

**NATURAL RESOURCES SYSTEMS PROGRAMME**  
***PROJECT REPORT***

**DFID Project Number**

R8294

**Project Title**

Policy brief on managing fisheries conflicts: Communication and consensus building in South and Southeast Asia.

Annex 2 of the Final Technical Report of project R8294.

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**Organisation**

WorldFish Center

**Date**

2005

**NRSP Production System**

Land Water Interface

# Policy Brief on Managing Fisheries Conflicts: Communication and Consensus Building in South and Southeast Asia



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## The WorldFish Center

In collaboration with:  
The WorldFish Center-Bangladesh Regional Office  
Fisheries Action Coalition Team, Cambodia  
Mitraniketan, India  
The University of Reading, United Kingdom

With funds from:  
The Department for International Development (DFID), United Kingdom

  
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## Table of Contents

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Executive Summary

Foreword

- 1 Introduction: Overview of fisheries and its problems in South and Southeast Asia
- 2 Why are there conflicts in fisheries?
- 3 Fisheries conflicts in South and Southeast Asia
  - 3.1 Typology of fisheries conflicts
  - 3.2 Fisheries conflicts in Cambodia, Bangladesh and India
- 4 Communication tools for understanding and managing fisheries conflicts
  - 4.1 Participatory Institutional Survey and Conflict Evaluation Exercise (PISCES)
  - 4.2 Fisheries Conflicts Communication Framework (FishCom): A tool for developing plans & strategies for managing fisheries conflicts
  - 4.3 Attitude surveys to assess opportunities for conflict management
  - 4.4 Participatory Consensus-Building Tool for Managing Fisheries Conflict: A PAPD-Based Facilitators' Guide (PAPD-Based CBT)
- 5 Policy Recommendations
  - 5.1 Develop, design and package information, education and communication (IEC) strategies for fisheries conflict management
  - 5.2 Institutionalize multistakeholder participation in fisheries conflict management
  - 5.3 Embed conflict management in natural resource governance

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## Executive Summary

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Overpopulation and poverty in South and Southeast Asia, particularly in fishing communities, as well as unsustainable fishing practices have compounded pressures on the region's fisheries. Conflicts occur alongside competing industry and the mass of people dependent on fishery resources. There are, however, far more complex conflicts with an inordinate amount of socioeconomic problems, cultural differences and political power struggles, complicated all the more by a diversity of interests, values, priorities and manners of use, and exploitation among resource users.

The social dimension and the role of the resource users in managing conflicts should be factored in when looking for solutions to conflicts. Communication amongst stakeholders in conflicts is one very important factor and is integral in the process of understanding conflicts that are typified in various categories.

Type I is about who controls the fishery, one that is quite common in Cambodia and Bangladesh. Type II is about how it is controlled where either lack or overenforcement is seen as the primary conflict as is prevalent in the coastal areas of Cambodia, Bangladesh and India. The third (Type III) typifies relationships between users of the resource while the fourth is the relation between fishery and non-fishery users. Type V conflict pervades when non-fishery interests and issues, such corruption amongst authorities involved, affect the fisheries stakeholders.

All of the above points to the necessity of conducting attitude surveys involving stakeholders from Project partners in Bangladesh, Cambodia and India. The plans and policies evolving from this Project have been considerably based on attitudes and perceptions of these stakeholders, including, very importantly, the region's fishers.

The Brief recommends, *inter alia*, the following:

- Develop, design and disseminate appropriate information, education and communication (IEC) materials through various means—group communication activities, print, multimedia, and even folk media
- Popularize the proposed manual called *PAPD-Based Consensus-Building Tool*
- Establish and institutionalize mechanisms to sustain the participation of all key players in the fisheries sector
- Require local administration and relevant government agencies to provide a sustainable participatory scheme to a qualified local NGO to lend support to fisheries conflict management in the long term
- Establish conflict management in natural resource governance by advocating pressure on governments to incorporate conflict management as necessary “cost of governance” and not just a “business-as-usual” activity.

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## Foreword

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Fisheries conflict management assumes perpetual time. That it is a work in progress makes an undertaking of such magnitude equally take time to realize returns, in both economic and conservation terms. For as long as competition for use and access to fisheries resources by a community of varied interests, wants and needs goes unabated with every fishery-dependent individual demanding more and better food and livelihood, conflicts may yet linger in an indefinite time horizon.

