

# PERCEPTIONS, VALUES AND ATTITUDES OF FISHERFOLK AND OTHER COASTAL STAKEHOLDERS TOWARDS OWNERSHIP OF FISHERIES RESOURCES AND ITS EXPLOITATION, MANAGEMENT AND SUSTAINABILITY

by

**Kee-Chai Chong**  
**Programme Coordinator/Management Advisor**  
**FAO Bay of Bengal Programme**

## ABSTRACT

This paper describes and discusses the values, perceptions and attitudes of fisherfolk and other coastal stakeholders towards ownership of fisheries resources and its exploitation, management and sustainability. It reports on the significant changes and shifts in these values, perceptions and attitudes from the old to the new generation of fisherfolk. Such changes and shifts in values, perceptions, attitudes and mode have been brought about through the spread of awareness and enlightenment of environmental consciousness.

### 1. Introduction and Background

Of the 200 fisheries monitored by the UN FAO Fisheries Department, a third has been overfished or depleted, mostly in the developed countries. A good case in point is the fisheries off the United States of America. In spite of the Magnuson Fishery Conservation and Management Act of 1976 which provides for the establishment and financing of regional fisheries management councils to oversee its implementation, American fish stocks have slowly been overfished and depleted. According to Moseley (1996), 34 % of U.S. fish stocks are utilised to the maximum safe limit and 23 % are overutilised. With 300,000 fulltime fishermen, manning a fleet of 100,000 boats, fishing contributes more than US\$25 billion a year to the U.S. economy.

This alarming situation is not entirely different in the developing countries where there are generally no restrictions on the number of fishermen and/or boats entering the fisheries. Many of the new entries are generally non-bona-fide fishermen with access to capital who wish to capitalize on the growing insatiable national and global demand for fish. There is already today a widening supply-demand shortfall of at least 30 million tons of fish a year. According to Garcia (1996), fish consumption in Asia is growing faster than in any other part of the world and will account for more than half the demand in 2010.

It is therefore quite clear from the size of the American industry alone, and elsewhere where fisheries support the economic fabric of the national economy, the different prevailing perceptions, mood and attitudes of the government and industry towards present and future exploitation and management of the fisheries. There is now clearly a real and urgent need not only for new regulations curbing or restricting its primary activity but also to rigorously implement and enforce them.

Long used to a system of fishing and mode of production where drastic curbs were relatively unheard of or even unknown, the new requirements to protect and manage fisheries and other coastal resources would not be readily nor easily accepted with open arms by the industry. There was and still is growing resistance towards protection and management of the resources and their habitats. But protection and management do not mean no fishing. The latter is slowly being understood and appreciated by growing number of people in the industry and government. Past and ongoing effort at creating, building, increasing and spreading greater awareness on the need for, benefits and approaches and methods of fisheries management is paying off.

## **2. Adequacy of "Knowledge" to Manage the Fisheries**

There is today general consensus among all the countries, developed and developing that overfishing is a serious problem and should be avoided but not enough or very little is done to prevent it. Many reasons can be cited for it; suffice to say that we have long passed the time where we need to show that overfishing is taking place or even get "bogged" down discussing the nature of the problem. The level of awareness on the need for fisheries management is already high, even among fisherfolk. Recent field surveys revealed that such awareness has not been capitalised upon to bring about badly needed changes in producer and consumer behaviour in responsible fishing (production) and consumption due to a lack of understanding and appreciation on the need for, benefits and methods and approaches of practical and enforceable fisheries management ideas, measures and grassroot activities/actions.

In spite of certain inherent limitations and weaknesses, our present state of knowledge, statistical databases and models derived from scientific theory, research, experiences and lessons learned from past management of fisheries, as well as indigenous knowledge passed down from one generation to the next, is adequate to manage the fisheries. In other words, the precautionary approach to fisheries management can be adopted without delay and prejudice. Both government-driven top-down and traditional community-based bottom-up fisheries management activities can be imaginatively combined to bring lasting positive impact of management effort not only on the fishing communities but also the resources and habitats.

Further, fisheries management intervention is also adequately provided for and covered by existing government policies and legislations in many countries, including necessary budgetary allocation. The latter perhaps may not be as much as

needed to enforce it. At the same time, many of these countries also acknowledge that fisheries management is not easy to implement and enforce, not the least being the meagre budget and humanpower. This is also partly because its implementation and enforcement mean different things to different people.

### **3. Purpose and Objective of Study**

The basic purpose of this study is to describe and discuss the prevailing values, perceptions, attitudes and mood of fisherfolk and other coastal stakeholders towards ownership of fisheries resources and its exploitation, management and sustainability. It is now very clear that the present system of fishing and mode of production are highly unsustainable. Such information can be imaginatively used to assist in the formulation of appropriate government policies and assistance programmes, including the provision of incentives and/or disincentives as the case may be to bring about desirable behavioural changes among fisherfolk and other coastal stakeholders.

Further, the information uncovered from the study is also invaluable in the planning and design of appropriate awareness-building and public education or campaign materials to correct wrong impressions, misconceptions, erroneous or misguided values, perceptions and attitudes of the fisherfolk and coastal stakeholders towards ownership of fisheries resources and its exploitation, management and sustainability, and/or build on and further strengthen those which are positive.

