

Trading amidst constraints

Trade in fish and fishery products in most States of the Organization of the Islamic Conference faces varied constraints

The fisheries sector of the member States of the Organization of the Islamic Conference (OIC) is considered a very important sector for their economic, social and nutritional development. The fisheries resources can be drawn from marine and inland waters, as well as from aquaculture in fresh and marine waters. If rationally and scientifically exploited, these fisheries could play, as they already do in some of the States, a much more important role in meeting the increasing demand for food, employment opportunities and in activating the economies of several member countries.

Marine waters border most of the Islamic States from all sides. These States are adjacent to waters of three oceans: the Atlantic, the Pacific and the Indian Oceans and several seas, among them, the Mediterranean, the Red Sea, the Caspian and the Black Seas. They also have access to some of the most important rivers including the Nile, the Brahmaputra, the Tigris, the Euphrates, as well as huge natural and man-made reservoirs and inland lakes of Africa and Asia.

Various other important water bodies exist in the regions and sub-regions where fisheries have high possibilities for aquaculture. The Exclusive Economic Zones (EEZs) expands the OIC member States marine waters to potentially rich international fishing grounds.

Fishing and fisheries contribute more than any other animal production activity to the protein intake in most of the developing regions, including most of the OIC member States. Fish and fishery products are important for the food security of many coastal populations. But, by all accounts, many wild marine and freshwater resources are on the decline

and this is a source of growing economic and social problems.

The rapid growth of the past decades in the exploitation of those sources has taken its toll: during the 1950s and 1960s, the global catch from commercial fishing grew three times faster than the world population. Production growth was slower afterwards; currently, as global fishery production (catch and aquaculture) oscillates around 100 million tonnes per year, per capita supplies keep declining. These trends have an obvious impact on prices: during the last decade, seafood prices have risen almost 4 per cent a year on average, rendering a traditionally cheap source of protein much less accessible to the poor.

The blame for the depletion of aquatic resources has been put mostly on two factors:

- the development of excess fishing capacity with respect to existing fish stocks and their natural growth rates; and
- the deteriorating condition of fish stocks due to the pollution of sensitive water areas (inland and marine waters).

Small-scale fisheries in developing countries played a comparatively minor role beyond their communities, although, at times, the pressure of growing local demand contributed to the overexploitation of coastal waters.

Large-scale sector

The development of fishing capacity has taken place mostly in the large-scale (industrial) and medium-scale fishing sub-sectors. Since the early days of international development assistance, the

main objective of fishery development projects has been to increase fishing efficiency and income levels through motorizing boats, improving gears and investment in harbour development and other infrastructure facilities. The sector and its manpower grew, also drawing workers from rural to urban areas.

At the same time, large numbers of small-scale fishermen had no access to that assistance, finding it increasingly difficult to survive in an overexploited environment. In this perspective, the crisis of fisheries is also a crisis of livelihoods.

The implications go far beyond dwindling fish stocks available to small-scale fishermen. Globally, fishing provides a source of living for about 100 million fishermen and their families, the majority of them the world's poorest. They are among the one billion people—nearly a fifth of the global population—for whom fish is the main source of animal protein. The scarcity of resources is leading to clashes between neighbours, as fishing fleets stray across maritime borders, after depleting stocks in their own waters.

It is estimated that 74 per cent of the world's fish harvest is still caught in the wild, and the harvesting has reached, and in many areas exceeded, sustainable rates. This, in part, is because the means

of exploitation has become so efficient. Fishing fleets use sonar, radar, aircraft and satellites to track shoals. Winches and motors handle drift-nets typically containing more than 18 tonnes of fish. This enables trawlers to increase not only catches but the discards—species that are inadvertently netted but are unwanted and consequently discarded.

The issue of discards is a very disturbing one since it results in a very large wastage of fishery resources from discarding unwanted catches at sea. FAO estimates that from a range of 18-39 million tonnes of fish per year may be discarded at sea to catch about 50 million tonnes of fish suitable for human consumption. Most of the discards are dead fish thrown overboard back into the sea, mainly from shrimp trawlers.

