Improving the Management of Biological Resources in Viet Nam's Tam Giang Lagoon



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Julie Meunier

[Photo: Fisher family at work in the Tam Giang Lagoon.]

At 22,000 hectares and almost 70 kilometres in length, Tam Giang lagoon is the largest coastal lagoon in Viet Nam. But its natural resource base is under threat as a result of population growth and over-exploitation from fishing and, increasingly, from aquaculture.

In 1995, researchers from Hue College of Agriculture and Forestry, Hue College of Science, and the Department of Fisheries, Thua Thien-Hue Province, began reviewing the utilization and management of the lagoon's biological resources by local communities. Their aim is to improve the management of fishing, aquaculture, agriculture, and other activities in order to provide sustainable livelihoods. The project has been funded by the International Development Research Centre (IDRC) and the <u>Canadian International Development Agency</u> (CIDA), with technical support provided by the <u>Coastal Resources Research Network</u> (CoRR) at Dalhousie University.

Aquaculture boom

In the richest fishery grounds of the lagoon, near the main opening to the sea, aquaculture has developed far beyond the lagoon's capacity. "Aquaculture began around 1977 with state-owned companies," says Ton That Phap, one of the project team's researchers. Since then, "all the fishers who turned to aquaculture have clearly become richer. Now they have a house, a television, and so on." But "while the aquaculturists were getting rich, the [traditional] fishers were getting poorer," he adds.

According to Phap, local fishermen and women have lost some of their fishing areas, while aquaculture has taken over most of the prime spots in the lagoon. The large increase in the number of nets and aquaculture ponds have also made an impact on the ecosystem by polluting the water and destroying natural nursery grounds, which normally offer shelter for juvenile fish, shrimp, and crab.

More clout

To ensure proper management of the lagoon, aquaculturists and fishers will have to work together, states Phap. "Our first objective is to give more clout to the fishers."

Other areas in the lagoon suffer from over-exploitation of aquatic resources, including the use of very small net mesh sizes and destructive technology such as electric fishing. Poor sandy soils around the lagoon produce very low crop yields which, in turn, force farmers to turn to fishing as an alternative. So far, thanks to the team's efforts, the communities and local governments around the lagoon are more aware "that the lagoon is in urgent need of sound management," says <u>Truong</u> <u>Van Tuyen</u>, the project coordinator. "Previously, there was no management at all, [because of] ignorance on the part of both fishers and local authorities."

Resource database

Building on this, the researchers have developed a resource database containing information on the fishers, their annual income, the species they fish, when they fish, where they live, and so on. The next step is to jointly plan and develop sustainable resource management strategies with the fishers — strategies that may involve drafting new laws, drawing fishing boundaries, and identifying the best periods to fish. To achieve these goals, the Vietnamese team is applying know-how from the Philippines, including participatory techniques and experience gleaned from community-based coastal resource management initiatives.

For example, the researchers have learned to become facilitators for the fishers, as they work out their own management strategies. They are also serving as resource persons, making suggestions on how to improve livelihoods from the existing resource base through better techniques. "We also have to take into account the inevitable effects of nature, such as floods or typhoons," explains Tuyen.

Capacity building

While challenges remain, the Tam Giang project has already made a significant impact in Viet Nam by helping government and university staff from different institutions learn how to effectively undertake, coordinate, and manage multidisciplinary research on an important local resource management issue.

Julie Meunier is a journalist for the Montréal-based publication, Réseau Liberté. (Photo: J. Meunier)

Resource Person:

Truong Van Tuyen, IDRC Project Coordinator, Hue College of Agriculture and Forestry, 24 Phung Hung, Hue City, Viet Nam; Tel: (84-54) 823-540; Fax: (84-54) 824-923; E-mail: lagunhue@dng.vnn.vn

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