### **4. Ownership**

There is a definite difference in perception between the old and new generations of fisherfolk towards ownership of the fisheries resources they have come to rely on for their daily sustenance and food/livelihood security. While the older generation fisherfolk still has a relatively under- or undeveloped sense of entitlement and ownership of the fisheries resources they have exploited for years, the younger ones are increasingly asserting their entitlement and ownership rights to the fisheries, sometimes bordering on militant tendency to entitlement and ownership claims to the fisheries. This is especially the case when the fishing grounds or fishing areas are in front or close to their settlements or fishing villages.

Open conflicts and clashes at sea or sometimes on shore between and among the different groups of fisherfolk are symptomatic and direct indications of their assertion of entitlement and ownership rights to the fishing grounds and fisheries resources. Different groups of fisherfolk now are increasingly defending their fishing areas and openly keeping others out of the fishing grounds they have fished for years or generations. In fact, the young generation fisherfolk is more vocal and articulate in their views and know their basic rights. They are not keeping silent nor do they want to suffer in silence anymore.

This sense of entitlement and ownership rights to the fisheries has also come about and facilitated or even accelerated by and through government effort at fisheries zoning the sea for different categories of fisherfolk: smallscale artisanal fisherfolk and largescale commercial or industrial scale operators. For example, in Malaysia, the Government under the Fishing Licensing Policy of 1981 has demarcated four different zones:

- (a) Zone A up to 5 nautical miles from the shore which is solely earmarked for smallscale owner-operated fisherfolk
- (b) Zone B from 5-12 nautical miles for owner-operated motorised boats (such as trawlers and purse-seiners) of less than 40 gross tons (gt)
- (c) Zone C from 12-30 nautical miles reserved mainly for motorised vessels such as trawlers and purse-seiners of more than 40 gt which should be wholly-owned and operated by Malaysian fishers, and lastly,
- (d) Zone D from 30 nautical miles onwards which is opened to foreign fishing through joint-ventures or charter operating deep sea vessels of 70 gt and above.

Of course, the fisheries zoning system or the allocation of fishing areas by types of fisheries and scale of operations came about as a consequence of growing conflicts and clashes between and among the different categories and groups of fisherfolk encroaching on each others' traditional or historical fishing areas. All the same, the sense of entitlement and pseudo-ownership claims to the fishing areas was brought about by such government effort at managing conflicts.

## **5. Approaches and Methods of Fisheries Management**

As can be seen from the above, fisheries management intervention is more at managing conflicts rather than initiating management from the very beginning before problems surface. Fisheries conflicts and clashes among fisherfolk and other stakeholders arise from growing intense competition for fisheries and other coastal resources which are growing scarce with time due to overfishing from growing fishing pressures, rather than proactive management. Such management intervention seems to be the general pattern of management effort in many countries, responding to conflicts and crisis.

Even though it is relatively easy to articulate and clarify what fisheries management is, and the need for and costs and benefits of fisheries management, there is still a lack of consensus on the approach and method/technique to be employed. Experiences with **input** and **output controls** in managing fisheries have so far given mixed results. So far, the lack of more success and positive impact of fisheries management can be traced to the piecemeal approach employed. As a

result, the costs of management and/or the lack of it have been high relative to its benefits and impact. The impact, if any has not been genuinely felt.

While awareness and appreciation on the need for and benefits of fisheries management is now relatively high among fisherfolk and government personnel, and still growing and spreading, there is still a lack of awareness and understanding on the approaches and methods and techniques of fisheries management *per se*. Besides, the perceptions and attitudes of fisherfolk towards fisheries management with all its imposed restrictions, driven as it were from the top and centre must also change from the present negative impressions of the government curbing their freedom, to be more positive and receptive. Similarly, government attitudes towards the poor in general and its attitudes towards the fishing communities which have so far been bypassed must also changed, from one of "the government knows what best for them to one which consults them on matters which directly affect them as well as involving them in arriving at decisions affecting them.

Management intervention and enforcement can be both **punitive** or "**hard**" and/or **non-punitive** or "**soft**". The approaches and methods adopted determine the costs and benefits as well as its impact. So far, the hard or punitive approach has been used more extensively, if not exclusively. This is a classic example of the perception and attitudinal problem being discussed here. It is time to employ the **persuasion approach** which is the soft or non-punitive approach. The latter approach is not only more cost-effective, it stands a better chance of working because the fisherfolk and stakeholders are brought into the management process from the very beginning. Because they are brought into the management process from the beginning, they will stay involved from their sense of belonging and pride of ownership of their contribution.

Such involvement and 'staying power' ensure the sustainability of the fisheries management effort and therefore its probability of success. It is also now increasingly acknowledged that the staying power and attention span of many fisheries projects and personnel, including some government policy-makers and planners are short. This is especially true in the case of fisheries management initiatives. These initiatives are seldom carried through to a logical conclusion, let alone in ensuring that the management initiative or reform is **institutionalised**.

