

Aquaculture

From farm to plate

International trade in aquaculture products has a human development dimension of special interest to the Asia-Pacific region

The Network of Aquaculture Centres in Asia-Pacific (NACA) is an intergovernmental organization promoting co-operation in development of responsible aquaculture, and improving aquatic resources management in Asia. There are 15 full member governments, and a further six participate actively in the work of the organization. With aquaculture products becoming significant in international seafood trade, there is an increasing trade dimension to NACA's work.

Aquaculture and small-scale fisheries are an important component of the livelihoods of many millions of people in Asia, including some of the poorest, and the need to better understand the implications of the seafood trade for human development, and to develop strategies to address priority concerns, is becoming urgent.

A regional consultation *Aquamarkets 2003: Market Access for Aquaculture Products*, organized by NACA and the Government of the Philippines in June 2003, assisted by the Food and Agriculture Organization of the United Nations (FAO) and the World Trade Organization (WTO), helped identify some of the key points to be addressed. This paper highlights some of the outcomes from the consultation, and issues emerging from other NACA work, concerning international trade in aquaculture products.

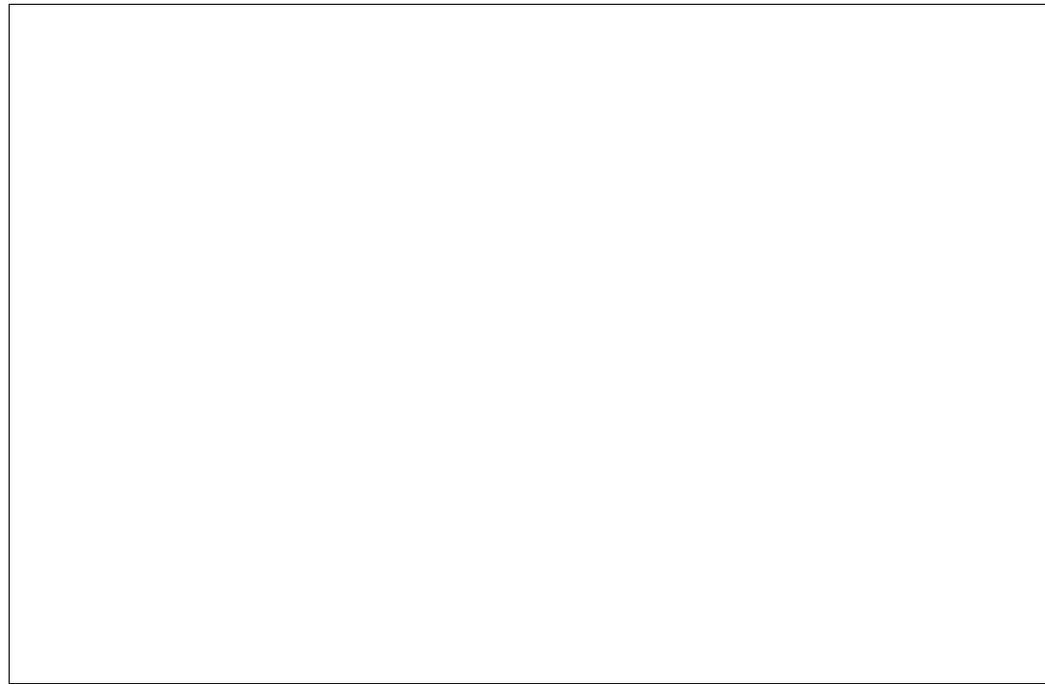
As readers of *SAMUDRA Report* know well, small-scale and subsistence fisheries, and aquaculture, play important roles in the livelihoods of many rural people throughout the region, although the significance is often 'hidden' in national, regional and international statistics, and even rural development projects. In the

lower Mekong basin, for example, the livelihoods of as many as 40 mn people, out of the 60 mn people living in the basin, are in some way connected or dependent on the Mekong rivers aquatic resources (directly in fishing, or 'foraging' for a wide range of aquatic resources from lakes, rice fields, swamps and floodplains, but also indirectly in marketing, processing and other activities). While these people are not all involved in trade of fishery products, the point is that in analyzing the relations between aquatic resources and trade, and particularly when considering the human development dimensions of this trade, the diversity of linkages between fisheries and aquaculture and the livelihoods of rural people must be recognized and understood.

