

**PASCN**

Philippine  
APEC  
Study Center  
Network

PASCN Discussion Paper No. 98-05

**The Effects of the APEC Early Voluntary  
Sectoral Liberalization  
on Fish and Fish Products**

*Marissa Macam et al.*



The *PASCN Discussion Paper Series* constitutes studies that are preliminary and subject to further revisions and review. They are being circulated in a limited number of copies only for purposes of soliciting comments and suggestions for further refinements.

The views and opinions expressed are those of the author(s) and do not necessarily reflect those of the Network.

Not for quotation without permission from the author(s).

---

**PASCN**

---

PHILIPPINE  
APEC  
STUDY CENTER  
NETWORK

---

PASCN Discussion Paper No. 98-05

**The Effects of the APEC Early Voluntary  
Sectoral Liberalization  
on Fish and Fish Products**

*Marissa Macam et al.*

---

November 1998

The *PASCN Discussion Paper Series* constitutes studies that are preliminary and subject to further revisions and review. They are being circulated in a limited number of copies only for purposes of soliciting comments and suggestions for further refinements.

The views and opinions expressed are those of the author(s) and do not necessarily reflect those of the Network.

Not for quotation without permission from the author(s) and the Network.

For comments, suggestions or further inquiries please contact:

**The PASCN Secretariat**  
Philippine Institute for Development Studies  
NEDA sa Makati Building, 106 Amorsolo Street  
Legaspi Village, Makati City, Philippines  
Tel Nos: 893-9588 and 892-5817

## **The Effects of the APEC Early Voluntary Sectoral Liberalization (EVSL) on the Fish and Fish Products Sector\***

**Ms. Marissa M. P. Macam  
Ms. Cristina M. Bautista  
Dr. Leonardo Lanzona**

### **Abstract**

This paper examines the likely effects of the EVSL on the fish and fish products sector, including the problems that prevent it from benefiting fully from the proposal. A competitive and efficient sector will not likely experience adverse consequences from the EVSL. Findings indicate that fresh and frozen shellfish and prepared and preserved fish have shown potential export competitiveness in the world market relative to the other fish sub-sectors and thus can be offered to EVSL. Though prepared and preserved fish can also be able to compete, these products seem vulnerable to face greater competition.

---

\* The views expressed herein do not necessarily represent the official views of the Philippine government in general, and/or the WTO/AFTA Advisory Commission in particular. This industry paper was prepared to provide some basic or background information; hence, in no way it is exhaustive. The intent is to offer the initial set of information for discussion and in the process, elicit the ideas that could be helpful in formulating the appropriate strategies in the development of this industry sector.

This was prepared under the "APEC Early Voluntary Sectoral Liberalization" project which was jointly funded by the WTO/AFTA Commission and the Philippine APEC Study Center Network (PASCN) in furtherance of the general objective of undertaking consensus building activities and other necessary measures to promote the Philippines as a competitive player in the global economy.

## **The Effects of the APEC Early Voluntary Sectoral Liberalization (EVSL) on the Fish and Fish Products Sector**

M.M.P.Macam, C.M. Bautista and L.A.Lanzona\*

The APEC Economic Leaders endorsed during their Fifth Meeting (AELM) in Canada in November 1997 the early voluntary sectoral liberalization of fifteen (15) sectors. These sectors were identified to have a positive likely impact to trade, investments and economic growth in the respective economies and the whole APEC region. These are: environmental goods, services, toys, fish and fish products, forest products, gems and jewelry, oilseeds and oilseed products, chemicals, telecommunications, mutual recognition arrangement, energy sector, food sector, natural and synthetic fiber, fertilizers, automotive, medical equipment and instruments, and civil aircraft.

This paper focuses on the fish and fish products sector proposed to the EVSL. The objective of this paper is to determine the possible problems of this sector that prevent it from being able to benefit fully from the EVSL proposed by APEC. In general, sectors that are more protected, less competitive, and more inefficient are expected to experience adverse consequences from the EVSL. Given these problems, paper will submit an action plan for the proper implementation of trade liberalization to this sector.

The remaining parts of the paper consist of the following sections. Section 2 provides a brief background of the sector, particularly in terms of the EVSL. This discusses the nominations of the fish sector for the EVSL and the coverage. Section 3 provides a situationer of the sector under study. This will suggest the extent of the possible effects that EVSL will have on the sector and serve as backdrop for the measures on competitiveness that will be discussed. Section 4 features these computed measures of competitiveness, and given these measures and other available data, discusses the implications of the EVSL to the sector. Section 5 provides the conclusion and recommendations on how to make these industries more competitive and efficient in an environment of lesser protection.

### **Nominations of Fish Products for EVSL and Coverage**

Fish and fish products were nominated for EVSL by Brunei Darussalam, Canada, Indonesia, New Zealand and Thailand. Other countries namely Hongkong, China, Australia, Papua New Guinea, Singapore, United States and Malaysia expressed support on same products. Except for Indonesia, all the nominating economies endorse the full scope of fish and fish products coverage.

The fish sector includes products derived both from capture fisheries and aquaculture. The scope covers both raw and processed products in all three major

---

\* Faculty members of the Economics Department, Ateneo de Manila University. The useful comments of Ponciano Intal, Myrna Austria, and Henry Peskin are gratefully acknowledged. The remaining errors are the authors' responsibility.

species groups- demersal finfish, pelagic finfish and crustaceans. The Harmonized System (HS) product codes specified in the proposal are as follows:

<u>HS Codes</u>	<u>Product</u>
03.02	fish, fresh or chilled
03.03	fish, frozen
03.04	fish fillets (fresh, frozen or chilled)
03.05	fish (dried, salted, in brine or smoked)
03.06	crustaceans
03.07	molluscs
05.11	animal products unspecified
15.04	fats and oils of fish and marine mammals
16.03	extracts juices
16.04	prepared or preserved fish
16.05	prepared or preserved molluscs and crustaceans
23.01	flours, meals of fish
23.09	animal feed, fish waste

A linkage chart showing the current most-favored nation (MFN) rate and the ASEAN common effective preferential tariff (CEPT) of the above fish products are shown in Figure 1.

In the area of tariffs, the nominating economies propose to eliminate tariffs on the above products not later than December 25, 2005, convert specific duties to ad valorem rates and abolish compound rates starting 1 January 1999. Those products with 20% duty or less would be phased out quickly. As for non-tariff measures, these would be eliminated not later than 31 December 2007. Those fish products with subsidies and sanitary and phyto-sanitary (SPS) measures that are inconsistent with the WTO Agreement should be removed by 31 December 2003. The proponents also suggested economic and technical cooperation measures in the light of the EVSL.

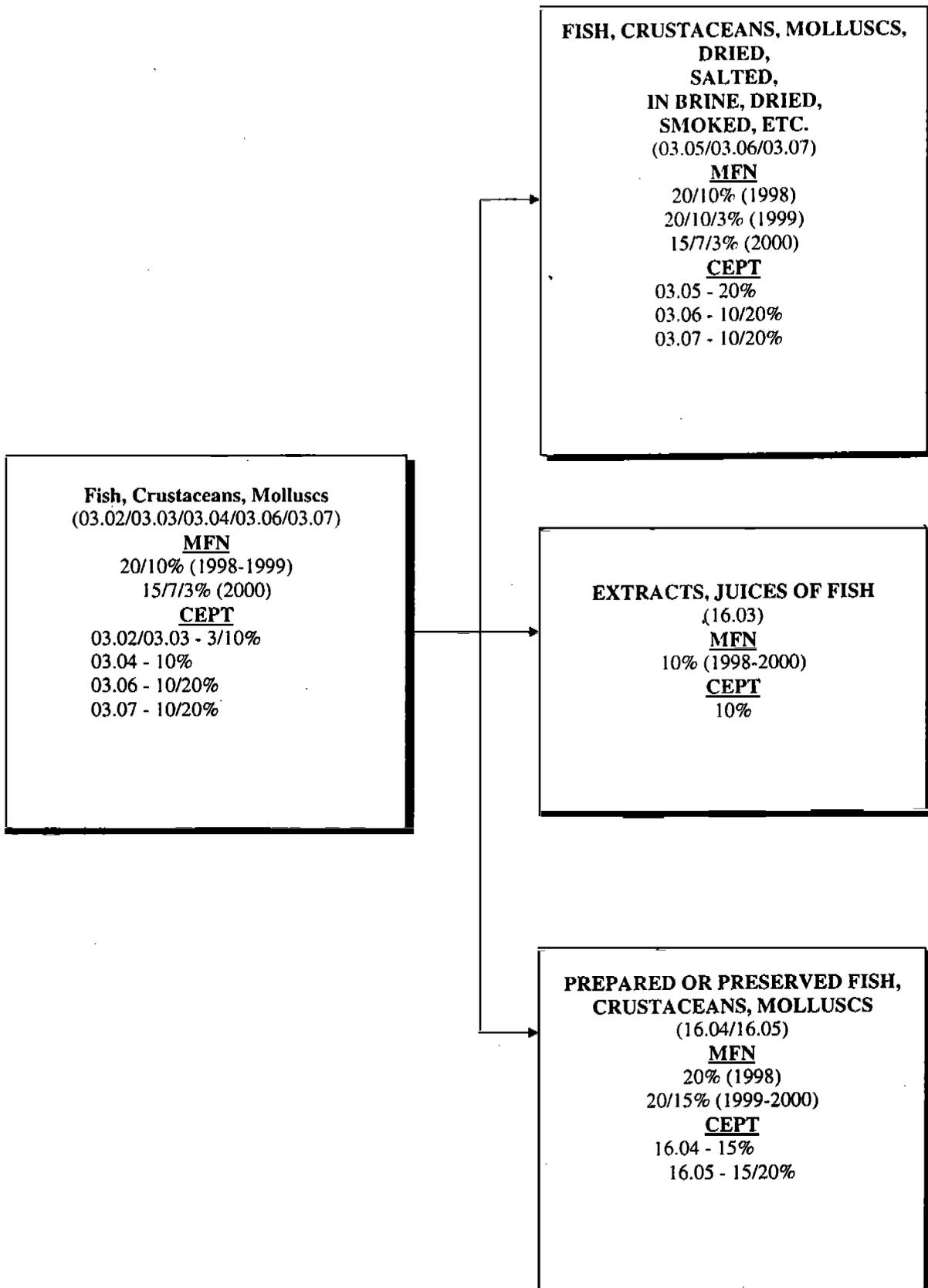
### **Industry Background and Performance**

