

Tread cautiously

At the FAO Technical Consultation on Policies for Sustainable Shrimp Culture, ICSF suggested 10 principles for sustainable shrimp aquaculture

It is now two years since the Code of Conduct for Responsible Fisheries was unanimously adopted by the FAO Conference and we would like to thank FAO Fisheries Department for organizing this highly relevant Technical Consultation on Policies for Sustainable Shrimp Culture. We are happy to be here at this Consultation. The co-operation established with NGOs during the Code process thus continues into more specific areas now.

The International Collective in Support of Fishworkers (ICSF) works to defend the right to life and livelihood of artisanal and small-scale fishworkers, especially in the South. Although ICSF's main area of work is related to marine fisheries, it is concerned about coastal aquaculture because of the implications of such developments for fishworkers and their communities.

The implications of shrimp aquaculture for, and its impact on, artisanal fishworkers were a major cause of concern at the South Asian Workshop and Symposium on Fisheries and Coastal Area Management organized by ICSF in Madras from 26 September to 1 October 1996. Participants from Bangladesh, India and Sri Lanka were serious in emphasizing the environmental, social and economic impacts of shrimp aquaculture on rural communities in their countries.

The main reason for the boom in shrimp aquaculture is a growing market for shrimp in the North, in conjunction with stagnant or reduced supplies from capture fisheries in the South. The wild stocks are already heavily overfished, as a result of unselective bottom-trawling in the coastal waters and destructive fishing of shrimp juveniles in lagoons and backwaters. The negative ecological and

social impact of bottom-trawling has been a matter of tremendous tension in the Asian region for at least 20 years, prompting several countries to create an exclusive zone in the coastal waters for artisanal fishers. Indonesia even banned trawling in the 1980s. The plight of fishers is now complemented by the indiscriminate development of shrimp aquaculture.

Almost the entire production of shrimp from aquaculture is in developing countries and, therefore, the negative impacts of shrimp aquaculture are of particular concern to fishworker organizations in several Asian and Latin American countries.

Fishworkers in countries like Bangladesh, India, the Philippines, Sri Lanka, Thailand, Ecuador, Peru, Mexico and Chile have expressed strong concern about the unregulated development and mushrooming of shrimp farms in the coastal areas for at least five reasons.

First, they fear that habitats and food chain linkages, essential for healthy fish stocks, are being destroyed as a result of mangrove clearance and the gleaning of gravid females and post-larvae from coastal waters. They protest the associated destruction of fish larvae, the loss of their nursery grounds, and declines in the diversity of coastal species.

Passive fishing disrupted

Second, they are incensed about interference in their fishing activities by shrimp aquaculture operations. Passive fishing operations are often disrupted by onshore installations to pump sea water. Turbidity resulting from shrimp farm effluents, and noise pollution from sea water pumps affect fishing grounds and disrupt fishing.



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Third, they resent the loss of traditional access rights to the coastal commons. Access, both to the shore and to the fishing grounds, is increasingly obstructed by shrimp ponds, forcing fishworkers to take different, and often much longer, routes to the fishing ground from their settlements. Further, fishworkers are also deprived of space to dry fishing nets and to process their fish.

Fourth, they protest the disruptions to their community life and to their non-fishing activities. There are instances where drinking water sources have been contaminated. Salination of the soil has impacted negatively on subsistence farming, while common lands, used for grazing cattle, collecting firewood and for fulfilling other primary needs, have suddenly become inaccessible or degraded. These, in particular, have increased the workload of women in the fishing communities. Off-season employment opportunities for fishworkers in farming operations have also declined.

Fifth, they apprehend the development of the fishmeal industry, since the demand for fishmeal and fish oil may lead to fishing down the food chain, with adverse consequences for fisheries, especially in Asia. Fishmeal and fish oil are two of the principal components of shrimp feed. Thailand, for example, reduces about 60 per cent of its total marine fish production into fishmeal, which has serious implications for the capture fisheries of the artisanal sector. Moreover, the water discharged from fishmeal plants has polluted the shellfish grounds of artisanal fishers in many places in Peru and Chile.

While the disruptions to coastal fishing activities and the inconveniences to fishing communities are well known, no serious attempts have been made to systematically document the negative impacts and to establish viable policies to remove such impacts in the long run. There are no effective regulations to manage shrimp aquaculture in a socially and ecologically responsible manner.

The apparent potential for huge economic returns, in the short-run, including foreign exchange earnings, has led governments and business interests to

ride roughshod over the long-term interests of fishing and other coastal communities. The expected rate of return on investment in shrimp aquaculture does not take into consideration the true social, economic and ecological costs.

Internalized costs

Once such costs are internalized, the economic rationale to pursue resource-intensive shrimp aquaculture development may cease to exist. Unless there is an effective regulatory regime based on sound principles, shrimp aquaculture will continue to cause problems.

Any definition of sustainable shrimp aquaculture has to take into serious consideration ecological, economic and social aspects. The following ten points should be urgently taken up while developing an effective monitoring and control system for shrimp aquaculture.

