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# **Implications of the WTO on Indian Marine Industry, Issues and Policy Perspectives**

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## **Abstract**

The outcomes of WTO negotiations under the Doha round, Hong Kong development round and the changing European Union regulations are likely to place new hurdles on the marine exports emerging from developing economies like India. In the light of the above, we attempt to discuss the impact of WTO-GATS on the Indian Marine Trade and Service industry, analyze the challenges faced by the developing countries, and suggest way-outs to respond them. Many other WTO-GATS related aspects have repercussions on the marine exports from the developing countries in Asia and India in particular; *namely* the outcomes from the Dispute Settlement Mechanism (DSM), the relation between trade rules and Multilateral Environmental Agreements (MEAs), Technical Assistance and Capacity Building (TA & CB) and the provisions for Special and Differential Treatment (SDT). The impact of GATS and the implications on Indian marine trade & services are specifically assessed in context of Tariff barriers, Non-tariff measures, Subsidies and Eco-labeling. Relevant policy implications follow the issues discussed.

**Keywords:** WTO, GATS, India, Marine Industry, Fisheries, Trade and Non-trade Barriers, NAMA, Implications, Suggestions

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# **Implications of the WTO on Indian Marine Industry, Issues and Policy Perspectives**

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## **Introduction**

The subject matter of World Trade Organization-General Agreement on Trade in Services (WTO-GATS) is incredibly broad as the term 'Service' is defined vaguely and tautologically in the agreement, so as to potentially include any and every activity. The focus of the GATS is on the liberalization and deregulation of the services sector and covers in its gamut over 160 service sectors. At stake are services such as financial services, telecommunications, distribution, transport, and issues include the movement of natural persons (*i.e.* temporary migration), cross-border supply, consumption abroad, environmental / health safety hazards and commercial presence, Stiglitz and Charlton (2005). These sectors constitute the target of deep liberalization and the next frontier for corporate-led globalization. The GATS came into force in 1995, and negotiations to further liberalize international trade in services started in 2000. The Doha Ministerial Declaration incorporated these negotiations into the "single undertaking" of the Doha Development Agenda (DDA), WTO (2003). Compared to issues related to Non-Agricultural Market Access (NAMA) and subsidies, other fisheries related trade issues have been less covered in the literature and by research. Although the outcomes of WTO-GATS negotiations are likely to affect fisheries trade, literature assessing the link between the two is very scant. The outcomes of WTO negotiations under the Doha round, Hong Kong development (HK) round (December 2005) and the changing European Union (EU) regulations are likely to place new hurdles on the marine exports emerging from developing countries.

In the light of the above issues, we attempt to discuss the impact of WTO-GATS on the Indian fishing industry, analyze the challenges faced by the developing countries, specifically India and suggest way-outs to respond to them. The paper is organized in 5 sections. Section 2 discusses the coverage of Marine trade under the WTO regime. Section 3 assesses the composition of marine trade in Indian export basket. Section 4 examines the impact and the implications of the same on marine trade with respect to tariff measures, non-tariff measures, subsidies and eco-labeling whilst, section 5 concludes.

## 2. Marine Trade and the Developing Economies

Marine products, on account of their health attributes and high unit value, are claimed to be one of the fastest moving commodities in world markets. In the context of WTO-GATS, the nature of linkage between trade performance and environmental measures has become a major concern for the developing countries and export of marine products are considered to be the most environmentally sensitive products in the international market. Within the WTO, fish is treated as an industrial product within a potentially free global market to be addressed within the NAMA negotiations, having been excluded from agriculture negotiations. During the Uruguay round, fisheries were left out of the Agreement on Agriculture (AoA) at the insistence of some EU countries that benefited from the EU fisheries subsidy regime. As a result, fisheries-related issues are covered by various other agreements. Most notably, fisheries subsidies fall under the discipline of the Agreement on Subsidies and Countervailing Measures (ASCM). The Doha and the HK round proceedings include a number of issues of particular importance to international trade in fish and fishery products, *i.e.* fisheries subsidies, market access, environmental labeling, the relationship between WTO trade rules and environmental agreements. The main areas up for negotiation were tariff and non-tariff barrier reductions under the negotiating group on NAMA and specific mention of a reduction of fisheries subsidies under the WTO negotiating ‘Group on Rules’. Apart from the above many other WTO-GATS related issues have repercussions on the marine exports from the Asian countries, namely the outcomes from the Dispute Settlement Mechanism (DSM); the current process of clarification on the impact of eco-labels on trade; the relation between trade rules and Multilateral Environmental Agreements (MEAs); Technical Assistance and Capacity Building (TA & CB); and the provisions for Special and Differential Treatment (SDT).

