



## Nutritional Security, Healthy Marine Ecosystems and Value Added Priorities for Developing Coastal Countries

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According to FAO estimates, global consumption of fish, currently 140 million tonnes, is likely to reach 200 million tonnes by 2030 [1]. Industrialized countries where households have strong purchasing power will increase their demand, while developing and emerging countries will use this as a basis to increase both their aquaculture production and the number of fish caught for export. Overall, the demand from international markets will lead to an increase of fish trade from low income countries to wealthy ones with severe nutritional consequences for population who rely heavily on fish for animal proteins.

Considering this, International agencies such as FAO, UNEP, UNDP and UNIDO, in conjunction with regional and national institutions have to set up priorities to face this situation and contribute to the implementation of a more equitable fish trade. Three priorities can be identified.

The first priority is to ensure a nutritional security for the population of developing countries that are exporting more and more fish. The poorest households still need to be able to continue to have access to animal protein from fish at affordable prices. Developing countries must therefore find a way to accommodate supplying both domestic and international markets. Exports must not place a strain on either the price or the range of goods offered to the local communities.

The second priority is to stop the degradation of marine environment. Marine resources are either being over- or fully exploited in all developing countries. Due to the change in the structure of ecosystems brought about by climate change, southern countries must replenish fish stocks to ensure that marine ecosystems are as resilient as possible to exogenous shocks. As such, foreign vessels should be granted access to national waters only if there is proof of a surplus of fish stocks or the existence of a regional management fishery organization.

The third priority is the increase of the value addition of fishery products. Since the value of fish primarily depends on its natural qualities and size, the care taken in catching, handling, storing and transporting is an important element in distinguishing among top-quality, second-class and downgraded fish not suitable for export. For instance, the price difference per ton between top-quality and second-class fish is around €1,000, and about €3,000 for downgraded fish [2] in Mauritania. The use of fishing methods that do little to foster quality results is estimated to lead to €80 million in lost of profits per year - almost equivalent to the sum of the country's yearly exports of fish. Unfortunately, this example is true in other developing countries. Thus, most of the wealth naturally generated by marine ecosystems is wasted through carelessness. While such waste had little impact twenty

or thirty years ago, today it is increasingly damaging, both economically and environmentally. Marine ecosystems are under severe stress due to the tendency of large and small-scale fishing vessels to focus on quantity, at the expense of quality. Shifting to higher quality products would allow fishermen to generate their current turnover while greatly reducing their catch.

There is a strong case, therefore, for developing countries to opt for commercial development based on quality products. For fresh, refrigerated and frozen fish, the care taken by operators is reflected in a higher selling price. For developed countries importers, this segment is not only more profitable, but also more promising for the future, as a result of the gradual shift in consumer preferences from canned to fresh quality fish [3] (such as fish stored in minus 60°C). In other words, adding value does not necessarily imply fish processing.

Using the 'quality' criteria to determine access to fisheries resources holds promising prospects for conservation, particularly considering the failure of current fisheries management systems. In developing countries, fisheries regulations, which have been modeled on those applied in developed countries, have often been ignored. The context is certainly different: the means for implementing policies in developing countries are scarce and enforcement capacities are limited. Furthermore, considering for instance the failures of the European Common Fisheries Policy, despite a €300 million annual budget, it is unrealistic to expect developing countries with much more meager budgets to meet the same standards. However, it is possible to take advantage of the market's appetite for 'quality' and related criteria (for example, rules of origin, HACCP and ISO production process certification, fair trade, Code of Conduct for Responsible Fishing, etc) to improve fisheries management. This would entail regulating fisheries not by attempting to monitor access to marine resources but by ensuring that all catches comply with international quality standards. In practice, it would mean giving up catches on fish that have not reached the right sexual maturity, as well as eliminating practices like non-selective fishing, the use of gears that are damaging to fish, and poor preservation methods that lead to wastage (see [4] for a presentation of the novel method for assessing the full cost of fishing practices and fishery policy, from the environmental, social and economic point of view). Such a mechanism would be set up and maintained by the fishing industry itself, and would therefore provide greater accountability by the industry. This is especially important considering that, over the last thirty years, the industry has felt increasingly marginalized and excluded from any decision-making process that affects it, due to governments' obstinate insistence on setting up centralized fisheries management systems. Attempts at initiating participative processes for fisheries management are indeed promising, but have a long way to go.

Trading away fisheries resources to meet economic growth requirements is hardly conceivable today, especially if the ultimate objective of national development policies in developing countries is to reduce poverty. Rather, it is crucial to consider fisheries resources as a source of economic growth and social development, and in this regard, the health of marine ecosystems cannot not consider as jeopardized.

Overall, this demonstrates the need for consensus-building between policy makers in the areas of fisheries and trade, and to a greater extent, those operating in the spheres of microeconomics, cooperation and development. Dialogue between these policy spheres should result in a consideration of the ways in which trade and fishing interact, as well as the specific objectives and constraints in each area (the need for exporting on the one side, and protecting resources on the other). This dialogue should then contribute to the development of strategies aimed at optimizing the potential of marine resources. The emergence

of links between fishing and trade policies also offers the merit of putting the environment at the forefront of the trade agenda. Ultimately, forging strong links between fishing and trade policies will contribute to the emergence of good governance in the fishing sectors.

## References

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