This section provides a backdrop for the analysis of the effects of the EVSL. The main issue is to determine the key factors which can be influenced by trade liberalization. The strengths and weaknesses of the sector, based on the discussions with the sector representatives, are also presented here.

**Structure.** The fish and fish products sector is comprised of production and preservation (processing) of marine products. The following are the three main fish production activities:

- 1) Commercial fishing refers to fishing activities in the offshore waters with the use of fishing vessels more than three gross tons. Major commercial fish catch includes Roundscad (Galunggong), Indian Sardines (Tamban) and other varieties of sardines, Skipjack (Gulyasan), Frigate Tuna (Tulingan) and other varieties of tuna, Slipmouth (Sapsap), Anchovies Dilis) and Indian Mackerel (Alumahan).

Figure 1  
Linkage Chart of Marine Products



- 2) Municipal fishing refers to capture activities in coastal and inland or fresh bodies of water such as lakes and rivers with or without the use of boats of three gross tonnage or less. Major municipal fish catch includes Fimbrated Sardines (Tunsoy), Squid, Anchovies, Frigate Tuna, Indian Sardines, Blue Crabs (Alimasag), Roundscad.
- 3) Aquaculture activities include brackishwater fishponds, freshwater fishponds, culture of oysters, mussels and seaweeds in marine areas and fishpens, fishcages in lakes and the like. Aquaculture output includes Milk Fish (Bangus), Prawns, Tilapia, White Shrimp, Grouper, Carp, Catfish, Mudfish, and Mudcrab.

The major processed marine products are canned tuna and processed shrimps and prawns.

***Strengths and Opportunities.*** In general, the fishing industry is supported by abundant water resources, skilled workforce for fish processing and canning, aquaculture technology and processing plants to absorb increase in demand. It is close to major Asian markets for fresh, frozen and chilled marine products. It contributes substantially to countryside employment.

The Philippine tuna industry, in particular, made a considerable stride over the last five years, with their highly-educated professionals, easily trainable workforce, and available supply of raw materials. Fresh tuna is made available year round since the government allows importation at a low tariff of 3 percent during the lean months from August to February. The industry utilizes conventional methods in tuna processing. Much of the advancement in technology is still derived from the services of foreign nationals who are employed by many local firms to impart valuable and practical know-how, especially in the area of quality control.

The opportunities that can be seized by the industry to its advantage includes: (i) the increasing demand for health-foods (low calorie, low fat and high protein), (ii) the legislative support provided by the newly-approved Fisheries Code and the Agriculture and Fishery Modernization Law, (iii) the liberalization on imports in some major Asian markets like Korea and (iv) the institutional support to global and regional trade by the World Trade Organization.

***Significance to the economy.*** The fishery sector contributed 3.9 percent to the country's total Gross Domestic Product in 1996 and 18.5 percent to the Gross Value Added in agricultural sector .

The sector contracted in 1996 by about 2.7 percent, in contrast to its 1995 growth of 2.0 percent. So that for the period 1990-1996, average annual growth of the fishery sector was pulled down to only 1.2 percent.

According to the Bureau of Fisheries and Aquatic Resources, the fishery sector provides employment to 990,872 workers or five percent of the country's labor force. Majority (68 percent) of the workers were engaged in municipal fishing. Twenty-six percent were in aquaculture and 6 percent in commercial fishing.

The NSO Annual Survey of Establishments presents some micro-level performance indicators for the sector. It classifies the industry into four groupings according to the 1977 PSIC Code: (1) ocean and coastal fishing; (2) inland fishing; (3) operation of fish farms and (4) other fishing activities. Table 1 shows a 22.4 percent average annual increase in the number of fishing establishments from 1990 to 1994. In 1994, 68 percent of the establishments employed an average of 10 or more workers. Almost half (47 percent) of the total establishments in 1994 were engaged in ocean and coastal fishing while 40 percent were operators of fish farms.

**Table 1. Performance Indicators for the Fishery Sector**  
(Values are based on constant 1985 prices)

Indicators	1990	1991	1992	1993	1994	Average growth (%)
Number of establishments	254	245	240	511	421	22.4
Employment	21,490	20,330	18,993	21,692	23,218	2.3
Average employment per establishment	85	83	79	42	55	-5.7
Capital expenditures during the year (P1,000)	639,102	302,417	258,261	202,248	264,752	-14.5
Census value added (P1,000)	1,671,312	1,939,305	1,053,545	925,216	1,273,710	1.2
Census value added per Worker (P1,000)	78	95	55	43	55	-3.4

Sources: Annual Survey of Establishments (1990-1993) and the 1994 Census of Establishment for Fishery, National Statistics Office.

Employment grew by a moderate 2.3 percent per year. Real expenditures on capital fell by an average of 14.5 percent. And possibly with reduced capital, the increase in the number of workers did not bring about substantial growth in the value added of the sector, which only grew by mere 1.2 percent per year. Labor productivity, measured as census value added per worker, fell by an average of 3.4 percent per year during the five-year period.

In the canned tuna industry, there are presently 17 BOI-registered firms, but only seven of these are active. The rest are no longer operating or not exporting. In processed shrimps and prawns industry, there are 39 BOI-registered firms.

**Production.** Except for the slight reduction in 1996, fish production had generally expanded during the 1992-1996 period. During this period, output of aquaculture grew faster than the output of municipal and commercial fishing. It can be noted that municipal fishing suffered in terms of steadily decreasing output in the 1990s (Tables 2A and 2B). In 1992, aquaculture accounted for only 28 percent of the 2.6 million metric tons produced, while municipal fishing produced 41 percent while commercial fishing produced 31 percent. By 1996, 35 percent of the 2.8 million metric tons came from aquaculture, and the share of municipal fishing fell to 33 percent while commercial fishing was rather stable at 3 percent.

**Table 2A. Volume of fish production by sector (In metric tons).**

Year	Aquaculture	Municipal	Commercial	TOTAL
1992	736,381	1,084,360	804,866	2,625,607
1993	793,620	1,013,969	824,356	2,631,945
1994	869,083	992,578	859,328	2,720,989
1995	919,039	972,043	893,232	2,784,314
1996	980,857	909,248	879,073	2,769,178

Source: 1996 Philippine Fisheries Profile, Bureau of Fisheries and Aquatic Resources

**Table 2B. Value of fish production by sector (In million pesos)**

Year	Aquaculture	Municipal	Commercial	TOTAL
1992	25,986	22,656	16,801	65,443
1993	30,163	22,031	18,021	70,215
1994	35,003	24,475	20,714	80,192
1995	33,527	26,464	23,065	83,056
1996	33,211	25,373	24,555	83,139

Source: 1996 Philippine Fisheries Profile, Bureau of Fisheries and Aquatic Resources.

