

LIPI Report

For the Institute of social sciences

'Community No Fishing Areas: Conservation or Conflicts.

A critique of community-based no fishing areas

Name: Henry Wake

Institute: (BA) Geography, University of Leeds

Field supervisor: Chris Majors

Dates of study: 11th July – 4 September 2003

Site studied: Sampela

Date of completion: February 2004

Introduction:

Increasing pressure on marine resources due to population growth, increased fishing technology and market forces has made over fishing and environmental degradation a very real phenomenon in S.E Asia and globally. There is a great need for conservation efforts to protect marine areas and ecosystems and to ensure sustainable development for the fishing communities that rely on these resources for their livelihood. Among the strategies of governments and conservationist NGOs 'Marine Protected Areas' or 'No Fishing Zones' are currently being championed as a last resort in environmental protection, by global organisations such as COREMAP, WWF and TNC. Marine protected areas (MPA) can be implemented in a top-down strategy or as in the case COREMAP phase II in a community based management (CBM) approach. Community based management has been introduced and implemented through out the 1990s as a conservation solution and heralded to be more effective than 'top-down' strategies, but there has been varying degrees of success at varying scales, and recently the raising of difficulties with such an approach. Hence it is of high relevance to assess the problems and limitations of the TNC and COREMAP phase II program to implement community based management of marine protected areas in Wakatobi in 2004, and provide recommendations for improvement.

Aims and Objectives:

The aim of this project is to explore the likely success, the problems and limitations of implementing community MPA's on a wide scale through out Wakatobi. The project will aim to get an understanding of community perceptions of MPA from a cross section of the population. And finally to assess the reality of MPA by looking at case study of the Operation Wallacea and Sampela MPA off Hoga. Objectives are (1) Assess the community perceptions of the environment, resource decline and the need for conservation (2) Assess the community capacity to develop and implement a community conservation strategy (3) Explore the reality of 'outsiders' imposing conservation agendas on Bajau fishing communities – The National park and Operation Wallecea MPA (4) Critically apply the problems and limitations of community-based MPA to the COREMAP and TNC programs. (5) Provide community recommendations for successful protection of marine resources.

Methodology:

The methodology was primarily interviews conducted within the Bajau village of Sampela working with a translator, the interviews consisted of two sections; (1.) 30 Shorter 'questionnaire' interviews for quantitative data aggregation. (2.) 20 More in-depth qualitative interviews. Interviews were conducted in a random sampling technique with in different target groups, but also focused on key figures with in the community. The final section was conducted in 6 focus groups of 4-6 people.

Preliminary results:

Perceptions of the environment, sustainability and need for conservation:

- Varying levels of awareness and concern over resource decline.
- Some recognise the need for conservation, many others don't.
- Limited thought or concern for the future.
- Varying perceptions of the extent of resource decline (from 5 to 50 %) and time until fishery collapses (from 7 to 50 years) and therefore a large range in terms of urgency for conservation.
- Most recognise decline is impacting their livelihood – they have to fish longer and fish prices are cheap.

- Fishermen's knowledge of what causes decline is varied and incomplete, however most think that bomb and cyanide destroys coral reef, also coral mining, and too many net fishers.
- Traditional belief is still that the sea can look after its self– also that fish stocks can be replenished through prayers to sea spirits.
- Many would like to know more about conservation and to provide information of the environment.

Community capacity to implement conservation strategies:

- Ideas are not uniform – there are many different perceptions, ideas and needs. Hence a community-based approach would be difficult in a diverse community.
- Bajau have leaders and institution, but this is not part of their tradition and has low capacity to implement effective management or enforcement - 'Bajau can't tell Bajau what to do'.
- Low property rights – from the previously nomadic life style the Bajau fish large areas which makes it hard to ensure successful 'community' management of a specific area.
- Culturally marine 'management' is an alien concept, and most people don't understand it.
- Belief that conservation is the responsibility of Tourists and the government alone, not the community.

Reality of National Park:

- The National park has had very little impact on the lives and use of marine resources by the Bajau people. Many don't know they are in a marine park, and have very limited knowledge of the park regulations.
- Most say the Jagawana don't have the capacity to enforce the rules; the Bajau having limited formal and informal contact with them due to cultural and language barriers. This is up-held by the fact that the Jagawana only have the funding to patrol in the sea once a month.

Reality, success and attitudes towards the Hoga MPA:

- The Hoga marine protected area has been successful in reducing the amount of fishing activity (estimated by about 80%), there have been very few infringements from the Bajau from Sampela.
- There was and currently still is varying support within the community (maybe 50% support), the majority of subsistence fishers want the site to be opened.
- However in implementation the idea was accepted and promoted by Operation Wallacea and village leaders, the meetings and discussion excluded many (often the most interested parties – such as subsistence fishers and women).
- The key to the success of the Hoga MPA is:
 - (1.) The compensation money paid to the village for development, this has caused conflicts as not all fishermen benefit, but is a major reason for success as village tax is paid from this.
 - (2.) The Kapala Desa role is central in the maintenance and running of the project, as he is respected and powerful
 - (3.) Site is important, the area is clearly visible from Hoga and Sampela – essential to success.
 - (4.) The involvement and presence of tourists.
- Both Operation Wallacea and the people of Sampela recognise the MPA wouldn't work with out these components.
- Bajau opinion is divided between different groups, groups who would use the area disagree as it's a place they can no longer fish, and the increase of fish is no benefit to them. Positive opinions are due to the compensation, but environmental benefits are of low concern.
- Many think that the wide spread implementation of MPA wouldn't work, due to the number of different stake holders in most areas, problems of enforcement, and the lack of community desire to close of areas which would impact on livelihoods.

Bajau recommendations for conservation:

- The use of larger mesh sizes (3" +) for gillnets is seen as viable and worth while.
- The of the use of traditional fishing techniques such as spear and line., external enforcement of bomb and cyanide use.
- Change of livelihood for some only from reef fishing to pelagic fishing or non-fishing livelihoods.
- Importantly awareness within the village, on a regular or permanent basis.
- Regulation of the fishing trade, is would be much more effective than regulating fishing.

Conclusions:

The Bajau community of Sampela is very diverse in opinion, awareness of environmental concerns and conservation. The community itself lacks the ability to effectively manage and enforce the protection of a MPA, as, as the Bajau put it 'people don't care, they just want to fish'. MPA's are clearly difficult to implement even if real financial incentives are provided and external bodies and local government enforce the site. The large scale implementation of purely community-based MPAs is likely to encounter great difficulties in implementation, most fishing communities simply cant afford to lose fishing grounds in hard times. However recommendations from communities can be successful and

can include enforcement to stop destructive techniques, larger mesh sizes and education to change the way people understand and therefore use marine resources.