The 50 Member States of the OIC exported in 1995 an estimated total of 1.3 million tonnes of fish and fishery products valued at US\$ 4.1 billion. They imported in the same year 889,000 tonnes, valued at US\$ 838 million, which makes these States, as a whole, net exporters.

Chief exporters

The main exporters are Indonesia, with 499,000 tonnes, valued at US\$ 1.7 billion, followed by Morocco, which exported 234,000 tonnes, valued at US\$ 787 million, while Malaysia exported 189,000 tonnes, valued at US\$ 335 million. As far as the

main importers are concerned, Malaysia is the main importer, with 258,000 tonnes, valued at US\$ 324 million, followed by Indonesia, with 159,000 tonnes, valued at US\$ 101 million, and then Nigeria, with 158,000 tonnes, valued at US\$ 80 million.

With regard to the imports and exports of the OIC Member States by the seven commodity groups, in 1995 these States exported mainly crustaceans and molluscs, at a value of US\$ 2.6 billion, while the main imports were of fish—fresh, chilled or frozen—for the value of US\$ 421 million or at a favourable trade surplus of US\$ 2.2 billion.

Trade trends in fish and fishery products in the main OIC Member States vary considerably from one sub-region to the other. In the South and Southeast region, Malaysia has a very high local consumption, along with the coastal areas and large urban centres, estimated at about 30 kg average per capita, while the Maldives has the highest annual fish supply in the world, 126 kg per person. Half of the fish landed in the market is fresh, while more frozen fish is being marketed. Fish utilization is also characterized by greater production of a wide range of value-added products or preparations, for both national and international markets.

Post-harvest losses of fish have been substantially reduced in recent years, as a result of improved infrastructure for landing, storage, transport and marketing. However, considerable seasonal losses in value still occur in some fisheries. Losses from oversupply are increasingly being channelled into feed for aquaculture.

Economic growth and policies of open trade have meant that the fish trade has expanded significantly over the last decade.

Some countries, particularly the new members of the World Trade Organization (WTO), such as Malaysia, are reported to be currently lowering their tariffs, following the outcome of the General Agreement on Tariffs and Trade (GATT) Uruguay Round. The percentage of catch going into international trade has

increased steadily in this sub-region and Indonesia is currently ranked third amongst the most important regional exporters.

In the sub-Saharan African sub-region, fish is a popular food item and provides an important part of the total animal protein intake. Fish is often consumed in small amounts with daily meals. Fish consumption in the region may be more important than it really is, but it is believed that the per capita consumption is declining due mainly to rapid population growth, a drop in imports aggravated by the weaker purchasing power of some countries and the decreasing share of domestic production retained for local markets, as artisanal fisheries increasingly turn to the more lucrative export markets.

Constraints to inter-regional trade include high transport and storage costs, poor handling practices, limited distribution networks and a lack of harmonization and proper enforcement of fish trade regulations. Tariff barriers and other trade restrictions persist among countries belonging to customs union. The main trade is in exports of small pelagics from the northwest coast southwards to the Gulf of Guinea countries.

Although the regional trade balance has been positive in value since the mid-1980s, sub-Saharan Africa remains a net fish importer in volume terms. Many countries have a small but growing export trade in fresh and frozen demersal fish and crustaceans, mainly to the European Union (EU), but the overall positive trade balance is based on the relatively large export volumes of only a handful of countries. Reliance on the EU market could cause difficulties in the future, as trade is liberalized and some exporters from Africa may lose their preferential status.

Varying consumption

In the Near East and North African region, fish consumption varies widely among countries. It averages from 1 kg per person per year in Afghanistan to about 40 kg per person per year in Yemen. The general average, however, is 5 kg annually. Fish are usually consumed fresh, particularly demersal fish, cephalopods and shellfish. Small

Mediterranean pelagics, such as sardines and anchovies, are used in fresh, canned or salted form, and tuna is mainly canned. In Yemen and Oman, small pelagic fish are also dried on the beach, to be used as animal feed, and in Morocco and Iran, they are utilized for producing fishmeal and oil.