**Export Performance.** Exports of marine products grew at an average rate of 3.3 percent per year from 1992 to 1996. While this is slower than the 39.8 percent average growth in imports, the Philippines remains to be a net exporter of fish and fish products. From 1995 to 1996, the value of fish exports have declined from US \$488 million to US \$ 418 million while its contribution to total Philippine exports have also decreased from 2.80 percent to 2.04 percent (Table 3).

**Table 3. Philippine exports and imports of marine products, 1992-1996.**

Year	Exports		Imports	
	FOB Value (US \$)	Percentage Share to Total Exports	CIF Value (US \$)	Percentage Share to Total Imports
1992	381,593,015	3.88	121,769,097	0.84
1993	464,991,579	4.09	287,240,582	1.63
1994	517,222,569	3.84	128,332,428	0.60
1995	488,383,820	2.80	267,696,856	1.01
1996	418,794,225	2.04	186,435,761	0.57

Source: Philippine Foreign Trade Statistics, 1992-1996, National Statistics Office.

In the fish canning industry, there are two major sectors. One is the tuna canning business that is about 95 to 98 percent export-oriented. The other one is the sardines and mackerel canning that is about 98 percent domestic market-oriented.

**Export Products.** The top exportable fish products are fresh, frozen shellfish (HS 03.06), prepared, preserved fish (HS 16.04), crustaceans (HS 16.05), and fresh, chilled or frozen fish (HS 03.02 to 03.04). Shellfish, fresh and frozen remained to be the top dollar earner of the fishery products. Note that the country is losing its strength in prepared, preserved fish and fresh, chilled or frozen fish as evident by the diminishing share of the products in the total fish exports and decreasing annual growth rate (Tables 4 and 5). The significant setback in 1995 of shellfish exports was a result of the shrimp disease outbreak that affected the shrimp industry in the Western Visayas. It however gained back its strength in the following year.

Exports of prepared or preserved crustaceans is gradually gaining potential as shown by its increasing share in total exports since 1992.

**Table 4. Distribution of Philippine marine exports by products, 1992-1996**

HS	Fish Product	1992	1993	1994	1995	1996
03.02 to 03.04	Fish, fresh, chilled or frozen	5.33	9.96	10.74	15.91	13.93
03.05	Fish, salted, dried, smoked	0.56	0.34	0.31	0.40	0.43
03.06	Crustaceans (shellfish, fresh, frozen)	63.56	56.67	55.49	53.87	54.54
16.04	Fish, prepared, preserved	29.06	31.44	31.53	27.64	26.91
16.05	Crustaceans (prepared or preserved)	1.50	1.59	1.92	2.18	4.19
Total		100.00	100.00	100.00	100.00	100.00

Source: National Statistics Office.

**Table 5. Annual growth rates of Philippine fish and fish product exports**

HS	Fish Product	1992-1993	1993-1994	1994-1995	1995-1996
03.02 to 03.04	Fish, fresh, chilled or frozen	1.26	0.22	0.35	-0.37
03.05	Fish, salted, dried, smoked	-0.26	0.02	0.18	-0.22
03.06	Crustaceans (shellfish, fresh, frozen)	0.08	0.11	-0.12	-0.27
16.04	Fish, prepared, preserved	0.31	0.13	-0.20	-0.30
16.05	Crustaceans (prepared or preserved)	0.29	0.36	0.03	0.39

**Export Markets.** The biggest markets for fish and fish products are the APEC economies comprising an average of 82.5 percent from 1992 to 1996 (Table 6). The share of the region slowed down in 1996 and still remained high at 83.2 percent.

**Table 6. Philippine exports of fish and fish product (FOB US \$), 1992-1996**

Year	APEC	Rest of the World	Total	% Share of APEC
1992	309,831,875	71,761,140	381,593,015	81.19
1993	381,623,997	83,367,582	464,991,579	82.07
1994	417,355,813	99,866,756	517,222,569	80.69
1995	416,841,012	71,542,808	488,383,820	85.35
1996	348,496,091	70,298,134	418,794,225	83.21

Source of basic data: National Statistics Office

Japan and the United States have consistently been the two biggest markets during the period although their demand has contracted since 1994 (Table 7). This may be traced to the increasing competitiveness of other countries in Asia, such as Thailand, China (Taiwan) and Indonesia, all of which are also APEC member countries (Table 8).

Thailand and Indonesia, both considered as the country's major competitors ranked first and second, respectively in world exports of fresh, frozen shellfish while the Philippines ranked only 19<sup>th</sup> in 1995. The United States is a major competitor in prepared and preserved fish exports which captured about 38 percent of world market in the same year.

**Table 7. Market destination of exported marine products in Asia Pacific (FOB value in million US\$)**

Country	1992	1993	1994	1995	1996	Average growth (%)
Japan	180.91	224.10	241.52	223.91	159.57	- 1.1
United States	64.21	64.73	69.86	65.16	61.06	- 1.1
Singapore	-	1.52	3.74	3.23	19.23	209.3
Canada	15.86	20.49	12.29	18.61	18.36	9.8
Korea	5.41	5.76	14.55	19.47	16.46	44.4
Hong Kong	10.12	12.26	13.55	17.32	16.31	13.4

Source: Board of Investments

**Table 8. Percent share in world exports of fish products of APEC economies**

Country	1991	1992	1993	1994	1995
Philippines	1.31	1.09	1.33	1.29	1.09
Indonesia	3.18	3.23	3.92	3.75	3.65
Thailand	8.09	8.56	9.47	10.14	9.71
Singapore	1.39	1.37	1.33	1.36	1.26
Malaysia	0.72	0.81	0.84	0.78	0.71
China	3.30	5.70	4.29	5.61	6.19
Korea, Rep. of	4.15	3.76	3.69	3.39	3.37
USA	8.89	9.71	8.63	7.63	9.57
New Zealand	1.56	1.80	1.78	1.66	1.74
Japan	2.02	2.06	2.01	1.74	1.50
Hongkong	1.59	1.55	1.39	1.49	1.25
Australia	1.60	1.87	2.00	1.93	1.86
Chile	1.60	1.94	2.06	1.63	2.22
Canada	5.99	5.74	5.67	5.22	4.99
Other Countries	54.61	50.83	51.57	52.39	50.88

Source of basic data: United Nations International Trade Statistics, 1996.

*Import performance.* The country's imports of fish and fish products followed an erratic trend from 1992 to 1996 (See Table 3). But on the average, it grew by 39.8 percent per year. Imports fell by almost one-third from US\$268 million in 1995 to US\$186 million in 1996 bringing down slightly the commodity's share to total Philippine imports from 1.01 percent to 0.57 percent. In terms of volume, imports declined by 5 percent from 311,204 metric tons in 1995 to 294,590 metric tons in 1996.

*Import products and sources.* Comprising the bulk of the 1996 fishery imports are: frozen sardines, mackerel and tuna, which were used by local canneries, constitute 29 percent, and fish meal, a vital component of animal feeds, made up 70 percent of the total fishery imports. Major sources of fish imports, in descending order, are Peru, China (Taiwan), and Korea. The rest includes USA, Papua New Guinea, Chile, Japan, Trust Territory of the Pacific Island, Indonesia and Singapore. The greater share of fish meal indicates the dependence of the animal feeds industry to imported raw materials while the relatively higher share of imported frozen tuna suggests that local market is still inadequate to meet the demand of fish and tuna canners.

*Net trade.* Overall, the net trade in the fishery sector is still positive. Although, the sector experienced setbacks in 1994 and 1995, recent performance of the industry indicate that there is still potential in the export market (Table 9).

**Table 9. Net trade of fishery sector by product, 1996**

HS Code	Fish Product	1996
		Net Trade (US \$)
03.02 to 03.04	Fish, fresh, chilled or frozen	(32,633,439)
03.05	Fish, salted, dried, smoked	1,143,416
03.06	Shellfish, fresh, frozen	163,778,837
16.04	Fish, prepared, preserved	79,800,884
16.05	Crustaceans	11,110,082
2301.20 00	Flours, meal and pellets of fish	(53,362,691)
23.09	Preparations of a kind used in animal feeding	(26,026,129)

Source of basic data :1996 Foreign Trade Data Statistics, National Statistics Office

**Problems: Weaknesses and Threats.** Although the potential for marine resources are present, there are threats to the fishing industry which come from either the natural environment or as a result of man-made conditions. These, together with the weakness of the industry, lead to the unstable supply of fish.

Fishing activities is certainly affected by the variances of nature: abundant months of fishing are prevalent during summer period and there is less catch at the onset of typhoon and cold weather.

