

100. WOM060

Documentation Centre
International Collective in Support of Fishworkers
27, College Road, Chennai, Tamil Nadu, India 600 006.



Women of coastal fishing communities in the Asian region: An agenda for research (Draft)

Chandrika Sharma

International Collective in Support of Fishworkers

Seminar on Women's livelihoods in coastal communities: Management of the Environment and Natural Resources

Organized by
The Institute of Social Studies Trust (ISST)
Ecumenical Resource Centre, United Theological College, Millers Road, Bangalore
June 6, 2005

Introduction

Communities that have engaged in fisheries as a full-time or part-time occupation have traditionally occupied coastal areas in Asia and elsewhere. Apart from fisheries, communities inhabiting the coast have also derived their livelihoods from farming, livestock breeding, extraction of salt etc.

This paper will focus on coastal communities that depend mainly on fisheries for a livelihood in Asia, with a specific focus on women of these communities. It will look at some of the developments in the fisheries and related sectors in Asia, as they impact on coastal fishing communities and women in these communities, and outline areas for research. It is structured as follows: (1) Background to the marine fisheries sector in Asia; (2) The role of women of coastal fishing communities; (3) Issues facing women of coastal fishing communities; and (4) Selected research priorities.

(1) Marine Fisheries in Asia: A Background

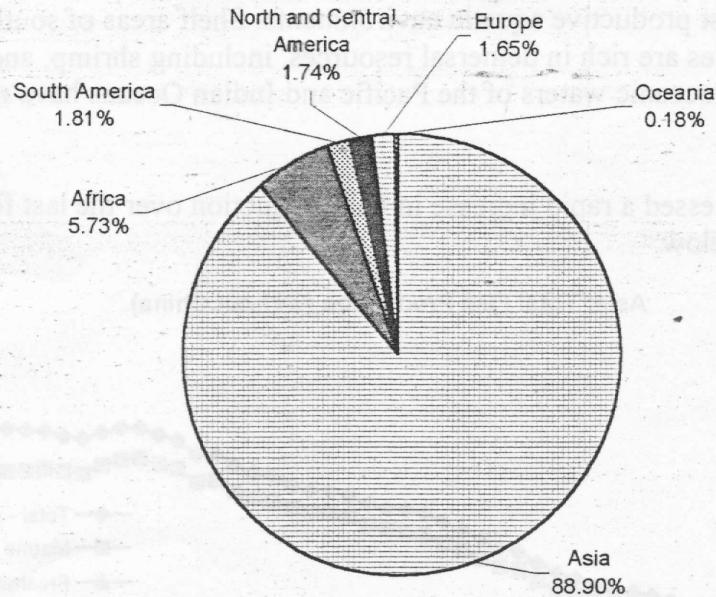
This section provides a broad overview of the changes taking place in the fisheries sector and in the coastal ecosystems in the Asian region.

(i) Fishers and fishworkers

Millions of people depend on fisheries for a living in the Asian region and undoubtedly, the sector is a major source, of employment, income and food security. According to the FAO (2005), of 47.6 million fishers worldwide engaged in fishing and fish farming as a full time, or more frequently as a part time occupation, as many as 42.3 million or 89 per cent are in Asia.

It is worth noting that according to the FAO both the number of fishers and fish farmers as well as their proportion is increasing in Asia. In 2000 FAO estimated that of 35 million fishers and fish farmers, 29.5 million or 85 per cent, were in Asia. In 1990, of 28 million fishers and fish farmers, 84 per cent were estimated to be in Asia. In Asia, China has the maximum number of fishers and fish farmers, followed by India, Vietnam, Indonesia, Bangladesh and the Philippines.

Percentage of fishers and fishfarmers by continent



Majority of fishers and fish farmers are small-scale, artisanal fishers eking out a living from coastal and inshore resources. It needs to be kept in mind that these figures are likely to be an underestimate. For example, a recent FAO study in Southeast Asia suggested that the figure reported to FAO for the number of inland capture fishers worldwide (4.5 million, full-time, part-time or occasional) is easily exceeded by those fishing in inland waters in just eight countries covered by the study, i.e. Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Thailand, and Viet Nam (FAO Regional Office for Asia-Pacific, 2002).

Further, these figure do not include those involved in other fisheries-related activities, such as marketing, processing, net-making, supplying ice, boat building etc. Significantly, women play an important role in several of these activities. A conservative estimate would, therefore, place the total number of people involved in fisheries-related activities in Asia at about 130m, assuming a ratio of about 1: 3, that is for every person that fishes there are three persons on shore engaged in fisheries-related activities.

It is significant that 90 per cent of the catch from small-scale fisheries worldwide goes to human consumption. In Asia, artisanal fisheries are estimated to contribute at least 50 percent of total fisheries production, providing extensive rural employment (ADB, 1997). For artisanal fishing communities, fishing is a source of livelihood as well as a culture and way of life.

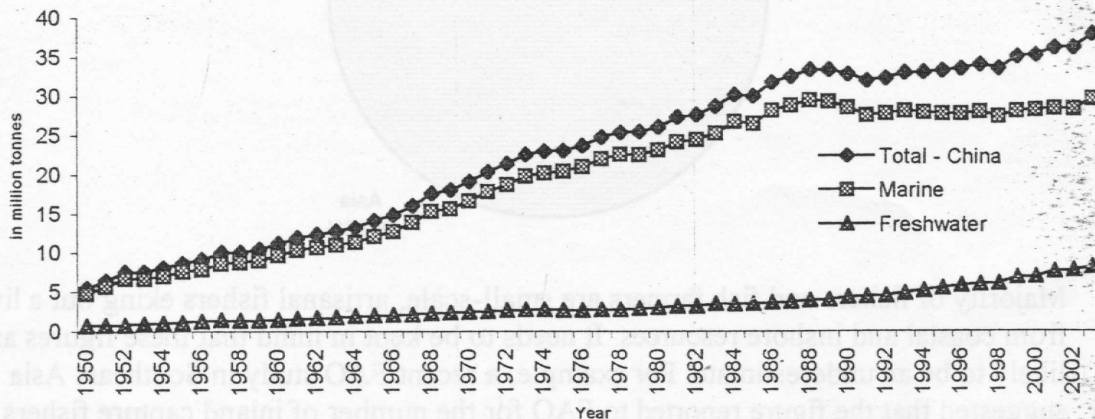
(ii) Fisheries and fisheries development