Another example from Vietnam indicates that 80 per cent of the communities in coastal Vietnam are in some way involved in fishing—this goes way beyond the traditional statistics on numbers of 'fishermen' or 'fishers'. The catfish farming industry in the Mekong delta of Vietnam is another example, with an astonishing array of stakeholders involved, including some very poor people, participating in feed collection and preparation, supply of raw ingredients, fish seed and marketing, processing of catfish for exports, and recycling of off-cuts, often by women, many of whom have been affected by the recent United States (US) 'anti-dumping' decision.

Better understanding

With the fishery sector as an important area for human development in Asia, an understanding of the array of stakeholders involved, and indeed ensuring their better participation in policy-setting processes and trade discussions, is necessary to bring a more



human development-oriented dimension to trade policy.

Asia is the major producer of aquaculture products. In production volume and value, developing countries in Asia have huge development stakes in the seafood trade for both aquaculture and capture-fishery products. Asia is the biggest producer of aquaculture products, contributing 90 per cent to global production. Aquaculture is the world's fastest growing food sector, and one in four fish now comes from aquaculture. The sector will continue to grow. Asia is already facing increasing trade-related constraints with aquaculture products, which are likely to substantially increase as the sector grows.

In such situations, understanding of links between trade and human development, awareness-raising and actions to address key issues are essential. Aquaculture itself has not been without its critics in both developing and developed countries, and particularly important are concerns about social and environmental impacts of some highly traded products such as shrimp. While such discussions will certainly continue, they are increasingly influencing trade and marketing of aquaculture products in some major importers, and will need to be addressed through better management as the sector grows. Asian governments and seafood businesses are moving towards

strengthening implementation of sanitary and phytosanitary standards (SPS) in aquaculture production, to address food safety and aquatic animal health requirements of trade.

Traceability of product will become essential for products to enter major importing markets. Application of hazard analysis critical control points (HACCP) is now moving back down the production chain from the processing plants to the producers, and eventually will include all inputs to aquaculture, such as feed and seed. As many participants in *Aquamarkets 2003* emphasized, such requirements may be particularly difficult for small-scale producers, raising concerns that the costs of compliance to adopt international SPS may be substantially beyond the capacity of small-scale producers, and small-scale trading/supply networks.

Active engagement

It is increasingly clear that developing countries need to engage more actively and effectively in the standard-setting processes for aquaculture products, such such as the FAO/World Health Organization Codex and OIE (Office International des Epizooties or the World Organization for Animal Health). The fishery sector in Asia, for example, and thanks to a joint FAO-NACA-OIE initiative, has only recently started to engage in OIE's aquatic animal health standard setting, traditionally the domain of livestock

veterinarians. The Manila consultation has also emphasized the importance of developing 'common positions' through co-operation among Asian countries, and putting forward these positions more effectively to international standard-setting bodies.

Awareness-raising of the importance of international standards in trade of aquatic products, and capacity-building among governments and the private sector is also important. Many fishery agencies in the region are simply not aware of the issues and their implications, but small-scale producers will be hit hard by the trade standards, when applied. The implications of SPS measures are likely to be particularly significant for the small-scale sector and need to be better understood. Producers will increasingly bear the costs of applying new standards for food safety and animal health, and are probably least well-equipped to do this. Measures need to be explored and put in place if these small producers are not going to be squeezed out of the seafood trading system.

