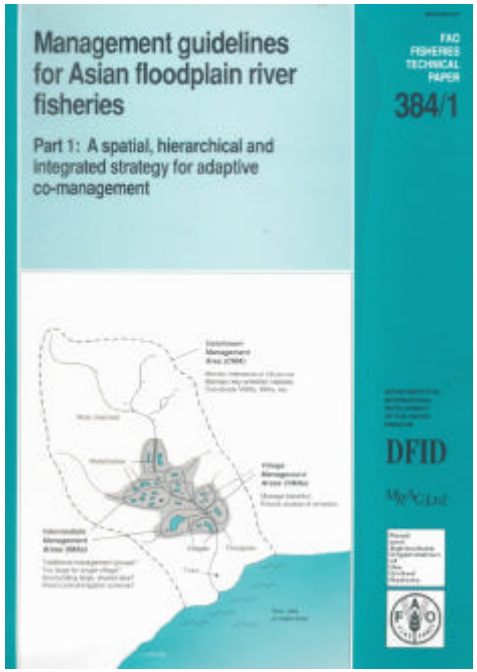
For further information….

These management guidelines were developed in 1997, based on the outputs of four DFID projects on Asian floodplain river fisheries (see links on the FMSP R8486 web page to FMSP projects R5485, R5953 and R6494, and RNRRS Socio-economic project R4791). Further FMSP projects since that time have focused on the use of 'harvest reserves' and the management of sluice gates for integrated benefits of agriculture and fisheries (see companion leaflets).



These guidelines were published as FAO Fisheries Technical Paper 384, written as a two-part set. Part 1 presents a framework for considering the 'why, what, who and how' of managing floodplain river fisheries, as summarised inside this leaflet. Part 2 of the paper describes the underlying research work which provided the basis for the recommendations. Part 2 includes information on environmental conditions, fish stocks, fishing practices and management arrangements used at project case study sites in Bangladesh, India, Indonesia and Thailand.

Both Part 1 and Part 2 may be downloaded from the FAO web sites as listed below. A PowerPoint presentation for use in training workshops about floodplain river fisheries management is also available on the FMSP site (http://www.fmsp.org.uk).

Hoggarth, D.D., Cowan, V.J., Halls, A.S., Aeron-Thomas, M., McGregor, A.J., Garaway, C.A., Payne, A.I. & Welcomme, R.L. (1999a). Management Guidelines for Asian Floodplain River Fisheries. FAO Fisheries Technical Paper, 384/1 FAO, Rome.

Part 1. A Spatial, Hierarchical and Integrated Strategy for Adaptive Co-Management. (63pp) (http://www.fao.org/DOCREP/006/X1357E/X1357E00.HTM)

Part 2. Summary of DFID research (117pp). (http://www.fao.org/DOCREP/006/X1358E/X1358E00.HTM)

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DFID Department for International Development

Introduction

This leaflet gives summary guidelines about the management of floodplain river fisheries for the benefit of fishery stakeholders. These guidelines were developed from a series of studies on Asian floodplain river fisheries that were undertaken with DFID funding between 1992 and 1997. The recommendations are particularly applicable to Asian rivers, but should also be relevant at a global level.

The guidelines were published in 1999 as FAO Fisheries Technical Paper 384 (see back cover). Inside this leaflet, we provide some of the key messages from each of the chapters 1-4 of Part 1 of the paper, as listed below:

Why mange?	Because floodplains are both valuable and vulnerable
What to manage?	The environment, the fish *and* fishing
Who should manage?	Sharing roles and responsibilities (co-management)
How to manage?	Identifying spatial management units, designing management plans, and managing adaptively

The guidelines emphasise the importance of different stakeholders working together in the integrated co-management of floodplain fisheries. Chapter 5 in the FAO paper provides checklists of the potential roles of national, catchment-level and local-level stakeholders in the management process.

Why manage floodplain rivers?

Floodplains provide many benefits, both socio-economic and environmental, but are threatened by overuse from a range of competing sectors. Management plans need to be adapted to the priority objectives at each site, and must bear in mind the limits imposed by the natural productive capacity of the resource.

What do I need to manage?

You need to manage both the impact of fishing on fish stocks, and the influence of a range of other sectors that use or affect the aquatic environment. In the picture on the right, the Komering River in Indonesia now dries up completely in the dry season due to a new irrigation scheme upstream of this fishing village.

Floodplain river fish include both 'blackfish' species that survive in the floodplain and migrate only small distances, and more migratory 'whitefish' species. These species have different management ranges and different management needs. You need to help blackfish survive the dry season by restricting capture at this time, and help whitefish reach their spawning grounds by limiting the use of barrier traps in key places. In multi-species river fish stocks, heavy fishing may cause the extinction of the largest, most valuable species, unless carefully controlled.