In general, the region does not contribute substantially to international fish trade, although Morocco is a major exporter of fish and is expected to increase its exports as the European demand for high-value fish increases and the Moroccan national fleet expands. Its sardine-processing sector, which contributes substantially to the Moroccan economy, has incorporated the latest technology to allow competitive production at world prices. The other countries, Tunisia, and Mauritania, export mostly high-value fish, with some cephalopods and crustaceans, to European markets and Japan. A number of countries have a modest expanding trade in fresh and frozen fish to Europe and inter-regional trade to Saudi Arabia, Bahrain, Qatar and the United Arab Emirates.

The medium-term outlook for global demand of food fish is largely determined by population growth, changes in per capita income and the pace of urbanization. The interplay of these factors was considered in a review prepared by FAO for the Conference on Sustainable Contribution of Fisheries to Food Security held in Kyoto, Japan in 1995. At 1990 constant real prices, the review gave a conservative estimate of the demand for food fish that was in the range of 110 and 120 million tonnes (live weight) for the year 2010, compared with 75 million to 80 million tonnes in 1994-95.

Projections indicate that North America, Oceania and Europe will have the highest per capita demand, at more than 20 kg per year (live weight equivalent), but that the large populations in Asia mean that region could account for about two-thirds of total demand.

Fishmeal is the main product derived from the fish used for non-food purposes, for use as feed in poultry and aquaculture. Thus, it is expected that the

demand for, and the supply of, fish for reduction will remain stable at between 30 million to 33 million tonnes over the next few years. Therefore, the projected demand for fish for all uses is in the order of 140 million to 150 million tonnes for 2010.

Per capita supplies of food fish increased in both 1994 and 1995. However, it is still not clear that growth in aquaculture production can compensate for the possible stagnation in aggregate food fish production from capture fisheries.

Aquaculture is becoming established outside its traditional confines of Asia and Europe, although absolute growth is still faster than elsewhere. It has become popular because it provides a source of income rather than simple subsistence, and can be incorporated into local agriculture systems to diversify the production base. There is considerable potential for further expansion and, under favourable conditions, production could be 39 million tonnes by 2010.

Aquaculture in industrialized economies has normally targeted high-priced species but, although this trend continues, the cost reductions achieved now make feasible the industrial or technically sophisticated culture of large volumes of comparatively low-value species as a substitute for 'white fish'. In the low-income countries outside Asia, the growth of commercial aquaculture will be stimulated by easier access to wealthy consumers in high-income countries and by the adoption of macroeconomic policies aimed at providing an environment conducive to small-scale entrepreneurs.

The two main constraints on aquaculture are environmental degradation and the availability of land and water. The first constraint sometimes results from the mismanagement of aquaculture facilities, and, secondly, from competition with other land and water uses, particularly in agriculture, and from urban encroachment into coastal zones. These factors will limit growth.

Worldwide harvest

As for marine capture fisheries, FAO estimates, with some reservations, that the potential worldwide harvest ranges from

about 85 million to 90 million tonnes under current fishing regimes, rising to 100 million to 105 million tonnes, if management systems for capture fisheries are improved in all oceans and if there is some reduction in discarding. The possible increase in sustained production is between 10 million to 15 million tonnes through the rebuilding of stocks and better management measures.

No significant additional supplies are expected from inland capture fisheries. Therefore, considering the increase in supply for human consumption, capture fisheries and aquaculture supply may just meet demand at constant real prices (of 1990) in the year 2010.

International interest in the trade of fish and fishery products will be stimulated by the various agreements concluded at the establishment of the WTO. The expanded membership of this organization and the ongoing discussions aimed at further liberalization of trade will facilitate the flow of fish and fish products to markets with strong purchasing power. Any official links between environmental protection, particularly resource conservation, and international trade will affect future trade volume and destination.

It is expected that the average world per capita fish consumption by about the year

2000 will continue to be 13.5 - 14 kg. However, the real price of fish will have increased somewhat and regional consumption and production patterns will have been shifted. Total production for human consumption should have increased to about 85 million to 87 million tonnes (live weight equivalent).