Resolving fisheries conflicts must be within a considerable timeframe; otherwise, sustainable fisheries conservation would cost the community and government—a cost of immeasurable value to both life and environment. An institutional approach needs pursuing, therefore. Efforts must be expended at effecting policies and mechanisms that would help streamline institutional arrangements for participatory conflict resolution and management. The mechanism for enabling fisheries conflict management has been laid down by the WorldFish project of that scope and coverage and is waiting reinforcement. The Project has likewise laid down policy context that has been robustly reassessed not merely by the Center, but essentially by Project partners in Bangladesh, Cambodia and India—engaging an enormous amount of inputs from numerous stakeholders in these countries. Policy discussions and decisions as well as recommendations subsumed in this Brief are a convergence of significant participation of a wider range of stakeholders.

Policies evolve their own sensitivity from purely organizational and technical to those that should take action on compelling competition for fisheries production and sustainable use, conservation and human needs, local governance and multistakeholdership; and thoughtful considerations of local, national and global concerns.

This Policy Brief is very much upon us. It matters little where policies originated. What we need to deal with is the substantial work ahead of all the pioneering efforts of contextualizing policies, and this means coming to terms with democratic and creative demand for conflict resolution and consensus building, build on from this effort, support multiple stakes on the fisheries sector, and begin to resemble a governing tool for manageable fisheries operations that involve and benefit a much larger community of partner-beneficiaries.

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## 1 Introduction

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### **Overview of fisheries and their problems in South and Southeast Asia**

About fifty per cent of South and Southeast Asia's rapidly growing population depends on fisheries for food and livelihood. Overpopulation and poverty are so well-entrenched in these parts of Asia, most visibly in fishing communities where the poor are often driven to look for a living, quite often, too, using unsustainable practices and other means for economic survival. Of late, fish has become one of the traded commodities in the global market and a revenue-generating resource for most governments and entrepreneurs in the region. The value of fish trade in South and Southeast Asia has been estimated at USD \_\_\_ in 2003 associated with \_\_\_mt of fisheries products exported mainly from Asia. An overexploited resource and a burgeoning fish industry, together with other pressures, contribute to the overall declining trends in fisheries.

Conflicts then arise when industry and a dependent mass compete for access to the resource. Conflicts come about when subsistence fishers, who are characteristically in huge numbers in developing countries, contest with other groups of fishers—big and small—as well as with other fisheries stakeholders who include, more often than not, authorities who do not enforce pertinent rules and regulations. Viewed broadly now, conflicts are a situation where there is evident lack of cooperation between parties of contradicting objectives. Yet, conflicts are often far more complex as there exist a number of socioeconomic issues that cover a wide range of institutional concerns and market failures contributing to the discord. Many conflicts in fisheries over gear use, landing-site use or market behaviour are not primarily about resource allocation, but are rooted in more complex institutional issues such as cultural differences and political power struggles (Bennette 2002).

The approaches for managing conflicts in fisheries are often complicated by real-life situations where there is diversity of interests, values, priorities and manners of use, and exploitation among resource users. In many circumstances conflicts arise from institutional failures in managing and enforcing laws and regulations on resource use and conservation.

Not all conflicts result in violence and they could be part of an iterative process of institutional change and evolution that in the end is a positive outcome. However, conflicts have costs and these costs should not exclude the potential contribution to a positive iterative process, else conflicts become negative costly forces that impact on policy and management operations.

Conflicts in fisheries tend to be resource-specific and hence, they could also be categorized as site-specific and variable with the nature of the resource users on-site. Thus, the social dimension and the role of the resource users in managing conflicts are important factors in finding a solution or mechanisms for conflict resolution. By understanding the whys and hows conflicts in fisheries develop and how managing these conflicts might be improved, fisheries in tropical developing countries can continue to supply a sustainable flow of benefits and support some of the world's poorest producers (Bennett 2002).

Communication amongst stakeholders in conflicts, either between those directly involved in conflicts and those that are potential instruments in conflict management and consensus

building, is a key activity integral to the process of understanding and resolving conflicts. Communication amongst stakeholders ensures participation in community-based management of natural resources. The underlying principle, however, is, when participatory methods cannot perform in an economically efficient manner as possible, then institutions founded on communications expertise could be explored and expedited.

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## 2 Why are there conflicts in fisheries?

