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## North East Aquatic Resources Management and Conservation - An Overview

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The aquatic resources of the NE are natural an renewable. But the production potential of our aquatic resources differ place to place depending on various factors. The sea water may be extensive but the productive area has limitations. As a result unlimited expansion of the sea fishing activity is not possible. What one should aim at is to expand up to the level when the maximum sustainable yield can be obtained for a long time. This is easily said but to get an idea of this level for the tropical fish resources is not easy. Unlike those of temperate waters where each fishery operating a particular gear fish for mainly one species, in the tropics practically all gears catch many different species each with its own characteristics like growth, survival, mortality rates etc. Under these conditions there is no easy way of estimating the maximum sustainable yield. Then one has to find other ways of arriving at this value. Such approaches were made for the Wadge Bank trawl fishery when it was exploited by the Sri Lankan trawlers. It was possible to obtain a satisfactory value for the grade two varieties (Lethrinids, Lutianids, Plectorhids etc.) which were the mainstay of the fishery. This was possible because of availability of reliable records of catch and effort data. But for the NE coastal fisheries such data are lacking. Fortunately however the more or less complete suspension of fisheries activities during the last couple of decades has been an indirect blessing. During the period prior to 1980, there has been a vary rapid expansion of fishing activities and by early eighties there was a feeling amongst fisheries workers that except for the offshore pelagic fisheries we have already reached or are very close to the expansion limits. At that time however Pedro Bank fishery was not yet in full swing. The absence of reliable data makes it difficult for one to access where exactly the level of exploitation is. In any case the suspension of fishing activities

irrespective of the state of the stocks in the early eighties, gave an excellent opportunity for the stocks to fully reestablish themselves to their normal levels. But now with the gradual reduction of the restrictions, the industry is expanding and the rate of exploitation is increasing. As stated earlier there is a limit to possible expansion. How does one determine this limit? One possibility is to monitor the total production accurately with the increase in the number of fishing boats in operation. During the early stages of expansion with the increase in fishing activity the total production would also increase but when over exploitation begins the production level will start going Further increase or even maintaining down... that level is not But obtaining reliable information along our coast is a very difficult task. Fish landings are spread all along the coastal areas and there is no practical way of obtaining reliable information. However there is one possibility. We are aware that the good varieties find a better market n the capital city and they are sent by road to the south. The landings around the peninsula all go through a bottleneck at Elephant Pass. This is an ideal location to monitor the quantity moving south. It is true that not all fish caught around the peninsula move to the south. But the large sizes and the popular varieties pass this way and this would give a reasonably worth while indication of the state of affairs. Similar bottlenecks can be found for the fish landings along the eastern coast of NE Mannar area where similar monitoring facilities can be established. This approach of course does not apply to the offshore pelagic fisheries because they are migratory in nature and also are being exploited by many nations.. They require an international approach.. The Problem for Pedro Bank is some what similar because of the poachers. However this will probably be temporary and when normalcy is established proper monitoring procedures can be established.

In addition there are other resources which cannot be overlooked. The Pearl Oyster, the Sacred Chank Fishery, the Window Pane Oyster Fishery and the Beche-de-mer Fisheries. Specific regulations were in existence for a long time which was necessary for their proper management. However for some reason or other these regulations were repealed in 1996. This is very unfortunate and every effort

should be made to reintroduce them in one way or the other for the proper management and conservation of these resources.

Regarding Aquaculture, its profitability and technical feasibility has been established by two farms around the Batticaloa Lagoon. However since aquaculture has the greatest potential for development, going by what happened in the south, development in brackish water areas should be regulated to avoid the causes of the disaster in the south. But aquaculture development in the fresh water sector has limited potential.