

The Evolution of Philippine Fishery Policies and Issues for Developing Export Markets Under a Global Trading Environment

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1. Introduction

In the realm of international trade in agricultural commodities, the Philippines has now turned into a net food importer. Such is the case with the major items as cereals, livestock meat and dairy products. The Fishery may be the remaining sector in agriculture where positive net exports can be sustained. In a globalized trade environment, however, export potentials do not necessarily translate to the development of the same from within, and to market access from without. While the rules on market access as defined by the country's multilateral and bilateral agreements are important, this paper focuses on the policy environment within.

1.1 Objective

This paper attempts to review the main aspects of the evolution of the policy environment in the last two decades, examine the character of the export performance of the Fishery sector, and identify major domains of policy to strengthen the export potentials in response to the more and more stringent demands on gaining market access in the international arena. The paper restricts itself to the existing literature on policies impacting on Philippine fishery production and trade, and on secondary data on the trends and character of the fishery industry output, imports and exports.

1.2 Issues

Resource endowments are one of the major determinants of the patterns of trade. In this regard, with the international recognition of its 200-mile Exclusive Economic Zone (EEZ), the endowments of the Philippine archipelago must be conceded as relatively vast. When a resource becomes depleted, however, the matter of export potential is naturally ruled out. While severe resource depletion in Philippine municipal waters is now well documented, there still are other fishery resources that can be properly managed for output and export expansion. Two sets of policy domains are forwarded as influencing the behavior of fishery exports: macro level and sector-specific policies. At the macro level, deemed important are the exchange rate and interest rate policies.

At the fishery sector level, trade policies (tariff and non-tariff) that distort relative prices are deemed to matter. There are, likewise, fishery-specific regulations that enhance or inhibit the exploitation of the fishery resources.

There are three broad sectors of the Philippine fishery industry - the Municipal, Commercial, and Aquaculture fisheries. These sectors are confronted with different sets of opportunities and constraints, responding differentially to changes in the policy environment.

Over the years, the output of the Municipal fisheries continued to decline from resource depletion in spite of the numerous laws restricting the entry of Commercial fishing on the coastal waters. This is a testimony to the ineffectiveness of the fishery laws and regulations to avert the undesired outcomes.

The continued encroachment of commercial fishers on the Municipal waters and their failure to exploit the vast territorial waters covered by the EEZ reveal that there are distortions in the set of incentives the commercial fishers faced in the last two decades. This is a matter important as the performance of marine exports is more closely linked with the Commercial rather than with the Municipal fishery sector.

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The potentials of the Aquaculture sector are of great interest as the performance of the industry is subject to greater control. Nonetheless, it is important that policy is attuned to the imperatives for making the sector competitive in price and product quality, not only for a global market that is growing, but also one that is becoming more discriminating. For the Municipal fishers, is there a room for small fishermen to participate in the market for fishery exports? While it is currently difficult to associate international trade with Municipal fishery activities, there is nothing that predestines local level activities to the domestic market. There are, however, two preconditions for participation of the Municipal fisheries in the export market: a) the reversal of the slide of the Municipal fisheries to depletion; and b) the evolution of institutions that will permit access technology, capital, and markets.

2. THE PHILIPPINE FISHERY SECTOR

2.1 Resource Endowments

2.1.1 Marine and Inland Waters

The Philippine archipelago is endowed with a relatively vast Marine area within its Exclusive Economic Zone (EEZ), 19.3 million km² in Oceanic waters and 2.7 million km² considered within Coastal waters. The archipelago has a total coastline spanning 17,460 kilometers. The Philippines, in addition, has some 750,000 hectares of Inland waters. Of these, Fishponds cover about 254,000 has (34%); Swamplands, 246,000 has (33%); Lakes, 200,000 has (27%); and Rivers and Reservoirs completing the rest (6%) (DA-BFAR, 2001).

2.1.2 Human Resources

As of the 1990 census, there were about 807,000 workers directly employed in the Fishery sector. About 46 percent (374,400) were in the Municipal fisheries, 44 percent in the Commercial sector (358,000), and nine (9) percent in Aquaculture (74,500). Employment in the Fishery constituted about 12 percent of employment in the whole of Agriculture.

2.2 Significance in the Agricultural Economy

2.2.1 Domestic Output

In 2000, gross value-added (GVA) in the Fisheries constituted about 19 percent of Agriculture GDP. From its position as second largest major contributor to the agricultural economy (behind Crops) in the 1980's, the Fishery is has now been overtaken by the more dynamic Livestock and Poultry industry by the second half of the 1990's. The evolution of the contribution of the Fishery relative to the other major sectors in agriculture is shown in *Figure 1*.

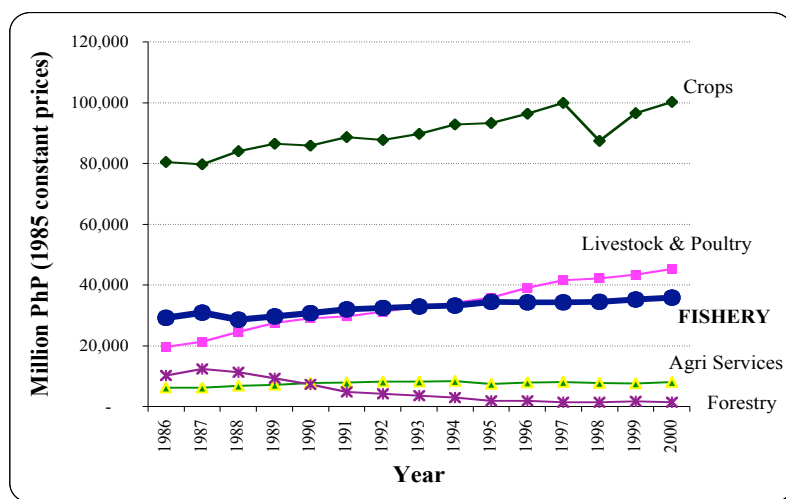


Fig. 1. Gross value added in agriculture, fishery, and forestry, 1986-2000, at constant 1985 prices.

2.3 Municipal, Commercial and Aquaculture Fisheries Output

In the last five years, the volume of fishery output had remained quite stagnant. There are, however, differential growth performances in the three major sub sectors in Fishery. The Municipal fisheries reached it peak in 1991, and from then on, a pattern of descent is noticed (Figure 2). On the other hand, both the Commercial and Aquaculture fisheries had shown a rather rapid growth from 1980-1995. Growth, however, had decelerated in the last years. In particular, the rate of output growth in Aquaculture fisheries was quite phenomenal. In 1980, its share to total output was the smallest (18%). By 1996, it had already surpassed the output of the two others.

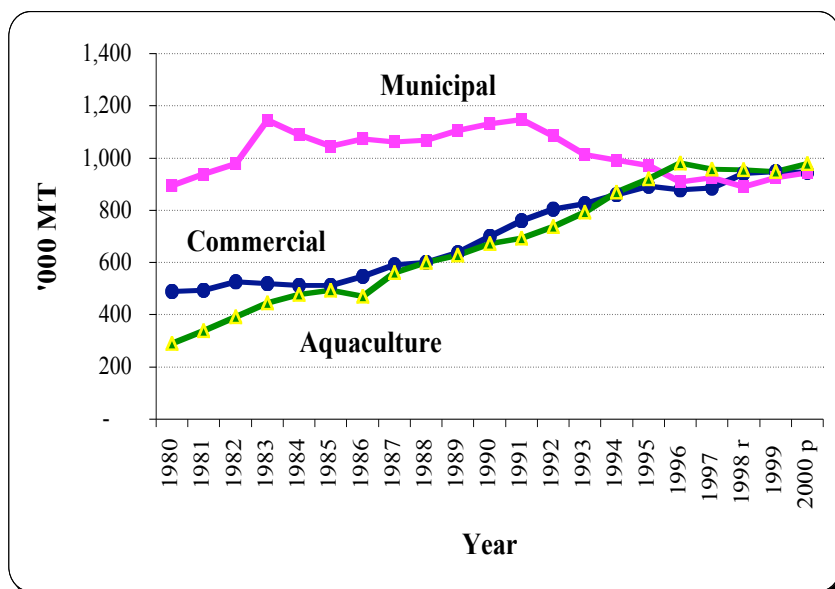


Fig. 2. Volume of output from Municipal, Commercial and Aquaculture Fisheries, 1980-2000

The decline of the Municipal fisheries is associated with the degradation of the coastal resources, notwithstanding the laws prohibiting commercial encroachment and the use of illegal fishing methods. Unless the descent to resource depletion is immediately reversed, the Coastal fishery resource base does not stand on firm ground as source of comparative advantage in fishing production and trade.