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The fishery sector has not been immune to escalating conflicts brought about by an increasingly scarce resources and mounting competition for the use and access of these resources. Competition exacerbates the decline of opportunities in fisheries sector. This grim scenario further looms the horizon over the economically marginalized groups of landless and capital-deprived fishers in South and Southeast Asia. Being marginalized, the poor continue to struggle for equity and assertion of their rights that are seen in diverging contexts. National fisheries development efforts have been expended at providing better and more food for them, such that most fishery rules and regulations enacted by national governments have been crafted to protect the interest and provide access for subsistence fishers and other authorized fishers, and, in general, provide for the needs of the consuming public.

In the context of equitable income distribution, management policies have often been evolving to equitably cater to the various interests of a wide range of fisheries stakeholders. Typically, these interests fall within the range of the three philosophical paradigms; conservation, rationalization, and social; or a compromise of a combination of two of these three.

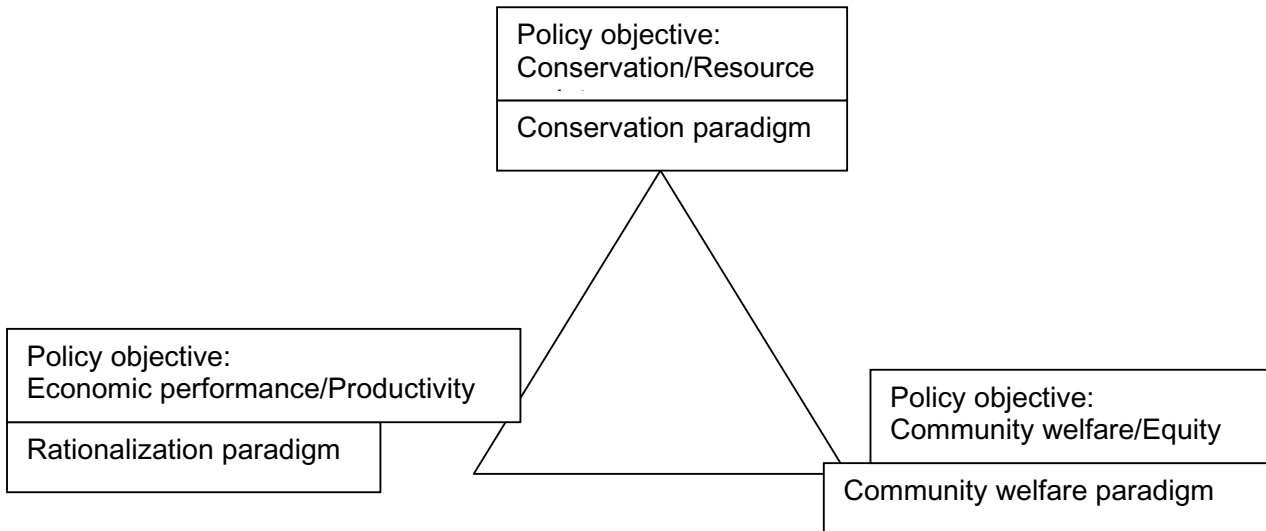
### Framework for Analysing Conflicts

Charles (1992) has provided a framework for analysing conflicts in fisheries by introducing a trio of fishery paradigms. Looking at Figure 1, the three corners of the inner triangle represents the extreme cases of the three philosophical paradigms that Charles postulates. This study extends the illustration through the rectangles that represent the paradigm, illustrating the policy objectives discussed in the same paper. The framework features three paradigms arising from the policy objective at which most groups of fishery resource users operate. The conservation paradigm operates with a policy objective centered on resource maintenance or conservation. This paradigm is based on the premise that the primary duty of the fishery management is to take care of the fish, and fishers are viewed as “predatory fleet” that must be directly managed through restrictive fishing hours, fishing location, fishing effort and catch quota.

The rationalization paradigm emphasizes the pursuit of economic performance and productivity. The policy context related to this paradigm is founded on the assumption that the society should seek to maximize fishery rents, compromising economic benefits over and above payments to fishers and vessels; and those fisheries that cannot attain this objective are “supposed to be rationalized.”

The social or community paradigm focuses on fishers as members of coastal communities, rather than a component of a fishing fleet, in contrast with the view in the conservation paradigm; or an individual fishing firm, as in the context of the rationalization paradigm. This social paradigm focuses on community welfare, distributional equity, and other social and

cultural fishery benefits. Charles noted that this paradigm tends to be attractive among fishers' unions, fishing cooperatives, and those living in or involved with fishing communities; however, these



**Figure 1. A framework for Understanding and Resolving Conflicts**

(Adopted with additions and illustrated from the concepts in Charles 1992)

groups remain to be underrepresented among the staff and management initiatives of many government fishery administrations during the time of his research. More recently, though, there has been an overwhelming interest in this paradigm and its “advocacy” element has contributed to the better understanding of its policy objectives even at the lower levels of the policy-making hierarchy.

