Participatory Fisheries Stock Assessment (ParFish)

Application of ParFish in Zanzibar, Tanzania

Introduction Sept 2004 Flyer #1

This flyer is the first in a series following the development of a methodology for Participatory Fisheries Stock Assessment (ParFish), and an associated Toolkit.

This flyer covers the following:

- What is ParFish?
- How ParFish is being developed through a project in Zanzibar.
- How you can be involved in ParFish.

ParFish is supported by the UK Department for International Development (DFID) through its Fisheries Management Science Programme (FMSP).

What is ParFish?

ParFish is an approach to fisheries stock assessment and a tool for involving fishers in development management actions.

It is a particularly suitable methodology for small-scale fisheries in developing countries as it:

- Allows a rapid assessment
- Encourages participation of fishers
- not require data recorded over a long time series

At the centre of ParFish is a software for stock assessment that can use a number of different sources of information including fisher interviews.

The ParFish software gives an indication of the level

exploitation of fisheries stocks. It also indicates what the optimal level of control (e.g. catch quota, the number of boats fishing or area of refuge) should be, to sustain fish stocks and give catch rates

The ParFish approach

5. Assist implementation of management plans Implement management Implement monitoring

6. Evaluate ParFish process

- Assess impacts of management actions
- Evaluate ParFish assessment & data collection Evaluate participatory process
- 1. Understand the context
- Assess the fishery and management context
- Identify and engage stakeholders
 Identify appropriate communication

acceptable to fishers.

However ParFish is not only about stock assessment but is an holistic approach that assists fishers and other stakeholders to enter a cycle of learning, management planning and implementation.

4. Give feedback and initiate management planning Feedback stock assessment results to

- stakeholders **Build consensus**
- Plan management, monitoring and enforcement action
- Agree evaluation criteria

3. Undertake ParFish Stock

- Data collection
- Data analysis using ParFish Interpret ParFish assessment

2. Agree objectives with

- Encourage participation
- Set management objectives Identify information

requirements

How is ParFish being applied in Zanzibar?



Activities

ParFish was first developed in Zanzibar in 2003, within the fishery of Kizimkazi. During this period, the fishers of Kizimkazi participated in interviews and fishing experiments to collect data for the assessment.

As part of the second phase of the project, the results of the analysis will be shared with the participatory fishers and methods used to build consensus on management actions. A Toolkit to give guidance on the ParFish approach will also be developed and tested. This will take place between September and November 2004.

Who is involved?

The project is being undertaken by the Institute of Marine Sciences (IMS) of the University of Dar es Salaam based in Zanzibar, partnership with Marine Resources Assessment Group (MRAG) based in the UK. See below for contacts.

What are the outputs of the ParFish Project?

Three main outputs

The project team will work in Zanzibar and the UK until February 2005 to produce the following outputs:

- 1. Management actions for the Kizimkazi fishery
- 2. Increased capacity of IMS
- 3. Developed and tested ParFish ToolKit

Kizimkazi is a region situated on the south western tip of Zanzibar. The ParFish project has worked within two villages in the region: Dimbani and Mkunguni. There are around 60 fishers in the mixed-species fishery. They fish on both the inshore and outer reefs and use hand lines and traps.

Management Actions

The project aims to develop management actions for the Kizimkazi fishery with the participation of fishers and other important stakeholders (e.g. local government and NGOs).

Increased capacity of IMS

The Institute of Marine Sciences undertakes a range of research activities within the marine environment. They have been involved in the ParFish project since its inception and have helped develop many of the data collection methods.

IMS will further develop its capacity in stock assessment through this project, and become a centre of excellence for the ParFish methodology in the region.



The ParFish ToolKit

The final output of the project will be the developed and tested ParFish Toolkit including:

- ✓ The ParFish software and manual
- √ Tools to guide the user through the ParFish approach

Latest update...

Achievements so far

The project has so far developed a draft version of the ParFish Toolkit consisting of the software and a range of tools for data collection, participation techniques and management planning.

What next?

Following the experience of developing management action plans with the fishers in Kizimkazi the ParFish Toolkit will be finalised. It will consist of the user-friendly software and guidance for undertaking stock assessment and management planning using the ParFish approach.



What can you do?

- 1. Let us know if you would be interested to trial the ParFish software with your own fisheries data
- 2. Tell us what you would like to see in the ParFish Toolkit
- 3. Support the further development and promotion of ParFish

CONTACT DETAILS

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