Who should be involved in management?

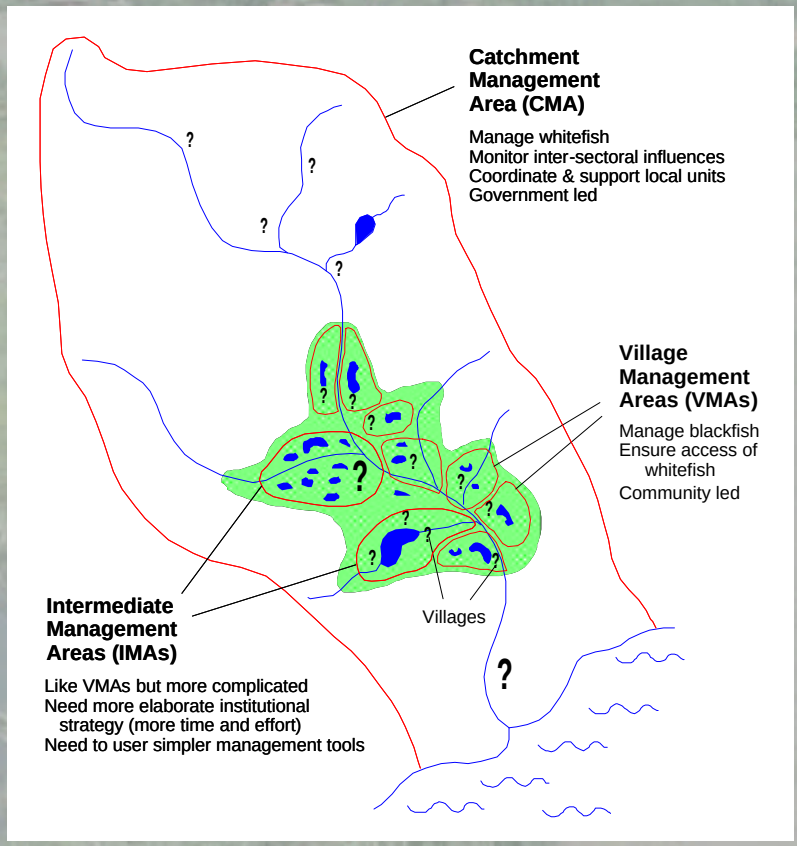
Effective management of floodplain rivers requires a co-management approach, that takes advantage of the skills and capacities of different stakeholders. The many different management roles should be shared both 'hierarchically' between national, regional and local partners, and 'spatially' between different management units in each floodplain catchment. There is no blueprint solution - a participatory, co-management approach must draw on the knowledge, skills and capacities of resource users, government officers, local development NGOs and other stakeholders, as available and appropriate in each location. Some places will also have better prospects for co-management than others (see list of conditions in the FAO paper). Management should begin in these optimal locations first.

Where conditions give good prospects for co-management, local people should take the lead in designing management plans for their local blackfish resources, and in enforcing their local rules and monitoring the outcomes. Government partners will also always have important roles, both in co-ordinating the management of whitefish and in legitimizing local plans with supporting legislation. NGOs may also play critical roles both as facilitators and in developing capacity.

How should we manage?

Floodplain fishery resources should be divided up into manageable 'units' allowing local resource users to control activities within their area. Management units should be selected to achieve the maximum possible overlap between the range of authority of the local managers (e.g. a village boundary) and the distribution range of a fish stock (e.g. blackfish residing in a village pond and the surrounding floodplain area). Management will be easiest in these simple 'Village Management Areas' as illustrated below.

Government-level managers will need to support local management areas and also work within 'Catchment Management Areas' as listed in the figure. In many locations, 'Intermediate Management Areas' will also exist, such as where several villages share the resources of a large lake without clear use rights. Management will be more difficult in these places and may need extra support, e.g. by NGO partners. The selection of spatial management units is outlined in detail in the FAO document.



Appropriate management measures will be needed in each unit. The FAO document describes the pros and cons of different tools, including managing the environment (e.g. restoring habitats, managing sluice gates); managing who can fish (e.g. by waterbody leasing), manging the amount and type of fishing (e.g. mesh size limits, reserves, closed seasons, gear bans) and managing the fish themselves (e.g. by stocking). The combination of rules selected should be written up as a management plan. The outcome should then be monitored and managed 'adaptively', comparing the results with those in other places, and making changes as needed. Government partners can help greatly in facilitating this process.