Challenging degradation

The small-scale fishermen at Brazil are no longer silent witnesses to the degeneration of their coastal and inland waters

he degradation of coastal and inland waters is not a mere academic issue for Brazil's small-scale fishermen. It is a living problem. The growing pollution of lakes, rivers and estuaries affects them directly, since they earn their very livelihood from these waters.

Such pollution has risen dramatically since the 1970s, when small-scale fisheries production represented about 60 per cent of Brazil's total catch and provided a large range of employment opportunities for the rural poor.

Overfishing by large trawlers is not the only factor responsible for the diminishing output of artisanal fisheries. The degradation of the coast, caused by urban and industrial expansion, has contributed too.

These processes began in the mid-1960s, first in the rich southern provinces and later, expanded to the north and northeast.

The Brazilian government's major programme to modernize fisheries through fiscal incentives, began in 1962, has marginalized most of the artisanal fishermen.

The new export-oriented fishing industry was out to maximize profits quickly. In the process, it overfished most of the commercial fish species, such as shrimp and lobster, in the south and north-east.

When catching these species was no longer profitable, the industry moved to the untapped resources of the Amazon basin, continuing the rapid destruction of fish species. In the process, it negatively affected the livelihood of hundreds of coastal and riverine human communities.

since fish is the main source of subsistence among the Amazonian populations.

Speculation in land is a main cause of the destruction of coastal habitats, particularly of mangroves, which is an important ecosystem for the reproduction of many fish species.

Brazil has the world's second largest mangrove area. Although legally protected, mangroves have been extensively cut in many parts of the coast for the construction of houses.

As a result, large areas of mangrove have been destroyed in Guanabara (Rio de Janeiro) and Todos os Santos Bay (Babla Bay). Sand barriers and islands are still being privatized to build marinas for rich people. This marginalizes the artisanal fishermen who live in those areas.

Further, most of Brazil's chemical and petrochemical industries have been built in biologically rich ecosystems, as in Mundau and Manguaba lagoons in Alagoas Province, in Suape (Pernambuco), Cubatao estuary (Sao Paulo) and a lagoon in Rio Grande do Sul.

Toxic waste

In the north-east region, where over 35 per cent of the small-scale fishermen live, the main source of pollution is the *vinhotoa* toxic waste produced by the large sugar-cane mills and illegally dumped into the rivers and estuaries, leading to high fish mortality.

A recent source of pollution is the use of mercury for extraction of gold in most of the rivers of the Amazonian basin, particularly in Madeira-Mamore and Guapore rivers. The situation is alarming, for many communities. Paradoxically, the establishment of protected areas has also

SAMUDRA DECEMBER 1994 27

badly affected small-scale fishermen. Many national parks and ecological reserves are being set up in the remaining forest areas of the coast where fishermen live. Their lifestyle and the respect they have for nature, on which they have traditionally based their livelihood, have made them protect important ecosystems like mangroves, forests and estuaries.

owever, according to the existing law, whenever a protected area is set up, these coastal fisherfolk have to be expelled. As a result, their traditional activities are severely limited and the fishermen are forced to move into the slum areas of the coastal cities.

Although the social organization of the artisanal fishermen in Brazil is still weak, they have formulated the first reactions against pollution and coastal degradation in the country. By the end of the 1970s, when the military regime was still in force, small-scale fishermen organized protests against the pollution caused by sugar-cane waste in the Goiana river, close to Recife.

In 1984, by the time the military regime ended, this fight against pollution was the initial step for a national mobilization to reorganize the existing structure of fishermen's social representation—the fishermen's guilds (Colonias de Pes cadores). These guilds were frequently controlled by local non-fishermen leaders

in a very autocratic way. The first guilds and federations were finally taken over by fishermen leaders in 1984 and 1987 in Pernambuco and Alagoas States.

Between 1986 and 1988, regional and national meetings were organized by small-scale fishermen to present suggestions to the Constitutional Assembly that approved the new constitution.

Own organizations

According to the 1988 constitution, fishermen are free to establish their own organizations. After 1988, the organized fishermen decided to create Monape—the National Organization of Fishermen. It brought these issues to the UN Eco 92 meeting held in Rio de Janeiro.

It is becoming increasingly clear that biological diversity can only be achieved in Brazil when the cultural diversity of fishermen's communities is respected.

This article is written by Antonio Cados Diegues, director of the Center of Maritime Cultures (CEMAR), Sao Paulo, Brazil