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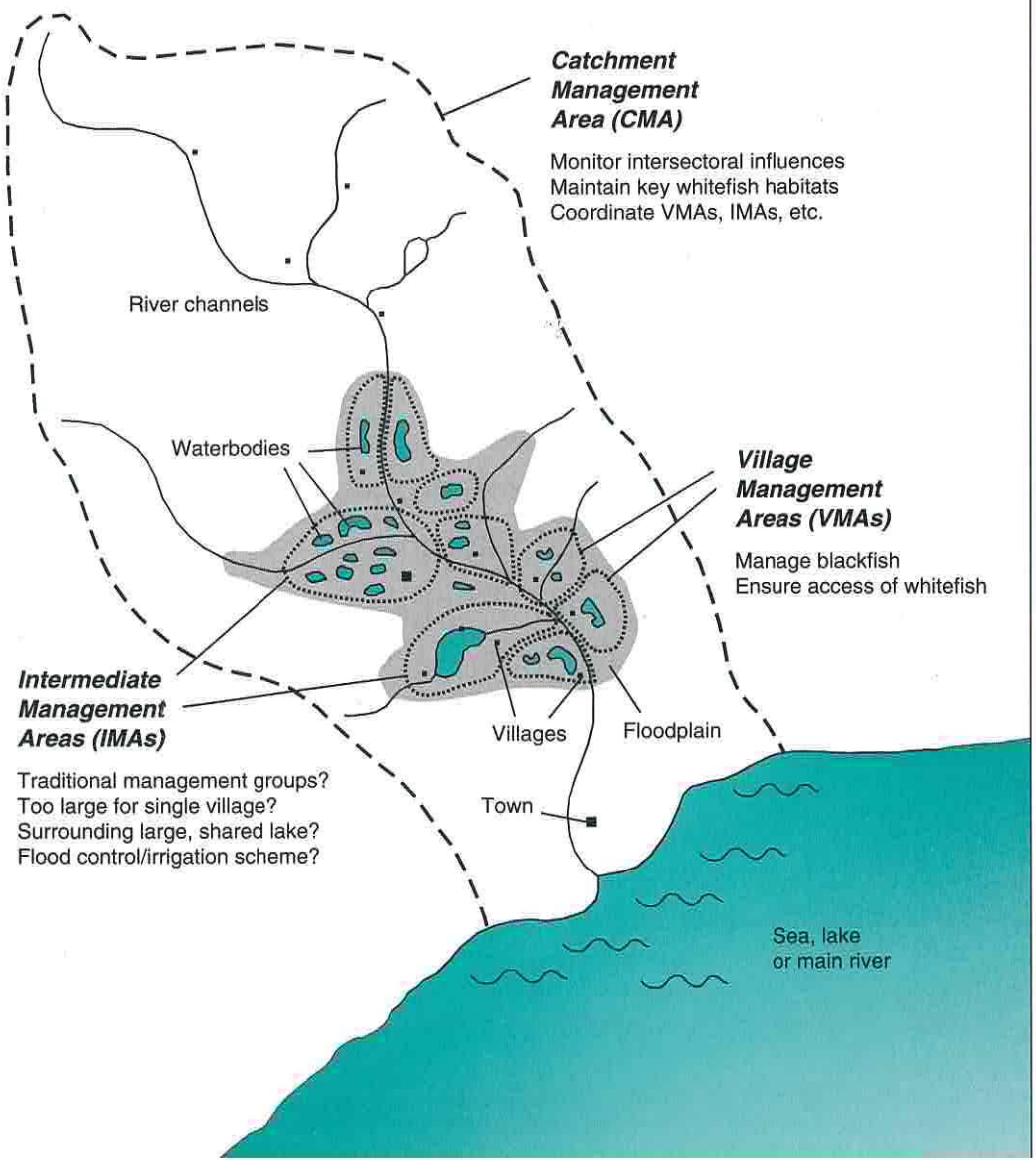
Management guidelines for Asian floodplain river fisheries

Part 2: Summary of DFID research



DEPARTMENT FOR INTERNATIONAL DEVELOPMENT OF THE UNITED KINGDOM

DFID

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Food and Agriculture Organization of the United Nations

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Management guidelines for Asian floodplain river fisheries

Part 2: Summary of DFID research

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Food
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Preparation of this document

These guidelines summarise a series of studies, funded by the UK Department For International Development (DFID, previously known as ODA) on the management of Asian floodplain river fisheries. Between 1992 and 1997, DFID has funded four separate projects in this area. The research was initiated by a project led by Bath University's Centre for Development Studies (CDS), entitled 'Poverty, Equity and Sustainability in the Management of Inland Capture Fisheries in South and South-East Asia'. The theme was then taken up by three projects, led by MRAG Ltd, and funded by DFID's Fisheries Management Science Programme (FMSP): 'River and Floodplain Fisheries in the Ganges'; 'Fisheries Dynamics of Modified Floodplains in Southern Asia'; and 'An Evaluation of Floodplain Stock Enhancement'.