Conflicts arise when the many dynamic interactions among natural resources, humans and institutions contradict arising from the underlying differences in priorities pursued by various fisheries players. Charles organized a wide range of fisheries conflicts into four interrelated headings, such as: 1) fishery jurisdiction, 2) management mechanisms, 3) internal allocation, and 4) external allocation. These four typologies are intended to be comprehensive but not mutually exclusive.

As in with Bennett et al. 2002, the research framework used in this Project was structured based on the concepts on institutional economics, transaction costs and institutional failure. Thus, the methodologies employed the procedures and principles of participatory rural appraisal (PRA) and rapid rural appraisal (RRA), which have been widely documented in theoretical and applied



literature (Pido et al. 1996).

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### 3 Fisheries conflicts in South and Southeast Asia

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#### 3.1 Typology of fisheries conflicts

Evaluating conflicts according to typology is often undertaken as a means of organizing data, which, in turn, leads to identifying suitable measures towards conflict resolution. Charles (1992) organized conflicts into four interrelated headings such as: 1) fishery jurisdiction, 2) management mechanisms, 3) internal allocation, and (4) external allocation. Warner (2002) expanded the boundaries of conflict to include other elements that are not directly related to immediate stakeholders in the resources and other intangible issues, such as cultural differences and corruption. In a more recent study, Bennett et al. (2001) extended the four conflict categories into five to include conflicts between fishers and those outside the fishery.

Type I is about who controls the fishery. This type of conflict is very common in Cambodia and Bangladesh where lot owners or powerful political elites use military or political power to prohibit the locals from accessing the resources. Type II is about how it is controlled, where either lack or overenforcement is seen as the primary conflict. This type of conflict is profound in the coastal areas of Cambodia, Bangladesh and India. Type III illustrates the relationship between users of the resource. Differences in ethnic groups, religion or scale of fishing are the factors that define Type III conflict. Examples of clashes between semi-industrial and in-shore vessels are found in India, but in Bangladesh the conflicts are amongst different religious groups. Type IV conflict is the relationship amongst other users of the aquatic resources, such as the relationship between fishery and non-fishery users. Type V conflict is reportedly prevalent in countries where corruption seems a major issue amongst authorities involved. Other than corruption, the fundamental belief that seems to lead to institutional weakness is the idea of capitalizing on the natural resource where states strongly intervene through policies and institutional reforms. Examples of each type of conflict are listed in the Table 1.

**Table 1. Typology of conflicts**

Type	Description of Conflict	Example
I	Conflict on who controls the fishery	Access issue on who amongst the fishers can fish
II	Conflict on how fisheries are controlled	Enforcement issues on how management systems are implemented; e.g. quota allocation
III	Conflict amongst fishery users	User groups-related issues, such as small- vs large-scale fishers; ethnic and religious groups
IV	Conflict between fishers and other resource users	Conflict arising from multiple use of resources, such as tourism vs conservation vs industrial development
V	Conflict between fishery- and non-fishery issues	Conflict external to, but affecting, fisheries such as corruption, politics, elite groups, environmental concerns, and economic change.

Source: Elizabeth Bennett et al. (2001)

### 3.2 Fisheries conflicts in Cambodia, Bangladesh and India

In Cambodia, one study site was located in Tonle Sap Lake; the other was along the Mekong River. Anlong Raing village is situated at the heart of Tonle Sap Lake where fishers live in houses in stilts and floats. This has earned the community the moniker “the floating village.” Anlong Raing is in under the jurisdiction of Kampong Por commune in Krakor District in Pursat Province. The second site involved Tamul Leu village, which is along one of the tributaries of the Mekong River under the jurisdiction of Koh Thkov Commune, Chhul Kiri District, Kampong Chhnang Province. Both study sites are characterized by freshwater environments, where majority of the households depend on fishing for food and livelihood.

The study sites in India involved the coastal fishing villages Pedajalaripetta and Bheemili, both in Andra Pradesh State. A third site, called Sakthikulangara in Kerala Province, was also selected in India to field test a consensus-building manual on Participatory Action Plan Development developed by the Bangladesh-based Center for Natural Resources Studies (CNRS).