Consumption is likely to remain at current levels, but at somewhat higher real prices in traditional industrial economics. By the year 2010, per capita consumption may have grown in Southeast Asia and the Near East and North Africa, and declined in sub-Saharan Africa and South Asia. The shift in production patterns will come from the increased share of food fish supplies from aquaculture. Substantial progress will have been made on matching fishing capacity to available stocks and discarding will have been substantially reduced, although catches will not yet have markedly increased as a result.

Low imports

In sub-Saharan Africa, per capita consumption will probably continue to decline due to low imports and inability of local production to keep up with population growth. The low fish consumption in South Asia will most likely continue and may increase somewhat in Southeast Asia. In the Near East and North Africa, per capita consumption will increase slightly but

remain low. Oil-based economies will continue to import fish. Most local production, except in Morocco and Oman, will be domestically consumed.

Overfishing is not a recent issue. However, it has become serious and affects capture fisheries in developing and developed countries. Unless effective action is taken, overfishing will get worse. Population pressure and the shortage of alternative employment opportunities, together with the lack of effective conservation and management policies, will increase the attraction of fisheries as a last resort to employment.

Most fishermen at most times catch more types of fish, and sometimes fish of small size, than they aim to. This is by-catch. Some of it is useful and is kept; the rest is discarded, which usually means returned to the sea. The need to minimize discards in industrial fisheries has become a major issue. FAO estimated it to be about 27 million tonnes per year. By-catch and its subsequent discarding is usually a consequence of the very nature of fishing. It may not be completely eliminated, but may be reduced.

Coastal fish habitats are rapidly being degraded in many parts of the world by industrial, urban and agriculture pollution, landfill, the damming and diversion of rivers, the clearance of

mangrove, sedimentation, mining and oil exploration and extraction, marine-based pollution, etc. ; while the fisheries sector suffers harm globally, it is also, itself, responsible for environmental damage.

A number of major problems confronting policymakers and fisheries managers have emerged in recent years as the complexity of management has become increasingly understood.

These problems include the lack, or inadequacy, of information relating to key biological parameters and the extent to which natural fluctuations and human impacts are responsible for observed changes in a resource base.

The 50 Member States of the OIC in 1995 produced, as a group, a total of 11 million tonnes of fish from all sources (marine, inland waters and aquaculture). Information on fish trade within each country, inter-regionally and intra-regionally, is still not comprehensive.

Trade balance

While the above figures indicate a favourable trade balance of 411,000 tonnes in quantity and about US\$ 3.3 billion in value, this favourable balance is due to the fact that the major fish and fishery products exported are mainly of high valued species of crustaceans and molluscs, which normally have high

international market prices, while the major imports are of fish, fresh, chilled or frozen, which are possibly of much lower value on the world markets.

In view of the fact that the trade figures do not indicate if the trade is within and among the member States of the OIC, it is, however, believed that the major trading partners are mostly from the developed countries, such as the US, Japan and the EU.

Notwithstanding the overall favourable trade balance, which seems to be due to the exports of high valued species from a very small number of the Member States, it is very important to point out that trade in fish and fishery products in the majority of the Member States faces a number of constraints of a varied nature, including:

- shortage of reliable information on products and prices
- lack of information on potential trade partners
- shortage of information on supply-and-demand situations
- tariff barriers
- insufficient knowledge of the various resources available
- limited capabilities on resource management and conservation
- inadequate infrastructure including fishing harbours, cold storage, ice plants, processing facilities, etc.

In order to improve the situation of fisheries in the majority of the Member States of the OIC and in order to achieve the socioeconomic, environmental and nutritional importance of fisheries, and the growing demand for fish products, certain actions are required to be carried out by the States concerned.

Among these actions are:

- reduce overfishing by taking drastic measures;

- rebuild and enhance fish stocks through better management and resources conservation;
- minimize wasteful fisheries practices, discards and post-harvest losses;
- develop sustainable aquaculture; and
- develop fisheries for new and alternative species based on principles of scientific sustainability and responsible management.

This piece is excerpted from a paper titled *Conservation of Fisheries Resources: Implications on Trade* by Izzat H. Feidi (ifeidi@thewayout.net), former Chief, Fish Utilization and Marketing Service, FIUU, presented at a seminar on Trade in Fisheries of the OIC Member States, at Agadir, Morocco