

# Fisheries & adaptive learning

## Project status:

April 2004

Brief # 3

Welcome to the third in a series of adaptive learning briefs. Since the last brief (December-03) a number of activities have been undertaken:

- The task of revising the existing adaptive learning guidelines has begun (see below).
- STREAM ([www.streaminitiative.org](http://www.streaminitiative.org)) have agreed to assist the project with the translation of the revised guidelines into Lao, Vietnamese, Khmer and Hindi languages. STREAM have also agreed to promote these through the STREAM website and regional hubs.
- CIFRI have been able to participate in the project once more. This is most welcome. It has been agreed that in West Bengal implementation of the adaptive learning guidelines will be conducted in both brackish and freshwater rice-fish systems. This will be done through a collaboration between WorldFish Center, Department of Agriculture of West Bengal (freshwater systems) and CIFRI (brackish water systems).
- As part of the process of implementing the adaptive learning guidelines, a rapid appraisal has been conducted in West Bengal to get a better understanding of the resource systems and uncertainties associated

with management (see pages 18 & 19 of the adaptive learning guidelines). This will be used in developing the learning strategies for these systems.

- A workshop was held in Vietnam by MRC with resource managers, researchers and government representatives to present some results from stocking experiments and to enable managers to share their management experiences (see overleaf).



*CIFRI staff collecting information on seasonal land use in Tangramary village in West Bengal, a village with many small brackish water rice-fish systems.*

## What are project objectives?

1. Develop the existing adaptive learning guidelines to improve both usefulness and readability
2. Communicate with relevant people in a way they find useful and accessible.
3. Implement the adaptive learning approach in rice-fish systems in India and reservoirs in the Mekong Basin to learn more about the process.

## How you can help:

We wish to both draw on the experiences of other practitioners as well as promote the approach as a framework for adaptive co-management. We would therefore like you to forward this brief to others who you think might be interested and also provide us with your views.

## Revising the adaptive learning guidelines

The results of the pre-testing have been used to inform the revision of the existing adaptive learning guidelines and more emphasis will be put on the fact that the guidelines provide a framework for implementing an adaptive co-management approach and how the principles of adaptive learning were executed in a real field setting to ensure learning by all.

We would like to thank all of you who assisted in the pre-testing as the feedback we received has been extremely valuable and will help us produce revised guidelines that

better meet the requirements of potential users.

However, we are still interested in your views and if you have any comments on the existing guidelines or would like to share your experiences of adaptive co-management we would like to hear from you (see contact details at the end of this brief). The current adaptive learning guidelines are available from the FMSP website as a PDF document (<http://dialspace.dial.pipex.com/town/green/gov67/FTRs/r7335a.htm>).

## IMPLEMENTING THE APPROACH - The Dak Lak Workshop, Vietnam

The workshop, "Learning from fisheries enhancement in the central highlands of Viet Nam", held in February in Buon Me Thuot was organised by the MRC and provided an excellent opportunity for researchers and fishery managers to share results and experiences of stocking from three reservoirs in the area. The workshop was attended by a total of 37 participants. The participants were from a range of backgrounds and included resource users from the reservoir fishers unions, representatives of the communes, researchers including both fisheries biologists and socio-economists together with extension officers.

Discussions at the workshop were wide ranging and covered both the technical aspects of stocking and harvesting as well as the benefits from the different forms of management currently employed at the reservoirs.

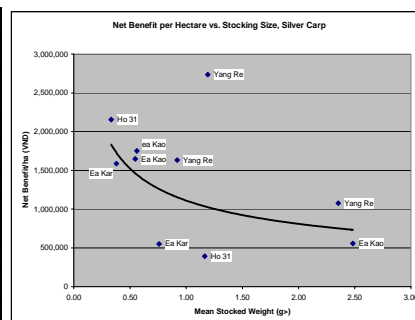
Participants agreed that exchanging experiences among different managers is a good opportunity to increase understanding. Differences

between reservoirs, not just in their bio-physical nature but also the needs and objectives of managers, led to agreement that a single, uniform, stocking strategy would be less useful and management should be a learning process to gradually improve management.

Priority areas related to stocking were identified and are shown in the table to the right. Managers indicated that it was important that fish stocked could be recaptured easily as problems had been experienced with catching larger stocked fish. This could be one area that could be examined to see if fast growing species with lower maximum size could be stocked in order to meet this need.

Priority areas for reservoir managers
Insufficient finances
Difficulty monitoring the fishery
Difficulty preventing overexploitation
Difficulty catching fish because of tree stumps
Productivity of the reservoirs is diminishing
Management contracts are too short
Seed quality
Price of fish seed is high
Lack of technical knowledge about stocking
Growth overfishing
Flooding in some locations

From the data that the MRC had collected on stocking and the reservoir fisheries the results of analysis indicated that there could be a financial benefit from stocking smaller size silver carp fingerlings (see graph below) though similar results for bighead carp were less conclusive. It was also possible to develop some initial recommendations on stocking for inexperienced fisheries managers. These recommendations suggested that stocking density and species combinations would be primarily determined by the size of the reservoir with stocking density decreasing with increasing area.



## CONTACT DETAILS

The project is implemented through a partnership between MRAG Ltd, the Mekong River Commission, WorldFish Center and the Department of Agriculture of West Bengal, India.

Robert Arthur  
Caroline Garaway  
MRAG Ltd, 18 Queen Street,  
London, W1J 5PN, UK  
Phone: +44 (0) 207 255 7786  
Fax: +44 (0) 207 499 5388  
Email: r.arthur@mrag.co.uk



Mark Prein  
Madan Dey  
WorldFish Center  
PO Box 500 GPO  
10670, Penang, Malaysia  
Phone: +60 (0)4 626 1606  
Fax: +60 (0)4 626 5530  
Email: m.prein@cgiar.org



Wolf Hartmann  
Management of River & Reservoir Fisheries in the Mekong Basin  
PO Box 7035, Vientiane, Lao PDR  
Phone: +856 (0)21 223 436  
Email: merops@laopdr.com



Government  
of West Bengal

Nirmal Saha  
SK Bardhan Roy  
Department of Agriculture, West Bengal  
Kolkata, West Bengal  
Phone: +91 (0)33 2476 1492  
Fax: +91 (0)33 2475 5674  
Email: agrievln@cal2.vsnl.net.in

This document is an output from a project funded by the UK Department for International Development (DFID) for the benefit of developing countries. The views expressed are not necessarily those of DFID.