In the Bangladesh study, the sites included the communities in the Titas River, an open access for fishers and other users, passing through the district of Brhamaanbaria. Another site was the Shapla Beel situated in Gokorno union of Nasirnagor Upazila of Brhamaanbaria.



Lotus plantation in Tamol Leu in Cambodia causes conflicts among fishers and lotus farmowners



Competition over access to fishing grounds breeds tension between traditional and mechanized fishers in Kollam, Kerala, India



Patibandh, “fences” across the beel are installed by influential “investors”, mostly non-fishers, to obstruct migration of fish, raises conflict with common fishers

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## 4 Communication tools for understanding and managing fisheries conflicts

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### 4.1 Participatory Institutional Survey and Conflict Evaluation Exercise (PISCES)

PISCES was developed by Bennett and Jolly (2000) within the purview of a four-year DFID-funded project on the *Management of Conflict in Tropical Fisheries*. PISCES, as an exercise, was meant to devise a simple, rapid and comprehensive tool that would soon prove useful in collecting information on conflict in artisanal fisheries in Ghana.

PISCES comprises these four fundamental activities: (1) participatory geographic information

exercise that involves spot or sketch mapping, (2) time-lines, (3) institutional wheels, and (4) semi-structured interviews.

Participatory approaches have already been used broadly as a tool for managing natural resources, especially in developing countries where management and policies are often coming from or used to come from central government agencies. RRA, a much earlier approach developed in the late seventies, was meant to collect information needed to create and raise awareness on specific resource management problems. Pido et al. (1996) then documented the procedure involved in RRA in a handbook intended for fieldworkers and researchers.

#### 4.2 Fisheries Conflicts Communication Framework (FishCom): A tool for developing plans and strategies for managing fisheries conflicts

The methods applied in this Project have linkages with those tested and documented in conflict management literature, Charles (1992), Bennett et al. (2001), Barr and Dixon (2001), Barr et al. (2000) and Sultana and Thompson (undated). The two earlier studies looked into the role of institutions in conflict resolution and consensus building. Meanwhile, FishCom ventured into looking at ways and means to evaluate and propose the use of communication tools useful in applying conflict-resolution and consensus-building processes in fisheries management, particularly in developing countries of South and Southeast Asia.

Below is a discussion on the procedures tested to improve management of fisheries conflicts in Cambodia, Bangladesh and India. Figure 1 illustrates the research framework for developing strategies for conflict management in fisheries. The overall process was categorized into two components: communication planning and consensus building.

The *Fisheries Conflicts Communication Framework*: a tool for developing plans and strategies for managing fisheries conflicts (FishCom) organized the steps (Figure 3.1 in Section 3.1 of this Chapter) that could be tested and adapted by groups of fishery stakeholders involved or interested in managing conflicts. The framework ensures that actions and decisions arising from participatory activities have good chance of being taken up by relevant stakeholders and organizations. The four major steps are:

##### 1) Information Gathering

This step intends to organize and understand key issues related to the conflicts and their causes, stakeholders and their relationships. The tools include: Socioeconomic Survey, Attitude Survey Statements, PISCES, and Rapid Appraisal of Fisheries Management Systems (RAFMS).

