Seminar Held in Nha Trang

The Viet Nam component of the Project Management of Reservoir Fisheries hosted a seminar on Reservoir Fisheries Management at Re- search Institute for Aquaculture No.3 in Nha Trang, 11-12 May 1999. The event attracted fifty participants, with concerns in reservoir fisheries in various capacities, from throughout the country. Included were representatives from the Ministry of Fisheries, Viet Nam National Mekong Committee, Research Institutes for Aquaculture Numbers 1, 2 and 3, Provincial Departments of Agriculture and Rural Development, Science and Techno- logy, Fisheries and subsidiary Provincial Agencies, the Fisheries University, University of Agriculture and Forestry, Dak lak Aquatic Products Company, and the Tropical Research Institute.

A total of 27 papers were given, of which the project presented twelve. The scientific studies were on fish biology, the environment, fish raising technologies, sociology and management practices in different reservoirs. Among these, the project staff introduced twelve reports about the 3-year implementation of the project in the province of Dak Lak.

The technical papers began with an attempt by the CTA of the project to summaries the lessons learned by the Project regarding a general approach to reservoir fisheries development, particularly in the context of the Central Highlands of Viet Nam, where the Project is located. Reports on the status of reservoir fisheries in various parts of the country followed, and occupied most of the first day. Sessions on fish culture in reservoirs (in which the Project presented one paper on cage trials of grass carp in Ea Soup reservoir) and on limnological studies (composed of presentations by the Fisheries University in Nha Trang) completed the first day. In the second day, two papers (including one from the Project) on specific technical issues relating to reservoir fisheries biology were presented. Six papers reporting on results of catch assessment from the six Project reservoirs followed. The final session consisted of three papers from the Project related to reservoir fisheries co-management issues. Finally, the seminar agreed to a series of recommendations, which follow.

Conclusions of the Seminar

The reports delivered by the project staff indicated:

a. Management practices in different reservoirs in Dak Lak. There are possibilities to transfer these experiences to other localities.

b. Contributions for helping train the province's fisheries extensionists and build up the capacity for management for some communities living around some selected reservoirs in the province.

c. Application of appropriate methods of catch assessment, highly-credible methods, to assess the possible exploitations for three types of reservoirs: small-sized, annually-stocked and harvested reservoirs; medium-sized and well-managed reservoirs which harvest both wild and stocked fish; medium-sized and wild fish exploited reservoirs which are accessed openly. These methods are available for other localities to learn from past experiences.

d. The effectiveness of increasing fish products and the economical effectiveness of stocking fish in reservoirs under good management conditions.

e. Cage fish culture can initially be a good solution to enhance the effectiveness of utilising the water surface. To be successful, however, it is necessary that cage construction materials be improved, species be well selected, technologies need improving and especially a reason-able food-processing base should be developed. The consumption markets should also be considered to avoid losses, recovering invested cost and having high benefit.

The reservoir fisheries have a good potential for development. Although a lot of effort has been made, only 20 per cent of the water surface is used. If most of the reservoir fisheries potential is exploited, this would contribute a good deal of protein for the communities living around reservoirs, create jobs and help reduce poverty in the areas. The results of the project will offer an experience for localities to learn in order to reach the common goal.

Because there has not been an orientation in developing the reservoir fisheries, especially since the open market policy started, the reservoir fisheries become more difficult; the infrastructure are degraded, the devolution of management authority to various levels is not clear, the general guidance to the branch is not united, confusing localities in management and use of the water surface to raise fish. The participants recommended that the Fisheries Ministry inform the Prime Minister to continue the 773 programme exploiting the water surface potential. Should the water surface be entrusted to fishermen in accordance to the Decree No.1 launched by the Government with duration of 20 years and stable faxation? Official laws are needed to ensure a legal status about rights in using the water surface to raise fish for the fisheries.
Another pressing issue is that scientific research on reservoir fisheries development is still scattered, unable to address the production needs. The participants agreed that the results of the reservoir fisheries project should be brought into play and that the state should increase its investment in this field. It is necessary to investigate and classify all the reservoirs in the country, investing more in the scientific research to gradually develop the fisheries there.

The participants also paid much attention to the research on the factors of changing the norms of reservoir environments. In general, old reservoirs are usually very poor in nutrition; however, under some human activities pollution still occurs in limited areas of reservoirs. Protecting the environment of reservoirs to ensure a sustainable exploitation calls upon a broad co-operation among agencies and localities, not only in the areas around reservoirs but also in their catchment areas.

To bring into play the results made in Phase 1, the participants thought that Phase II is needed and during the Phase II, measures for organising reservoir fisheries management should be studied further to prove the project's recommendations, as well as to introduce these experiences nation-wide. All the participants also wanted to have a closer cooperation with the project's activities in the years to come.

The participants expressed their thanks to the MRC, Danida, the Project Directorate, the expatriate advisers, RIA No.3, that facilitated them to take part in the seminar and exchange their experiences. They highly appreciated the abundant and practical contents of the seminar, the good organisation and the hospitality of the organisers. They wished the "Reservoir Fisheries Project" every success.

**Additional Suggestions from the Advisers**

Protection of the environment, which affects the fish, and managed exploitation are needed in order to ensure sustainable production from the fisheries.

Interventions must not marginalise those who depend on the reservoir, particularly socially or economically-disadvantaged people.

The best management system for a reservoir will depend on the unique characteristics of that reservoir. At the same time, participation of the resource users in the management of the fisheries should be encouraged. This should be possible if the users are given a clear mandate, with authority to manage the resource, and secure management tenure.