## Out of a lake

Growing demand for the white flesh of the Nile perch has integrated Lake Victoria's fisheries into the global economy

ake Victoria is the second biggest freshwater lake in the world. With its 69,000 km area, the lake has the same size as Ireland. The lake is shared by three countries: Tanzania, which possesses 49 per cent of the area of the lake, Uganda, which has 45 per cent and Kenya, which has 6 per cent.

The total catch of fish from Lake Victoria during the 1960s and 1970s was quite stable: about 100,000 tonnes of fish was caught annually. During the late 1950s, Nile perch (Lates niloticus) was introduced in the Ugandan and Kenyan parts of Lake Victoria. Until 1979, the perch constituted only an insignificant part of the total catch. A rapid proliferation of the perch took place during the 1980s when the Nile perch, which is a predator, started to feed heavily on the indigenous fish of the lake. Lake Victoria became famous for the loss of an estimated two-thirds of its endemic cichlid fish species. With the dramatic decline in species, there was a simultaneous phenomenal increase in the total annual yield—from about 100,000 tonnes annually to 500,000 tonnes in the late 1980s and 1990s. In the last 10 years, FAO reports that about 25 per cent of the annual total catch from Africa's inland fisheries has come from Lake Victoria.

The major socioeconomic effect of the introduction of the Nile perch is the transformation of the fisheries from a local and regionally based fisheries to one closely integrated into the global economy. The reason for this integration into the global economy was the strong demand which developed in the rich industrialized countries for the white flesh of the Nile perch.

During the 1980s and 1990s, about 35 processing factories for Nile perch was established along the shores of Lake

Victoria. In these factories, the perch is filleted and then exported to Europe, Japan, the Middle East and the US. The international demand for the fillets of the perch is so strong that hardly any Nile perch below 1 kg is left for the local market. There is a strong competition among the factories to secure enough raw material, and most factories can only get enough fish to utilize about half of their invested capacity. Many of the factories established have received loans and development assistance from the international development banks and bilateral donors.

In 1996, IUCN (the World Conservation Union) started to implement a research project, entitled *Socioeconomics of the Nile perch Fishery on Lake Victoria*, documenting the effects of the globalization of the Lake Victoria fisheries. The main issues the project wanted to investigate were the following:

- What are the effects of the export of Nile perch on the food security of the local people?
- What are the effects of the export industry on the employment opportunities in the fisheries (the traditional production, processing and trading sectors)?
- What are the effects of the export industry on the sustainable utilization of the fish resources?

## Report findings

Through a number of published reports (listed below), these issues have subsequently been documented. Briefly stated, the findings are: Although the catch of fish has increased fivefold, the consumption in many areas around the lake has been halved. Nutrition surveys

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indicate that up to half the children around the lake are severely malnourished.

In Kenya, the annual per capita consumption has dropped from 6 kg to 3 kg during the last 15 years. Thousands of fishermen have lost their jobs as the factories have encouraged the adoption of new mechanized production technology (trawlers and a new drift-net technology).

Tens of thousands of women in the traditional processing and trading sectors have lost their jobs, as the large trucks from the factories take the fish directly from the beach to the factories. Stock assessment biologists have found many indications of too strong a fishing effort. The average size of the Nile perch caught has, for many years, been getting smaller.

These findings are based on a number of reports published by the IUCN project over the two last years, namely:

- Rich Fisheries—Poor Fisherfolk: Some Preliminary Observations about the Effects of Trade and Aid in the Lake Victoria Fisheries by Erik G. Jansen
- From Local to Global Markets: The Fish-exporting and Fishmeal Industries of Lake Victoria—Structure, Strategies and Socioeconomic Impacts in Kenya by Richard O. Abila and Erik G. Jansen
- Trawling in Lake Victoria: Its History, Status and Effects by James Siwo Mbuga, Albert Getabu, Andrew Asila, Modesta Medard and Richard O. Abila
- Traditional and Central Management Systems of the Lake Victoria Fisheries in Kenya by John P. Owino
- A Review of Biodiversity and Socioeconomics Research in Relation to the Fisheries in Lake Victoria by Okeyo-Owuor, J.B.
- Constraints and Opportunities for Community Participation in the Management of the Lake Victoria

Fisheries by Erik G. Jansen, Richard O. Abila and John P. Owino

In late 1999, new reports will be published on the macroeconomic context of the Lake Victoria fisheries and the changes of technology which have occurred in the production sector of the fisheries. These publications are freely available from: IUCN Eastern Africa Regional Office, P.O. Box 68200, Nairobi, Kenya (fax: 254 890615).

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