Important fish producing countries in the region include China, Thailand, Indonesia, Korea, India, Philippines, Malaysia and Vietnam. In 2001, nine Asian countries were among the top 20 countries in terms of production from marine capture fisheries. The

marine ecosystem in Asia is known to be highly diverse and fertile, comprising mangroves, sea grass beds, coral reefs, estuaries, bays, rivers, lakes, and swamps—biologically the most productive aquatic environments. Shelf areas of southeast and South Asian countries are rich in demersal resources, including shrimp, and small pelagic resources while the oceanic waters of the Pacific and Indian Oceans have rich tuna resources.

The region has witnessed a rapid increase in fish production over the last few decades, as seen in the figure below:

Asia: Total Fish Production (without China)



This has been fuelled by technological developments in harvesting, refrigeration and transportation and growth of markets. The 1960s and 1970s, for example, saw the development of the highly-efficient trawl fisheries for shrimp in the entire region, to cater to the huge demand for shrimp in the world market. The focus of government fisheries development policies was on development and exploitation of fisheries resources, both for domestic consumption and export.

These policies were pursued more aggressively in the post-1980 period, when countries in the region, to a greater or lesser extent, went in for liberalization, privatization and deregulation, with an emphasis on increasing trade and foreign exchange earnings. Policies to attract foreign investment, including in the fisheries sector, were adopted. The Indonesian government, for example, encouraged joint ventures in fisheries, especially for the exploitation of offshore resources.

In several countries like Thailand, Philippines and parts of India and Indonesia, as a consequence of the overriding emphasis on increasing production with little attention to regulating technology and managing resource use, there is strong evidence of over-fishing in coastal waters. The implications for those dependent on coastal resources for a livelihood, the millions of small-scale fishers and fishworkers with little access to capital and skills to diversify or move out of the sector, is evident. Countries in the region are

now emphasizing the need to diversify into aquaculture and to offshore waters within and outside the country.

For example, the abundance of demersal fish stocks in the Gulf of Thailand in the early 1990's was only one tenth of the level in the 1960s when the trawl fisheries started. Coastal tuna resources in the Philippines have continued to decline, encouraging an expansion of tuna fishing in Indonesian waters through bilateral arrangements. In the Philippines, some estimates suggest that as much as 65 percent of the original 450,000 hectares of mangrove area has been converted to other uses, primarily brackish-water fishponds. The decline in wild shrimp catch due to overfishing, and the resulting shortfall in the demand has resulted in the development of shrimp culture since mid-1980s, with its own set of negative environmental and social consequences.

The emphasis has clearly been on economic growth, trade and revenue generation. While the importance of management is increasingly recognized to ensure sustainability of the fisheries resource, in practice, this is not a priority. In the latter half of the 1990s, in the aftermath of the economic crisis in East Asia, when the importance of the fisheries sector as a revenue earner increased, a recent World Bank report (March 2001) noted that "levels of environmental spending, which were relatively limited to begin with, declined in all East Asian economies aside from Malaysia."

In South-east Asian countries with relatively stronger economies, such as Thailand and Malaysia, a different trend is emerging. Alternative use of coastal resources, such as for tourism and aquaculture, are being seen as economically far more lucrative than small-scale fisheries. Controlling small-scale fisheries may be seen as a way of managing fisheries by reducing fishing pressure in coastal and inshore areas, even as expansion of industrial fisheries in offshore areas may continue to be supported. The future of small-scale fisheries in such a context remains to be seen.

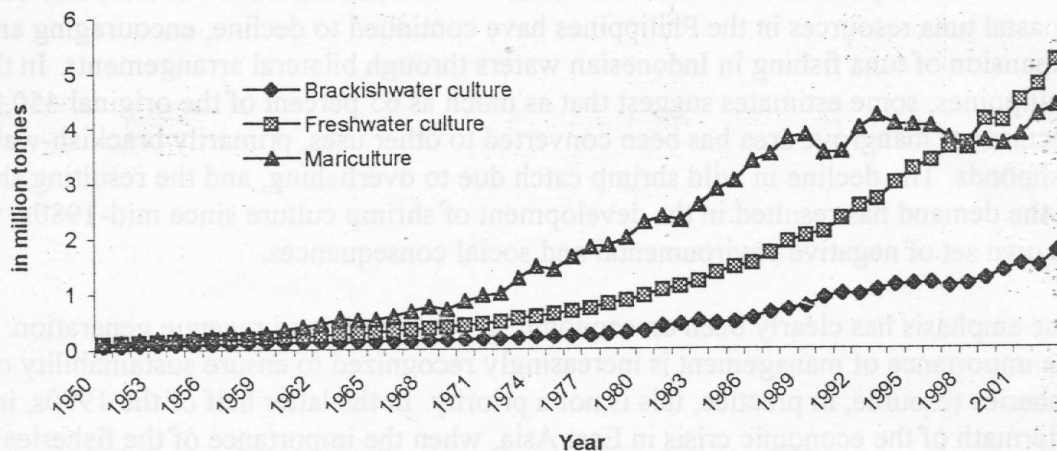
(iii) Aquaculture

Attracted by the possibilities of higher foreign exchange earning, countries like Thailand, India, Bangladesh and Indonesia provided incentives to export-oriented intensive shrimp culture. This was also the period when catches of wild shrimp in these countries were either stagnating or declining, as a result of over-fishing. Thus, while Thailand harvested as much as 90 percent of its shrimp from natural resources before 1984, mainly from the Gulf of Thailand, by 1987 cultured shrimp production had taken off focusing mainly on black tiger prawns. Government initiatives, along with higher earnings potential, prompted numerous coastal farmers to shift their production from rice to shrimp. Cultured shrimp made up 70 percent of the total yield produced in 1999. In the case of India, the share of aquaculture shrimp in the total shrimp exports from the country has grown in quantity terms from 33 per cent in 1988-89 to 59 per cent in 2001-02 and in value terms from 49 per cent to 86 per cent (MPEDA 2002)