##### 2) Communication Planning and Strategy

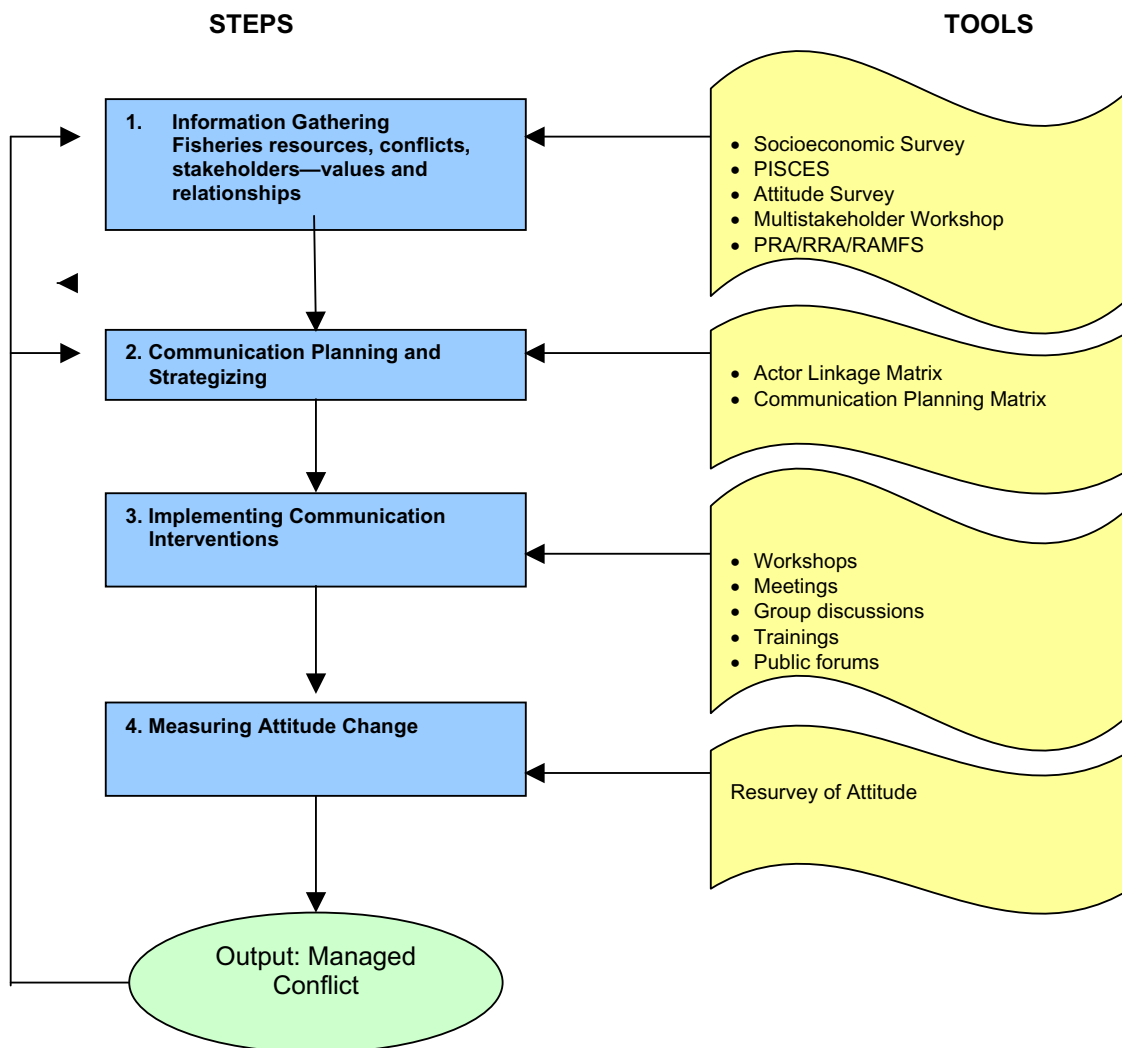
This step is designed to organize methods for communicating conflicts to a variety of stakeholders. The tools used are Actor-linkage Matrix (ALM) and Communication Planning Matrix (CPM). The ALM is an approach used to map information and flows of information between key stakeholders. The CPM involves a set of communication activities designed to meet specific objectives among specified communication partners or stakeholders.

##### 3) Implementation of Communication Interventions

This step guides the conduct of selected communication interventions to resolve conflicts. The actionable interventions are evaluated and pre-implementation activities are arranged and acted upon as planned. Typically, the cost and logistical arrangements of physical and human resources are crucial factors considered in the implementation of communication interventions.

##### 4) Attitude Change Measurement

This step intends to measure changes in attitude towards conflict resolution and consensus as influenced by communication interventions. This step involves a comparative evaluation of the outcomes of responses to the *Attitude Survey Statements* elicited in an *ex-post* survey with the outcomes of the *ex-ante* attitude survey.



**Figure 1. Communication Framework for Managing Fisheries Conflicts**

#### 4.3 Attitude surveys to assess opportunities for conflict management

Attitude surveys are conducted to gain a better insight and understanding of the conditions, values and priorities of fishers and conflict managers on issues related to fisheries conflicts. Survey results serve as a basis for evaluating the behavior of stakeholders, and for incorporating the perceptions of fishers and various stakeholders in the communication strategy for managing fisheries conflicts. An attitude survey uses a set of standard questions to a predetermined group of respondents. It can be conducted using face-to-face meetings, focus group discussions (FGDs) or multistakeholder workshops. For the more literate stakeholder group the survey forms could be distributed or posted, filled in and submitted at prescribed later date. The set of questions may also be followed through in the resurvey of attitudes to determine change in attitudes of the same group of respondents over time arising from some impact factors under evaluation.