The Commercial and Aquaculture fisheries appear to still have room for expansion in output. The export potentials, however, depend on the existence of competitive advantage, and the ability to capture market niches in the global trade in fish and fish products.

2.3.1 Contribution to Exports

Export products from the Fisheries are classified as Non-traditional exports. Coconut products had historically and consistently dominated agricultural exports in terms of export revenue. Since 1995, however, Coconut products had been on the decline. On the other hand, the Non-traditional exports of Fish and Fish Products, as well as Banana had supplanted the Traditional exports of Fruits and Vegetables, and Sugar. Fisheries now ranks second to Coconut Products in share of agricultural export revenue, contributing about 19 percent of the whole. Among the Non-traditional agricultural exports, the contribution from the Fisheries was largest at 41 percent.

In the major food groups, such as Cereals, Livestock Meat and Dairy, the Philippines has now become a net food importer. The Fishery is one of the remaining areas where the Philippines still generates significant net export revenue.

3. EVOLUTION OF THE POLICY FRAMEWORK FOR FISHERIES ACTIVITY AND TRADE, 1980-2000

3.1 Macroeconomic Reforms

From the 1970's up to 1984, the Philippines adopted a fixed exchange rate policy vis-à-vis the U.S. dollar. External shocks between 1979-83 compounded the impact of policy imbalances. With the stagnation of exports

and widening deficits, the exchange rate was sustained only by resort to foreign borrowing –reflected in the doubling of the Philippine’s foreign debt to 75 percent of GNP from 1975 to 1983 (Houben, 1997).

With a severely depleted foreign exchange reserves position, two successive major devaluations were enacted between 1983-84. The measures above, however, failing to produce the desired results in a deepening economic crisis, an exchange rate was put into a float. Under an officially declared flexible exchange rate policy at the end of 1984, from an official exchange rate of PhP18.57/US dollar in the first quarter of 1985, the Philippine currency was allowed to gradually depreciate, reaching PhP49.25/US dollar by the 4th quarter of 2000.

3.2 Trade Reforms, 1981-2000.

3.2.1 The 1980’s.

Trade liberalization and tariff reform in the 1980s had its roots in two major trade reform programs in 1981: the Import Liberalization Program (ILP), and the First Tariff Reform Program (TRP-I). The ILP intended to phase down regulations and quantitative restrictions to trade. The TRP, on the other hand, intended to reduce tariff rates on imports and narrow down the range of tariffs, to provide a relatively more equitable treatment among sectors. The ILP and TRP-I, however, were derailed when the Philippine economy was hit by a severe and prolonged recession in 1983-85, then revived with the ascension of the Aquino administration with the overthrow of the Marcos regime in the “People Power Revolt” of 1986.

3.2.2 Trade Reform in the Early 1990s.

Trade reforms in the first half of the 1990s were essentially a continuation of the pursuit of directions initiated by the ILP and TRP-I. In 1991, the Second Tariff Reform Program (TRP-II) was launched. This aimed to further lower the tariff rates on imports, and simplify the tariff structure into a four-tier scheme, with the respective rates of 3%, 10%, 20%, and 30%. In 1994 the Third Tariff Reform Program (TRP-III) was issued to further scale down and simplify the tariff structure. Among others, it sought to lower tariffs on “non-sensitive” agricultural products.

3.2.3 Multi-lateral Trade Agreements in the 1990’s.

There were two multi-lateral trade agreements that the Philippines entered into in the 1990’s - the ASEAN Free Trade Area (AFTA) Agreement of 1992, and the WTO Agreement on Agriculture in 1995. In the AFTA Agreement, Fishery items are covered in the implementation of scaling down of tariffs up to 2003 along the Agreement on the Common Effective Preferential Tariff (CEPT) Scheme.

The WTO Agreement, required opening up the agricultural sector by the removal of quantitative restrictions (QRs) on imports and allowing for the agreed-upon levels of “minimum access volumes” (MAV) for imports of previously protected sectors. In exchange, the country was allowed to impose high bound tariffs for out-quota imports. Fish and Fish Products do not fall under the WTO Agreement on Agriculture (Salayo, 2000). Fishery, however, is covered by the general rules on the GATT, specifically in Article XI of GATT 1994 which bans the use of quantitative import restrictions

3.3 Institutional Reforms, 1987-98.

There are four (4) major pieces of legislation affecting the institutional framework of Fishery activities, spanning the period 1987-98. These are the Comprehensive Agrarian Reform Law (CARL) of 1987 (RA 6657); The Local Government Code (LGC) of 1991 (RA 7160); the Agriculture and Fisheries Modernization Act (AFMA) 1997 (RA 8435); and the Philippine Fisheries Code (PFC) of 1998 (RA 8550).

The CARL of 1987 had particular provisions that have impact on Aquaculture. Although the provision for a 5-hectare retention limit to land ownership was waived on fishponds and other aquaculture activities (Gonzales et al., 1998), this constitutes an exception to the general rule on retention limits. There are transaction costs attending to the application of the exception in the course of business activities in aquaculture.

The Local Government Code of 1991 incorporated a particular provision extending the limits of the Municipal waters to 15 miles from the shoreline (from the 7-mile limit provided for in the 1975 Fisheries Code). This meant that commercial fishing became legally excluded from the new 15-mile limit. At the same time, the Code devolved a significant portion of the functions of the national agencies, such as the Department of Agriculture – Bureau of Fisheries and Aquatic Resources (DA-BFAR) to the Municipal Governments, to the Local

Governments, for example, in matters pertaining to the management, development, exploitation and protection of the fisheries and aquatic resources.

The AFMA of 1997 and the Fisheries Code of 1998 are closely related. The AFMA prescribes the urgent measures the government shall undertake, the incentives to provide, for agriculture and fisheries to modernize, become efficient and competitive amidst a globalizing and liberalizing trade environment.

The Philippine Fisheries Code of 1998 is considered a landmark Act for the Fisheries, consolidating all fisheries laws. It was a Act explicitly providing for the “development, management, and conservation of the fisheries and aquatic resources, integrating all pertinent laws thereto...” (RA 8550). On the stance to fisheries trade, the 1998 Code is significant in that although food security was an overriding concern in Chapter 1, Section 2, the Declaration of Policy the same section provides that:

“2a. ...A flexible policy towards the attainment of food security shall be adopted in response to changes demographic trends for fish, emerging trends in trade of fish and other aquatic products in domestic and international markets, and the law of supply and demand”; and

“2c. To ensure rational and sustainable development, management and conservation of fishery and aquatic resources in the Philippine waters including the EEZ and in the adjacent high seas, ...”

The 1998 Code also provides for specific incentives as well as restrictions to fishery production and trade activities.

3.4 Fishery-Specific Programs and Policies, 1980-2000¹

The content and thrust of Fishery programs would be from the elements of various local and foreign-assisted programs for the fisheries in the 1980s and the 1990s. On the other hand, the content and tenor of Fisheries policies could be distilled from the various Fishery Administrative Orders (FAOs) of the DA-BFAR on matters relating to the exploitation of fishery resources, and in the export and importation of fish and fish products. The relevant FAOs relating to trade in the Fisheries are provided in *Appendix Tables 1-3*.