Enough has been written about the social and ecological impact of the rapid expansion of export-oriented shrimp aquaculture, particularly in Bangladesh, Thailand, Philippines and India. There is a recognition that it is essential to minimize ecological and social impact and to move towards more sustainable forms of shrimp culture, and reportedly some

progress is being towards this. However, in many areas, problems continue to persist underlining the need for better management and enforcement.

Production from Aquaculture in Asia (without China)



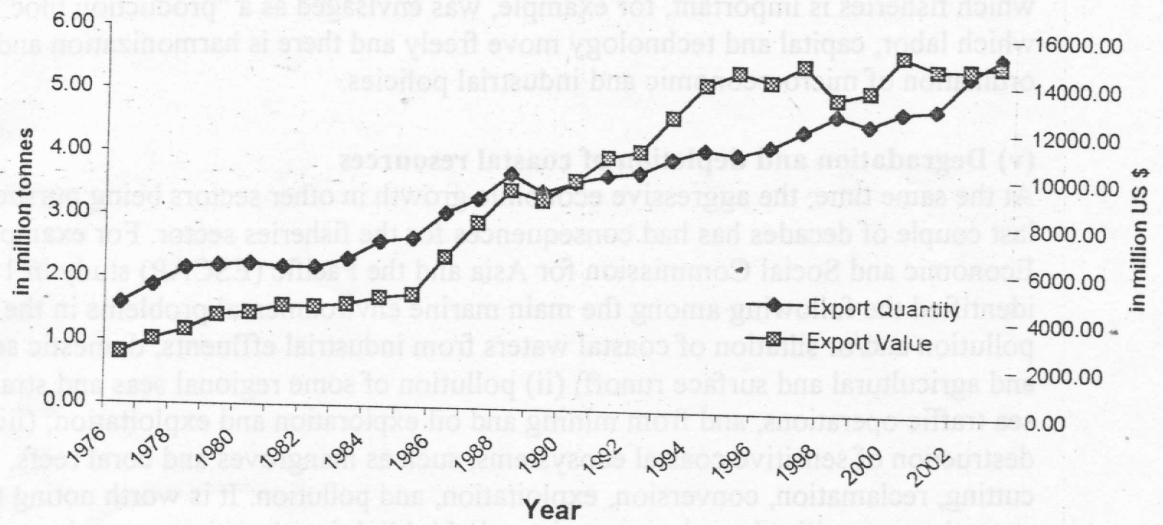
Source: FAO, FISHSTAT, 2005

It is significant that according to FAO statistics, aquaculture's contribution to global supplies of fish, crustaceans and molluscs continues to grow, increasing from 3.9 percent of total production by weight in 1970 to 29.9 percent in 2002. Currently, two-thirds of the total food fish supply is obtained from fishing in marine and inland waters; the remaining one-third is derived from aquaculture.

(iv) Trade

Fish and fish products are an important export commodity in the Asian region and, in 2002, seven Asian countries were among the top 20 exporters. Important exporting countries include Thailand, China, Taiwan, Vietnam, Indonesia, India and Korea. Exports are mainly to markets in Japan, EU and the US. The figure below shows growth in exports from the Asian region, excluding China, both in quantity and value terms.

Quantity and Value of Fishery Products Exported - Asia (without China)



Source: FAO, FISHSTAT, 2005

Globally, in 2002, total trade of fish and fishery products increased to an export value of US\$58.2 billion and fish imports reached a new record of US\$61 billion (FAO 2004). Developed countries accounted for more than 82 percent of the value of total fishery product imports. The net receipts of foreign exchange by developing countries (i.e. deducting their imports from the total value of their exports) increased from US\$3.7 billion in 1980 to US\$17.4 billion in 2002 (FAO, 2004). For developing countries in Asia and elsewhere, fish trade is clearly a significant source of foreign exchange. Shrimp is the most traded seafood product internationally.

In general, countries in Asia lay great emphasis on increasing trade and expanding exports of fish and fish products, and several initiatives have been undertaken towards this. In 1997, for example, the Asia Pacific Economic Community (APEC) leaders launched a comprehensive program to open markets in nine key industrial sectors, including fisheries. In 1998 APEC completed an agreement to "lower tariffs and other trade barriers" in these nine sectors.

Similarly Bangladesh, China, India, Republic of Korea, Lao People's Democratic Republic and Sri Lanka are signatories to the Bangkok agreement, an initiative of ESCAP. This is a preferential tariff arrangement that aims at promoting intra-regional trade through exchange of mutually agreed concessions by member countries. Fish and fish products are listed under the preferential tariff arrangements in the case of India, China and Sri Lanka.

East Asian countries have created several sub-regional growth areas like IMT-GT (Indonesia, Malaysia and Thailand), and SGT (Singapore, Malaysia and Indonesia) and

BIMP-EAGA (comprising Brunei Darussalam, the Indonesian provinces of Kalimantan, Sulawesi, Maluku, and Irian Jaya; Sabah, Sarawak and the Federal Territory Labuan in Malaysia; and Mindanao and Palawan in the Philippines). The BIMP-EAGA, a region in which fisheries is important, for example, was envisaged as a "production bloc" within which labor, capital and technology move freely and there is harmonization and co-ordination of micro-economic and industrial policies.

