### Participation and fishing communities

### Addressing the challenges of fisheries development

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#### Introduction

The community is a relatively recent focus of fisheries development. The central role of small-scale fishers and their livelihoods to development initiatives emerged from analyses of earlier failures (Lawson, 1977; Emmerson, 1980; World Bank., 1984). Fisheries development efforts of the post-war period were aimed almost exclusively at increasing production and were focused on industrial fishing fleets. Ironically, concerns over the failure of these efforts were soon followed by concerns for over fishing and initiatives designed to conserve the fish stocks and assist with the management of the newly assured Economic Exclusion Zones (EEZ) of coastal nations in the South (see Sarch 1997 for a full review of fisheries development policy).

The focus of fisheries development has now largely moved away from production enhancing investments in the industrial subsector to artisanal (small-scale, semicommercialised) fishers. Nonetheless, conflict between development objectives remains and how to balance the needs of sustainable resource management against those of sustainable livelihoods has not been resolved.

Although fisheries development approaches have shifted, towards the needs of small-scale fishers, the methods used to plan and implement development initiatives have been slower to follow. Campbell and Townsley comment on this in Box 1.

Fisheries development is characterised by specific challenges which other sectors do not face. Firstly, the nature of the resource makes it particularly difficult to monitor, fish are

highly mobile, hidden from view and subject to environmental fluctuations that are often not documented or well understood by outside experts. The information requirements for development interventions based on fish resources are challenging whatever approach to development is used.

## BOX 1 EVOLUTION OF POLICIES

The shift in fisheries development policy towards greater concern for social issues, very apparent in wider international development policy, has been much less visible in fisheries than in other sectors. The past emphasis of policies towards production and conservation. is reflected in the structure and skill levels in many fisheries departments. This has often emphasised the technology of production and processing, and the biology of the resource. The social, cultural and micro-economic aspects of the fishery have been less well addressed. In addition participatory methods has come late to fisheries and are still not widely used. This lack of emphasis on sociological and participatory aspects of the sub-sector is closely associated with, and in some cases may have contributed to, the marginalisation of small-scale fisheries from the development process.

Adapted from Campbell and Townsley, (this issue)

Secondly, the diversity of small scale fishing, especially in the South, has important implications for development initiatives. Access to fish can be subject to tenure arrangements which adapt to changes in the wider environment, often irrespective of any legislation which may govern them. This can make it difficult to monitor policy impact. Further, the role of fishing in the overall

livelihood strategies of poor communities can be complex. Such diversity is challenging to understand and difficult to plan for.

And thirdly, a history of conflict between fishers, fishery mangers and their enforcement agents means that fishers have frequently seen attempts to intervene as threats to their livelihoods. Fisheries development has not managed its public relations well.

Participatory approaches offer methods which attempt to tackle these challenges at a level appropriate to small-scale fishers. Participation has achieved widespread success in avoiding the suspicion of fishing communities as the contributions in this issue demonstrate. Participatory approaches have also been used to explore the issues which have proved so challenging to fisheries development, for example, in investigating the operation of fishing tenure arrangements at community level, in achieving consensus between different interest groups and in tapping local knowledge to learn about the fish resource base. This overview considers how the contributors to this issue have participation to meet the particular challenges of fisheries development, the lessons that can be learned from their experiences and the challenges that remain.

#### The contributions

The contributions to this issue reflect fisheries development efforts aimed at a spectrum of objectives ranging from co-management for sustainable fish stocks to improving the welfare of fishing communities. The contributors show how participatory approaches have been used to understand the resource, manage fisheries and plan for development.

#### Understanding the resource.

Thomas and Danjaji (this issue) explain how they adapted RRA methods for a wetland-wide assessment of environmental change. Ira (this issue) describes the process of documenting participatory methods for coastal zone management.

#### Managing fisheries

Both Townsley et al (this issue) and Sarch et al (this issue) demonstrate how useful participatory approaches can be in investigating local arrangements for access to fishing. Inglis et al (this issue) describe how they used PRA methods to bring local views into fisheries management in Scotland. Baird et al (this issue) explain how a school-based community awareness programme supported community-based management in Laos.

