Sustainable Resource Management

Payments to local communities in Malawi are providing a self-sustaining management system promoting ecological viability for Lake Chilwa

Funded by the Danish International Development Agency (Danida), the Lake Chilwa Wetland Project in Malawi attempts to prevent the overexploitation of Lake Chilwa's natural wealth and biodiversity. The project developed to support community groups and institutions in sustainably managing their resources. As markets already existed locally for the lake's natural products, the purpose was to insure the continuation of the resource extraction while maintaining the integrity of the ecosystem.

What is the Lake Chilwa Wetland Project?

In 1998, Danida provided a grant of 10.5 million Danish Kroners for a project that focused on empowering local communities. Through institutional capacity-building and



Photo: Ramsar Convention on Wetlands, Ramsar Convention Bureau

coordinated technical support, local ministries were created in the three districts bordering the lake. Though the project was originally intended to have two phases, it completed only one, as Danida declined to fund the second. However, the case is notable nonetheless, because the efficient creation of institutional and organizational foundations, and local buy-in during the first phase ensured the sustainability of the project through phase two without any further investment.

What Happened at Lake Chilwa?

Lake Chilwa, recognized as a natural resource of international significance by its inclusion as a Ramsar site, is one of Africa's most bountiful lakes. Twenty percent of all the fish caught in Malawi come from Chilwa, supporting over 6,000 local fishermen. The lake also provides a source of income for an estimated 100 bird catchers. Roughly 350,000 resident birds breed in the wetlands, and migratory birds also use them as a stopover. But, at current consumption rates, the lake cannot sustain the fishers' and bird catchers' rates of extraction. Increased demand for bird meat (over one million waterfowl have already been killed) has been cause for particular concern for the region's biodiversity (Jensen, 2003; Schuijt, 2002).

The area is also important for the local residents: districts of Zomba, Machinga, and Phalombe use Lake Chilwa's water for domestic use and irrigation, and agricultural activities dependent on this irrigation constitute an estimated 50% of Malawi's total rice crop. The lake's surrounding natural vegetation also provides economic benefits in the form of material for brooms, baskets, mats, fish traps, as well as construction material for roofs, fences, and walls. The grassland supports livestock, which provides another source of income through the sale of meat and milk (Schuijt, 2002).

How Did the Lake Chilwa Wetland Project Work?

To capitalize on Malawi's trend toward decentralization, assistance was given to aid the local population in the creation of an Environmental District Office (EDO) in each state, and a District Development Committee (DESC) in each district, to manage the stewardship of the resources by the local extractors.

Consultants hired by the districts and funded by Danida created 23 studies that contributed to a Wetlands "State of the Environment" Report, which was widely printed and distributed. A Wetlands Management Plan was subsequently created and approved by all three lake districts. The Danida payments also funded 41 awareness sessions which utilized various community outreach efforts including a local band,

a drama group, and an NGO that created 43 working groups throughout the three districts (Jensen, 2003). The working groups created action strategies that were called for within the Wetlands Management Plan, which encouraged buy-in from the local people and encouraged them to become resource stewards (Ibid).

To promote acceptance and implementation of the plan, communication and education was a large and broad-based part of the strategy. The sustainable use of the resources was promoted through TV, video documentaries (shown in community centers), newspapers, preaching manuals, radio programs and simple project flyers. In a particularly novel approach, 23 journalists from print and electronic media were trained in investigative reporting, which resulted in more news coverage on environmental issues for all of Malawi (Ibid).

When Danida's support ended in 2002 before the start of the second phase, there was justifiable concern that the project would begin to fail. However, two years later, the institutions created by the project were still viable and effective.

Why was the Lake Chilwa Wetland Project Successful?

The DESC has continued the monitoring required to compile the state of the environment reports (DSOERs) and district environmental action plans (DEAPs). The Lake Chilwa Inter-District Management Committee has also survived as the overall custodian of the wetlands. In addition, the community-based natural resource management committees, created for bird catching and fisheries, were able to survive on their own due to the support of the traditional leadership, and the generation of modest revenue from the issuance of licenses and fines. The combination of low overhead and the potential for significantly more support (the fishing industry is estimated at US\$11 million per annum) should guarantee their survival (Ibid, Schuijt 2002).

The model of the Lake Chilwa Wetland Project can be replicated in other countries that are exploring decentralization of natural resource management. In addition, the existing local market for resource extraction is a powerful incentive for communities to maintain economic sustainability through the preservation of local ecosystems and their natural resources. Key to the process is an excellent and comprehensive communication and education strategy, a thorough integration of traditional authority structures, and transparent long-term goals that can easily link the dependence of long-term economic viability to long-term environmental stability.

For Additional Information:

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Map: CIA Factbook (https://www.cia.gov/cia/publications/factbook/geos/mi.html) This report was researched and written by Aimee Barnes, Matthew Ebright, Emily Gaskin and William Strain from the Master of Public Administration in Environmental Science and Policy program of the School for International and Public Affairs at Columbia University.



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