

## Pollution Control and Other Measures to Protect Biodiversity in Lake Tanganyika

by Andrew Menz

Popularly known as the “Lake Tanganyika Biodiversity Project” this project has its origin at The First International Conference on the Conservation and Biodiversity of Lake Tanganyika held in Bujumbura on 11-13 March 1991. At this meeting a large group of scientists from the four riparian states of Burundi, D.R. Congo, Tanzania and Zambia and their international colleagues identified and expressed concern at the increasing threats to the lake’s unique and economically important resources. The lake is vulnerable to pollution because of its natural characteristics, and there are presently few efforts to conserve its biodiversity. The most immediate threats to the lake environment and biota are pollution from excess loads of sediment and nutrients caused by erosion in the watershed, industrial and urban pollution including boat discharges, and intensive fishing with inappropriate methods. These problems and their effects are increasing, and others such as oil exploration and transportation on the lake cause concern. It was recognised therefore that immediate attention was required to assess and control pollution and protect biodiversity. Subsequently, steps were taken to attract the interest of international

financing activities which generate global environmental benefits. The GEF operates in four theme areas: Climate Change, Ozone Depletion, International Waters, and Biodiversity and was thus a natural source of funding for the current project. Although originally conceived as primarily a biodiversity project, it corresponds to GEF interests in both biodiversity and international waters. In terms of the new GEF operational programmes it corresponds to a “freshwater ecosystem” (biodiversity) programme, a “water body based programme” (international waters), and since many of the problems in the lake are associated with sedimentation from land runoff, it is considered to be an “integrated land and water multiple focal area” programme.

By February 1995 a Project Document had been signed by all riparian countries, the funding agency UNDP/GEF and the executing agency United Nations Office for Project Services (UNOPS). In August of 1995, UNOPS selected a consortium comprising the Natural Resources Institute, the Marine Resource Assessment Group and the Institute of Freshwater Ecology, all based in the UK as the Primary Implementing Subcontractor.

This 5 year, 10 million US dollar, project aims to improve understanding of the ecosystem function and effects of stresses on the lake system; to take action on all measures necessary to maintain the health and biodiversity of the ecosystem and to co-ordinate the efforts of the four countries to control pollution and to prevent the loss of the exceptional diversity of Lake Tanganyika. The ultimate objective of the project as stated in the Project Document is:

---

*“to demonstrate an effective regional approach to control pollution and to prevent the loss of the exceptional diversity of Lake Tanganyika’s international waters. For this purpose, the development objective which has to be met is the creation of the capacity in the four participating countries to manage the lake on a regional basis as a sound and sustainable environment.”*

---



funding agencies in order to secure funding for a regional project to address the problems identified.

Funding was eventually secured through the UNDP/ Global Environmental Facility (GEF) which at the 1992 Rio environmental summit meeting, was endorsed as a mechanism for fi-

More specifically, the project aims to:

- establish a regional long term management programme for pollution control, conservation and maintenance of biodiversity in Lake Tanganyika.
- formulate a regional legal framework for co-operative management of the lake environment.
- establish a programme of environmental education and training for Lake Tanganyika and its basin.
- establish tested mechanisms for regional co-ordination in conservation management of the Lake Tanganyika basin.
- produce a comprehensive strategic plan for long-term application to be based upon the results of a series of special studies aimed at improving the understanding of the lake as a whole.
- implement sustainable activities within the Lake Tanganyika Strategic Plan and incorporated environmental management proposals.

These objectives are being achieved through establishing a regional framework for co-operation, including endeavours to develop a legal agreement for lake management; investigating pollution including sources, effects and control; and

## LEAD AGENCIES AND NATIONAL COORDINATORS

Lead agency in <b>Burundi</b> National Coordinator	Institute for the Environment and Conservation of Nature Jean-Berchmans MANIRAKIZA - Director General, INECN
Lead agency in <b>D.R. Congo</b> National Coordinator	Dept. for Management of Renewable Natural Resources. Mady AMULE - Director, GRNR
Lead agency in <b>Tanzania</b> National Coordinator	Division of Environment, Office of Vice-President Rawson YONAZI - Snr Environmental Officer
Lead agency in <b>Zambia</b> National Coordinator	Environmental Council for Zambia James S. PHIRI - Director, ECZ

investigating biodiversity and conservation measures leading to the setting up of protected areas as underwater parks. Project activities are implemented by government environmental ministries and agencies, and sectoral departments as a major objective to strengthen national capabilities and community participation. The scope of participation is broad and involves numerous institutions at all levels reflecting the need not only to study the lake itself but to take account of the enormous catchment area of the lake where, human activities influence the quantity and quality of the water that runs into the lake.

The operational structure of the project is outlined in the figure (far left). At the highest level is the Project Steering Committee (SC) comprising a small group of senior civil servants, principally from the lead agencies for the project in each country (see Box). The Steering Committee is responsible for overall project direction and decision-making on matters of policy. Supporting the SC is a Regional Technical Advisory Committee. A recent project review recommended the formation of National Steering Committees, to bring together senior reps from other Ministries in each country that have an important role in the project in order to enhance ownership and awareness at this level. Supporting the NSCs are the National Working Groups, (NWG). These comprise approximately 10 members drawn from all



Lake Tanganyika Catchment Area

the major stakeholder groups and institutions and provides a forum for exchange of information, resolving technical and implementation issues and latterly for the development of the Strategic Action Plan for the lake which will be the major output of the project as it will define and establish the process by which all future management interventions will be prioritised and co-ordinated. As the project proceeds it is hoped to involve both NGOs and the private sector as important stakeholders in the lake's resources and their management.

The special study investigations are largely carried out from a number of lake shore bases. These have been established in Bujumbura in Burundi, Kigoma in Tanzania and Mpulungu in Zambia, a further base will be established at Uvira in D.R. Congo. The role of the Consortium is to help the riparian states achieve the project objectives through providing methodological advice, coordination and facilitation services to local institutions who are responsible for carrying out the agreed work plan. Throughout there is a strong emphasis on training and institutional capacity building.

The Project Coordination Unit, based in Dar es Salaam, is the principal regional focal point for the co-ordination of all project activities. It is intended to administer and facilitate project operations in the region and, most importantly, to act as a link and information conduit between countries, institutions and other related projects.

Finally it should be stressed that GEF support is intended to be a catalyst to a continuing process - the problems facing Lake Tanganyika and its basin cannot be resolved through a single, time-bound intervention such as this project. The current GEF project must, therefore, be seen as the first step in a long process of developing regional capacity to provide sustained and effective environmental management and will therefore aim to identify mechanisms through which appropriate activities may continue into the future. The project must ensure that any processes and mechanisms established are financially and socially, as well as environmentally, sustainable. This will require (through the Preliminary Strategic Planning process) establishing mechanisms for early prioritisation of major existing and potential threats to the integrity of the lake and formulating viable strategies for future co-ordinated management.

*Andrew Menz is Project Coordinator for the Lake Tanganyika Biodiversity Project.*