
***Fisheries Dynamics of Modified
Floodplains in Southern Asia***

***Sub-Project 6: The utility of Visible
Implant (VI) tags for marking tropical
river fish***

Project R5953

Fisheries Management Science Programme
managed by *MRAG*, under the ODA
Renewable Natural Resources Research Strategy

MRAG Ltd, March 1997

ODA FMSP Project R5953
Fisheries Dynamics of Modified Floodplains in Southern Asia
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Paper: 'The utility of Visible Implant (VI) tags for marking tropical river fish'

1. Background

The ODA Fisheries Management Science Programme's project R5953: Fisheries Dynamics in Modified Floodplains in Southern Asia is a three year comparative investigation of a hydrologically modified river floodplain in Bangladesh and a more pristine one in Indonesia. The project was designed to address two key developmental needs:

1. *To understand the implications of migration, reproduction and dry-season survival strategies of river fish on the management of inland capture fisheries.*
2. *To understand the impacts of flood control measures on the fish production potential of modified floodplains, and make recommendations on the wider management of floodplain resources for fish production.*

This sub-project was undertaken to determine the utility of visible implant tags, particularly for studies of growth within the second objective above.

2. Sub-project objective

To assess the utility of visible implant (VI) tags for marking tropical river fish for population dynamics studies.

3. Personnel

The sub-project was undertaken by the following collaborating staff of the Marine Resources Assessment Group Ltd (MRAG), 8 Prince's Gardens, London, SW7 1NA, UK:

Mr A.S.Halls, PhD research assistant

and of the Department of Fisheries, Biology and Limnology, Bangladesh Agricultural University

(BAU), Mymensingh:

Mohammed Ekram Azim, MSc Student

4. Research activities and programme

As detailed in the following paper, an experiment to assess the utility of VI tags for marking five species of tropical river fish was conducted in culture ponds at the Bangladesh Agricultural University, Mymensingh between March and July, 1995.

5. Description of outputs

This sub-project was written up as a paper 'The utility of Visible Implant (VI) tags for marking tropical river fish' submitted to the journal Fisheries Management and Ecology in January 1997, as shown in the attached proof.

The sub-project confirmed that VI tags could be used to measure the growth rates of certain species of fish, having no significant effects on tagged specimens. Tag loss rates, however, were extremely high for the most important and smallest key species *Puntius sophore* and *Glossogobius giuris*. Following this result, an alternative methodology was developed to determine the growth component of the Bangladesh floodplain production model (see sub-project 4).