1980-1986: Exploitation of the Fisheries

The period up to 1986 could be characterized by the existence of two major Fishery Programs for small fishermen which provided for supervised credit schemes for the purchase of motorized boats and fishing equipment. Price controls on diesel fuel (the “poor man’s fuel”) were also in effect.

In the realm of international trade, import and export permits were required. Export and import bans on particular fish species were imposed (see Appendix Table 1.). This was consistent with the general description of a trade regime which had rigid import and export controls.

1986-1992: Steering Away from Supervised Credit Programs

In this period, the supervised credit programs for the Fishery established in the previous regime were discontinued. The export taxes were also removed by 1986. With the passage of the Omnibus Investment Code of 1987, the set of incentives for pioneering investments provided by the Board of Investments (BOI) became available also to Commercial Fisheries and Aquaculture ventures. The incentives included, among others, interest rate subsidies on equipment, tax exemptions on diesel fuel and in inorganic fertilizer (Gonzales, et al., 1998).

Although it was during this period that the Import Liberalization Program (ILP) and the Tariff Reform Program (TRP-I; TRP-II) were resumed, an export ban on mollusks was placed (see Appendix Table 2). An import ban on tuna from Mexico and Venezuela were also imposed.

1992-1998/2000: Training Sights on the Country’s EEZ

¹ This section draws heavily from Costales (2002), “Macroeconomic, Agricultural Trade and Fisheries Policies in the Philippines, 1981-2000.” Study on Strategies and Options for Increasing and Sustaining Fisheries and Aquaculture Production to Benefit Poor Households in Asia (ICLARM).

In this period, poverty in the coastal areas and the rehabilitation of the degraded Municipal Fisheries had become major concerns. With the Coastal waters close to depletion, the high seas within the country's EEZ became the logical frontier for commercial fishing. Incentive schemes were devised in the 1998 Fisheries Code for commercial fishing in the high seas.

On the trade side, a more serious consideration was placed on the export market for fish. The more stringent quality requirements for the exportable fish became explicitly recognized. The HACCP Standards for food safety were now being encouraged to be adopted by fish exporters (see Appendix Table 3).

In the summary, the evolution of Fisheries policies revealed a gradual movement from subsidized exploitation of the Municipal fisheries to a more conservational approach; from focus on the Municipal fishery resources to the potentials of the entire EEZ; and from an early regime of the import and export regulations on fish to gradual liberalization of trade in fish and fish products.

4. FISHERIES TRADE PERFORMANCE, 1980-2000

4.1 Volume of trade

The volume of exports and imports of fish and fish products, in metric tons (MT), is presented in *Figure 3*. The downturns in the volume of imports almost exactly correspond to the periods of economic recession in 1983-85, 1990-91, and the Financial Crisis of 1997-98.

For exports, the low volume levels in the early years of 1980-1984, extending to 1985 correspond to the period of a fixed exchange rate regime, coupled by tight foreign exchange and export and import controls, and export taxes in the Marcos era.

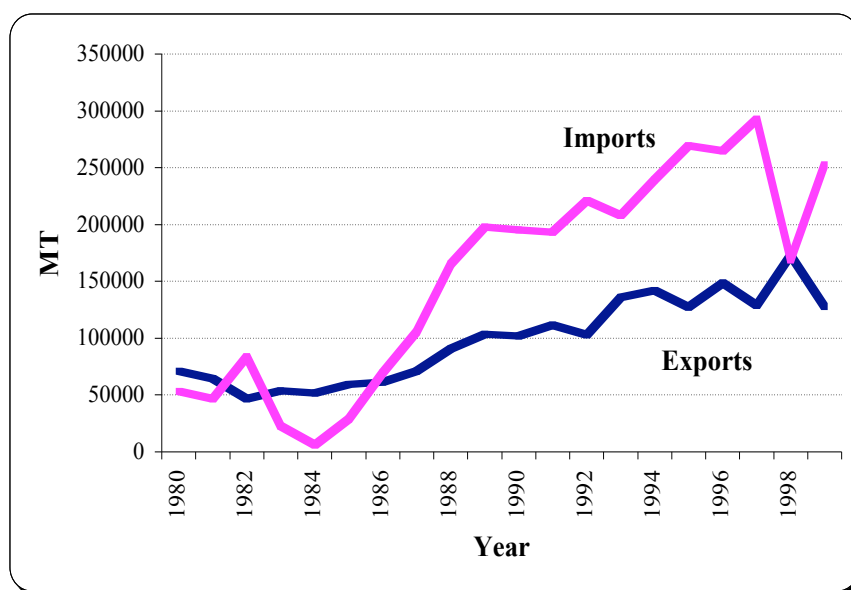


Fig. 3. Volume of exports and imports of fish and fish products, 1980-1999.

Starting 1996, the volume of exports began to expand, steadily and consistently until 1994. Over the same period, extending to 1997, the volume of imports quadrupled.

4.2 Value of Exports and Imports

The behavior of the value of fishery exports and imports from 1980-1999 is shown on *Figure 4*. The value of exports is consistently and significantly higher than that of imports, suggesting that the Philippines was exporting high-value fish and fish products while importing low-value fish and fish products.

The early years of 1980-85 also marked a period of very low levels of import and export values. The period of rapid growth in export value spanned 1985-94, while that of imports was 1985-1997. At this peak in 1994, net export revenue reached US\$425 million.

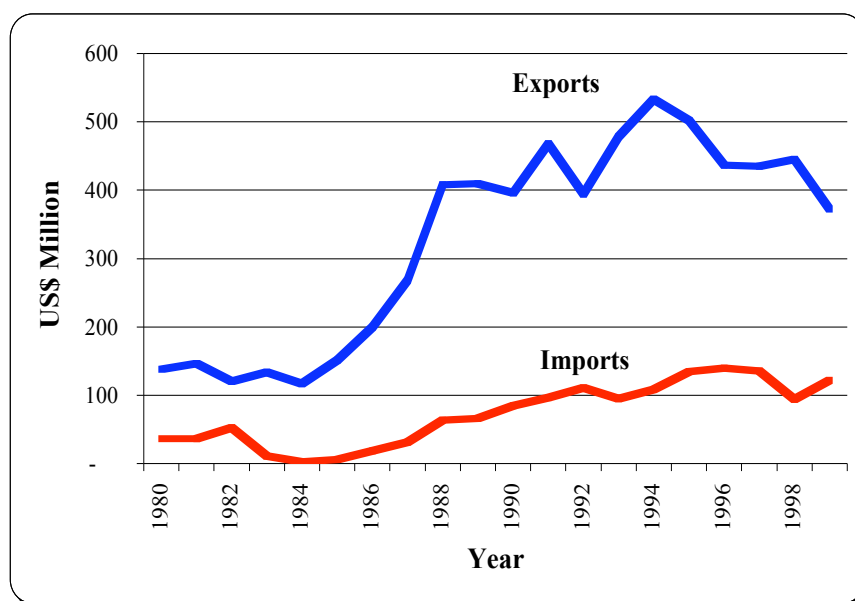


Fig. 4. Value of exports and imports of fish and fish products, 1980-1999.

4.3 The Structure of Fishery Exports

For the year 2000, the distribution of value of exports in million US dollars is given in *Table 1*. Under the DA-BFAR classification of Fishery exports, the major items generating export revenue are readily identifiable as Crustaceans, Tuna, and Seaweeds/Carrageenan. Crustaceans, the top export revenue earner (39%) consists mainly of Shrimp and Prawn, fresh/chilled or frozen. Tuna (30%) comes in two forms: fresh/chilled, frozen; or processed (canned).

Seaweed and Carrageenan is a newcomer in the Fishery export scene. The commodity, however, does not enter in the standard FAO system of commodity classification for the Fisheries.

Table 1. Value of fishery exports, by major classifications, 2000.

