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SOME PROJECTIONS OF MARINE LIVING RESOURCES IN THE YEAR 2000 A.D.

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In India, sea fish largely comes from the capture of natural fish populations from the coastal waters. In 1947, the marine fish production in India was 0.4 million tonnes and today it has reached 1.5 million tonnes. Although the increase has been significant, it has not really reached a spectacular figure. This is because our fishing effort has largely been confined to a narrow coastal zone. The estimates of potential fish yield from the Indian Ocean vary from 7 million to 17 million tonnes. Of this potential, India's contribution is expected to be 5-9 million tonnes. From the Indian Exclusive Economic Zone, the fish production is expected to be about 3 million tonnes. The projected fish requirements of India's population by the 2000 A.D. is expected to be 11.4 million tonnes. Of this, nearly 7 million tonnes is expected to come from the sea and the rest from fresh water resources. Is it conceivable that our technology of fishing i.e. the development of mechanized boats (crafts and gears), including the methodology of fish finding, will reach a level within the next 15 years to achieve the expected target? The answer is that it is very unlikely that the 7 million mark can be achieved from mechanized fishing alone.

The next alternative, therefore, is to generate extra resources of seafood by sea farming or aquaculture. At present the total production of fish and prawns from aquaculture practices is about 10000 tonnes. This is because out of the total potential areas of wetland available for culture, only a small fraction is being utilized for cultivation. If the unused areas of wetland (coastal and brackish waters) are utilized effectively, a substantial increase would indeed be possible. Intensive efforts are being made by several South East Asian countries to generate more and more resources by culture practices. The potential in this sector appears to be very high.

Seaweeds form another important living resource and these are being used as food, animal feed, fertilizers and as raw materials for chemicals and pharmaceutical products. Today the seaweed production in India is about 20000 tonnes. This is not enough even to keep several seaweed-based industries in

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India going. The result is that many industries had to be closed down. The natural regeneration of seaweeds in beds is not fast enough to meet the growing demands and hence the only way to generate extra resources is by their cultivation on ropes and wooden frames. Projections indicate that the production of seaweeds by cultivation will increase substantially within the next two decades.

The other living resources which unfortunately have been used "unwisely", or it would be more correct to say "misused", are the mangroves and coral reefs. During the last two decades, mangroves have been severely depleted because these have been used as a source of timber and charcoal. It is only in recent years that mangroves have been recognized as ecologically vital plants for the protection of shoreline from erosion.

Similar has been the fate of coral reefs. Due to population pressure along the coast, most of the coral reefs in coastal areas (fringing type), once known for their lush vegetation and a multitude of fauna, have become dead. This is largely due to pollution and industrial development along the coast. The forecast is that by the year 2000 A.D., the reefs which would probably survive would be on the atolls of Lakshadweep and on some of the islands of Andaman and Nicobar.