**Table 1. Global Trends in Fishery Exports & Imports (US \$ Billion)**

Region	1976		2001	
	Exports	Imports	Exports	Imports
<b>World</b>	7.98	8.84	56.10	60.26
<b>Developing Economies</b>	2.94	1.19	28.03	10.66
<b>LIFDC</b>	0.96	0.44	10.82	3.16
<b>Developing / World (%)</b>	37	13	50	18
<b>LIFDC / World (%)</b>	12	5	19	5

**Note:** (LIFDC) Low-Income Food Deficit Countries

**Source:** WTO (2002)

Globally, fish has become a highly traded commodity, with 38 % (live weight equivalent) of total fisheries product being traded internationally in foreign markets, Vannuccini (2004). In terms of overall merchandise production and trade, the global share of developing countries was 37.5 % in 2001 but their share in global fish exports was over 50 % (See Table 1), WTO (2002). The livelihoods of approximately 150 Million (mln.) people depend on fisheries, aquaculture and associated activities and over 20 % of the world's 38 million fulltime fishers earn less than US\$ 1 per day, World Bank (2006). According to Delgado *et al.*, (2003), global capture production of food fish has rapidly increased from 44.5 mln. tonnes in 1973 to 64.5 mln. tonnes in 1997. The vast majority of this production (over 90 % in 1997) has come from marine fisheries. During this period, the production of developed countries as a whole declined by about 3.6 mln. tonnes, whilst production in the developing world increased at an average annual rate of 3.4 %. The above evidence mirrors an overall shift in production towards developing countries away from developed countries. Part of this shift is probably the consequence of the establishment of 200 mile Exclusive Economic Zones (EEZs) that allow coastal nations to claim exclusive fishing rights. At the same time, capture fisheries is an industry in crisis as the natural resource limits of the oceans, coastal regions, and many inland water bodies have been reached, World Bank (2004). According to FAO estimates, 25 % of the world's major fisheries are over fished, and 40 % are fully fished, resulting in declining fish stocks and ecological change, World Bank (*ibid*).

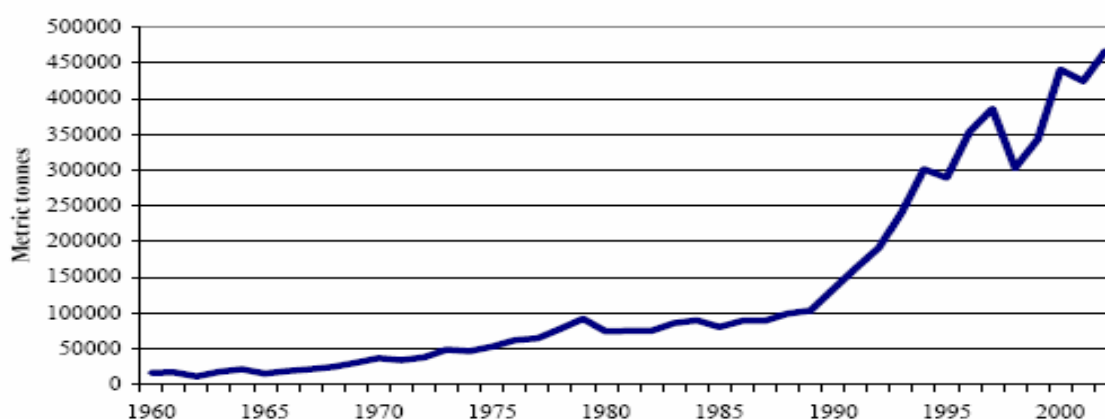
As per the FAO statistics, developing countries like China, Thailand, Vietnam, Chile, Taiwan, Indonesia, India, Peru and South Korea are the main exporters in terms of value of fisheries products during the 2000-2005 periods. At the same time, with 34 % of the export value (*i.e.* this may include intra EU trade), the EU is globally the most important exporter with Norway, USA, and Canada being other major players amongst developed countries, Lem (2004). Denmark, Spain, Netherlands, United Kingdom, Germany and France are the principal EU exporters. The export value of internationally traded fish and fisheries products was US\$ 58 Billion (bln.) in 2002, exceeding the combined value of net exports of rice, coffee, sugar, and tea, World Bank website January 2006). Developed countries absorb 80 % of the value of world imports, with Japan, USA, and the EU being the principal destinations. Whilst LIFDC's account for 20 % of fishery exports in value terms in 2002, the share of all developing countries combined in fishery exports was 49 % by value and 55 % by quantity (Lem, 2003; quoted in Bostock *et al*, 2004). The net receipts of foreign exchange (*i.e.* export

minus import values) for fishery commodities by developing countries increased from US\$4.0 billion in 1982 to US\$17.4 billion in 2002, Vannuccini (2004).

### **3. Indian Marine Trade & Services**

In India, till late seventies, the export of marine products mainly consisted of dried items like dried fish, dried shrimp, shark fins and fish maws *etc.* However, later there was a decline in the export of dried marine products, and subsequently the exports of processed items continued to make steady progress in marine trade. The markets for Indian marine foods were initially confined to Singapore, Sri Lanka and Myanmar to a great extent. When frozen and canned items figured increasingly in the export basket, USA, France, Canada, Japan and Australia became the important markets for Indian marine products. During 1980's canned items slowly disappeared and frozen items became the prominent ones in India's seafood trade. India has the seventh largest capture fishery, and is second in importance in terms of aquaculture production. It is also a significant exporter (*See Figure 1*), although per capita consumption of fish is low (5 kg per capita). The export of marine products grew to be one of the important item of India's exports from a 40.4 US\$ in 1970-71 to US\$ 1320.5 mln. in 2003-04 accounting for approximately 2.08 % of the total export from India. In 2003-2004 it has a share of 17.83 % in total agricultural exports, Reserve Bank of India (2004).