COMMODITY	Value (US\$ M)	Share (%)
Crustaceans	168.14	38.7
Tuna	128.31	29.6
Seaweeds/Carageenan	85.12	19.6
Mollusks	32.22	7.4
Other Fish	20.36	4.7
TOTAL	434.15	100.0

Source: DA-BFAR, 2001.

Table 2 presents the average annual value of Fishery exports in the last five years covering the period 1995-99, using the 7-commodity FAO system of classification of Fish and Fish products. Of the seven commodity types, only three figure prominently as Philippine exports. These were: Crustaceans and Mollusks - fresh, chilled, frozen, dried or smoked (49%); Fish Products and Preparations (29%); and Fish - fresh, chilled or frozen (20%). The dominance of Crustaceans is still reflected but the importance of Tuna is more or less masked. The structure of Fishery exports indicates is that Philippine exports are limited to a rather narrow range of high-value items. Export revenue will crucially depend on the market conditions of these commodity groups.

Table 2. Structure of fishery exports, by average annual value, by major classification, 1996-99.

COMMODITY CLASSIFICATION	Value, Average, 1996-99 ('000 US\$)	Share (%)
Fish: fresh, chilled or frozen	83,435	19.8
Fish: dried, smoked, salted	3,114	0.7
Crustaceans & Mollusks: fresh, chilled, frozen, dried, smoked)	208,314	49.3
Fish: Prod.&Prep.	121,010	28.7
Crustaceans &Mollusks: Prod.&Prep.	6,334	1.5
Oils&Fats	15	0.0
Meals, Feeds	59	0.0
TOTAL	422,281	100.0

Source: FAO, 2001.

It could be asked whether the structure of Philippine Fishery exports had always consisted of the three dominant commodity classes. In *Figure 5* the dominant position of the three commodity groups as a whole had been maintained over the last two decades. There had, however, been changes in the respective shares in export revenue. In the early period 1980-84, the shares were relatively balanced. Over the next 10 years (1985-94), Crustaceans and Mollusks became extremely dominant, accounting for about 60 percent of total Fishery export revenue. At the same time, these years marked the steep decline in the relative share of Fresh, Chilled and Frozen Fish to only about 10 percent of export revenue.

The last period (1994-99) depicts the decline in the relative position of Crustaceans and Mollusks, and the significant recovery of Fresh, Chilled and Frozen Fish. Through two decades, one notices the relatively stable position of Fish Products and Preparations.

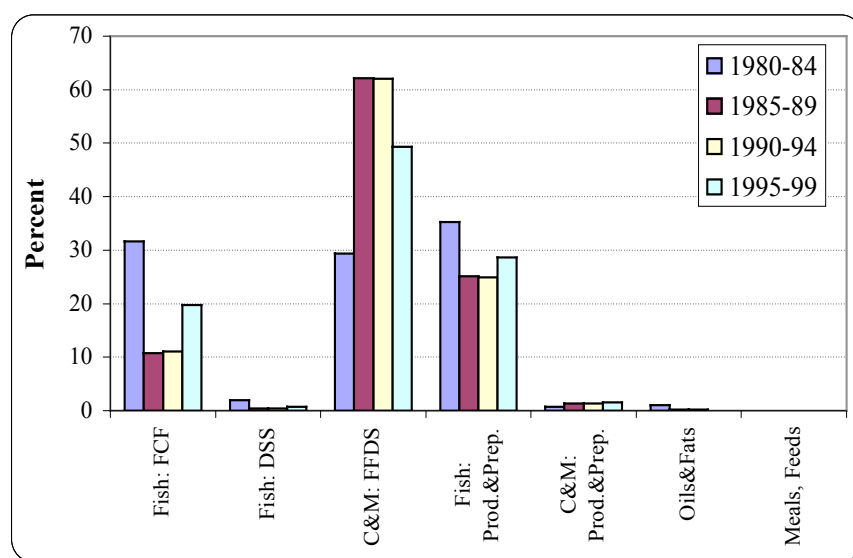


Fig. 5. Shares in value of fishery exports, by commodity class, 5-yr averages, 1980-1999.

4.4 The Structure of Fishery Imports, 1980-1999

The structure of Philippine Fishery imports in the last five years, 1994-99, by FAO commodity classification is shown on *Table 3*. Of the seven commodity classes, Philippine imports are practically on only two items: Fish - fresh, chilled or frozen (56%); and Meals and Feeds (39%)

What the above reveals is that the Philippines also imports fresh, chilled or frozen fish. These are mainly inputs to the tuna canning industry. The country has a significant domestic and export market for canned tuna as well as fish products and preparations.

Table 3. Structure of fishery imports, by annual average value, by commodity class, 1996-99.

COMMODITY CLASSIFICATION	VALUE	
	Annual Average 1996-99 ('000 US\$)	SHARE (%)
Fish: fresh, chilled or frozen	87,482	56.0
Fish: dried, smoked, salted	292	0.2
Crustaceans & Mollusks: fresh, chilled, frozen, dried, smoked)	4,368	2.8
Fish: Prod.&Prep.	1,506	1.0
Crustaceans & Mollusks: Prod.&Prep.	1,548	1.0
Oils&Fats	705	0.5
Meals, Feeds	60,375	38.6
TOTAL	156,275	100.0

Source: FAO, 2001.

The other significant import commodity is Fish Meal and Feeds. With the rapidly expanding Livestock sector and growing Aquaculture industry, the importation of significant volumes of Meals and Feeds from Fish could be readily understood.

The structure of Philippine Fishery imports had relatively been the same, except in the early years of 1980-84. In *Figure 6* is shown the shares in import value of the major commodity classifications of fish, evaluated at 5-year averages from 1980-1999. In the early years of fixed exchange rates prior to the recession period, the imports of Fish Products and Preparations occupied the most dominant position, covering 66 percent of total Fishery value of imports.

In the subsequent years, this class of imports almost dropped out and never recovered, and only two classes of Fishery imports remained.

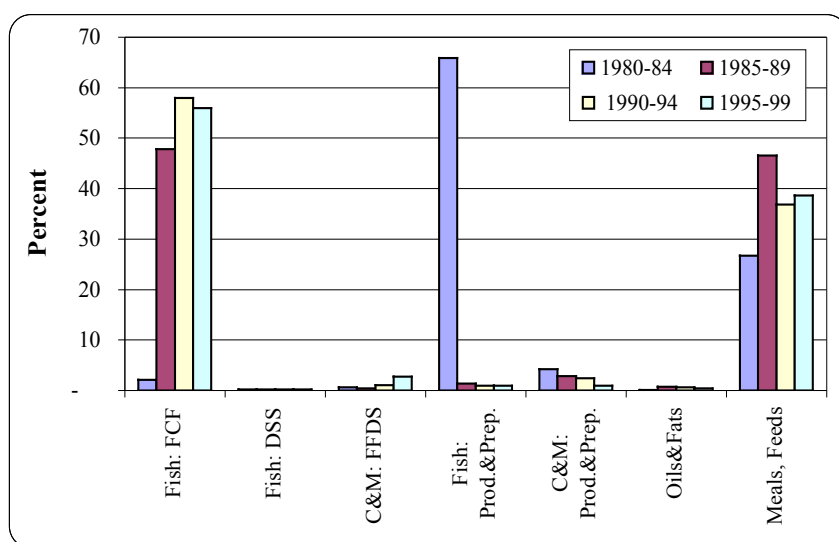


Fig. 6. Shares in value of fishery imports, by commodity class, 5-yr averages, 1980-1999.

4.5 Trends in Fishery Exports, 1980-1999

4.5.1 Crustaceans and Mollusks: Fresh, Chilled, Frozen, Salted.

As the top Fishery export revenue earner, Crustaceans and Mollusks consist largely of fresh, chilled or frozen Shrimp and Prawn. In *Figure 7* is shown the trends in volume and unit value of exports of Crustaceans and Mollusks, from 1980-1999. In volume terms, the first decade marked the rapid and sustained expansion in output, witnessing almost a 9-fold increase in output from 1980 to 1991. From 1991, onwards, however, the volume of exports began to gradually decline along trend.