Man-made threats, on the other hand, can still be further classified into two sources. First, there are domestically caused problems such as (i) water pollution due to the irresponsible waste disposal behavior of households and firms, (ii) overfishing and the use of dangerous fishing techniques, and (iii) inappropriate government policies that raise the cost of inputs or discourage investments in the industry. A specific example of unhelpful policy is the perceived protection received by producers of tins and plastic materials that are important inputs to fish preservation and packaging. Nominal tariffs of these packaging products are shown in Table 10.

Clearly, the government through taxes and subsidies should reallocate its resources towards these efficient and potential sectors in order to improve and increase their efficiency; and to sustain their competitiveness both in terms of price and quality.

**Table 10. Rate of duty of packaging materials used by fish/tuna canning industry, 1998-2000**

HS Code	Description	Rate of Duty (%)		
		1998	1999	2000
7210.11 00	Tinplates	7	7	7
7210.12 00				
7212.10 00				
7310.10 00	Tincans	15/10	10	10
7310.21 00				
7310.29 00				
Chapter 39 (various hdgs.)	Plastics	3/5/10	3/5/10	3/7/10

Source: Tariff Commission

Another source of man-made threat comes as a consequence of developments in the trade environment as globalization proceeds. These threats include (i) the non-trade barriers such as quality certification requirements of foreign buyers and (ii) emerging competitors like India and Indonesia.

Globalization can be an opportunity for those who are strong and prepared to compete, but it cuts deep into the sectors that are weak and unprepared. However, a positive effect of the wave of globalization is that it forces the government and the industry people to think thoroughly about the sources of its weakness. For the fish and fish products sector, the competitiveness is undermined by the (i) high cost of finished feeds, feed ingredients and packaging materials, (ii) inadequate infrastructure like wharves and ports, (iii) inadequate post-harvest facilities like cold storage (ice plants) and conveyors that help in the preservation of the fish quality, (iv) old, poorly maintained and even obsolete fishing vessels and equipment, (v) lack of competently-trained manpower that can work on board fishing boats, and (vi) problematic distribution or marketing system.

#### **Expected Impact of the EVSL**

Average nominal tariff on finished fishery products decreased from 82.35 percent in 1992 to 28 percent in 1996 (Table 11). For its inputs, average tariff declined to 19.22 percent in 1996 from 53.6 percent in 1992. The current average nominal tariff on raw materials of fish products is 10.68 percent while that of finished fish products is 18 percent. The reduction on the tariffs resulted from the Tariff Reform Program implemented under Executive Orders 470 (effective 24 August 1991), 288 (effective 16 January 1996) and 313 (effective 3 May 1996). All import restrictions on fishery products have been lifted starting in 1981.

**Table 11. Nominal tariffs of fish and fishery product sectors, 1991-1998\***

<u>Raw Material</u>	Description	1991	1992	1993	1994	1995	1996	1997	1998
03.02]	Fish, Crustaceans, Molluscs	25.56	47.78	40.37	32.96	25.56	16.22	16.22	8.44
03.03]		26.00	27.00	26.67	26.33	26.00	16.60	16.60	8.60
03.04]		30.00	50.00	43.33	36.67	30.00	20.00	20.00	10.00
03.06]		50.00	100.00	80.00	60.00	30.00	26.00	26.00	16.00
03.07]		50.00	95.42	76.67	57.92	30.00	26.67	23.33	16.67
<u>Finished Product</u>									
03.05]	Fish, Crustaceans, Molluscs, Dried,	50.00	87.31	70.77	54.23	30.00	30.00	30.00	20.00
03.06]	Smoked, etc.	50.00	100.00	80.00	60.00	30.00	26.00	26.00	16.00
03.07]		50.00	95.42	76.67	57.92	30.00	26.67	23.33	16.67
16.03]	Extracts, Juices of Fish	35.00	57.50	50.00	40.00	30.00	20.00	20.00	10.00
16.04]	Prepared or Preserved Fish,	43.33	58.33	50.00	41.67	30.00	30.00	26.67	20.00
16.05]	Crustaceans, Molluscs	50.00	56.00	48.00	40.00	30.00	30.00	22.00	20.00
Average tariff on raw materials		32.44	53.60	45.61	34.14	27.07	19.22	19.96	10.68
Average tariff on finished products		48.50	82.35	67.25	52.06	30.00	28.00	25.80	18.00

Source : Tariff Commission

\* Up to E.O. 465

Economic theory indicates that, for a small country, a higher tariff is inferior to a lower one. Industries that have been provided with this form of protection generally tend to be less efficient since they are able to control the domestic market. The country consequently experiences higher prices and lower output because industries are not allowed to achieve their potential production, given their available resources, while remaining profitable in the domestic economy.

Nevertheless, while it is clear that protection is harmful to the economy, the present industrial sector is characterized both by the lack of understanding of the economic costs of tariff protection and the presence of powerful political-social forces that strongly oppose any change in the status quo. This system of protection creates substantial rents to the producers of import-competing goods, to the importers that benefit from the allocation of (non-marketed) import rights, to organized labor that is sharing part of the monopoly rents resulting from the protection, and to the government bureaucracy that was administering the restrictive trade policies. Because sectoral liberalization affects a wide range of these social groups, it may be necessary to identify the short-term impacts of this policy. Moreover, since trade liberalization is expected to benefit the economy only in the long-run, the short-term adjustments required by this policy will have to be considered.

Trade liberalization through the EVSL increases the extent with which the whole industry can trade with other markets, providing better access to the markets particularly in ASEAN countries. This is particularly true for the subsectors that enjoy some competitive advantage. Moreover, as markets of other countries become more accessible, the probability of discovering other markets which used to be restricted become greater. In the domestic economy, the country also benefits as the entry of imported goods make fish and other products cheaper, thereby providing greater food security.

*Strengthening Export Competitiveness.* Exports of fish products have been increasing from 1992 to 1994 though this figure had somewhat diminished in the next two years. The value of fish exports dropped by 5.57 percent in 1995 and 14 percent in 1996.

Table 12 presents the revealed comparative advantage (RCA) indices of Philippine exports of fish and fish products from 1992 to 1995. The RCA is a ratio of a commodity group's export share in the country's total exports to the commodity's group share in the total world exports. A country has revealed comparative advantage (disadvantage) in exporting the good if the index value is higher (lower) than unity.

**Table 12. Revealed comparative advantage (RCA) indices for fish and fish products, 1992-1995**

SITC Code	Description	RCA			
		1992	1993	1994	1995
034	Fish, fresh, chilled, frozen	0.44	0.83	0.61	0.41
035	Fish, salted, dried, smoked	0.36	0.03	0.27	0.11
036	Shellfish, fresh, frozen	7.74	6.92	6.13	2.44
037	Fish, prepared, preserved	5.83	6.30	4.83	1.92

Source of basic data: 1995 United Nations International Trade Statistical Yearbook; Philippine Foreign Trade Statistics, various years.

The estimated RCA indices indicate that the Philippines has a revealed comparative advantage in two out of four sub-sectors in the fishery sector. These are fresh and frozen shellfish (SITC 036); and prepared and preserved fish (SITC 037). Clearly, these products were likely to be ready to face foreign competition. Note however that while potential export competitiveness on the two sub-sectors is evident, the values of the indices have declined from higher values in 1992 to lower ones in 1995.

It is important to note that the relative share of fresh, frozen shellfish to the country's total exports fell by 6 percent in 1995 while world export increased in the same year. This means that these fish products became less competitive in that year

which may be due to shrimp outbreak disease that affected the industry. From a rank of 16<sup>th</sup> in 1994, the Philippines went down to rank 19<sup>th</sup> in 1995.

Clearly, the government through taxes and subsidies should reallocate its resources towards these efficient and potential sectors in order to improve and increase their efficiency; and to sustain their competitiveness both in terms of price and quality.

For prepared and preserved fish, the share of these products to the country's total exports increased but world exports increased at a faster rate. Thus, these products are still competitive but the country is getting more specialized in other goods (e.g., electronics).

The lower than one unity for the other fishery sub-sectors (SITC 034 and 035) indicate that the country do not have the relative comparative advantage to export these products in the foreign market including the APEC economies.

**Improving Food Security.** The local demand for fish is substantial. Next to rice, fish products have the most substantial share in per capita food consumption. In 1993, fish products constituted 12.3 percent of the total food consumption (as purchased), the second highest share next to rice with 35.1 percent share. The reduction of tariffs will hence allow cheaper products into the economy, thus improving food security.