Indian seafood exports are less than the global average, with about 12 % of its total fish production (wet weight equivalent) entering world trade. As a share of the marine fish production it is about 25 % of the total marine fish production. India has a coastal population of 370 mln. people or 36 % of the country's total population, DOD (2002) and about 6.7 mln. people depend on fisheries for a livelihood, Government of India (2001). This includes roughly 725, 000 full-time, and an equal number of part-time, fishermen engaged in fishing operations and over one mln. people engaged in pre and post-harvest activities. While 48 % of full-time fishermen are on the East Coast of India, 35 % are on the West Coast, and the remaining 17 % are spread over other states and union territories. There are also about 300,000 people employed directly in the shrimp aquaculture sector and about 700,000 people in ancillary units, AAI (2002).



**Fig 1. Evolution of Fish and Fishery Product Exports from India, 1960–2002**  
**Source:** Reserve Bank of India (2004)

India is currently the fourth largest fish producer in the world after China, Peru and Japan. Marine products form a bulk of the exports of agricultural products. More than 3 % of India's exports are marine products. Although tariff levels have been reduced recently (from an average of 60% to 35%), these remain high even by the standards of other major Asian economies. From 1951 to 2003 India's fish production increased eight-fold from 7.52 lakh tonnes in 1950-51 to 6.2 lakh tonnes in 2002-2003, accounting for over 5 % (*approx.*) of the world's total fish production, Directorate of Economics & Statistics (2004). In the realms of food production, the rate of growth of Indian fish production is second only to that of wheat. Over 70 % of total fish production of India is sold fresh in the domestic market, about 11 % are dried or salted, and about 6 % are converted to fishmeal, Government of India (2001). The impact of the Uruguay Round Agreement on the Application of Sanitary and Phytosanitary (SPS) agreement and the agreement on Technical Barriers to Trade (TBT) adopted by WTO Members in 1995 is clearly depicted through the above figure.

#### **4. Implications of WTO-GATS on India Marine Industry**

The exports of inland and marine capture fishery products are of integral importance to government revenues and income and employment generation in India. Indian fisherman and fishery exporters face complex negotiations at the WTO-GATS level on tariffs and fishery subsidies, and bilateral and regional negotiations with the EU in the formulation of Economic Partnership Agreements (EPAs) and Fisheries Partnership Agreements (FPAs). In addition, they need to comply with increased food safety standards. The impact of GATS and the implications on Indian marine trade & services are assessed in context of Tariff Measures, Non-tariff measures, Subsidies and Eco-labeling.

#### 4.1 Market Access – Tariff Measures

Tariffs on fish and fishery products are generally quite higher in developing countries posing problems to the development of international trade. After the completion of the Uruguay round, the average weighted import tariffs on fish products were reduced to 4.5% in developed countries, Lem (2004). Although this may seem quite low, the average hides a number of very high tariffs for selected species and products (tariff peaks), as well as cases of tariff escalation where processed or value added fish products are subject to higher duty than unprocessed fish. Tariffs on primary fish commodities have declined significantly in developed countries and have decreased even in the developing countries of Asia, where they were previously much higher than in developed countries.

**Table 2. Reductions in Average Tariffs for Fisheries Imports in Select Asian Countries**

Country	Share of c.i.f value (percent)			
	Tarrif before WTO		Tarrif after WTO	
China	1991	47	2001	11-23
Thailand	1995	60	1999	5-30
Philippines	1994	10-60	2000	2-15
India	1993-94	60	2002-03	35
Bangladesh	1991-92	59	200-2001	28

Source: Dey *et al.*, 2002

While average tariff levels have declined (*See Table 2*), it should be noted both that most fish trade is in processed products of some sort, and that developed countries generally maintain higher tariff rates on processed fish commodities than on chilled fresh fish, a case of “tariff escalation” shown in Table 3. Yet even the tariff rates for processed products are fairly low (compared with meat out of quota, for example), and it is not plausible that tariffs are or will be a major constraint on the growth of fish exports from developing countries. Import duties in developed country markets continue therefore to present a barrier to processing and economic development in the fishery industries in many developing countries, and also to developed countries outside the large trade areas, for example Non-EU members (Lem, *ibid*).

Tariff cuts on fish products would mean a reward to those who engage in economically ‘efficient’ mass exploitation and hasten the depletion of the ocean’s resources. Sustainable local suppliers would be forced out of their domestic market and the rape of the fisheries would intensify. Developed countries often have zero or relatively low levels of tariffs on fish, but there are cases of escalation with some peaks. EU rates are higher than in



many developed countries i.e. on average are around 10%, but zero rates apply for ACP (African Caribbean and Pacific) and LDC states. As such the issue of concern to developing country exporters depends on their current exemption status and hence potential change in competitiveness arising from further liberalization (*e.g.* the extension of tariff exemptions to non-ACP and LDC states which may radically alter competition in the supply of EU markets).