1. Recognize the right to life and livelihood of fishworkers.

States should make every effort to ensure that fishworkers are not adversely affected by the development of shrimp aquaculture industries. Their right to a secure and just livelihood and their access to fishing grounds should be protected. In this context, states should uphold Article 6.18 of the Code of Conduct for Responsible Fisheries:

6.18. Recognizing the important contributions of artisanal and small-scale fisheries to employment, income and *food* security, states should appropriately protect the rights of fishers and fishworkers, particularly those engaged in subsistence, small-scale and artisanal fisheries, to a secure and just livelihood, as well as preferential access, where appropriate, to traditional fishing grounds and resources in the waters under their national jurisdiction.

2. Implement Article 9 of the Code of Conduct for Responsible Fisheries.

We are happy to notice the importance this consultation attaches to Article 9 of the Code of Conduct for Responsible

Fisheries. We would specifically urge this consultation to attach special significance to the following paragraphs and to incorporate them into regulatory mechanisms:

9.1.1 States should establish, maintain and develop an appropriate legal and administrative framework which facilitates the development of responsible aquaculture.

9.1.2 States should promote responsible development and management of aquaculture, including an advance evaluation of the effects of aquaculture development on genetic diversity and ecosystem integrity, based on the best available scientific information.

9.1.3 States should produce and regularly update aquaculture development strategies and plans, as required, to ensure that aquaculture development is ecologically sustainable and to allow the rational use of resources shared by aquaculture and other activities.

9.1.4 States should ensure that the livelihood of local communities and their access to fishing grounds are not negatively affected by aquaculture developments.

9.1.5 States should establish effective procedures specific to aquaculture

to undertake appropriate environmental assessments and monitoring with the aim of minimizing adverse ecological changes and related economic and social consequences resulting from water extraction, land use, discharge of effluents, use of drugs and chemicals, and other aquaculture activities

3. Set up participatory regimes for aquaculture regulation

States should set up regulatory regimes for shrimp aquaculture with the participation of all stakeholders, including fishworkers. Additionally, the practice in some countries, in relation to salmon aquaculture, of prior notification of areas that could be brought under aquaculture operations subject to no objection from the communities living in the vicinity of those areas, should be adopted in shrimp aquaculture.

4. Ensure legislative coherence and greater co-ordination among agencies

States should provide a cohesive set of legislation for the management of shrimp aquaculture and should ensure greater co-ordination among the departments of industry, finance, trade, agriculture, forestry, fisheries and other relevant departments at the national and local levels in planning, implementing and

monitoring of shrimp aquaculture activities.

5. Establish Environmental Assessment (EIA) procedures

Before granting approval to shrimp aquaculture operations, States should make mandatory environmental and social impact assessment procedures. EIAs must be prepared in the context of existing activities in the area and their likely burden on the ecosystem. All EIAs should account for the social, economic and ecological costs due to shrimp aquaculture. Further, there should be provisions for a public review process.

6. Adopt a precautionary approach

Given the extent of negative externalities from shrimp aquaculture and the poor state of knowledge about the impacts of shrimp farming, it is important to apply a precautionary approach to shrimp aquaculture development. This should be done not only from an ecological point of view, but also from an economic and social point. Any attempt at promoting aquaculture should be made only after looking at its likely consequences for other sectors, especially marine capture fisheries.

7. Introduce ecolabels in shrimp aquaculture

It may also be worthwhile to develop ecolabels to certify that a particular kind of shrimp aquaculture operation has been carried out in a responsible manner. This could be possible after developing a set of criteria for sustainable aquaculture in consultation with all significant stakeholders, including fishworkers, under the aegis of the state and/or non-state agencies.

8. Withdraw financial support to irresponsible aquaculture practices

Governments, multilateral and bilateral agencies should withdraw credit support to all forms of shrimp aquaculture that are socially irresponsible and ecologically destructive.

9. Implement compensation mechanisms

Penal clauses should be introduced in national legislation to ensure that the aquaculture industry pays for the damages it causes to the environment and to the life and livelihood of fishworkers and other coastal communities.

10. Minimize dependence on fishmeal and fish oil as a source of feed

It may further be worthwhile to discourage aquaculture practices dependent on fishmeal and fish oil that are manufactured from fish caught by destructive fishing practices. Preference should be given to shrimp aquaculture practices that depend on locally produced feed and which can be integrated into fishing and farming operations.

Any form of aquaculture activity that leads to the destruction of mangroves and the associated destruction of fish larvae and their nursery grounds should be prohibited. Interference by aquaculture activities in fishing operations and in accessing fishing grounds and coastal commons should be completely stopped. All disruptions to community life in coastal areas should be prevented. A precautionary approach should be adopted for shrimp aquaculture development. Viable aquaculture regulatory bodies should be set up with the participation of all stakeholders, including fishworkers. Coastal states should uphold the interests, as well as the right to life and livelihood, of fishing communities. We hope this Consultation can contribute substantively to developing a purposive policy framework to address the negative impacts of shrimp aquaculture, especially on Southern artisanal and small-scale fishworkers. 3

This Submission of ICSF was made to The FAO Technical Consultation on Policies for Sustainable Shrimp Culture, held at Bangkok, Thailand, from 8-12 December 1997