**Greater Economic Efficiency.** Trade liberalization has a positive impact on exports that no longer enjoy tariff protection. A reduction in tariff protection to locally-sold products implies a reduction in penalty to exports. Exports of fishery products experienced a 109 percent growth rate in 1992, after the implementation of the second phase of the tariff reform program.

Tariff affects differently the importable and exportable sectors. The fishery sector has a substantial import content, particularly for those that uses fish as an intermediate input. With the reduction in tariff and non-tariff protection in recent years, greater import competition was felt to some extent. Imports of fish and fishery products sector rose by 39.7 percent from 1992 to 1996. Their share in total imports however declined from 9.37 percent in 1992 to 5.75 percent in 1996. The share of real imports to real GDP however did not vary in 1996. The contraction in the figures seems to show that import competition was not intense as it was in 1992.

As the country liberalizes its market with the APEC trading partners, greater import competition is then expected. Philippine imports value of fish and fish products have been erratic during the past five years posting at an average annual growth rate of 39 percent. Sixty-five percent (65%) of the total imports were supplied by the APEC economies. Of this, 5.46 percent came from the four nominating economies, i.e., Canada, Indonesia, New Zealand and Thailand.

Tables 1 and 2 in fact show that despite the protection through tariffs given to the fishery sector, its production and value added have not grown substantially. Capital expenditures and value added per worker have recorded negative growth rates during the 1990-1994 period. While the number of establishments have increased,

average employment decreased. These industries may seem to be disadvantaged by the tariff system.

The previously overvalued currency made the value of exports more expensive relative to the value of imports, leading to a lower real value added for the good. Hence, whatever effective protection these industries were receiving was being negated by an overvalued currency.

Moreover, the fishery sub-sector may be penalized by the implicit protection given to the other related industries resulting to higher cost of inputs, e.g., tin cans (due to tinplates), packaging and feeds. It is thus imperative that these disincentives be eliminated first before opening the country's fish market to its APEC competitors. Those inputs should be first liberalized to assist the exporting fish sub-sectors lower its costs of production and eventually cost of exportation.

***Increasing the Vulnerability of Uncompetitive, though Labor-Intensive, Industries.*** The other sub-sectors, SITC 034 and 035, are uncompetitive (as shown by lower than one RCA estimates) and will be more vulnerable when faced with greater competition. About a million people depend on fishing as their means of livelihood. Hence, it will be untimely to liberalize the fishing sector given the absence of needed infrastructures, safety nets, as well as technical and financial support to prepare them for global competition.

The efficiency gains of trade liberalization should be sufficient to compensate those who are adversely affected. Hence, the government should institute the proper taxes and subsidies to distribute the benefits coming from this policy. In the absence of the institutions to implement the appropriate distribution policy, measures can be created to improve the competitiveness of these industries. It is thus recommended to liberalize flours, meals and pellets of fish or of crustaceans, molluscs or other aquatic invertebrates (HS Code 2301.20 00). These are imported inputs needed by the industry. Those fish products locally produced may be phased-in at a later date to give the fish sub-sector sufficient time to adjust.

***Elimination of the Illegal and Inefficient Activities.*** While there is hardly any data on illegal fishing and other environmentally hazardous practices of fishing, reports show these are substantial. Trade liberalization can lead to less damaging depletion of fish resources, and make production more efficient and environmentally sound.

## **Conclusion and Recommendations**

The Tariff Commission conducted consultations on 13 November 1997 regarding the proposed liberalization of four (4) sectors including the fish and fish products. During the consultations, the Department of Agriculture expressed its inclination to support the Philippine participation in the liberalization of fish and fish products on a slower phase basis subject to the following conditionalities:

- meaningful and substantial targets for eliminating prohibited subsidies and domestic support, SPS measures to align with the international standards, reducing non-tariff measures and making these transparent, eliminating technical

barriers to trade (TBT), or otherwise reducing the use of trade restricting and trade distorting measures other than tariffs; and

- definite targets and timetable for concrete economic and technical cooperation measures.

This paper has examined the likely effects of the EVSL on the fish and fish products sector by using the available data and estimating competitive advantage by the trade patterns of the country through the estimation of the Revealed Comparative Advantage (RCA). The findings indicate that fresh and frozen shellfish (SITC 036) and prepared and preserved fish (SITC 037) have shown potential export competitiveness in the world market relative to the other fish sub-sectors. Assuming a uniform five percent rate on these products in 2004 under the APEC EVSL, SITC 036 is most likely to be able to compete. SITC 037 can also be able to compete but seems vulnerable to face greater competition.

In sum, the current problems besetting the fishery sector are distortions in the form of monopolies and other forms of protection in the domestic market (not especially in the fish product sector) that should be directly corrected by means of specific policies, such as taxes and subsidies. One has to view that the fish sector uses intermediate inputs that are produced by other industries in the economy. Without these measures, the benefits that can be derived from trade liberalization will not be shared to all the sectors. The industry is aware that liberalization is imperative for globalization, and the only way to survive is to be competitive if these measures to distribute the benefits are not put in place.

The recommended action plan is detailed, as follows:

(i). Tariff Reduction Program

Liberalize first the raw materials (especially not locally produced). In general follow the TRP schedule for the fish products. Final duties should be within the 0-5 percent rate. As a developing economy, the Philippines should negotiate for flexibility to phase-out tariffs more slowly. (See Table 13 for the specific commodity lines and EVSL tariff reduction program.)

(ii). Non-Tariff Measures

Eliminate NTMs simultaneously with phasing-out of tariffs and prioritized as follows:

- (1) quantitative import/export restrictions
- (2) export subsidies
- (3) import/export levies
- (4) others

(iii) Subsidy

The APEC leaders asked the Fisheries Working Group (FWG) to identify subsidies used in the fisheries sector in order to determine how the WTO Agreement on Subsidies and Countervailing applies to these subsidies. This may

affect the incentives provided for under the Export Development Act which are potentially beneficial to tuna exporters. The Philippines should thus take advantage of the flexibility provided in the application of subsidies under the WTO Agreement on Subsidies and Countervailing Measures.

(iv). Facilitation Measures

Sanitary and Phytosanitary Measures (SPS)

- Task the FWG and/or CTI Sub-Committee on Standards and Conformance to undertake the review regarding SPS measures of APEC member countries.
- Harmonize fish and fish products standards, guidelines and/or recommendations with the International Standards.
- Standard principles for the enhancement of the food safety and quality of fish and fishery products

(v) Economic and Technical Cooperation (ECOTECH)

- Technical cooperation to strengthen scientific research on domestic and transboundary fish stocks so that the biological health of fish reserves is adequately understood.
- Technical cooperation on the standardization and application of fisheries statistical methodologies used on resource management.
- Technical cooperation on the development of fisheries management policies and programs to control fishing efforts within biologically sustainable levels.
- Enhanced international technical cooperation on joint management and sharing of straddling stocks and of high migratory fish stocks across transnational boundaries.
- Enforcement of fisheries management regulations through the application of new surveillance technologies and information management systems.
- Implement other economic and technical cooperation measures to promote and sustain the development of the fishery sector (e.g. establish an APEC network of marine protected areas, develop a catalogue of sensitive habitats in APEC member economies and management approaches).
- Technical cooperation to design and improve cost effective fishing technologies that should also include environmental and conservation issues.
- Technical collaboration and training in the development and implementation of modern inspection systems based on Hazard Analysis Critical Control Point (HACCP) methods to protect human health and facilitate access to fish markets.

- Technical cooperation to assist exporting countries like the Philippines to meet SPS requirements. This ecotech measure should include post-harvest technologies to improve product quality and to minimize fish wastage and discards.
- Technical assistance to upgrade existing laboratories and equipment for testing of standard including the provision of qualified expertise to support scientific research; and the development and implementation of HACCP methods.
- Enhanced international technical cooperation in research and development regarding disease abatement for agriculture product, specifically shrimp.
- Enhanced cooperation to implement existing international and regional instruments concerning marine pollution in each economy.
- Facilitate cooperation and technology transfer in the areas of sustainable aquaculture, deep-sea fishing, resource conservation techniques, and stock breeding know-how between participating APEC economies.
- Enhanced cooperation and technical transfer between participating APEC economies in coastal zone management and related planning and training to more effectively resolve competing demands on coastal marine encumbrances from industrial development, mining, forestry, agriculture, aquaculture and commercial fishing, including technical cooperation on the cooperative management of marine resources for small boat fishermen.
- Technology transfer on the monitoring of fish diseases and fish stocks.