(v) Degradation and depletion of coastal resources

At the same time, the aggressive economic growth in other sectors being pursued over the last couple of decades has had consequences for the fisheries sector. For example, an Economic and Social Commission for Asia and the Pacific (ESCAP) study in 1992 identified the following among the main marine environmental problems in the region: (i) pollution and/or siltation of coastal waters from industrial effluents, domestic sewage, and agricultural and surface runoff; (ii) pollution of some regional seas and straits from sea traffic operations, and from mining and oil exploration and exploitation; (iii) destruction of sensitive coastal ecosystems, such as mangroves and coral reefs, through cutting, reclamation, conversion, exploitation, and pollution. It is worth noting that coastal communities have been consistently highlighting these issues, as they are the first to feel the impact of these negative developments.

Despite the growing awareness and concern, coastal and other aquatic ecosystems continue to be degraded by pollution and unsound forms of utilization. These negatively impact on fisheries, as shallow-water fish habitats such as mangroves, sea grass beds, coral reefs, estuaries, bays, rivers, lakes, and swamp are important fish breeding and nursery grounds, where many species reproduce. The barriers on most major rivers in the region, such as dams, weirs, and hydropower structures, also have a major impact on migratory species that swim upriver to spawn.

Increasing population, urbanization, intensive agriculture, industrialization, shipping traffic, coastal settlements, and a range of other human activities including offshore mining exploration and exploitation, tourism, coastal reclamation, and loss of mangroves and wetlands are all exerting increasing pressures on the marine and coastal environments, threatening the livelihoods of those dependent on these resources for survival, and increasing the vulnerability of coastal populations to natural disasters, as witnessed during the recent tsunami.

(2) The Role of Women in Coastal Fishing Communities

This section looks the roles taken on by women within the fisheries and within coastal fishing communities, in Asia and elsewhere.

| | |
|---|--|
| As workers within the fisheries (paid and unpaid) | Women coastal communities in Asia often work in fish marketing, in the preparation of bait, making and repairing nets, collecting crabs and shellfish, gathering and cultivating seaweed and algae, in processing (smoking, salting and drying fish), and, in rare case, fishing. They |
|---|--|

| | |
|---|---|
| | <p>may also work in aquaculture farms.</p> <p>Women often take on 'liaison work' on behalf of their fishermen husbands, such as dealing with financial institutions for credit for fisheries operations and for repayment, dealing with the governmental fisheries agencies, and so on. In India, it is reported that loans are often taken by women members of self-help groups for their fishermen husbands, with the onus for repayment is on them.</p> |
| As workers in processing plants | Women in countries such as Thailand, Indonesia, India, the Philippines and Sri Lanka are active in the processing sector, as either part-time or full-time workers in processing plants, or workers under sub-contracting systems, working on a piece rate basis. |
| As those responsible for the family and community | Women, as everywhere else, are almost entirely responsible for the care and nurture of the family. Where the men stay away fishing for long periods, women run the household in the absence of their husbands. They are important actors in the fishing community and are important in maintaining social networks and the culture of the community. |
| As workers outside the fisheries | Often, women of coastal fishing communities take on activities outside of the fishery, that give them some form of stable monetary income, since the income from the fishery is inherently unstable and unpredictable. In rural areas, women may be involved with agricultural work or in making and selling handicrafts made of locally available natural resources. In both urban and rural areas, women may start some work that generates income, such as running a small shop or a restaurant, either individually, or as part of groups, or take up employment as domestic workers etc. |
| Within community organizations and fishworker movements | Women are sometimes active in community organizations such as religious groups, in local government structures and in fishworker organizations. Where women have organized, they have also been active in political struggles, as for example, against joint venture arrangements in India or against destructive fishing methods in several Asian countries. Women tend to very active particularly at the local level. |

The roles women play differs by region, by religion and culture, by age, by levels of economic development, by proximity to urban centers etc. Thus, in the catholic communities along the western coast of Sri Lanka, women play an active role in fish handling and marketing in the beach, while in the predominantly Buddhist southern

coastal fishing communities, the presence of women in the beach is not socially accepted. A study from Bugtong Buto (Ibajay municipality in Aklan Province) in Central Philippines indicated the importance of age as a factor in fish trading activities. It was seen that fish trading is a major activity for middle-aged and older women, whose husbands may have become too old to earn an income from the physically demanding work of fishing, and who may be less burdened with reproductive and other domestic responsibilities (Pena and Marte, 2001).

In general, while the exact nature of the work of women differs vastly, the common factor is that it is rarely seen as 'productive'. It has low social value and is normally seen as an extension of the 'domestic' space. Little value is attached to the domestic and community tasks performed by women. Available data or information does not capture the complexity or the multidimensional nature of work undertaken by women of fishing communities, and, not surprisingly, few policies are formulated taking into account these realities.

It is as important to stress the dynamic and changing nature of women's roles in the fisheries and in fishing communities, in response to larger changes within and outside the fisheries sector, changes that, as discussed earlier, include the following:

- Modernization of the sector, including, *inter alia*, adoption of efficient technologies like trawling and purse seining, expansion of the industrial fleet and of harbour-based fisheries, and the rapid development of technologies related to refrigeration, transportation and processing;
- Increasing export-orientation as fisheries are seen as an important exchange earner by governments in the Asian region;
- Expansion of export-oriented monoculture of species like shrimp;
- Growing competition for coastal resources for, among other things, urbanization, industrialization and tourism;
- Degradation and destruction of coastal resources not only to make way for the above activities, but also as a result of upstream activities including dam construction, and as a result of increased levels of land and sea based pollution;
- Adoption of policies by States to attract foreign investment, including tax incentives and policies facilitating joint venture agreements, and labour reforms;
- Adoption of policies linked to privatization and liberalization by States, reducing the role of the state in delivery of basic services such as health and education.

These developments have often shaped and changed women's roles in fisheries and fishing communities—thus women who were earlier self-employed as processors or traders may have since become wage labour in processing plants or shrimp peelers at harbours, or in cases, been displaced from the sector itself.