Certification of aquaculture products and ecolabelling is becoming an increasingly important issue for Asia. Both the US and the European Union (EU) will require traceability of aquaculture products in some form in the near future, and international certification and ecolabelling of aquaculture products are imminent. Some schemes already exist, such as the organic certified shrimp products from Vietnam, but, overall, product volumes are small. The potential for labelling to become a further non-tariff barrier is a concern expressed by developing countries in Asia during the Manila consultations, and the implications for small-scale aquaculture producers again may be particularly significant. Certification related to better management of aquaculture, if implemented in a fair and practical way, sensitive to the needs of small-scale producers in developing countries, may provide opportunities to support responsible and sustainable development of aquaculture, addressing some of the environmental and social concerns about some forms of aquaculture. However, the active participation of Asia in the process

of development of certification principles and systems that really take account of the special circumstances of aquaculture development in Asia will be essential if such goals are to be achieved. The issues at stake here are very significant, in terms of the number of small-scale producers (and input suppliers, traders, etc.) and financial sums involved. At the same time, the possibility of increased confusion in seafood markets, and additional cost burdens among producers and producing countries, exists from multiple certification schemes. As some form of certification and ecolabelling of aquaculture products is inevitable, the time is right to actively engage producers and producing countries of Asia in the process of developing fair and, as far as possible, harmonized approaches to certification.

With increasing attention to food safety, labelling and traceability, market chains are becoming more vertically integrated, according to the 'farm-to-plate' philosophy. Thailand is planning a massive campaign in 2004 by declaring it 'Food Safety Year' to improve awareness and farming systems for safe aquaculture production, and to link 'safe' food producers to processors and market access. Capacity-building and technical assistance will be essential to ensure small-scale producers can participate, and hopefully, benefit from such trends. The implications of traceability for the small-scale services and input suppliers surrounding some aquaculture systems, with very fragmented input supply and trading systems (for example, the catfish industry), remain to be seen.

At the same time, vertically integrated market chains may provide producers with more stable markets, and even perhaps opportunities for funding from 'higher' up the chain to support costs of transition to better practices. Consider shrimp farming which generates globally around US\$6-7 bn at the farm gate.

Safety requirements

At the consumer plate, the product is worth US\$40 bn or more. The strict food safety requirements and SPS measures being required are increasingly being put on the producer at the bottom of the chain, adding an additional cost to small-scale

to be fully explored. The issues need to be clearly understood, and trading positions and capacity-building, national policies and institutions put in place to provide the necessary support.

As many Asian nations face common issues affecting the aquaculture sector, there is a considerable opportunity and need to improve national, regional and international co-operation to share information on markets and trade in aquaculture products, and to ensure that relevant information on fisheries and aquaculture are provided to those engaged in trade negotiations, and to enhance co-operation between the private and public sectors. *Aquamarkets 2003* emphasized that nations in the Asia-Pacific region should develop common stances on issues of interest to the aquaculture sector, such as in harmonizing standards and technical regulations, regionally as well as internationally. Apart from SPS standards, there are a number of other trading issues and agreements being discussed in the 'Doha Development Round', even after the problems at Cancun, including multilateral environment agreements, subsidies, services and others, which will have an influence on international trade of aquaculture products. Better understanding of the issues, and participation of developing countries in the discussions, will be essential. ¶

producers at a time when commodity prices for major aquaculture products are, at best, stable, and are likely to go down. There must be ways to bring some of the value at the consumer plate to assist producers develop, and adapt to, the modern market chains and consumer demand.

Traditional fisheries and aquaculture institutions are not yet well equipped to address issues surrounding trade and aquaculture products. With major shifts occurring in trading patterns and market chains, the right sort of institutional support will be necessary for small-scale aquaculture producers (and fishers) and the network of support services and associated small-scale industries, to adapt to the changing international fishery trading system. The social implications are highly significant. There are considerable positive human development impacts that can occur through responsible development of aquaculture and international trade in aquaculture products. Nevertheless, institutional and policy changes may be necessary also, such as more emphasis on empowering farmers and farming groups to organize at the base of the chain. The opportunities for 'self-help groups'—formal or informal organizations of small-scale farmers—as a way of bringing small-scale producers together, and a foundation for better market access are promising, but remain

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