UN Sustainable Development
Success Story

Lake Toba-Lake Champlain Sister Lakes Exchange

Location: Lake Toba, Indonesia

Responsible Organization

Lake Toba Heritage Foundation, in partnership with USAID, Government of Indonesia, Lake Champlain Basin Program, Vermont Agency of Natural Resources and Monitor International.

Description

Lake Toba is the largest lake in Indonesia, and the source of the Asahan River which flows east to Tanjung Balai on the east coast of Sumatra. The Asahan River is the source of electricity for an aluminum smelter and the citizens of the area. The Lake Toba watershed, which is the world's largest volcanic crater lake, covers about 4,000 square kilometres. The lake suffers from degraded water quality, loss of habitat and biological diversity, and invasions of troublesome non-native plants and animals.

The Lake Toba Heritage Foundation was established in August 1995 to counter the rapid degradation of the region and to conserve and promote the unique cultural and social heritage of the Batak people. The Foundation has been at the forefront of promoting environmental quality through workshops, seminars, and technical training for stakeholders in the basin, and has forged working partnerships among local businesses and governments.

Recognising that other ecologically vital lakes around the world are threatened by such incursions, the Lake Toba Heritage Foundation used part of a USAID-sponsored grant to establish a sister lakes relationship with the Lake Champlain Basin Program (LCBP). The arrangement began in November 1996 with a visit by the coordinator of LCBP. The visit was geared toward assisting the Indonesian government and NGOs in understanding prevailing U.S. institutional mechanisms for watershed management and to identify opportunities for a sustained exchange program between the two lakes (the visit was funded by the Vermont Agency of Natural Resources, the US-Asia Environmental Partnership -USAEP, and USAID).

Subsequent to this initial visit, the Vermont Agency of Natural Resources secured a grant through the Council of State Governments and USAEP for a one-year technical exchange program funded by USAID. The Lake Toba-Lake Champlain Sister Lakes Exchange is currently underway.
The overall goal of the program is to transfer U.S. watershed management experience, technologies, and practices, using the Lake Champlain model for managing a large, freshwater lake.

Objectives for the exchange include: (i) strengthening the institutions responsible for managing Lake Toba through the establishment of a long-term, sustainable sister lakes relationship between key institutions involved in the management of both Lake Toba and Lake Champlain; (ii) promoting the export and use of innovative environmental technologies for treating wastewater and controlling nuisance aquatic plants in Indonesia; (iii) transferring information, skills, and management systems related to improving industrial environmental performance and environmental infrastructure related to pulp wastes; and (iv) strengthening non-regulatory and voluntary approaches to improving the environment in the Lake Toba region.

**Issues Addressed**

Freshwater Management, Technology Transfer, Sustainable Development of Small Islands and Developing States (SIDS).

**Results Achieved**

A long-term relationship has been established between key institutions on both lakes, which will allow for the continued transfer of U.S. watershed management experience, technologies, and practices to the Lake Toba region.

An 18-person delegation from the Lake Toba region visited Lake Champlain in September 1997. Their visit resulted in a report with recommendations for improving the management of Lake Toba. A 12-person delegation from the Lake Champlain region is expected to visit Lake Toba in April 1998. The exchange program is expected to achieve the objectives stated above. In addition, the Lake Toba Heritage Foundation and the Lake Champlain Basin Program have signed a Memorandum of Understanding to formalise the sister lakes relationship.

**Lessons Learned**

Large, freshwater lakes of the world share similar management challenges. Some of the greatest challenges have to do with managing a resource shared by multiple jurisdictions in a large geographic area. Many of the management solutions require successful citizen and stakeholder involvement. Through initiatives such as the Lake Champlain Basin program, the United States has gained considerable experience in managing large watersheds. This experience is directly transferable to other countries, as demonstrated by the Lake Toba-Lake Champlain Sister Lakes Exchange.

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