(3) Issues facing women of coastal fishing communities

This section will take a closer look at key trends and issues facing: women as workers in fisheries-related activities; women as workers in modern fish processing; women as caregivers in fishing families; women as members of coastal fishing communities; and

women as members of organizations, against the background provided in the earlier sections.

(i) Women as workers in fisheries-related activities

Women engaged in pre-harvest work such as net-making: Traditionally, nets were woven locally using cotton yarn or other natural fibre. The introduction of synthetic yarns and net-making machines has led to the displacement of thousands of people traditionally involved in these activities, many of whom were women. In Kanyakumari district of Tamil Nadu, India, for example, the introduction of these machines reportedly led to the displacement of 20,000 women employed in this work at one stroke. (ICSF, 1997). This has also been reported from Pakistan (Shah, 2002). Little documented information on trends in the work of women in the pre-harvest sector is available from other Asian countries.

Women engaged in fishing, gleaning and collection activities in inshore areas and intertidal zones: Thousands of women are working in intertidal areas, backwaters and inshore zones, collecting crabs, shrimp, shellfish, seaweed etc. for income and domestic consumption. Their work, health and incomes are rendered highly vulnerable by increasing levels of pollution (especially near urban and industrial areas) and destruction of coastal habitats, such as mangroves (among other things due to shrimp aquaculture). This has been reported from several Asian countries, including India and Thailand, though little documentation on this exists. It is also common that these lands are taken over by tourist and other interests, given the growing pressure on coastal resources and the fact that most fishing communities have no legally recognized 'customary' rights to coastal and intertidal lands, even though they have used these areas for generations.

Women engaged in fish processing and marketing activities: Women are most active in the post-harvest sector. Traditionally, women of fishing communities in many Asian countries have been playing important roles in marketing fresh fish, and processing surplus catch for sale at a later date. In many ways fishing was a family- and community-based enterprise. However, with modernization of the sector, the growth of the industrial fleet and the expansion of domestic and export markets, the situation has fast changed. Bigger players with capital have entered the sector as financiers, export agents, etc. and it is this chain that controls the trade in fish, especially higher value fish, as seen in India (Salagrama 2002). Women of fishing communities, with meager access to capital, information and technology, tend to handle low-value fish, or trash fish, for the domestic market, or to work as wage labour sorting and cleaning fish. They face increasing problems in getting access to fish catches. The fact that landing are more centralized and often at great distances from the fishing village, has not made the situation easier, as women are forced to travel longer distances, as in India and Sri Lanka (Amarasinghe and Kumara 2002). All this is not to deny that some women have managed to become successful entrepreneurs, taking advantage of the new opportunities offered by the lucrative domestic and export market for fish.

Women are also feeling the impact of policies facilitating exports and trade pursued by States in the region. This is particularly the case when the species imported or exported

are those that have a local market and provide local employment. In India, for example, the export of ribbonfish, a species that has a good local market, to China, has expanded with repercussions for the thousands of people in the chain employed in processing, transporting and selling the fish, often to distant markets within India. In the Philippines, imports that are entering the wet market through illegal channels, are depressing prices and thereby incomes of local producers and vendors of fish. In Sri Lanka, imports of dried tuna have reportedly depressed prices in the local market, reducing the income of local women processors.

Women workers on aquaculture farms: It is known that the growth of aquaculture (including mariculture and brackishwater aquaculture) is providing employments to thousands of people in the Asian region, including to women. Proponents of aquaculture often cite the employment generating potential of aquaculture. However, there is little or no information about nature of employment that is generated, the conditions of work on farms, the wages given etc. The little information available is anecdotal. For example, it is known that shrimp aquaculture units in Thailand employ migrant labour from neighbouring countries such as Myanmar to minimize labour costs, and this aspect needs to be better understood. Shrimp aquaculture in many cases has been extremely lucrative in the initial period, till hit by disease or other problems, forcing many farms to shut down. The impact on workers in these farms is little studied.

(ii) Women as workers in processing plants

Export of processed fish products is an important source of foreign exchange for countries in the Asian region, particularly for Thailand, China, Taiwan, India, Indonesia, Vietnam and Philippines. The processing sector is highly competitive and the Asian region, with cheap labour and relatively good access to resources, tends to enjoy a competitive edge.

A study from Southern Thailand (SDF unpublished, 2004) traces the way in which resource degradation and the decline of coastal fisheries prompted women of fishing communities, who earlier were self-employed within the fishery, to move to wage labour. Women either took up formal employment in nearby factories, particularly in fish processing plants, or worked as informal labour working under various sub-contracting arrangements, processing species such as crab. The study suggested that though women have gained access to some form of stable income or minimum wage, women experience weakening of family and community links, higher levels of stress, occupational-health related problems etc. The study clearly draws out the links between resource degradation, the decline of community-based livelihoods and the shift to paid labour.

At one level, fish processing plants provide employment to thousands of workers, particularly women. However, reports indicate that women tend to be employed in low-paid jobs with low levels of job security, often under poor conditions of work with long-term implications for their health, as has been reported in India (Nishchith 2001). In several countries, including India, processing plants employ young women migrant workers (*Yemaya*, 2000), and there are reports of the difficult working and living conditions, low pay, and harassment of women workers. In India, sub-contracting is also common, and some tasks take place outside the plant premises, as in peeling sheds

(Nayak 2001), where workers are employed on low wages and often paid on a piecemeal basis.

While cost cutting, often at the expense of the labour employed, is one dimension, given the fiercely competitive nature of the sector there have also been cases where processing plants have been shut down, causing large-scale unemployment. In many Northern countries processing plants have either shifted to countries with cheaper labour and greater resource availability, or shifted to highly mechanized operations, causing large-scale displacement of labour. It is only a matter of time that countries in Asia also go in for such technology, perhaps in the name of complying with the high sanitary standards imposed by Northern countries, with severe implications for local employment. This is a trend that needs to be closely monitored.