The Technical Paper is written in two parts. Part 1 outlines a practical strategy for the management of large floodplain rivers based on the experiences gained by these projects and on other literature from related research. Part 2 includes the more technical data derived from the research projects, on which the guidelines in Part 1 are based. The Part 1 guidelines are presented in a simple and user-friendly style to provide both policy makers and field officers with the tools they need to manage river fisheries, and the technical and institutional background to make them work. The guidelines may also be used in the construction of courses for regional fisheries officers and related extension workers.

Funding for the preparation of this paper was provided by the UK Department For International Development. The Technical Paper was published through FAO to ensure the widest possible dissemination of its ideas. Over the years, the research theme has benefitted from the active participation of a wide range of local collaborators, including staff from: the Bangladesh Agricultural University (BAU), Mymensingh, Bangladesh; the Bangladesh Centre for Advanced Studies (BCAS), Dhaka, Bangladesh; the Bangladesh Institute for Development Studies (BIDS), Dhaka, Bangladesh; the Central Research Institute for Fisheries (CRIFI), Jakarta and Palembang, Indonesia; the Environmental Laboratory of the University of Patna, India; the Coastal Resources Insititute (CORIN) of the Prince of Songkla University, Hat Yai, Thailand; the Zoology Department of the University of Allahabad, India; the Zoology Department of the University of Garhwal, India. The many contributions of these collaborators to the ideas in this paper are warmly acknowledged. Special thanks are due to CRIFI's Dr Fuad Cholik, Dr Fatuchri Sukadi, Novenny Wahyudi, Dr Achmad Sarnita, Ondara, Agus Djoko Utomo and Zahri Nasution; to BAU's Dr M.A. Wahab; to MRAG's Prof. John Beddington and Kanailal Debnath; to CDS's Alex Kremer, Claire Hall, Dr Adrian Winnett and Prof. Chris Heady; to CORIN's Dr Somsak Boromthanarat and Dr Awae Masae; to the University of Patna's Dr R. Sinha; to BCAS's Dr Saleemul Huq; to Proshika's Rashed un Nabi; to DFID's Dr John Tarbit, Neil McPherson and Chris Price; and to FAO's Dr Jim Kapetsky.

MRAG Ltd is a leading international consulting firm, specializing in aquatic resources management, development, research and assessment, and information technology. The group has extensive experience of working in marine, freshwater, riverine and floodplain environments, and has worked in more than 60 countries for governments, private sector companies and international agencies. MRAG was formed in 1984, currently has a core staff of more than 20 professionals from a range of disciplines, and is located in the Imperial College campus, in the University of London. The group is associated with, and covenants funds to, the Marine Education and Conservation Trust, a charity which supports research and education.

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Abstract

This technical paper provides guidelines for an integrated management strategy for floodplain river fisheries. The paper is written in two separate volumes. Part 1 presents the guidelines in a 'user-friendly' format, to promote their uptake by fishery managers, policy makers and field officers. Recommendations are given both on the alternative technical tools which may be used to manage river fisheries, and on the institutional factors required for their success. The highly variable ecological and social characteristics of floodplain rivers demand locally-appropriate and adaptive solutions, rather than a single 'blueprint' approach. The recommended management strategy allocates responsibilities both hierarchically and spatially, and promotes the effective collaboration of government, communities and other stakeholders at appropriate levels.

The more technical Part 2 describes the underlying research work which provided the basis for these management guidelines. Investigations were made during four projects funded by the UK Department For International Development (DFID), in Bangladesh, India, Indonesia, Nepal and Thailand, between 1992 and 1997. Part 2 describes the floodplain river environments, the fish stocks and the fishing practices found at some of these study sites. Justification is given for a range of technical management tools for river fisheries, including the use of access controls and reserves, and the manipulation of water levels within flood control and irrigation schemes to give benefits to fishing as well as agriculture. Final chapters in Part 2 describe lessons learnt on the management of enhancement fisheries (e.g. based on fish stocking), and on the prospects and limitations of participatory management for these resources.

Distribution:

Inland fisheries: warm and cold waters
Directors of Fisheries
Fishery Regional Officers
Fisheries Department

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