**Table 3: Tariff Escalation for Some Developed-Country Fisheries Imports**

Product	Share of border c.i.f. value (percent)			
	European Union		Japan	
	Conventional	GSP	MFN	GSP
<b>Skipjack</b>				
Fresh	22	0	3.5	3.5
Canned	24	0	9.6	6.4
<b>Mackerel</b>				
Fresh	20	0	0	0
Processed	25	0	9.6	7.2
<b>Scallops</b>				
Fresh	8	2.8	10	7.2
Processed	20	7	9.6	7.2
<b>Crabs/Lobsters</b>				
Fresh	10	8.2	7	7
Processed	20	7	6.7	6.7

**Note:** GSP and MFN denote General Scheme of Preference and the Most Favored Nation status respectively.  
**Source:** Dey *et al.*, (2002).

The U.S. Seafood Regulation in December 1995 has mandated every processor and importer to comply with HACCP from December 1997. To ensure compliance with its food-safety regulations, the U.S. Food and Drug Administration (FDA) require importers to meet one of two conditions. First, importers may obtain seafood from countries with voluntary agreements with the FDA. These agreements may document that the countries' seafood safety systems are equivalent to or in compliance with those of the U.S. Second, if these agreements do not exist, importers must have records demonstrating that foreign firms' products entering the U.S. have been processed in accordance with U.S. HACCP requirements. Such records may include a copy of the foreign firms' HACCP plan. EU requirements in this regard are more comprehensive than U.S. requirements.

Implication of Tarrif barriers for India: EU is India's largest trading partner. According to the Indian Export-Import Policy 2002-2007, all marine products with a few exceptions under the Wildlife Protection Act 1972, can be exported free subject to pre-shipment quality

inspection. 90% of Indian seafood exports comprise frozen fish, shrimp and cephalopod. The average tariff rate in Japan, the biggest Indian seafood market, is 4.1 %. US, the second biggest market for Indian seafood, has just a nominal 1 % tariff duty. EU, the third biggest importer, has an average tariff duty of 10.2 %, followed by China, the fourth biggest, which has a bound tariff rate of 18 %. The EU, Japan and the US extend preferential tariff treatment under Generalized System of Preferences (GSP) to Indian products including seafood. In general, tariff measures are not seen as a trade barrier by the Indian seafood industry to the US and Japanese markets. However, it is seen as a barrier to access some of the markets in developing countries, including China, as well as the EU market. India is still in List 1 of Annex 1 of the EC Decision 97/276/EC, amended by 99/136/EC, whereby all organizations exporting seafood to the EU require export-worthy certification of their processing facilities by an EU-nominated inspection agency. In the case of India, that agency is the Indian Export Inspection Council (EIC).

#### ***4.2 Market Access – NonTariff Measures***

Non tariff measures include the SPS regulations and the growth in quality control regimes promoted particularly by the developed importing countries. The Uruguay Round Agreement on the Application of Sanitary and Phytosanitary (SPS) agreement and the agreement on Technical Barriers to Trade (TBT) adopted by WTO Members in 1995 have given a new direction to the international sea-food trade and services. These agreements are intended to ensure that requirements such as quality, labeling and methods of analysis applied to internationally traded goods are not misleading to the consumer or discriminate in favour of domestic producers or goods of different origin, Bostock *et al.* (2004). A key aspect has been the development of HACCP, which can impose significant costs from the viewpoint of the developing country supplier. SPS measures are unlikely to be relaxed and hence issues arise primarily in the form of mitigation and enhancement options. TBTs arise especially in the context of specification and labeling. Whilst the latter may assist in promoting (more) sustainable fishing practice they also again impose costs on producers. Areas such as eco-labeling are voluntary and there is scope for negotiation for those developing country suppliers wishing to participate.

The SPS Agreement was set up to avoid sanitary standards being used as an unjustified barrier to trade by importing countries. There are several key principles including the sovereign right of a country to put protective measures in place, but these measures should not be more restrictive than necessary to achieve the appropriate level of protection.

The Agreement stresses that SPS measures should be scientifically based as well as the importance of risk assessment in determining the appropriate levels of SPS measures. Of crucial importance are transparency in the development and implementation of measures and the adoption of international standards. The SPS Agreement gives status and legal force to the standards set by the Codex Alimentarius Commission. The Codex Alimentarius (food code) was created in 1963 by FAO and WHO to develop food standards and guidelines and as become a global reference point for consumers, food producers and processors, national food control agencies and the international food trade. The SPS Agreement applies only to measures covering food safety, animal and plant life and human health. Other technical measures outside this area come within the scope of the TBT Agreement. The SPS and TBT Agreements are thus complementary and mutually reinforcing. The TBT Agreement tries to balance the trade facilitating aspects of standards against their trade distorting potential by obligating countries to ensure that technical regulations and standards, including packaging, marking and labeling requirements and procedures for assessment of conformity with technical regulations and standards, do not create unnecessary obstacles to international trade or discriminate in favour of domestic producers or goods of different origins. It does this by: Encouraging “standard equivalence” between countries; promoting the use of international standards; and mandating that countries notify each other of changes in their standards via enquiry points.