(iii) Women as caregivers within the family

Women of fishing communities have crucial roles in the care and nurture of their families and communities. With men away at sea for considerable periods, women are responsible for many of the land-based roles, including handling and selling the fish, handling the family finances and making ends meet, cooking and housework, care of the children and elderly, maintaining community and social networks etc.

Developments at sea have had implications for all these roles of women. For example, the growth of trawling and the industrial fleet in Asian countries has been a constant source of conflict in the region. Small-scale and artisanal fishermen have had to face increasing competition for resources, often in the same fishing grounds. Many fishermen have lost their gears and nets, and even their lives, at sea as a result of indiscriminate trawling activities and conflict in inshore zones. Such conflicts have been witnessed in several Asian countries including Indonesia, India, Thailand and Malaysia. Artisanal and small-scale fishermen allege that such forms of non-selective fishing deplete and degrade resources and that large catches by these fleets depress market prices. For women of fishing communities, this has often meant a decline in the income available to run the family and household. It has also, in extreme cases, meant having to cope with the loss of their men in conflicts with trawlers, as in Indonesia (Sharma 2000)

It is also the case that as resources become scarce, the small-scale and artisanal fleet in the Asian region, for example in Sri Lanka, India, Philippines, is moving into deeper waters, even into international waters or into the Exclusive Economic Zones of neighbouring States. There are several cases where small-scale vessels have been confiscated and the crew arrested and even jailed, often for months and even years. The plight of the family of crew members back home is not difficult to imagine. The entire burden of keeping the family intact falls on women. (See for example, Kumara, 2000, for a report on arrests of Sri Lankan fishermen).

In Sri Lanka a recent study on the wives of crew working in the multi-day fishing sector (Amarasinghe, 2004) indicated that though incomes of crew members on board multi-day vessels have increased, there is nevertheless a social cost being borne by wives and families of crew members. Wives of deep sea fishworkers, while experiencing some

degree of autonomy in decision-making, are taking on greater responsibilities during the long absences of their men. With the change in family structure, women also have to cope with greater problems in bringing up their children, as children take to drugs, drop out of school etc. Apart from this, the arrest and detention of crew members in neighbouring countries, for periods that may last two years, imposes a big strain on women, as they have to manage their families in the absence of a regular income, while trying to secure the release of their men. The study clearly shows the changing roles of women in fishing communities, as many in the community shift to multi-day fisheries. In a coastal fishery context in contrast, women played far more active roles within the fishery itself, related to vending and processing the fish.

In addition, given the growing trend of withdrawal of States from service delivery functions, the costs of education and healthcare are increasingly passed on to families and communities, who can ill afford to take on this burden. Women, as care givers and nurturers, take on a much greater burden.

(iv) Women as members of coastal fishing communities

Degradation, destruction and pollution of coastal habitats is increasingly common in the coastal belt of Asian countries. These negative developments have affected women and coastal communities in several ways. For example, the destruction of coastal habitats such as mangroves, coral reefs, sand dunes and other coastal vegetation, has sharply increased the vulnerability of communities to natural disasters such as typhoons, cyclones and the recent tsunami.

Tasks of daily survival, such as bringing water and fuelwood are becoming increasingly onerous with the salinization of ground water and destruction of coastal vegetation. A little discussed problem is that faced by women as a result of decline in tree cover, as several coastal villages, especially in Asia, lack toilets and sanitation facilities (Salagrama 2002). There is a clear decline in the quality of life as linked to environmental degradation, an aspect that is little reflected in data or statistics. It would be important to document comprehensively these developments and their impact on coastal fishing communities in general, and on women of these communities in particular.

It would be as important to outline an action agenda to restore coastal ecosystems, drawing on views, concerns and suggestions of coastal fishing communities, recognizing communities as key players with close knowledge of their ecosystems and changes that have taken place affecting their life and livelihoods. A detailed documentation and analysis of the institutional capacity in place, including at the community level and in local government, to carry forward the action plan, would also be essential.

There are, at the same time, many cases where fishing communities have been uprooted and displaced, or face displacement, to make way for 'development' (industry, urban growth, tourism...). Ironically, even as fishing communities are victims of environmental degradation, they are now increasingly victims of conservation efforts. Blind ill-conceived environmentalism is leading to the displacement of communities from their

fishing grounds. The growth and power of such environmentalism, with a middle-class, urban and Western understanding of environmental issues, is yet another disturbing trend.

Case study on impact of pollution from the gold mining industry on fishing communities in Buyat, North Sulawesi, Indonesia, presented at the *Asian regional consultation on women in fisheries*, 11 to 14 August 2004, Medan, Indonesia

Fishing communities in Buyat, North Sulawesi, have been at the receiving end of the pollution caused by gold mining operations of the mining company, PT. Newmont Minahasa Raya (NMR), a subsidiary of Newmont Mining Corporation, based in Denver, Colorado, USA, one of the largest mining company in the world. Buyat village comprises about 60 families, all of them dependent on fisheries for a livelihood. The community shifted here in 1968 as the village they were in earlier was taken over for setting up the gold mines.

Mining activity, in general, has had severe environmental implications, polluting the air and the water, destroying the soil structure, and causing erosion and sedimentation. The use of water in large quantities has drained the marshland, causing decline in soil fertility and depletion of groundwater. The impact of tailing wastes (mercury, arsenic and cyanide) on marine areas has also been observed. Content of arsenic found in some fish species was found to far above the range considered safe for human consumption. Other research showed that phytoplankton, polychaeta, shrimp, and crabs, between certain depth ranges, contained cyanide and mercury in high concentration, over the safety limit.

For women of the community, the pollution and destruction of their resources has had severe implications. Fish catches, particularly in nearshore waters where fish were earlier abundant, have declined. Studies have also indicated a decline in the species diversity of their catch. Not surprisingly local incomes from the fisheries are also reported to have declined. Out of desperation people have even resorted to criminal acts such as stealing coconuts from gardens of other people or taking diesel fuel from the company.