The frequent changes in fisheries management and development thrusts and directions, competing and conflicting or incompatible objectives, inconsistencies and contradictions have taken their toll. Because of the short-term nature of such initiatives or intervention, lasting impact is sacrificed. Their impact and benefits, if any are discernible only during the duration and life of the projects, if at all.

Government, non-government and fishing community's interests in and willingness to introduce or re-introduce participatory community-based fisheries or coastal resources management (CBFM/CBCRM) is growing and steadily spreading in many countries. However, such interests must be carefully thought through and

not hastily implemented. The governments must be very clear on the implications of community-based fisheries or coastal resources management. The first immediate implication is whether the governments are prepared and ready to decentralise and share such management responsibility and authority with the fishing community and coastal stakeholders. A few countries have experimented with CBFM/CBCRM and had negative experiences. This is because such co-management has not been experimented or tried in recent times.

There is also little or no clear understanding on the definition of the community in CBFM/CBCRM. Who is the community? As is well known, the fishing and coastal communities are not a homogeneous group; there are the owners of fishing boats who may never set out to sea to fish or are land-based and those who go out fishing; there are also the fishing boat captains, the crew or fishing labour, including the motor boat mechanic or engineer, and the cook. Among them, there are smallscale, largescale, traditional or artisanal and commercial fisherfolk and other coastal resource users, including bystander stakeholders. The community in effect comprises each and every stakeholder in the entire marketing chain/channel, from the fisherfolk who are the primary producers to the final consumers and in between there are market intermediaries such as the middlepersons, money lenders, input suppliers, seafood processing and cold storage operators, the final consumers or customers of fish, etc.

So far, very little is known about the value system, perceptions and attitudes of these different stakeholders towards fisheries, its ownership, exploitation and management. What does each stakeholder respond to? How can each and everyone of them be made to be more caring and protective of natural resources which have provided them with the means and source of their sustenance and raw materials for industrialization and economic wellbeing?

For example, the customers of fish through their purchasing power and disposable income can exercise their consumer rights to bring about and induce responsible producer and consumer behaviour, by voting with their purchases. The prices the consumers are willing to pay or not willing to pay or buy products from unmanaged fisheries can influence fishing behaviour. By not willing to buy gravid females or juvenile fish, they are sending strong market signals to the middlepersons and fisherfolk that there is no longer a market for such unsustainable production of fish. The middlepersons, on their part will stop buying such products to be sold because the consumers are no longer willing to pay for them.

Before, CBFM/CBCRM is introduced, it is important to study the perceptions, values and attitudes of the fisherfolk and other coastal stakeholders towards the ownership of the fisheries and coastal resources and their exploitation, management and sustainability. It is only through uncovering their values, perceptions and attitudes that a working system of CBFM/CBCRM can be implemented with a working probability of success. Consultation and fisherfolk

involvement and participation are necessary in managing a resource such as fisheries because of the open access free entry common property nature of the resources.

## 6. Attitude Formation and Change

Values, perceptions and attitudes can be shaped, inculcated and moulded. An excellent illustration is the disposal of household waste or garbage. One generation ago, such waste or garbage is just thrown or dumped into a waste receptacle to be carted away by the municipal garbage collectors. Today, households are increasingly sorting out their garbage according to those which can be recycled and those which cannot be re-used such as organic and perishables that will have to be disposed off properly because they will decompose and become putrid. Garbage today is increasingly being sorted out and disposed off accordingly. In the past, garbage is garbage. Such was the attitude on waste disposal of the old generation and it has taken a long time for the present positive attitude to evolve to the present state of heightened awareness, consciousness and enlightenment.

## 7. Concluding Remarks

Fisheries support large populations in developing countries, especially the poor in the rural areas. The perceptions and attitudes of the government towards the poor have been one of paternalistic tendency, best summed up as "government knows what is best for its people".

Recent intervention in the fisheries sector in the form of the introduction and transfer of technological advances and modernisation to improve the standards of living of the fishing communities and other coastal stakeholders has grossly undermined and weakened local pseudo-institutional and community ties. The traditional and customary ties among members of the community and among communities have broke down. In its place, community indifference and apathy have developed. It is time to rebuild and strengthen the sense of the importance of community and communal ties.

To accomplish this, significant change and shift in the value system, perceptions and attitudes of the fisherfolk and other coastal stakeholders towards resource management arising from the spread of environmental awareness are required.

Lastly, concrete effort must also be mounted to help the fisherfolk and their communities to **develop more fully their sense of entitlement and/or ownership of the resources they have relied on for generations for their food and livelihood security**. Preliminary limited survey results show that the fisherfolk and their communities still have a relatively under- or in some cases undeveloped sense of entitlement and ownership of the fisheries resources they have exploited for generations. This is in sharp contrast to their land-based counterparts who, very

early on initiated appropriation and entitlement to the land and forests they occupied and exploited.

The Bay of Bengal Programme (BOBP) for Integrated Coastal Fisheries Management has spearheaded a regional survey and comparative study on the values, perceptions and attitudes of fisherfolk and other coastal stakeholders towards ownership of fisheries resources and its exploitation, management and sustainability in its seven member countries.