The EU has been at the forefront in developing food safety standards and has had a profound influence on the development of the seafood export industry in developing economies. EU standards are enforced and regulated at the country level and thus a restriction of exports to the EU under the regulations affects all members of the export community. EU legislation for all food products has recently been brought under one directive and the scope has been extended to all aspects of the supply chain from "farm to fork". This legislation supersedes the individual commodity based directives. All the steps in the chain from primary producers (fishermen and aquaculture units) need to take on board, in a more structured manner, the principles of HACCP systems and other quality assurance needs thus broadening the scope of the competent authority in regulating the industry. The need to ensure that quality assurance measures are instituted prior to arrival at the processing factory gate poses a major challenge to export industries, particularly for the small-scale and non-industrialized sectors of the industry. Of even greater concern is the fact that in order for the ‘farm fork’ principle to be seen to be working a system of traceability of products throughout the chain will need to be instituted, Bostock *et al.*, (*ibid*). Imports into the USA

are regulated under the Federal Regulations, often referred to as 21 CFR 123 (see *US FDA Centre for Food Safety and Applied Nutrition, web site [www.cfsan.fda.gov](http://www.cfsan.fda.gov), February 2006*). These regulations apply to domestically produced products and imports. They require that processors of fish and fishery products operate preventive control systems that incorporate the seven principles of HACCP. While new regulations with regard to quality control, such as HACCP, have been adopted by all major importing countries and made compulsory for their fish processing industries, one notable exception is Japan. While some firms in Japan have neither HACCP nor external suppliers. Standards for imports of fish and fishery products into Japan are governed by the legislation set out in the Food Sanitation Law and the Quarantine, Bostock *et al*, (*ibid*).

Implications of Non-tariff barriers for India: According to the Seafood Exporters Association of India (SEAI), since February 2002, there were several cases of rejection of Indian shrimp imports in the EU market on account of detecting traces of prohibited carcinogenic antibiotics like *nitrofurans* and *chloramphenicol* as well as other bacterial inhibitors like *amino-glycosides* and *macrolides*. Following the EU requirements, on 17 August 2001 India issued a notification specifying the limits for various antibiotics, pesticide and heavy metal residues in seafood products, ITN (2002). International Organization of Standardization (ISO) 9000 is recognized under the Export-Import Policy of Government of India. Firms, including seafood firms, enjoy certain privileges if they are ISO 9000 firms. Under the 1997-2002 Export-Import Policy, Government of India, exporters with ISO 9000 were given Special Import License (SIL) up to 5 % of f.o.b. value. Certification against ISO 9000 is beginning to emerge as a major industry in India. There are many auditors with experience in assessment of quality management against ISO 9000, and the certifiers in India with the highest credibility in the international market are those under multinational companies.

#### **4.3 Fishery Subsidies**

There is considerable debate as to what fisheries subsidies actually are and what they include which complicates any discussion of their implications for markets, resources and livelihoods. World Bank (2004) defines fishery subsidies as “government actions or inactions that are specific to the fisheries industry and that modify – by increasing or decreasing – the potential profits by the industry in the short, medium or long-term”. The WTO’s definition of subsidies in the Agreement on SCM include: Specific financial transfers from state to the industry; The state foregoing normally collectable revenue (*e.g.*

tax free fuel) ; Provision of services or investments to industry; State purchases of industry outputs other than on commercial terms and also includes all form of state income or price support. Subsidies can also be categorized in relation to the rights of members to make complaint and take action (countervailing measures) and can be *Prohibited*: export enhancing subsidies or subsidies giving preference to domestic producers or grants tied to the use of domestically produced goods; and *Actionable*: a subsidy that may be challenged on the basis of causing ‘adverse effects’ to the interests of other WTO members.

Subsidies may occur in a wide range of fishery components especially on the catch side and indirectly via research and development or support to poor fishing communities. Key issues include perceived distortions that arise especially from EU subsidies (also Japan) with action by other developed (and some developing) country exporters seeking their reduction. There is also a widespread perception and/or concern amongst developing countries that subsidies facilitate the continued operation of excess capacity in long distance fishing fleets with adverse consequences for sustainability. These aspects have led to debates in a number of international forums. Ongoing scope for negotiation and change may have important implications for the management of common pool resources in the form of fish stocks. The Declaration of the fourth WTO Ministerial Conference (Doha, 2001) stipulates that “In the context of these negotiations, participants shall also aim to clarify and improve WTO disciplines on fisheries subsidies, taking into account the importance of this sector to developing countries”. As a result, several proposals from WTO members aiming to reduce fisheries subsidies were tabled, mostly attempting to reduce or eliminate those subsidies that increase fishing capacity, Lem (2004).

