated the crustacean fishery including shrimps, prawns, lobsters and deep sea spiny lobsters which can be successfully exploited to earn valuable foreign exchange.

A number of papers deal with the fishery resources of Bay of Bengal including Andaman and Nicobar Islands, Chilka Lake, Hooghly-Matlah estuarine system and Madras coast. Jhingran and Natarajan, while discussing the fishery of Chilka Lake, have warned that the prawn resources of the lake are over-exploited. The Bay of Bengal has been mentioned as an area of lesser fisheries resources than the Arabian Sea. However, the IIOE results have indicated that the Bay of Bengal has as much density of fish eggs and larvae as any other sea. The volume also gives a good account of estuarine, offshore, deep sea and trawl fishery resources of both east and west coast of India.

The resources of clams, oysters, cockles and pearl oysters have been mentioned by different authors. Their distribution is given on both east and west coasts of India. S. Jones and K. Alagaraswamy have thought that adequate statistics and biological data are not available and have emphasised the need for biological and systematic farming

for increasing the production. A history of pearl fishery has been given since 1700, by Mahadevan and Nayar and these authors have concluded that the only alternative left to increase pearl production is to resort to pearl culture. The same authors have explored the chank grounds by means of SCUBA diving in the Gulf of Mannar and Palk Bay.

M. Umamaheswara Rao has given the potential resources of the Indian seaweeds and the possibilities of their culture. Coral resources have also been discussed and their conservation has been suggested by C. S. Gopinadha Pillai.

The book also deals with fishing vessels, fishery technology and quality control. These aspects are also important in increasing fish catch, catch efficiency and quality of fishery products. No contribution, however, seems to have been received on fishing gears.

G. N. Mitra has suggested some steps for the management of fisheries, while K. Chidambaram has pointed out the need for building up of an infrastructure for fishing industry.

Looking at the volume as a whole it can very well be said that this book has achieved its aim as S. Z. Qasim, Director, CMFRI has indicated in his preface. It forms a good source for the factual material on marine living resources of the seas around India.