For unit value of exports, the year covering 1984-1988 was a period of continuously increasing unit value. From 1989 onwards, however, a general decline in unit values could be observed.

The years of decline in export volume, compounded by falling unit values, had a telling effect on export revenue from Crustaceans and Mollusks from 1991-1999. As these were the top Fishery export earners, one would expect adverse effects on the overall Fishery export revenue.

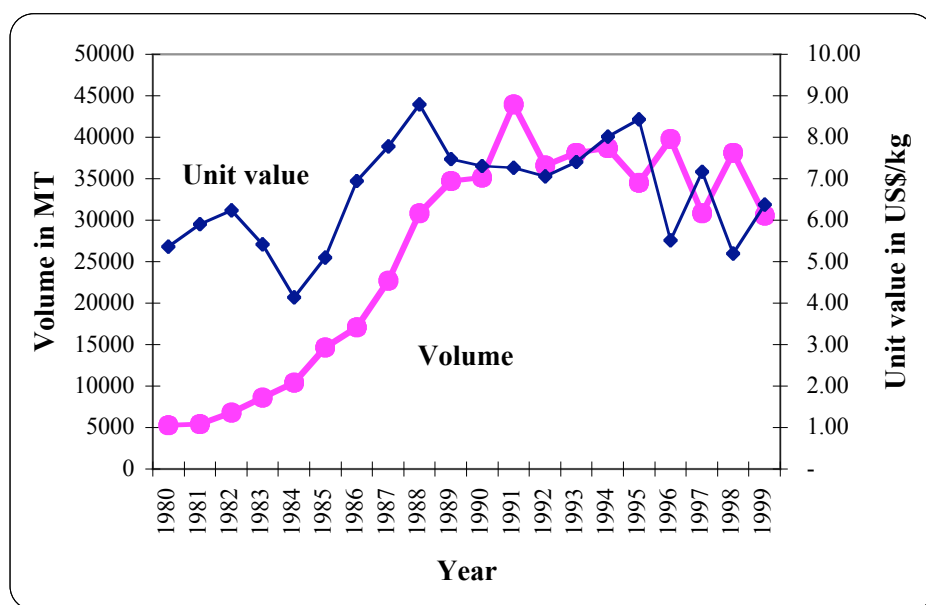


Fig. 7. Trends in volume and unit value of exports of Crustaceans and Mollusks, 1980-1999.

4.5.2 Fish Products and Preparations.

Figure 8 shows the behavior of trends in volume and unit value of exports of Fish Products and Preparations. This category mainly consists of manufactured (canned) tuna, where manufacturing grade tuna can either be domestically produced or imported. In terms of volume of exports, one notes a rather long period of general expansion in the sector, spanning the years 1980-1996. The slide in output starting 1997 coincides with the Asian Financial Crisis of 1987-98.

In terms of unit value, one also notes that unit values for Fish Products and Preparations were in a general decline along trend, then stabilizing in the decade of the 1990s, fluctuating about US\$2/kg.

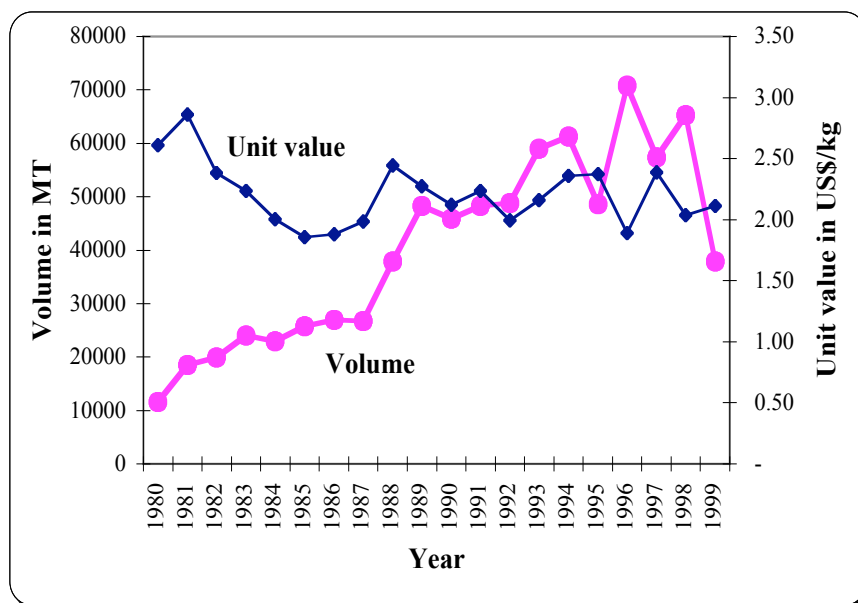


Fig. 8. Trends in volume and unit value of exports of Fish Products and Preparations, 1980-1999.

4.5.3 Fresh, Chilled and Frozen Fish.

The behavior of volume and unit value of exports of Fresh, Chilled and Frozen Fish over two decades is shown in *Figure 9*. This category consists mainly of fresh, chilled, or frozen Tuna. In general, unit values of exports were increasing along trend from 1980-1997, indicating an attractive international market for this class of Fishery export. The volume of exports, however, stagnated for over a decade from 1982-92. Although the export taxes were already removed by 1986, and the process of trade liberalization was started, the response from this sector was rather slow. It was only in 1993 that this sector began to recover, reaching a new peak of 66,700 MT by 1998.

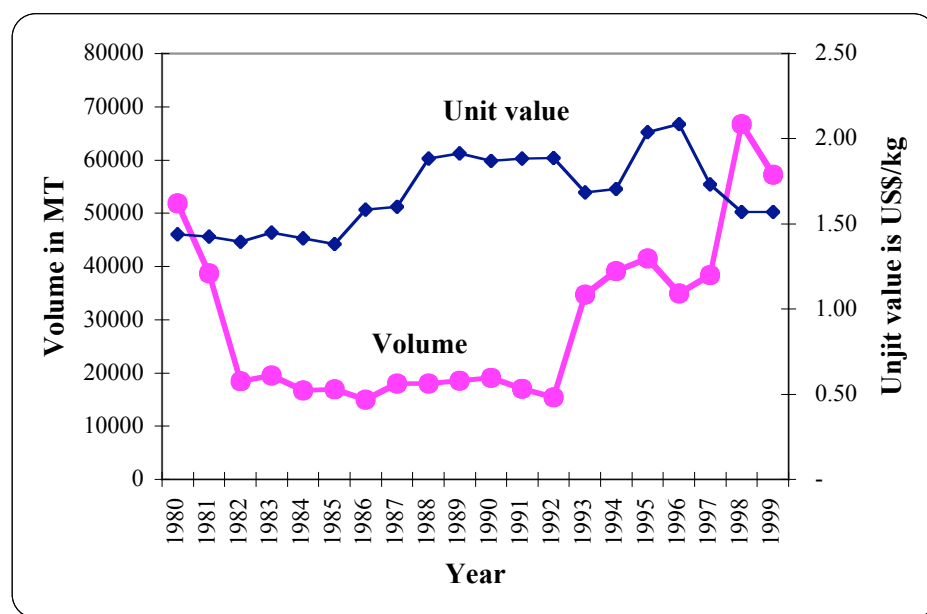


Fig. 9. Trends in volume and unit value of exports of Fresh, Chilled and Frozen Fish, 1980-1999.

4.6 Trends in Fishery Imports, 1980-1999

There are only two major categories of Fishery commodities that are significant on the importation side: a) Fresh, Chilled, Frozen Fish; and b) Fish Meals and Feedstuff. In *Figure 10* is shown the behavior of the volume of imports for the two major classes. For both, the first years covering 1980-85 was a period of very low levels of imports. This coincides with the period where quantitative import restrictions were still in place.