Most of the literature on subsidies in fisheries focuses on marine capture fisheries rather than aquaculture. Study like that of the OECD (2003) presents a simple qualitative economic model which considers the effects of giving Government Financial Transfers (GFT) to fisheries and suggests that in the main where there is catch control or preferably effective fisheries management; government financial transfers have no effect on the total catch or the price of fish. A key theme of a study by MRAG (2000) is the interaction between context and subsidy. The study argues that bilateral access agreements are the kind of subsidy that have most impact on developing country coastal and island states. The study summarizes both the negative and positive impacts from the access agreements organized under three headings: biomass and stocks; economic and social. These impacts are very context specific and vary considerably in magnitude and are difficult to isolate from other

factors affecting the sector. The role played by good fisheries management systems was highlighted in the case studies.

The bulk of subsidies are aimed at offshore fisheries which are largely commercial requiring mechanized oceangoing vessels rather than coastal or inshore fisheries that are largely artisanal in nature. Some of these subsidies have implications for developing country fisheries and livelihoods of poor people. Transparency regarding subsidies is an issue: few members of the WTO have complied with their obligation to report subsidies. The political sensitivity of the subsidies issue is highlighted by the use of euphemisms for subsidy: *e.g.* ‘government financial transfers’ and ‘economic incentives’. There are also large inconsistencies in the data that is publicly available. There has been more attention in the literature on the trade effects of subsidies than their effects on sustainability. Most discussions of subsidies largely focus on the fisheries sectors in developed or middle-income countries. This is due both to their scale and the ease of access to data. Moreover, MRAG (*ibid*) stresses, subsidies on deep water fleets from developed countries “are likely to have a much greater impact”.

Subsidies are also seen as a driving force in creating the overcapacity in the fishing industry which leads to over-fishing. According to World Bank estimates (*as* quoted in Milazzo, 1998) annual subsidies to the fisheries sector are of the order of US\$14 billion to US\$20 billion, whilst WWF (2005) estimates that fisheries subsidies amount to at least US\$15 billion per annum. OECD (2005) states that “governments pay out some US\$ 6 billion a year to support the fisheries sector in OECD countries” in order to help manage fish stocks, to modernize fishing fleets, and to assist communities and regions that can no longer make a living out of fishing to develop other economic activities. UNEP (2004) describes the dual impacts of fisheries subsidies on trade and the environment, whilst WWF (2005) states that “once a hidden problem, inappropriate subsidies are now widely recognized as contributing to the profound crisis of over fishing that threatens fish stocks and human welfare around the world”. According to the World Bank (2004), formal access of foreign vessels to fishing grounds within the EEZ of fish-rich countries is usually regulated under fishing agreements and many fishing agreements are heavily subsidized by industrial countries (*e.g.* the EU pays 83% of the license fee, the vessels themselves only 17%). The type of subsidy most frequently found in developing countries is in form of bilateral or multilateral development projects. However, there are some fishing subsidies in developing countries, for example: port facilities owned and managed by the public sector; subsidized lending and credit provision – in some cases in order to adopt new technology; sales tax

exemptions for inputs used by the fishing industry; subsidized fishing inputs in the form of import tax exemptions.

Implication of Subsidies for India: Within the framework of the SCM Agreement, only export subsidies are to be treated as prohibited ones. Even if we treat the entire annual budget of Marine Products Export Development Authority (MPEDA) as a prohibited subsidy, which may not be the case if we do a careful analysis of all their schemes, it amounts to less than half % of the annual seafood export value. Even though fisheries subsidies are small, from an overcapacity and over-fishing point of view, their role is to be better recognized in India. Fuel subsidies in terms of tax revenue foregone are extended in several Indian States to the fishing industry and it has become an important consideration for trawler operators to decide whether or not to undertake a particular fishing trip. Also, the criteria for subsidy schemes are often based on political, not legitimate social, considerations. In India, there are instances of misuse of subsidy schemes by fishermen themselves. The vessel owner would sell his fuel quota illegally in the open market and he would buy fuel for his fishing operation from the open market. The net benefit in such a transaction is in favour of the owner since the fuel quota is in his name, whereas the operational costs of fishing are collectively shared between the owner and crew. The owner thus privatizes his benefits by exclusively enjoying the proceeds of the sale of his fuel quota in the open market, and socializes his costs since running costs of a fishing operation, including costs of fuel, are shared among the owner/s and workers and treated as common expense. In this case, the owner of the fishing vessel is only partially bearing the burden of costs of fishing operation.

Under the SCM Agreement perhaps the most important aspect to consider in relation to fisheries subsidies in the Indian context, arguably in developing countries in general is the revenue foregone rather than government financial transfer. Irrespective of the nature of the fisheries, whether or not targeting high-value-low-volume, or low-value-high volume fisheries, there are no fee either to enter the fishery or to access fisheries resources, both for the rich and poor fishers. A mechanism to generate revenue by taxing fish exports, or high value shrimp fisheries and aquaculture, should be considered. At least one or two % of the landed value of fisheries, based on ownership pattern of fishing assets, should be appropriated through user fees.