#### 4.4 Participatory Consensus Building Tool for Managing Fisheries Conflict: A PAPD-Based Facilitators' Guide (PAPD-Based CBT)

Consensus building was primarily meant to engage fishers in formulating and agreeing on solutions they see fit towards managing conflicts that arise from a variety of their problems. The participatory approach employed in resolving conflicts through a democratic system affirms the importance of consensus building—also known as collaborative problem solving or collaboration—as a conflict-resolution process that allows various stakeholders (parties with an interest in the problem or issue) to work together to develop a mutually acceptable solution. The specific methods are described in the draft PAPB-Based CBT manual developed and designed by the WorldFish Center.

The communicative function of this manual makes it easy for users to facilitate stakeholders' participation more actively and efficiently, ensure that stakeholders' views are heard vis-à-vis the need to involve them in managing aquatic and fisheries resources. It is anchored on the application of community-based principle that is, in turn, based on such core values as trust and confidence; community-based economic needs, seasons, and situations in view of kin relationships that have bearing on both the individual stakeholders and their community. At such level, the causes of social, economic, and political conflicts are most visible.

The PAPD-Based material was so called because it made liberal use of PAPD, a methodology that, as used in Bangladesh, seeks to build consensus amongst the different users of common pool resources to improve natural resource management for better floodplain livelihoods. Facilitating the PAPD ensures that the methodology is not implemented mechanistically, and takes locally-relevant social factors into account.

PAPD is a participatory methodology for building consensus among multiple stakeholder groups on the sustainable management of natural resources. This method was developed originally by the CNRS, an NGO based in Dhaka, Bangladesh, and a team of researchers in Newcastle and Durham Universities. It involves holding a series of linked local workshops where different stakeholders around a waterbody participate separately and in plenary to develop a management plan for the common aquatic resources they use (Barr et al. 2001). Barr and Dixon (2001) described PAPD process as including 13 stages grouped into four major phases: Problem Census; Problem Cluster and Prioritization; Impact Analysis of Solutions; and finally, Consensus on Proposed Activities. Post-PAPD activities may also be recommended for information dissemination, networking, and monitoring and evaluation.

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## 5 Policy Recommendations

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### 5.1 Develop, design and package information, education and communication (IEC) support materials and approaches for fisheries conflict management

Promote and disseminate results of the study and other useful Project outputs through workshops, seminars, symposia, and similar group communication activities. Other veritable channels in a wide variety of IEC materials and approaches that can be harnessed for purposes of contributing to existing knowledge on conflict resolution and management are current publications—journals and the working print media. There is the battery of IEC materials to

choose from, from print to broadcast to audio-visual and multimedia productions. There are still others to consider in a variety of indigenous communication tools, such as the folk media that include folk drama. The use of information highway is another viable means, for example, the internet. Yet there is another, and that is the use of cellular phones that have become a virtual communication tool even amongst small fishers and their families, who are also fast catching up with electronic messaging technology, now becoming a reliable, fast and effective message delivery channel.

All of the above cases point to the limitless use of communication tools available at the stakeholders' disposal. Creative and technical handling of these materials is also limitless. In the hands of a technically adept and creative corps of communication planners rests the use of the elements of the communication process. This has been comprehensively tackled in the Project' communication planning component, which demonstrates the interplay of five Ws and one H—who, being the communication partner/s; why, the objective/s; what, content or message; how, the channel or method through which the message is conveyed or the information content delivered; when, being the timeframe of communication activities; and the whom, which says who should be responsible in undertaking such activities.

The PAPD-based CBT discussed above is an example of an IEC support material and that, in particular, illustrates the approaches for fisheries conflict management. The results of the field trial conducted in Sakthikulangara, a coastal village in Kerala in India, which was an offshoot of the Project Team's training on PAPD in Bangladesh have been packaged into a working manual called *PAPD-Based Consensus-Building Tool, A Facilitators' Guide*, now proposed for publication and dissemination, at least initially, in partner countries—Cambodia, India and Bangladesh. The manual has undergone adjustments to fine tune and make it as suitably adaptable as possible to these countries based on their needs and prevailing conditions of their fisheries resources. Popularizing the manual may require wider dissemination of its potential use as consensus-building and fisheries conflict management tool through press releases and generation of other popular IEC materials; for example, primers, in question-and-answer format of the CB process.