For both, the period of rapid growth started in 1986. Fresh, Chilled and Frozen Fish reached its peak in

1996, while imports of Meals and Feedstuff reached its own a year earlier in 1995. The Financial Crisis of 1997-98 had an adverse impact on both Fish import categories, but with a stronger one on the Meals and Feedstuff.

It should be noted that the importation of Fresh, Chilled and Frozen Fish is linked to the demands of the Fish Canning industry which has both domestic and export markets. Importation of Fish Meal and Feedstuff, on the other hand, is linked to the domestic Livestock industry, and to some extent, the Aquaculture industry.

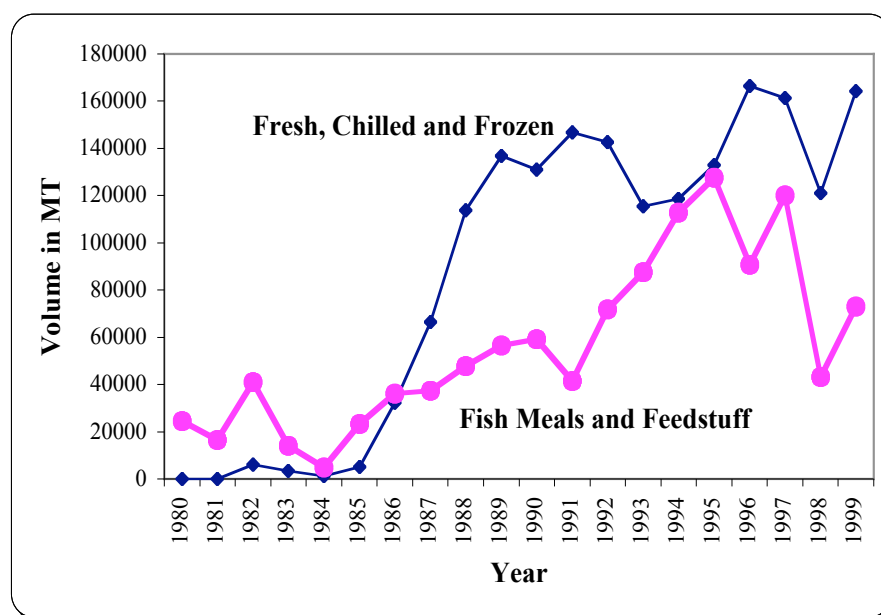


Fig. 10. Volume of imports of Fresh, Chilled and Frozen Fish, and of Fish Meals and Feedstuff, 1980-1999.

5. THE MACROECONOMIC AND TRADE POLICIES UNDERLYING FISHERIES TRADE PERFORMANCE

5.1 Macroeconomic Policies

5.1.1 The Real Exchange Rate

While indeed the periods of a fixed exchange rate regime (1980-84) and floating exchange rate regime (1985-onwards) are readily identified, it matters also whether over the period of floating exchange rates, the series of depreciations of local currency were sufficient to remove the distortions of an overvalued exchange rate. The judgment is made by comparing the official exchange rate (OER) with the estimates of the shadow exchange rate (SER) over time.

Alviola (1997), obtained estimates of the SER from 1981-1994. These estimates are summarized and presented in *Table 4*. In the table is presented the OER, SER, and rates of overvaluation of the local currency vis-à-vis the US dollar in three period segments. During the regime of fixed exchange rates, the overvaluation averaged at a high of 31 percent. Over this period, one can thus surmise the magnitude of the penalty imposed on exporters of the three major categories of Fish exports.

The rate of overvaluation declined substantially to an average of 18.5 percent in the next period, 1985-1990, and again slightly to 17.4 percent over the next period.

Table 4. Official and Real Exchange Rates of the Philippine Peso, 1981-1994.
(In In US\$/Ph peso)

PERIOD	Official Exchange Rate	Real Exchange Rate	Peso Overvaluation (%)
1981-84	0.098	0.075	30.9
1986-90	0.048	0.040	18.5
1991-94	0.037	0.032	17.4

Source: Alviola, 1997.

For the period 1995-2000, there are no new estimates found in the literature. Available, however, are the nominal (NEER) and real (REER) effective exchange rate indices provided by the Central Bank. The REER represents the appreciation or depreciation of the Philippine peso over the currencies of its major trading partners.

Using 1987 as the base year, the NEER and REER indices are shown on *Figure 11* for the years 1987-2001. It can be observed that even as the Philippine currency depreciated in nominal terms, the years covering 1987-1997 was a period of a real appreciation of the local currency.

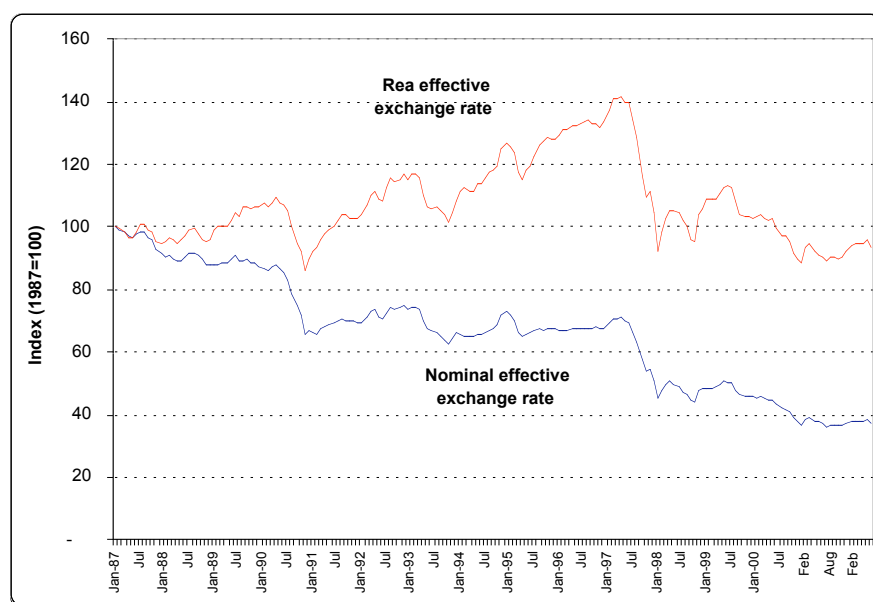


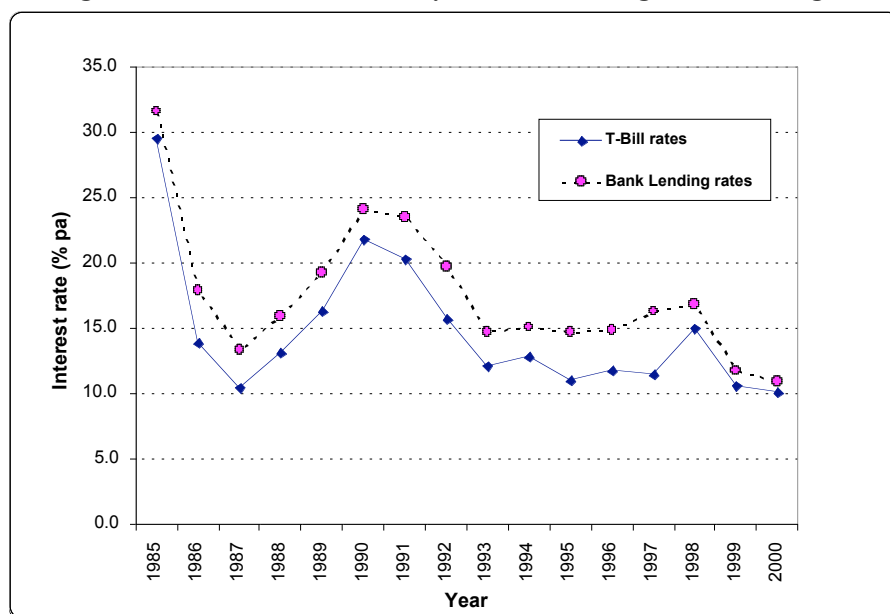
Fig. 11. Nominal and real effective exchange rates, Philippines, 1987-2002.