The disposal of tailings in the Buyat bay has also led to greater incidence of illness. Buyat bay villagers are reported to suffer from a variety of health problems including tumours and swellings on their bodies, skin irritation, stiffness, temporary paralysis, severe headaches and birth defects. and blood samples taken have been seen to contain arsenic and mercury over the reference range. There is the possibility of the long-term impact of heavy metal poisoning of people from Buyat bay, as in the cases from Minamata gulf in Japan in 1925.

Data showed that women were more affected. Women reported constant headaches, pain in the joints, tremors, brain damage, lumps spread on the body and itchiness. Many women reported reproductive problems, such as frequent miscarriages. It was also observed that the highest number of problems were reported by those in the age group 21 to 30 years old—the economically productive years.

These developments have had implications for the already skewed gender relations within the family and community. For women, apart from the impact on their health, these developments have meant a doubling of the work burden. Even in the face of illness they have little alternative to looking around for any work that gets them an income. As illness increases within families, the work of care-giving always falls on the women. Women adopt various strategies to survive in the face of these problems: from going to sea, to stealing coconuts, to making cookies to sell, and to becoming hostesses/prostitutes in the other areas to pay their family debt.

They now go, for example, for fishing trips with their husbands and other men. They find it hard work but consider that they have no choice—they are willing to do anything for survival, even if it is a crime and is illegal. In a society that tends to favour the male child, during times of economic

hardships, girl's education is often neglected as she is expected to be only a housewife. It is the boys who get preference even in terms of nutrition and food, with implications for the health of girls and women.

(v) Women as members of organizations

Women's role in community organizations and in decision-making processes varies, based on the limited research and anecdotal information available. In Thailand women of several Muslim fishing communities report that they play important roles with the community and within decision-making structures. However, reports indicate that, in general, women's representation within traditional community decision-making structures is weak. In the caste panchayats of fishing communities along the Coromandel coast of India, for example, women are not represented within the community decision-making structures, as was more than evident in the post-tsunami period. It is important to note, however, that due to the typical division of labour within small-scale fishing communities, where men fish and women process/ market the fish, women of the community interact more with the outside world and have greater control over the finances, than say, women of farming and other rural households.

On the issue of women's representation in fishworker organizations, the picture, not surprisingly, remains more or less the same. At a meeting of fishworker organizations (FWOs) and NGOs in the Asian region held in Thailand in 2001 (Sharma 2002), it was noted that in most countries of the region, efforts at developing fishworker organizations are relatively recent. It was further noted that even where fisherfolk have organized, women are often not part of such organizations. Organizations present shared the problems they faced in organizing women. It was evident that women of fishing communities in the Asian region have a long way to go in terms of seeking better representation within organizations and within decision-making processes.

It has been observed that women tend to be more active with organizations at the community and local level. This has been the case in several countries and women have been active in various struggles, for example, against trawling activities in Indonesia and India, against the gas pipeline project in Thailand, against joint ventures in India, against arrest of Sri Lankan fishermen in third countries in Sri Lanka, and against activities that degrade the coastal environment in the Philippines and Sri Lanka. They have been very much a part of community initiatives towards resource management, as in Thailand and the Philippines.

In some cases, where women have organized and have been given the space to represent their interests within FWOs, the participation of women has strengthened the larger organization and broadened its agenda. Women have been able to raise issues that concern women as fishworkers even as they have actively supported the struggles of the fishermen. Most significantly, they have raised issues that concern the quality of life within fishing communities—issues such as access to health, sanitation and education. *They have brought in a community perspective to the fisheries debate.* Their ability to do so stems from the fact of the multi-faceted roles they perform, roles that straddle the home, the family, the community and the workplace.

Increasing women's participation within organizations is, in general, reported to be difficult and challenging. It is reported that women themselves tend to undervalue their own work and contribution, and are hesitant to take on more active roles within organizations. To help women recognize their own self-worth and their own identity as fishworkers and as important members of the family and community, is in itself a challenge.

In some cases, even when the importance of women's participation is emphasized by the organization, little is in fact done to make this possible and women continue to be marginal players. In other cases, the attitude towards women's participation has been patronizing, and little space has been provided for women to bring forth issues that are of concern to them. At most, women are seen as actors supporting the agenda of their men. Where women have organized and have become a force, this has even been perceived as a threat, and has become a divisive issue, as an issue of men versus women.

In general, a better understanding of women's participation in organizations (traditional and modern) at the community level, in local governments and within fishworker organizations, the constraints they face in participation, the different perspectives they have brought in, and ways in which their meaningful participation can be strengthened, would be highly relevant.

(4) Selected research priorities

Section 3 identified some key trends and issues facing women of fishing communities, identifying areas for which further study would be needed. The paper being presented at this seminar by Nalini Nayak also identifies relevant research issues. This section will, therefore, limit itself to proposing selected issues impacting on coastal fishing communities and their livelihoods at the local level that would benefit from monitoring and analysis at a macro-level.

Trade in fish and fish products

Women, in the multifaceted roles they play in the sector, particularly in marketing fish, are impacted by macro-level trade policies. Mention has already been made in earlier sections of the impact of imported fish and fish products on livelihoods of fish traders in the Philippines and Sri Lanka. There is clearly a need to closely monitor and analyze trade-related developments, both at the international level and at the regional level, given the growing importance of regional and preferential trading arrangements in the Asian region. It is important to monitor their impact on: small-scale fishers, traders and processors of fish, on food security of local consumers, and, as important, on the fish resource base. Research undertaken should be in a position to propose appropriate policy options that defend and support the interests of the small-scale fisheries sector and of poor consumers, and that sustain the resource base.

An important area for research would be on trade between regions (within the country and with neighbouring countries) in artisanally processed fish and fish products. Little is known about this form of trade or bottlenecks to it, and policy support has been minimal.

There is a need to document such forms of trade and to propose policy options for support.