Hence, the government should reallocate its resources towards those efficient ones by removing the disincentives particularly to the potential exportables. As for the vulnerable sectors, the government should assist them through technical and financial support to upgrade and modernize the fishing fleets, to establish an efficient marketing system, to implement training programs for manpower, to continue the development of post-harvest facilities and research on controlling marine products diseases and on post-harvest technology. These are vital policy measures which should be in order to enable the fishery sector improve its efficiency and compete globally.

The liberalization efforts under the APEC EVSL provide a wide market base for the exportable fish products as well as access to low cost imported inputs. To maximize the gains from such an endeavor, liberalization should be across all sectors and be sequential in terms of its inclusion - i.e., from the raw materials, intermediate and finally finished goods.

## **References**

Thomas, F. Position paper presented during the roundtable discussion held 11 March 1998 submitted by the Federation of the Fishing Association.

1996 Philippine Fisheries Profile, Bureau of Fisheries and Aquatic Resources, Department of Agriculture.

Results of Workshop on “Modalities for the Early Voluntary Sectoral Liberalization of Fishery Sector”.

Minutes of the Roundtable Discussion - Consultation on “Early Voluntary Sectoral Liberalization Program for the Fish Sector” held 11 March 1998.

HS NO.	HS HDG. NO.	DESCRIPTION	RATE OF DUTY(%)								REMARKS/COMMENTS	
			1998	1999	2000	2001	2002	2003	2004	2005		
03.02		Fish, fresh or chilled, excluding fish fillets and other fish meat of heading No. 03.04.										
	0302.11 00	- Salmonidae, excluding livers and roes : -- Trout ( <i>Salmo trutta</i> , <i>Oncorhynchus mykiss</i> , <i>Oncorhynchus clarki</i> , <i>Oncorhynchus aguabonita</i> , <i>Oncorhynchus gilae</i> , <i>Oncorhynchus apache</i> and <i>Oncorhynchus chrysogaster</i> )	10	10	7	7	7	5	5	5	Follow TRP Schedule	
	0302.12 00	-- Pacific salmon ( <i>Oncorhynchus nerka</i> , <i>Oncorhynchus gorbuscha</i> , <i>Oncorhynchus keta</i> , <i>Oncorhynchus tshawytscha</i> , <i>Oncorhynchus kisutch</i> , <i>Oncorhynchus masou</i> and <i>Oncorhynchus rhodurus</i> ), Atlantic salmon ( <i>Salmo salar</i> ) and Danube salmon ( <i>Hucho hucho</i> )	10	10	7	7	7	5	5	5	Follow TRP Schedule	
	0302.19 00	-- Other -- Flat fish ( <i>Pleuronectidae</i> , <i>Bothidae</i> , <i>Cynoglossidae</i> , <i>Soleidae</i> , <i>Scophthalmidae</i> and <i>Citharidae</i> ), excluding livers and roes :	10	10	7	7	7	5	5	5	Follow TRP Schedule	
	0302.21 00	-- Halibut ( <i>Reinhardtius hippoglossoides</i> , <i>Hippoglossus hippoglossus</i> , <i>Hippoglossus stenolepis</i> )	10	10	7	7	7	5	5	5	Follow TRP Schedule	
	0302.22 00	-- Plaice ( <i>Pleuronectes platessa</i> )	10	10	7	7	7	5	5	5	Follow TRP Schedule	
	0302.23 00	-- Sole ( <i>Solea</i> spp.)	10	10	7	7	7	5	5	5	Follow TRP Schedule	
	0302.29 00	-- Other - Tunas (of the genus <i>Thunnus</i> ), skipjack or stripe-bellied bonito ( <i>Euthynnus (Katsuwonus) pelamis</i> ), excluding livers and roes :	10	10	7	7	7	5	5	5	Follow TRP Schedule	
	0302.31	-- Albacore or longfinned tunas ( <i>Thunnus alalunga</i> ):										
	0302.31 10	--- When imported during the months of August to February	3	3	3	3	3	3	3	3	} Options:	

0302.31 20	--- When imported during the months of March to July	10	10	7	7	7	5	5	5	} 1. Follow TRP Schedule } 2. Zero is also acceptable as beginning rate. Bureau of Fisheries and Aquatic Resources (BFAR) recommends zero rate in support of sustainability of fisheries resources. Moreover, these are inputs to the fish canning.
0302.32	-- Yellowfin tunas ( <i>Thunnus albacares</i> ):									
0302.32 10	--- When imported during the months of August to February	3	3	3	3	3	3	3	3	}
0302.32 20	--- When imported during the months of March to July	10	10	7	7	7	5	5	5	
0302.33	-- Skipjack or stripe-bellied bonito:									}
0302.33 10	--- When imported during the months of August to February	3	3	3	3	3	3	3	3	
0302.33 20	--- When imported during the months of March to July	10	10	7	7	7	5	5	5	}
0302.39	-- Other:									
0302.39 10	--- When imported during the months of August to February	3	3	3	3	3	3	3	3	}
0302.39 20	--- When imported during the months of March to July	10	10	7	7	7	5	5	5	
0302.40 00	- Herrings ( <i>Clupea harengus</i> , <i>Clupea Pallasii</i> ), excluding livers and roes	10	10	7	7	7	5	5	5	Follow TRP Schedule
0302.50 00	- Cod ( <i>Gadus morhua</i> , <i>Gadus ogac</i> , <i>Gadus macrocephalus</i> ), excluding livers and roes - Other fish, excluding livers and roes :	10	10	7	7	7	5	5	5	Follow TRP Schedule
0302.61	-- Sardines ( <i>Sardina pilchardus</i> , <i>Sardinops</i> spp.), sardinella ( <i>Sardinella</i> spp.), brisling or sprats sardinella ( <i>Sardinella</i> spp.), brisling									} Zero is also acceptable as beginning rate since these are inputs to fish canning
0302.61 10	--- When imported during the months of August to February	3	3	3	3	3	3	3	3	
0302.61 20	--- When imported during the months of March to July	10	10	7	7	7	5	5	5	Follow TRP Schedule
0302.62 00	-- Haddock ( <i>Melanogrammus aeglefinus</i> )	10	10	7	7	7	5	5	5	Follow TRP Schedule
0302.63 00	-- Coalfish ( <i>Pollachius virens</i> )	10	10	7	7	7	5	5	5	Follow TRP Schedule
0302.64	-- Mackerel ( <i>Scomber scombrus</i> , <i>Scomber australasicus</i> , <i>Scomber japonicus</i> ):									

	0302.64 10	--- When imported during the months of August to February	3	3	3	3	3	3	3	3	Zero is also acceptable as beginning rate since these are not produced locally.
	0302.64 20	--- When imported during the months of March to July	10	10	7	7	7	5	5	5	Follow TRP Schedule
	0302.65 00	-- Dogfish and other sharks	10	10	7	7	7	5	5	5	Follow TRP Schedule
	0302.66 00	-- Eels ( <i>Anguilla</i> spp.)	10	10	7	7	7	5	5	5	Follow TRP Schedule
	0302.69 00	-- Other	10	10	7	7	7	5	5	5	Follow TRP Schedule
	0302.70 00	- Livers and roes	10	10	7	7	7	5	5	5	Follow TRP Schedule
03.03		Fish, frozen, excluding fish fillets and other fish meat of heading No. 03.04.									
	0303.10 00	- Pacific salmon ( <i>Oncorhynchus nerka</i> , <i>Oncorhynchus gorbusha</i> , <i>Oncorhynchus keta</i> , <i>Oncorhynchus tshawytscha</i> , <i>Oncorhynchus kisutch</i> , <i>Oncorhynchus masou</i> and <i>Oncorhynchus rhodurus</i> ), excluding livers and roes	10	10	7	7	7	5	5	5	Follow TRP Schedule
	0303.21 00	- Other salmonidae, excluding livers and roes : -- Trout ( <i>Salmo trutta</i> , <i>Oncorhynchus mykiss</i> , <i>Oncorhynchus clarki</i> , <i>Oncorhynchus aguabonita</i> , <i>Oncorhynchus gilae</i> , <i>Oncorhynchus apache</i> and <i>Oncorhynchus chrysogaster</i> )	10	10	7	7	7	5	5	5	Follow TRP Schedule
	0303.22 00	-- Atlantic salmon ( <i>Salmo salar</i> ) and Danube salmon ( <i>Hucho hucho</i> )	10	10	7	7	7	5	5	5	Follow TRP Schedule
	0303.29 00	-- Other - Flat fish ( <i>Pleuronectidae</i> , <i>Bothidae</i> , <i>Cynoglossidae</i> , <i>Soleidae</i> , <i>Scophthalmidae</i> and <i>Citharidae</i> ), excluding livers and roes :	10	10	7	7	7	5	5	5	Follow TRP Schedule
	0303.31 00	-- Halibut ( <i>Reinhardtius hippoglossoides</i> , <i>Hippoglossus hippoglossus</i> , <i>Hippoglossus stenolepis</i> )	10	10	7	7	7	5	5	5	Follow TRP Schedule
	0303.32 00	-- Plaice ( <i>Pleuronectes platessa</i> )	10	10	7	7	7	5	5	5	Follow TRP Schedule
	0303.33 00	-- Sole ( <i>Solea</i> spp.)	10	10	7	7	7	5	5	5	Follow TRP Schedule
	0303.39 00	-- Other	10	10	7	7	7	5	5	5	Follow TRP Schedule