The plunge in both the NEER and REER after 1997 coincides with the series of devaluation of the peso when the Asian Financial Crisis hit on July 1997. It could also be observed that the magnitudes of the nominal depreciation were large enough to bring the REER back to its base level in 1987.

5.1.2 Interest Rates

The Central Bank sets the tone for interest rates on loans and deposits by the rate it sets for its 91-day Treasury Bills (T-Bills). In *Figure 12* is shown the behavior of interest rates on 91-day T-Bills on an annual average basis, from 1985-2000. One can readily bisect the series into two periods. The first period covering 1985-1992 depicts a period of financial instability with relatively high interest rates. In five of the eight years, lending rates were between 19-32 percent per annum.

Fig. 12. Interest rates on Treasury Bills and Lending, annual averages, 1985-2000.



For the second period spanning 1993-2000, the T-Bill rates had generally come down somewhere between 10-13 percent per annum. Lending rates also went down between 11-15 percent per annum. In general, it is asserted for about a decade up to 1992, investors in the Fisheries for the export market had to come to terms with the extremely high cost of money.

5.2 The Evolution of Fisheries Tariff Policy

The evolution of tariff policy in the Fisheries has to be viewed within the overall context of the Philippines' Import Liberalization Program (ILP) and the Tariff Reform Programs. The schedule of tariffs on Fish and Fish Products from 1985-2000 is shown in *Table 5*. The extension to 2001-2005 is also included.

There are "Seasonal" tariffs for major Fish items, in fresh, chilled or frozen form. The higher tariffs are imposed during the "regular season" covering March-to-July. The tariffs are lowered significantly in the "lean" months covering August-to-February.

Over the years, there were discernible shifts in tariff policy. The first period, 1985-92, would more or less be covered under TRP-I. The regular season tariff ranges are between 20-30 percent for Fresh, Chilled or Frozen Fish and Crustaceans. These rates were comparable to those "Non-sensitive" agricultural products. During the "Lean season," tariffs fall to low 10 percent, providing an opportunity for local fish processors (canning) to have access to raw materials. Primary processed Fish (smoked, salted, Dried), however, were slapped a relatively high tariff at 50 percent.

The Second period (1993-97) depicts a reversion to a more protectionist regime, as tariff barriers were heightened for certain Fish items. In particular, regular season tariffs were raised for Tuna (40-50%); for Fillets of Fish (40-50%); and Smoked Fish (60-80%).

The Third period (1998-199) marked a substantial lowering of tariff barriers, with regular season tariffs now ranging between 10-20 percent. "Lean season" tariff went down to just three (3) percent. The further decline in tariffs extends up to 2005.

While a movement towards lower tariffs could be discerned over the entire period 1985-2000, there is a class of Fishery commodities that were imposed very high tariffs all throughout – that on Feed preparations for fish and animals. For the period 1993-97, tariffs were raised to up 50 percent. Even for the period 2000-2005, tariff are still high at 20-40 percent.

At the same time, however, there is a class of feeds that is given preferential entry – that of Feeds for Prawns with relatively low tariffs of 20 percent for the period 1985-1997, then down to 3 percent from 1998-2005. The tariff differential on Prawn feeds relative to feeds for other fish imposes a large penalty on raising Tilapia and Milkfish relative to that of Crustaceans. One notes that although Milkfish and Tilapia are the major Aquaculture output in the Philippines, they had not become competitive export products.

**Table 5. Tariff schedules for Fish and Fish Products, 1980-2000; 2001-2005
(in percent)**

HS Code	Product	1985-88	1989-92	1993	1994	1995-97	1998	1999	2000	2001	2002	2003	2004-05
3.02 Fish, fresh or chilled (March to July)							10	10	7	7	7	5	5
	(August to February)*						3	3	3	3	3	3	3
3.02.32	> Yellowfin tuna (March to July)	30	30	50	40	30	10	10	7	5	5	5	5
	(August to February)*	10	10	10	10	10	3	3	3				
	> Milkfish (March to July)	30	30	30	30	30	3	3	3	3	3	3	3
	(August to February)*	10	10	10	10	10							
3.03 Fish, frozen													
3.03.4200	> Yellowfin tuna (March to July)	30	30	30	30	30	10	10	7	5	5	5	5
	(August to February)*	10	10	10	10	10	3	3	3				
	> Milkfish	20	20	20	20	20	20	20	15				
3.04 Fish fillets and other fish meal		20	30	30	30	20	10	10	7	7	7	5	5
3.04.1000	> fresh or chilled (March to July)	20	30	30	30	20	10	10	7	7	7	5	5
	(August to February)*	10	10	50	40	40							
3.04.2000	> Frozen fillets (March to July)	20	30	30	30	30		10	7	7	7	5	5
	(August to February)*	10	10	50	40	40							
3.05 Fish, dried, salted or in brine		50	50	40	35	30	20	20	15	15	10	7	5
	Fish smoked	50	50	80	60	30	20	20	15	15	10	7	5
3.06 Crustaceans, live, fresh, chilled, frozen, dried, salted or in brine													
3.06.1300	> Shrimps and prawns, frozen	20	20	20	20	20	20	20	15	15	10	7	5
3.06.2300	> Shrimps and prawns, not frozen	20	20	20	20	20	20	20	15	15	10	7	5
3.07 Mollusks, oysters, scallops,							20	20	15	10	10	7	5
23.09 Animal feed preparations													
	>prawn feeds	10	10	10	10	10	3	3	3	3	3	3	3
	>others ('catch all' tariff line for animal feeds: hog feeds, bangus feeds, tilapia feeds, etc.)	30	30	50	50	50	45	45	45	40	35	30	20

Source: Philippine Tariff Commission, various years.

* in general, tariff rate from March to July is imposed, but tariff rate is reduced when importation occurs during the lean fishing months of August to February.

**input to canning industry, zero tariff is acceptable beginning 1999

***not locally produced, zero tariff is acceptable as beginning rate

V11. ECONOMIC PROTECTION AND PENALTY IN THE FISHERIES

The trade performance in the Philippine fisheries can be associated with their degree of protection or disprotection over the years. There are two major sources of incentives distortion: the direct and indirect policy interventions. The direct sources pertain to interventions that are sector-or commodity-specific, distorting prices of output and inputs. The indirect factors stem from economy-wide policies such as the exchange rate interventions (Krueger, Schiff and Valdes, 1988).

Using the Krueger-Schiff-Valdes (KSV) approach to measuring nominal rates of protection (NPR), Alviola (1997) obtained estimates of rates of protection on various Philippine Fishery products, decomposed into its direct and indirect components. In *Table 6* are provided the estimates of nominal protection rates for major export items - Chilled Tuna, Chilled Prawn, and Canned Tuna.

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In *Table 6*, for the two fresh/chilled/frozen items, both were directly and indirectly penalized, with the exchange rate overvaluation reinforcing the penalties imposed by direct intervention.

In the case of Canned Tuna, while there were relatively high levels of direct protection ranging from 37-54 percent, these were dampened by the exchange rate overvaluation effects.

Between the disprotected items, the highest penalties were imposed on Chilled Tuna, where total NPRs ranged from -85% in 1981-86 to -70% in 1991-94. The greater magnitude of penalties on the fresh/chilled/frozen Tuna industry than on the Prawn (and Shrimp) sector coincides with the markedly slower growth in export volume of fresh/chilled/frozen Tuna as against its Crustacean counterpart.

The case of Canned Tuna is interesting in that the relatively high regular season tariffs on fresh/chilled/frozen Tuna indeed registers in the positive high direct protection levels on the item. The imposition of barriers to inputs to Canned Tuna, however, does not serve the objective of efficiency since Fish Products and Preparations are in fact the second largest Fishery export revenue source.