In the light of recent changes in legal regimes for foreign investment in India, it is possible for excess fishing capacity in other countries to end up in the Indian EEZ. Vessel

buyback schemes with the intent of reducing domestic fishing capacity (e.g. South Korea and Taiwan) could result in such fishing capacity ending up in Indian waters if subsidies are provided to vessel owners of distant water fishing nations to transfer their excess fishing capacity to Indian companies. They could effectively end up competing for the same fisheries resources with the domestic sector, mainly comprising fishing vessels below 20 m length. This can deny a level playing field to Indian fishing vessels and it could also give rise to fishing conflicts in the EEZ. There should also be protective measures within national legislation to prevent subsidized distant water fishing vessels from gaining unfair access to the national resources.

#### ***4.4 Eco-labeling***

A number of fisheries related eco-labels already exist (e.g. Marine Stewardship Council (MSC), Responsible Fisheries Society of the United States, Global Aquaculture Alliance) for labeling species that are judged to be sustainably fished. The objective of such ecolabeling programmes is to create market based incentives for better management of fisheries by creating consumer demand for seafood products from well managed Stocks or from sustainable aquaculture, Lem (*ibid*). The DDA also addressed labeling requirements for environmental purposes (i.e. eco-labels), in order to clarify the impact of eco-labeling on trade and examine whether WTO rules stand in the way of eco-labeling policies.

While certification and labeling schemes may in some cases offer the opportunity of higher prices and access to niche markets, there are concerns (but little evidence) over the possible negative impacts on developing country producers (MacFadyen, 2004; Bostock *et al*, 2004). Although eco-labeled products are not yet prominent in any market, concerns are based around a number of issues, such as: Legitimacy and credibility; a mismatch between certification requirements and the reality of tropical small-scale fisheries and potential distortions to existing practices and livelihoods, Gardiner and Viswanathan, (2004).

Implications of Eco-labeling for India: There are several concerns about ecolabeling in developing countries and specifically India. Firstly, there is fear of losing access to market if eco-labeled fish and fish products gain greater preference in import markets. Secondly, there is worry about the affordability of costs associated with adjusting fisheries to comply with ecolabeling standards, and about costs of certification and chain of custody and whether or not the market, if they go for certification, can adequately compensate their higher costs. Thirdly, there is apprehension that fishers in the small-scale artisanal sector would lose their



autonomy if they have to comply with standards that are developed and applied by external agencies to their fish exports without taking into account the specific aspects of their fisheries. Fourthly, there are doubts about the practicability of eco-labeling in multi-species, multi-gear fisheries since the unit of certification is the fishery in its entirety. Apart from the above, several concerns about the implications of voluntary ecolabeling for the artisanal and small-scale fisheries in developing countries have been expressed, particularly in the context of the ecolabeling programme in fisheries, viz., the MSC, which was established in 1997, ICSF (1998). In the history of MSC from 1997 to 2002, for example, there are no fisheries from developing countries that have been certified, although there are potential candidates for MSC certification from developing countries including a couple of village-specific crab, mackerel and sardine fisheries from Tuticorin in Tamilnadu.

## **5. Summary and Policy Implications**

Over the last couple of decades the policy space available for the developing countries has shrunk dramatically. And if the developed countries have their way in the current NAMA negotiations, it will shrink over the next decade making economic development in the developing world all but impossible. The impact of the Doha and HK round related to fisheries is not confined to NAMA. Fish related products and fishery services are one of the ‘sectoral initiatives’ that would see the early elimination of tariffs. Perversely, tariff cuts on fish products would reward those who engage in economically ‘efficient mass exploitation and hasten the depletion of the ocean’s resources. How best the benefits of tariff reductions compare with the costs of non-tariff measures should be looked into in the context of small producers and exporters of seafood.

Sustainable local suppliers would be forced out of their domestic market and the rape of the fisheries would intensify. India should also cross-link adoption of effective fisheries management and habitat protection measures in their national waters to greater access to the export market for durable goods such as textiles and garments in the US and EU markets, as suggested by Abrego, *et al.*, (1999). Eliminating bad subsidies and targeting good subsidies for fisheries management and human development should be adopted at a regional level to prevent good policy regime of one country from being undermined by the bad policy regime of another. Given the pattern of fish production and consumption in India, market access is an important consideration for Indian fishers and seafood exporters. Fishers certainly benefit from the export market because export varieties of fish generally command a higher price in India.

Among the ETBs faced by seafood and shrimps from India pertain to the level of pesticides and antibiotics. Various antibiotics and chemicals like oxolinic acid and oxytetracyclines without any specified limit are totally banned. Consignments containing DDT, Aldrin and Heptachlor are bound to be rejected. The EU directive has also imposed process standards requiring hygiene during handling, processing and storage of marine products. US ban on Indian shrimp products was a unilateral restriction on environmental reasons. In 1996, US banned shrimps from entry unless harvested by aquaculture caught with turtle excluding devices, or by manual instead of mechanical means or in cold water.