	- Tunas (of the genus <i>Thunnus</i> ), skipjack or stripe-bellied bonito ( <i>Euthynnus Katsuwonus pelamis</i> ), excluding livers and roes :									
0303.41	-- Albacore or longfinned tunas ( <i>Thunnus alalunga</i> ):									
0303.41 10	--- When imported during the months of August to February	3	3	3	3	3	3	3	3	} Options:
0303.41 20	--- When imported during the months of March to July	10	10	7	7	7	5	5	5	} 1. Follow TRP Schedule
0303.42	-- Yellowfin tunas ( <i>Thunnus albacares</i> ):									} 2. Zero is also acceptable as beginning rate. Bureau of Fisheries and Aquatic Resources (BFAR) recommends zero rate in support of sustainability of Fisheries resources. Moreover, these are inputs to the to the fish canning.
0303.42 10	--- When imported during the months of August to February	3	3	3	3	3	3	3	3	}
0303.42 20	--- When imported during the months of March to July	10	10	7	7	7	5	5	5	}
0303.43	-- Skipjack or stripe-bellied bonito:									}
0303.43 10	--- When imported during the months of August to February	3	3	3	3	3	3	3	3	}
0303.43 20	--- When imported during the months of March to July	10	10	7	7	7	5	5	5	}
0303.49	-- Other:									}
0303.49 10	--- When imported during the months of August to February	3	3	3	3	3	3	3	3	}
0303.49 20	--- When imported during the months of March to July	10	10	7	7	7	5	5	5	}
0303.50 00	- Herrings ( <i>Clupea harengus</i> , <i>Clupea pallasii</i> ), excluding livers and roes	10	10	7	7	7	5	5	5	Follow TRP Schedule
0303.60 00	- Cod ( <i>Gadus morhua</i> , <i>Gadus ogac</i> , <i>Gadus macrocephalus</i> ), excluding livers and roes	10	10	7	7	7	5	5	5	Follow TRP Schedule
0303.71	- Other fish, excluding livers and roes : -- Sardines ( <i>Sardina pilchardus</i> , <i>Sardinops</i> spp.), sardinella ( <i>Sardinella</i> spp.), brisling or sprats ( <i>Sprattus sprattus</i> ):									

0303.71 10	- - - When imported during the months of August to February	3	3	3	3	3	3	3	3	Zero is also acceptable as beginning rate since this is locally produced but insufficient to meet demand.
0303.71 20	- - - When imported during the months of March to July	10	10	7	7	7	5	5	5	Follow TRP Schedule
0303.72 00	- - Haddock ( <i>Melanogrammus aeglefinus</i> )	10	10	7	7	7	5	5	5	Follow TRP Schedule
0303.73 00	- - Coalfish ( <i>Pollachius virens</i> )	10	10	7	7	7	5	5	5	Follow TRP Schedule
0303.74	- - Mackerel ( <i>Scomber scombrus</i> , <i>Scomber australasicus</i> , <i>Scomber japonicus</i> ):									
0303.74 10	- - - When imported during the months of August to February	3	3	3	3	3	3	3	3	Zero is also acceptable as beginning rate since this is locally produced but insufficient to meet demand.
0303.74 20	- - - When imported during the months of March to July	10	10	7	7	7	5	5	5	Follow TRP Schedule
0303.75 00	- - Dogfish and other sharks	10	10	7	7	7	5	5	5	Follow TRP Schedule
0303.76 00	- - Eels ( <i>Anguilla</i> spp.)	10	10	7	7	7	5	5	5	Follow TRP Schedule
0303.77 00	- - Sea bass ( <i>Dicentrarchus labrax</i> , <i>Dicentrarchus punctatus</i> )	10	10	7	7	7	5	5	5	Follow TRP Schedule
0303.78 00	- - Hake ( <i>Merluccius</i> spp., <i>Urophycis</i> spp.)	10	10	7	7	7	5	5	5	Follow TRP Schedule
0303.79 00	- - Other	10	10	7	7	7	5	5	5	Follow TRP Schedule
0303.80 00	- Livers and roes	10	10	7	7	7	5	5	5	Follow TRP Schedule
03.04	Fish fillets and other fish meat (whether or not minced), fresh, chilled or frozen.									
0304.10 00	- Fresh or chilled	10	10	7	7	7	5	5	5	Follow TRP Schedule
0304.20 00	- Frozen fillets	10	10	7	7	7	5	5	5	Follow TRP Schedule
0304.90 00	- Other	10	10	7	7	7	5	5	5	Follow TRP Schedule
03.05	Fish, dried, salted or in brine; smoked fish, whether or not cooked before or during the smoking process; flours, meals and pellets of fish, fit for human consumption.									

0305.10 00	- Flours, meals and pellets of fish, fit for human consumption	20	20	15	10	10	7	5	5	Follow TRP Schedule
0305.20 00	- Livers and roes, dried, smoked, salted or in brine	20	20	15	10	10	7	5	5	Follow TRP Schedule
0305.30 00	- Fish fillets, dried, salted or in brine, but not smoked	20	20	15	10	10	7	5	5	Follow TRP Schedule
0305.41 00	- Smoked fish, including fillets : -- Pacific salmon ( <i>Oncorhynchus nerka</i> , <i>Oncorhynchus gorbuscha</i> , <i>Oncorhynchus keta</i> , <i>Oncorhynchus tshawytscha</i> , <i>Oncorhynchus kisutch</i> , <i>Oncorhynchus masou</i> and <i>Oncorhynchus rhodurus</i> ), Atlantic salmon ( <i>Salmo salar</i> ) and Danube salmon ( <i>Hucho hucho</i> )	20	20	15	10	10	7	5	5	Follow TRP Schedule
0305.42 00	-- Herrings ( <i>Clupea harengus</i> , <i>Clupea pallasii</i> )	20	20	15	10	10	7	5	5	Follow TRP Schedule
0305.49 00	-- Other - Dried fish, whether or not salted but not smoked :	20	20	15	10	10	7	5	5	Follow TRP Schedule
0305.51 00	-- Cod ( <i>Gadus morhua</i> , <i>Gadus ogac</i> , <i>Gadus macrocephalus</i> )	20	20	15	10	10	7	5	5	Follow TRP Schedule
0305.59 00	-- Other - Fish, salted but not dried or smoked and fish in brine :	20	20	15	10	10	7	5	5	Follow TRP Schedule
0305.61 00	-- Herrings ( <i>Clupea harengus</i> , <i>Clupea pallasii</i> )	20	20	15	10	10	7	5	5	Follow TRP Schedule
0305.62 00	-- Cod ( <i>Gadus morhua</i> , <i>Gadus ogac</i> , <i>Gadus macrocephalus</i> )	20	20	15	10	10	7	5	5	Follow TRP Schedule
0305.63 00	-- Anchovies ( <i>Engraulis</i> spp.)	20	20	15	10	10	7	5	5	Follow TRP Schedule
0305.69 00	-- Other	20	20	15	10	10	7	5	5	Follow TRP Schedule
03.06	Crustaceans, whether in shell or not, live, fresh, chilled, frozen, dried, salted or in brine; crustaceans, in shell, cooked by steaming or by boiling in water, whether or not chilled, frozen, dried, salted or in brine; flours, meals and pellets of crustaceans, fit for human consumption.  - Frozen :									