The Manual is also a rich material for advocacy of consensus building as a potent tool for fisheries conflict management.

## 5.2 Institutionalize multistakeholder participation in fisheries conflict management

There should be established mechanism to sustain the participation of all key players in the fisheries sector, those who have a stake in its development and those who are poised to positively contribute towards minimizing negative impacts of fisheries conflicts and thus play their inherent role in the conservation and economies of fisheries resources.

Sustainable mechanism leads to institutionalization of multiple-stakeholder participation in fisheries conflict management. This must consider involvement that ensures a range of conditions, values and priorities not only of fishers but those of other stakeholders and sectors as well whose interests, values and priorities are potentially in conflict with fishers. A multiple stakeholder involvement is a commitment to institutionalize efforts, with a mandate for ensuring acceptable beneficial returns to stakeholders through sustainable fishing and social responsibility. Institutionalization shall help motivate the community to protect the local environment.



Advocate for support of local administration and relevant government agencies to provide a sustainable participatory scheme to a qualified local non-governmental organization working on fisheries conservation and economies with the ultimate goal of empowering multiple-stakeholder management teams to take ownership of fisheries conflict management. It must be incumbent upon the local administration to devise mechanisms for concomitant, sustainable institutional support to help ensure that fisheries conflict management is likewise institutionalized and carried out in the long term.

Finally, there must be guarantee that the institutionalization approach to fisheries and conflict management integrate concerns and values of fishers and stakeholders in keeping with sustainable fisheries environment protection. The goal is for the government and community to institutionalize multiple-stakeholder participation towards instilling a sense of ownership of fisheries management and conservation programmes.

### 5.3 Embed conflict management in natural resource governance

As policy makers begin to demand responsibility and reporting for fisheries programmes on conservation and development, the avowal for stakeholders' commitment and social responsibility focusing on such a programme will necessarily be ingrained in natural resource governance. It is thus essential that the conflict-resolution and consensus-building methods, which generated some knowledge on the applicability of conflict resolution mechanisms based on communication planning and strategies, reach policy makers.

Advocacy should also be an underlining activity at putting a certain amount of pressure on governments to take a progressive stance at incorporating conflict management as necessary "cost of governance" and not just a "business-as-usual" activity. As stakeholders and the community at large become aware of the need to conserve and sustain fisheries resources through systematic resources management, then certainly consensus building for managing fisheries conflicts has requisites of governance. Natural resource governance should hinge on a policy framework whose structural components require not just government action and policies to address conflicts over fisheries, but also facilitative communication framework that allows for an empowered participation of key stakeholders to engage in democratic and creative consensus building vital in resolving conflicts.

## REFERENCES

- Bennett, E., A. Neiland, E. Anang, P. Bannerman, A. Atiq Rahman, S. Huq, S. Bhuiya, M. Day, M. Fulford-Gardiner, W. Clerveaux. 2001. Towards a better understanding of conflict management in Tropical Fisheries: Evidence from Ghana, Bangladesh and the Caribbean, *Marine Policy*, 25:365-376.
- Barr, J.J.F., P.J. Dixon, M.M. Rahman, M.A. Islam, M.I. Zuberi, A.A. McGlynn and G.P. Ghosh. 2000. A participatory system-based process for identification of improved natural resources management for better floodplain livelihoods. Project report of R6756. Newcastle: Center for Land Use and Water Resources Research, Newcastle University.
- Barr, J.J.F. and P.J. Dixon. 2001. Methods for concensus building fro management of common property resources. Final Technical Report of R7562. Newcastle: Center for Land Use and Water Resources Research, Newcastle University.
- Charles, A.T. 1992. Fishery conflicts: A unified framework, *Marine Policy*, 16(5): 379-393.
- Pido, M.D., R.S. Pomeroy, M.B. Carlos and L.R. Garces. 1996. *A handbook for Rapid Appraisal of Fisheries Management Systems (Version 1)*. ICLARM Educ. Ser. 16, 85p.
- Sultana, P. and P. Thompson. Undated. Building Consensus and Social Capital for Community Based Wetland and Fisheries Management in Bangladesh and the Mekong Delta. ICLARM-The WorldFish Center.
- Warner, M. 2000. *Conflict Management in Community-Based Natural Resources Projects: Experiences from Fiji and Papua New Guinea*. Working Paper 135 (edition). London: ODI.