Fish processing industry

The importance of the fish processing industry in Asia is growing, given especially the availability of cheap and relatively skilled labour and lower costs of production. Country-level studies of the sector in the Asian region on aspects such as: conditions of work in the sector; occupational health and related issues; wages and gender-based differentials in wages; the changing nature of employment (increasing casualization of labour for example); the impact of changes in technology used in the industry; health and sanitary standards imposed by fish importing countries and the impact on labour employed and on fish exports, would be useful in developing a comparative picture of the sector. It would be useful, if not necessary, to situate these studies in a global context, and to track the manner in which capital constantly moves in search of cheaper raw material (fish) and labour costs. Research should highlight the larger picture and should lead to policy that ensures protection of core labour standards in the sector as a whole.

Aquaculture

As discussed in the first section, currently one-third of the total food fish supply derives from aquaculture, a quantum leap from a situation just a couple of decades ago. Proponents of aquaculture see it as the future of fisheries in the wild. Clearly this is a sector to closely monitor. Critics have pointed to the detrimental social and environmental effect of intensive forms of aquaculture, the unsustainable use of fishmeal as feed for culturing carnivorous species, the excessive use of chemicals and antibiotics, the use of non-native species etc. Apart from the above aspects, and their impact on coastal fishing communities, it would be essential to study aspects that would include: ownership and size of farms, marketing arrangements such as the emergence of sub-contracting arrangements, the level of employment and conditions of work in aquaculture units in the region. The latter is an area about which little or no information exists. The effort should be to propose appropriate policy towards ensuring sustainable and equitable development of aquaculture, learning from the experience globally and in other countries.

In conclusion, this paper has provided a broad overview of the marine fisheries sector in Asia, the roles played by women within the sector and in coastal communities and key changes and trends affecting coastal fishing communities. It has identified selected issues impacting on coastal fishing communities and their livelihoods at the local level that would benefit from research and analysis at a macro-level. There can be no doubt that research that contributes to policy and action can play an important role in making visible the work of women, in improving their economic and social well-being and quality of life, and in reducing their vulnerability to economic and environmental shocks and disasters.

Bibliography

1. ADB, 1997. The Bank's Policy on Fisheries, ADB, Manila
2. Amarasinghe O and Kumara H, 2002. *The Process of Globalization and Sri Lanka's Fisheries* in Proceedings of the Asian Fisherfolk Conference: Cut Away the Net of Globalization, 2002, Follow-Through Committee, Thailand
3. Amarasinghe O, 2004 (unpublished). *Study on the Changing Role of Women in the Deep Sea Fisheries Sub-sector of Sri Lanka* presented at the Asian regional consultation on women in fisheries, 11 to 14 August 2004, Medan, Indonesia
4. ESCAP, 1992. The State of the Environment in Asia and the Pacific 1990, ESCAP, Bangkok, 1992.
5. FAO, FISHSTAT, 2003. FAO Fisheries Department, Fish Information, Data and Statistics Unit, FISHSTAT PLUS 2.3 Version
6. FAO, 2002. The State of World Fisheries and Aquaculture, FAO, Rome.
7. FAO, 2004. The State of World Fisheries and Aquaculture, FAO, Rome.
8. FAO Regional Office for Asia-Pacific, 2002. Inland capture fisheries statistics of Southeast Asia: current status and information needs. Thailand.
9. ICSF, 1997. Women First: Report of the Women in Fisheries Programme of the ICSF in India. Volume 1. (Women in Fisheries Dossier Series No. 2). International Collective in Support of Fishworkers, Chennai, India
10. Kumara, Herman, 2000. *Whose Problem?* in *Yemaya* No. 4, International Collective in Support of Fishworkers, Chennai, India
11. Marine Products Export Development Authority, 2002. MPEDA-An Overview, MPEDA, Kochi, India
12. Nayak, Nalini, 2001. *Public hearing*, in *Yemaya* No. 8. International Collective in Support of Fishworkers, Chennai, India
13. Nishchith, VD, 2001. *Role and Status of Women Employed in Seafood Processing Units in India*, in Williams et al (ed) International Symposium on Women in Asian Fisheries, ICLARM Contribution No. 1587, Manila
14. Pena dela L and Marte CL, 2001. *The Plight of Older Women in a Fishing Village: The Women Fish Traders of Bugtong Bako, Aklan, Central Philippines*, in Williams et al (ed) International Symposium on Women in Asian Fisheries, ICLARM Contribution No. 1587, Manila
15. Salagrama V, 2002. *Fish Out of Water: The Story of Globalization, Modernization and Artisanal Fisheries of India*, in Proceedings of the Asian Fisherfolk Conference: Cut Away the Net of Globalization, 2002, Follow-Through Committee, Thailand
16. SDF, 2004 (unpublished). *Case study on the Impacts of Fishery Processing Industries on Fishing Communities in Thailand: The Changing Role of Women in Fishing Communities*, presented at the Asian regional consultation on women in fisheries, 11 to 14 August 2004, Medan, Indonesia
17. Shah, MA, 2002. *A bleak Future*, in *Yemaya* No. 9, International Collective in Support of Fishworkers, Chennai, India

18. Sharma, C. 2000. *Skirting the ban* in *Yemaya* No. 3. International Collective in Support of Fishworkers, Chennai, India.
19. Sharma, C. 2002. *Coming Together* in *Yemaya* No. 9, International Collective in Support of Fishworkers, Chennai, India.
20. World Bank, 2001. East Asia Update: Regional overview: Special Focus Corporate and Financial Restructuring, Poverty Reduction and International Development Goals, Environment, World Bank, East Asia and Pacific Region.
21. *Yemaya* No. 6, 2000. *Harsh working conditions*, letter written by the National Commission of Labour Rights (NCLR) to the Ministry of Labour, India. *Yemaya* No. 6, International Collective in Support of Fishworkers, Chennai, India

ICSF
FOR DIGITIZATION
DATE: 05/11/2018