0306.11 00	-- Rock lobster and other sea crawfish (Palinurus spp., Panulirus spp., Jasus spp.)	10	10	7	7	7	5	5	5	Follow TRP Schedule
0306.12 00	-- Lobsters (Homarus spp.)	10	10	7	7	7	5	5	5	Follow TRP Schedule
0306.13 00	-- Shrimps and prawns	20	20	15	10	10	7	5	5	Follow TRP Schedule
0306.14 00	-- Crabs	20	20	15	10	10	7	5	5	Follow TRP Schedule
0306.19 00	-- Other, including flours, meals and pellets of crustaceans, fit for human consumption	20	20	15	10	10	7	5	5	Follow TRP Schedule
	- Not frozen :									
0306.21 00	-- Rock lobsters and other sea crawfish (Palinurus spp., Panulirus spp., Jasus spp.)	10	10	7	7	7	5	5	5	Follow TRP Schedule
0306.22 00	-- Lobsters (Homarus spp.)	10	10	7	7	7	5	5	5	Follow TRP Schedule
0306.23 00	-- Shrimps and prawns	20	20	15	10	10	7	5	5	Follow TRP Schedule
0306.24 00	-- Crabs	20	20	15	10	10	7	5	5	Follow TRP Schedule
0306.29 00	-- Other, including flours, meals and pellets of crustaceans, fit for human consumption	20	20	15	10	10	7	5	5	Follow TRP Schedule
03.07	Molluscs, whether in shell or not, live, fresh, chilled, frozen, dried, salted or in brine; aquatic invertebrates other than crustaceans and molluscs, live, fresh, chilled, frozen, dried, salted or in brine; flours, meals and pellets of invertebrates other than crustaceans, fit for human consumption									
0307.10 00	- Oysters - Scallops, including green scallops, of the genera Pecten, Chlamys or Placopecten :	20	20	15	10	10	7	5	5	Follow TRP Schedule
0307.21 00	-- Live, fresh or chilled	20	20	15	10	10	7	5	5	Follow TRP Schedule
0307.29 00	-- Other - Mussels (Mytilus spp., Perna spp.) :	20	20	15	10	10	7	5	5	Follow TRP Schedule
0307.31 00	-- Live, fresh or chilled	20	20	15	10	10	7	5	5	Follow TRP Schedule
0307.39 00	-- Other	20	20	15	10	10	7	5	5	Follow TRP Schedule

	- Cuttle fish ( <i>Sepia officinalis</i> , <i>Rossia macrosoma</i> , <i>Sepiola</i> spp.) and squid ( <i>Ommastrephes</i> spp., <i>Loligo</i> spp., <i>Nototodarus</i> spp., <i>Sepioteuthis</i> spp.):									
0307.41 00	-- Live, fresh or chilled	10	3	3	3	3	3	3	3	Input to canning industry, zero is acceptable beginning 1999
0307.49 00	-- Other	10	3	3	3	3	3	3	3	Input to canning industry, zero is acceptable beginning 1999
	- Octopus ( <i>Octopus</i> spp.):									
0307.51 00	-- Live, fresh or chilled	10	3	3	3	3	3	3	3	Follow TRP Schedule
0307.59 00	-- Other	10	3	3	3	3	3	3	3	Follow TRP Schedule
0307.60 00	- Snails, other than sea snails	20	20	15	10	10	7	5	5	Follow TRP Schedule
	- Other, including flours, meals and pellets of aquatic invertebrates other than crustaceans, fit for human consumption:									
0307.91 00	-- Live, fresh, or chilled	20	20	15	10	10	7	5	5	Follow TRP Schedule
0307.99 00	-- Other	20	20	15	10	10	7	5	5	Follow TRP Schedule
5.11	Animal products not elsewhere specified or included; dead animals of Chapter 1 or 3, unfit for human consumption.									
0511.10 00	- Bovine semen	3	3	3	3	3	3	3	3	} Not locally produced. Zero is also acceptable as beginning rate.
0511.91	- Other:									
	-- Products of fish or crustaceans, molluscs or other aquatic invertebrates; dead animals of Chapter 3:									}
0511.91 10	--- Brine shrimp eggs for hatching for use as live-feed in prawn fry culture	3	3	3	3	3	3	3	3	}
0511.91 20	--- Fish waste	3	3	3	3	3	3	3	3	}
0511.91 90	--- Other	3	3	3	3	3	3	3	3	}
0511.99	-- Other:									}
0511.99 10	--- Animal semen for breeding purposes other than bovine semen	3	3	3	3	3	3	3	3	}

0511.99 20	---	Silkworm eggs	3	3	3	3	3	3	3	3	)
0511.99 30	---	Sinews and tendons; parings and similar waste of raw hides or skins	3	3	3	3	3	3	3	3	)
0511.99 90	---	Other	3	3	3	3	3	3	3	3	)
15.04		Fats and oils and their fractions, of fish or marine mammals, whether or not refined, but not chemically modified.									
1504.10 00	-	Fish-liver oils and their fractions	3	3	3	3	3	3	3	3	Zero is also acceptable beginning 1999 since these are not produced locally.
1504.20 00	-	Fats and oils and their fractions, of fish, other than liver oils	3	3	3	3	3	3	3	3	Zero is also acceptable beginning 1999 since these are not produced locally.
1504.30 00	-	Fats and oils and their fractions of marine mammals	3	3	3	3	3	3	3	3	Zero is also acceptable as beginning 1999 since these are not produced locally
16.03	1603.00	Extracts and juices of meat, fish or crustaceans, molluscs or other aquatic invertebrates.									
	1603.00 10	--- Meat extracts and meat juices	3	3	3	3	3	3	3	3	Not locally produced accelerate rate from 10% to 3%
	1603.00 90	--- Other	3	3	3	3	3	3	3	3	Not locally produced accelerate rate from 10% to 3%
16.04		Prepared or preserved fish; caviar and caviar substitutes prepared from fish eggs.									
	1604.11 00	- Fish, whole or in pieces, but not minced : -- Salmon	20	20	15	10	10	7	5	5	Fish canning manufacturers expressed support liberalization (HS 16.04) as long as other inputs will be included in EVSL such as packaging materials which are inputs to the industry

1604.12 00	-- Herrings	20	20	15	10	10	7	5	5	Fish canning manufacturers expressed support liberalization (HS 16.04) as long as other inputs will be included in EVSL such as packaging materials which are inputs to the industry
1604.13 00	-- Sardines, sardinella and brisling or sprats	20	20	15	10	10	7	5	5	Fish canning manufacturers expressed support liberalization (HS 16.04) as long as other inputs will be included in EVSL such as packaging materials which are inputs to the industry
1604.14 00	-- Tunas, skipjack and bonito (Sarda spp.)	20	20	15	10	10	7	5	5	Follow TRP Schedule
1604.15 00	-- Mackerel	20	20	15	10	10	7	5	5	Follow TRP Schedule
1604.16 00	-- Anchovies	20	15	15	10	10	7	5	5	Follow TRP Schedule
1604.19 00	-- Other	20	20	15	10	10	7	5	5	Follow TRP Schedule
1604.20 00	- Other prepared or preserved fish	20	20	15	10	10	7	5	5	Follow TRP Schedule
1604.30 00	- Caviar and caviar substitutes	20	15	15	10	10	7	5	5	Follow TRP Schedule
16.05	Crustaceans, molluscs and other aquatic invertebrates, prepared or preserved.									
1605.10 00	- Crab	20	15	15	10	10	7	5	5	Follow TRP Schedule
1605.20 00	- Shrimps and prawns	20	15	15	10	10	7	5	5	Follow TRP Schedule
1605.30 00	- Lobster	20	15	15	10	10	7	5	5	Follow TRP Schedule
1605.40 00	- Other crustaceans	20	15	15	10	10	7	5	5	Follow TRP Schedule
1605.90 00	- Other	20	15	15	10	10	7	5	5	Follow TRP Schedule
23.01	Flours, meals and pellets, of meat or meat offal, of fish or of crustaceans, molluscs or other aquatic invertebrates, unfit for human consumption; greaves.									
2301.20 00	- Flours, meals and pellets, of fish or of crustaceans, molluscs or other aquatic invertebrates	3	3	3	3	3	3	3	3	BFAR proposed zero rate on this item for the following reasons:  1. not locally produced.

---

										2. fish meal comprises about 40% of the total value of our imports of fish and fish products. This is an ingredient of feeds for aquaculture, poultry and livestock.
23.09	Preparations of a kind used in animal feeding.									
2309.10 00	- Dog or cat food, put up for retail sale	10	10	7	7	7	5	5	5	Exclude from EVSL coverage, this is not a fish product.
2309.90	- Other:									
2309.90 10	--- Feed Additives	3	3	3	3	3	3	3	3	} Exclude from EVSL coverage. There are chemical products used as inputs to feeds manufacture (i.e., all animal feeds).
2309.90 20	--- Premixes	3	3	3	3	3	3	3	3	}
2309.90 30	--- Prawn feeds	3	3	3	3	3	3	3	3	Follow TRP Schedule.
2309.90 90	--- Other	45	45	45	40	35	30	20	20	Sensitive agricultural product - "catch all" tariff line for animal feeds (hog feeds, tilapia feeds, bangus feeds, etc.)

---