### **Following Policy Implications emerge from the above discussions**

1. The livelihood of vast masses of poor people is threatened by the ongoing negotiations in NAMA, most importantly of those involved in fishing. Any drastic changes in tariff or other rules of market access will have direct consequences for them. The Government must therefore give special consideration to this fact and any deliberation on NAMA must entail special discussions on the impact on employment and livelihood in such sectors. Unfortunately the Indian government has virtually accepted the contents of the earlier discredited as the basis for NAMA negotiations. The majority of WTO members in Cancun had rejected that historically, all late industrializes including the USA developed their industry behind high protection. The key issue concerning NAMA is that while developing countries protect their markets through higher tariffs, the main mode of protection for the developed countries is through non-tariff measures, particularly through the use of technical barriers. Such barriers in the developed countries are not being discussed simultaneously or with the same priority. Therefore a further reduction in tariffs as is being negotiated in NAMA will not lead to any greater market access for the developing countries including India but will certainly ensure greater market access for the developed countries. Any further steep reductions in tariffs on industrial products will accentuate the process of de-industrialization of fishing sector, which has already commenced with tough import competition being faced by many sectors in small and medium industries. Indian Government's mandate at such future negotiations must be comprehensively debated and decided by an explicit consensus to be evolved in the Parliament.

2. The major fishing companies in developed countries use massive factory ships to process their catch. Thus small countries, whose waters are the source of the fish gain do not benefit through jobs and development of local industry. The companies have been pressing their government to secure commitments on 'services related to fisheries' in the GATS negotiations that will entrench their control over processing of the resource and of its global marketing and prohibit the source countries from reasserting control over the benefits from the resource. Small-scale fishers in India point out that their problems arise from the open access regime for foreign trawlers, not from subsidies. From their perspective, blanket rules that prohibit subsidies would restrict the right of governments to support small fishers and protect the food security of coastal communities.

3. In lieu of meeting the costs of fisheries management, seafood exporters should demand a reduction in tariffs on Indian seafood imports in EU and Japanese markets, where the average tariffs are 10.2 % and 4.1 % respectively. EU and Japan are already in the process of rewarding better fisheries management regimes in their seafood import markets. A one percent tax on exports can fetch US\$12 mln. per year at current levels of export revenue earnings, which could provide sufficient financial resources to introduce fisheries management measures. A verifiable environment management system, under the ISO 14000, can be adopted in marine fisheries and shrimp aquaculture to demonstrate effective fisheries and aquaculture management measures to the import markets. As long as fishmeal continues to be the main feed, and brood stock comes from the wild and post larvae are collected from the coastal waters, shrimp aquaculture should be treated as a subset of marine fisheries.

4. Some of the HACCP measures are difficult for small-scale beach-based fishers to meet and hence they will not be in a position to access the international market. Similarly, unless the State invests on behalf of the industry in expensive quality control measures, high compliance costs with seafood safety standards could push out small processors and exporters from business. How best the benefits of tariff reductions compare with the costs of non-tariff measures should be looked into in the context of small producers and exporters of seafood. Being a highly sensitive item from the health and environment point of view, compliance costs of the seafood industry are bound to be quite high in relation to other durable exports from developing countries. US lost the case at WTO when India and other

affected countries challenged the ban. However, the ban since 1996 adversely affects the Indian shrimp exports.

5. Although there have been significant impacts on the fishing industry as a result of turtle protection measures there does not seem to be any significant impact on the exports of India as a result of MEAs. It is quite likely that, in future, MEAs might play a major role in the seafood exports of India if MEA obligations are to be met to maintain market access. In fact, fish trade is fast emerging as an area with potential conflicts between MEA obligations and trade rules.

6. In developing countries, the fisheries administration is fragmented, with responsibility divided among such an array of actors (In India, around 11 ministries across the central and state governments) that any sectoral coherence in policy is very difficult to secure. Similarly, there is usually no clear policy to address the problem of over-capacity. For instance, the State of Goa has 1128 registered trawlers and this is far above the saturation point compared to the fact that the Food and Agricultural Organization of the United Nations following a study recommends 30 trawlers per 10 kilometers of coastline. Given that Goa has 105 kilometres of coastline the number of trawlers should have been around 315 but it has instead 1128 of them, Rodrigues (2005). A comprehensive central policy in this regards need to be immediately evolved.

7. India should start in earnest putting in place a fisheries management plan. Subsidies to the industry to adopt and implement such a plan should be defended as non-actionable subsidies. The EC position on non-actionable subsidies is also of relevance to developing countries like India since several of the proposed subsidies in this category can also be defended within the framework of special and differential treatment of developing countries.

8. Under Article 4 of Agreement on Sanitary and Phytosanitary Measures, members are in the process of bilateral determination of the equivalence of SPS regulations and regulatory processes between importing and exporting nations. (While the international standards of US, EU and Japan are more an extension of their domestic standards, such

standards in India are exclusively applied to its export market. India, for example, does not have any quality standard for seafood for its own domestic consumers and needs to establish the equivalent.

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