#### Planning for development

Ramesh et al (this issue) and Nkwentie (this issue) explain how they have used participatory workshops to reach consensus between different interest groups within the fishing sector and formulate recommendations for development initiatives. Alvares and Maneschy (this issue) describe a similar process with the women of three fishing communities in Brazil. Inglis et al (this issue) and Campbell and Townsley (this issue) both examine the role of participation in the vertical integration of planning from resource users up to managers and policy makers. Johnson and Camara (this issue) examine the lessons learned from the experiences of 14 planning committees created following a participatory port profiling initiative in Guinea.

The experiences documented here reflect all stages of the fisheries development cycle from learning to learn, planning for action and learning from action. They have been ordered on this basis, starting with experiences of participatory learning and closing with experiences from participatory action. I hope that this special issue on participatory approaches with fishing communities provides a resource for further participation in fisheries development. *PLA Notes* looks forward to its readers sharing their experiences with fishing communities in future issues.

#### The challenges: fish resources

Understanding the aquatic ecosystems on which fisheries development initiatives are ultimately based poses problems whatever approach to development is used. Fish remain hidden, mobile and fluctuate whoever is catching them. The implications of this for initiatives based on external regulation of the numbers of fish caught are expensive, highly unpopular. **Participatory** technical, and approaches to 'stock assessment' based on indigenous technical knowledge can be impressive. Whether or not the accuracy of such knowledge is accepted, it does provide a valid basis for community development initiatives, the success of which depends on community perceptions of their fishing resources. Box 2 summarises the participatory techniques used by a fishing community in the Philippines to reveal a wealth of information about their fishing resources and to provide a basis for micro-planning.

# BOX 2 PRA IN SANTA MERCEDES VILLAGE, THE PHILIPPINES

The community used a range of PRA techniques to analyse their fishing (and other) resources. The fishers were particularly pleased with their seasonal calendar which they used to provide a detailed breakdown of the fish species availability throughout the year . Matrix ranking was used to analyse species preferences. A sea map detailed the resource base of the estuary fished by the community: fish habitats, the location of different species, breeding grounds and gear types were included.

Adapted from Mascarenhas and Hildago (1992).

Given the mobility of fish and their sensitivity to environmental fluctuations, an ecosystemwide understanding of the resource base is vital for fisheries development planning. The local specificity of PRA techniques is often cited as a reason why they cannot be used for development planning at higher levels. But in this issue Thomas and Danjaji show how they investigated environmental histories with 27 villages throughout a wetland region in Northern Nigeria. Using this approach, they were able to derive a regional picture of environmental change for development planning.

Mascarenhas and Hildago (1992) and Thomas and Danjaji (this issue) have shown how

valuable local-level knowledge can be in understanding fisheries resources. At this stage, however, further examples investigations participatory of fisheries resources have been hard to find. Much scope remains for the development of participatory techniques which will reveal community understandings of their fishing resources and provide bases for community development efforts.

#### The challenges: fisheries management

There is an increasing realisation in fisheries development that managing fish stocks is as much a political issue as it is a technical one. Who is able to fish is as important, if not more so, than how much fish are caught and this underlies many fisheries management failures. Participatory approaches based on local perceptions of the resource base and existing community institutions can be non-threatening and provide a common understanding on which to plan successful development.

The experiences documented in this issue show how PRA methods have facilitated a detailed understanding of local systems of fisheries tenure in the South Pacific and in Northern Nigeria (Towns ley et al and Sarch et al, this issue). Both experiences highlight the importance of documenting what were previously unwritten boundaries and understandings. This process was valued highly by the fishing communities, and as Townsley et al point out, could fundamentally alter the nature of the tenure system.

PRA practitioners need to be aware of the power of their methods. Baird et al (this issue) show how this process has been used positively in Laos. Having agreed on management institutions to govern access to fishing resources in their village, fishing communities 'ratified' these at a village meeting attended by outside officials and politicians. These people legitimised community-based management and strengthened commitment to it.

The experience of community-based fisheries management in Laos shows that it is possible to move from understanding the details of community institutions for managing resources to strengthening them. The investigations of local management systems in Nigeria and the Pacific show how the rapport developed with the communities during this process can provide a useful starting point. However, as yet few documented experiences of the processes that lead from understanding to action are available. They are needed and would undoubtedly provide a valuable contribution to community-based fisheries management world-wide.

#### The challenges: diversity

Although heterogeneity within the fisheries sector is well known, it's diversity continues to challenge development efforts. How do initiatives which benefit one group within the fishery affect the others, especially women? How do fisheries initiatives affect household livelihood portfolios? For example how would credit for women fish processors affect the prices they pay fishers for their catch? How will credit repayments affect their ability to feed fish to their children?

An approach which has been used in two of the contributions to this issue is to achieve consensus between the different groups at the planning stage. Ramesh et al and Nkwentie explain how they used a workshop environment to bring together fishworkers as diverse as fish smokers, deep sea divers and ice-plant workers. PRA methods were then used to explore and analyse their problems. Nkwentie explains how fishers, fish processors and fish retailers were able to agree on fish preservation as an area in which development would benefit them all.

Despite the importance of women's work in fishing communities, often in the selling and processing fish, and their crucial role in fishing households, the challenges which confront them have, until recently, received little attention in fisheries development. Alvares and Maneschy (this issue) examine the role of women in three Brazilian fishing communities. Their work demonstrates the diversity of the income sources in many fishing households, who depend both on fishermen's income and that of their wives. Alvares and Maneschy describe how group meetings were used to plan actions which the women of the fishing

communities believed would be of most benefit to their families.

The articles by Ramesh et al, Nkwentie and Alvares and Maneschy all show how valuable the participatory workshop can be both for understanding diversity within the fisheries sector and achieving consensus. Alvares and Maneschy point out that some women find it difficult to attend group meetings because of social and moral restrictions. This illustrates the need for participatory approaches, for both learning and action, which can reach women within poor households and for attention to be focused on using participatory approaches to understanding the role of fishing in complex household survival strategies.

#### The challenges: vertical integration

The need to integrate fisheries policy, its implementation, and fishing community goals challenges fisheries development whatever its starting point. Campbell and Townsley (this issue) start at the beginning. They describe the PIP (participatory and integrated policy) process which has been developed to improve the implementation of small scale fisheries process overtly development. The PIP addresses the conflicts which can exist between the policy objectives of different (development) agencies and the article explains the practical ways in which these can be addressed.

Inglis et al (this issue) start halfway through the process. They describe how they were asked to use participatory approaches to enable local views to inform fisheries management in Scotland. Up until that point resource users had been polarised from fisheries managers. Inglis et al describe how a series of workshops using PRA methods enabled local people to express their views to fisheries managers.

The official acceptance of community-based initiatives is an important component in their sustainability and can be crucial as Schärer describes in Box 3. Baird et al's description (this issue) of community based management in Laos also demonstrates this point. Johnson and Camara's explanation (this issue) of the characteristics of successful and enduring landing site development committees in

Guinea highlights the importance of both official status and political support to the success of the local-level planning committees.

# BOX 3 COMMUNITIES JOIN FORCES TO GUARANTEE SUSTAINABILITY

For seven years, predatory fishing with illegal boats and fishing gear went unchecked in the communities of Prainha and Redonda in Brazil. Neither armed conflict at sea, declining lobster exports nor the cries for help from the communities' artisanal fishers alerted the authorities. The death of a fisherman finally brought the communities together to send a protest delegation on the sailraft, the SOS Survival, to Rio de Janeiro. Their 74 day protest hit the headlines and after a march on the Governor's Palace, a state fisheries committee was created and a Lobster Management Plan implemented. Within two ships had been months. 40 'pirate' apprehended and the fishing communities were able to implement and enforce their local management plan to restrict catches of undersized lobsters.

Source: adapted from Schärer, R. (1997) Fishing Communities and Movements in the North-East of Brazil. Contact: Amigos de Prainha do Canto Verde, Caixa Postal 52722, 6051-000 Fortaleza, Ceará, Brazil.

#### Conclusion

Fisheries development initiatives are increasingly concerned with the well-being of fishing communities. Participatory approaches are a recent and welcome addition. The contributions in this issue document a wide range of experience and its is hoped that they provide a springboard for further participatory work with fishing communities. Specific challenges continue to confront fisheries development and much scope remains for exploring participatory solutions.

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#### NOTES

The *In Touch* section of this issue contains a number of relevant resources, including videos, books and journals, on the participation and fisheries theme.

A Topic Pack on 'Coastal Resource Management' is available from the Institute of Development Studies, University of Sussex, Brighton BN1 9RE, UK. Contact: Patta Scott-Villiers.

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