Table 6. Nominal protection rates (NPRs) for various fishery products, 1991-94(In percent)

ITEM/YEARS	NPR		
	<i>Direct</i>	<i>Indirect</i>	<i>Total</i>
Tuna, chilled:			
1981-96	-66.1	-19.5	-85.6
1987-90	-65.2	-14.9	-80.1
1991-94	-57.5	-12.2	-69.7
Prawn, chilled:			
1985-90	-20.5	-10.6	-31.1
1991-94	-29.6	-10.2	-39.8
Canned Tuna:			
1981-96	54.1	-13.7	40.4
1987-90	46.6	-10.5	36.1
1991-94	37.0	-10.2	26.8

Source: Alviola, 1997.

6. EXPORT MARKETS

The view into the export performance of the Fishery of the Philippines would not be complete without some insights on the destination of its major export items. The three main export items are considered: Shrimp and Prawn (fresh, chilled or frozen);

Tuna (fresh, chilled or frozen); and Canned Tuna. The major destination countries and their shares in the respective items in year 2000 are shown in *Table 7*.

**Table 7. Major countries of destination of main fishery exports, 2000.
(In percent)**

COUNTRY	Shrimp and Prawn (%)	Tuna: Fresh, Chilled, Frozen (%)	Canned Tuna (%)
Japan	71.6	28.3	-
USA	14.9	42.2	25.7
South Korea	5.3	-	-
Singapore	-	-	23.6
Canada	-	-	10.0
Others	8.2	24.9	40.7
Total	100.0	100.0	100.0

Source: DA-BFAR, 2001.

For fresh, chilled and frozen Shrimp and Prawn, significance of the Japanese market is obvious (72%). For fresh, chilled and frozen Tuna, the U.S. market is significant (42%). The case of Canned Tuna is different in that there is greater diversification export markets than in the fresh, chilled and frozen products.

It is glaring that the entire block of EU market is absent from the major destinations. Under the current agreements, no exporting firm can export fish and fish products to the EU without the particular plant of the firm obtaining a formal or official accreditation to export to the EU. For the Philippines, the BFAR has now been deputized by the EU to perform the accreditation function. As of June 2002, there were only 36 plants of exporters in the entire Philippines which had obtained their respective EU Approval Number.

7. SUMMARY AND ISSUES FOR DEVELOPING EXPORT MARKETS

In the span of two decades, 1980-2000, there were, indeed, major policy regimes that the Fishery export sector had to contend with. The policy regimes coincided with the periods of stagnation (1980-84) and rapid growth (1985-94). The slowing down of export performance in the later years (1996-2000), however, appears to be associated more closely with the shocks in the export market, with structural constraints in productive capacity, and with the failure to gain market access outside the traditional Japan and the U.S. markets. Market access is related to the issue of certifiability at point of origin of products in matters pertaining to food safety according to the standards of alternative EU export market.

The Fishery has still remained to be one of the few food sectors in Philippine agriculture where net exports are positive. The export items, however, are limited to only three classes of Fish commodities. These are: i) Fresh, Chilled or Frozen Fish; ii) Fresh, Chilled, Frozen, or primary processed Crustaceans and Mollusks; and iii) Fish Products and Preparations. By item, these were mainly fresh, chilled or frozen Tuna; fresh, chilled or frozen Shrimp and Prawn; and Canned Tuna.

On the policy side, both economy-wide and sector-specific policies had their respective impacts on incentives for the main export products. The period of stagnation and low levels of activity in the trade of Fish from 1980-85 coincided with the policy regime of fixed exchange rates, high interest rates, and explicit quantitative restrictions on foreign currency holdings, as well as on the export and import of commodities. During this period, export taxes were imposed on Fish products, and the local currency was then extremely overvalued.

The following years 1986-92 were a period of major trade and tariff reforms. A floating exchange rate system came into play. Although some residual overvaluation of the domestic currency still remained, they were

significantly lower than in the first regime. Export taxes on Fishery exports were removed. While there were still a number of quantitative trade restrictions at work, the volume of exports in all three main commodities experienced a phenomenal expansion.

The years covering 1993-2000 was a period of strengthening the trade reforms initiated in the second period. On the monetary side of the economy, bank lending rates declined significantly relative to the previous decade. Fishery export growth, however, was not sustained, foundering in the last five years, particularly for the fresh, chilled and frozen Crustaceans and Tuna. Although export demand was acknowledged to have been adversely affected by the Asian Financial Crisis spanning 1997-98, the structural weaknesses of domestic productive capacity began to make its presence felt. Technology in Shrimp and Prawn production was unable to prevent the break out of a major disease problem. Total commercial fishing output began to slow down, suggesting decline in the natural productivity of the traditional fishing grounds. This, however, also mirrors the limited capacity to explore and exploit the Fishery resources extending to the country's entire recognized EEZ.

The resilience of export volumes in the Fish Products and Preparations sector, even in the face of declining average world prices, suggests a potential source of output and export growth which needs to be judiciously addressed by domestic trade policy. Currently, canning grade tuna is protected. As an input to the tuna canning industry which has a large export market, it doesn't make economic sense to continue penalizing an industry that has become the second largest source of export revenue in the Philippines.

Despite two long decades of disprotection of the fresh, chilled and frozen Crustacean and Tuna industries, the fact that these two industries still continue to generate net export revenue behooves that for these two sectors to be able to continue their roles in the coming decades as major export earners in Agriculture, the direction of policy should be towards the removal of specific policy areas where remaining direct penalties exist.

For future market niche creation and expansion, the issue of certifiability at origin for food safety of main export products, particularly fresh, chilled and frozen shrimp, prawn, and tuna must be institutionally addressed. The body to undertake the inspection and testing for certification of food safety, in accordance with internationally accepted standards (e.g. HACCP) should be an institution that has the mark of credibility. The certifiability of output quality will play a significant role in fisheries trade in the coming decades ahead.

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APPENDIX

Table 1 – FAO's on Fisheries Trade, Series 1982-86.

FAO No.	Year	Salient Provisions
135	1982	<ul style="list-style-type: none"> • Requirement of an import permit before the importation of fish and fisheries products is allowed
141	1982	<ul style="list-style-type: none"> • Ban on the export of live gravid shrimps or the genus <i>Peneaeus</i>
143	1983	<ul style="list-style-type: none"> • Ban on the export of live prawns of the species <i>Peneaeus monodon</i>
143-5	1983	<ul style="list-style-type: none"> • Regulation on the size of live prawns allowed for export (≤ 60 g/piece) • Export ban of fry, fingerlings and spawners
147	1984	<ul style="list-style-type: none"> • Requirement for issuance of a commercial permit/commodity clearance before fish or fisheries products could be exported; • Requirement for the payment of export fee (tax) for the export of fish
162	1986	<ul style="list-style-type: none"> • Size regulation for the export of mud crab (alimango) (< 10 cm carapace length) • Requirement of export permit before live mud crabs could be exported.

Source: DA-BFAR, 2002.

Table 2 – FAO's on Fisheries Trade, Series 1990-92

FAO No.	Year	Salient Provisions
168	1990; 1991	<ul style="list-style-type: none"> • Export ban on shelled mollusks of the species <i>Tridacna derasa</i>, <i>Tridacna gigas</i>, and <i>Hippopus porcellanus</i> • Allowing the export of shelled mollusks of the species <i>Tridacna crocea</i> and/or its derivatives
173	1991	<ul style="list-style-type: none"> • Export ban on <i>Bangus</i> (milkfish) fingerlings
183	1992	<ul style="list-style-type: none"> • Ban on the importation of yellow fin tuna and tuna products from Mexico and Venezuela

Source: DA-BFAR, 2002.

Table 3 – FAO's on Fisheries Trade, Series 2000-2001

FAO No.	Year	Salient Provisions
189	1994	<ul style="list-style-type: none"> • banning the importation of live shrimp and prawn of all stages
168-2	1996	<ul style="list-style-type: none"> • suspending the effectivity of FAO 168-1 (1990; 1991) on the prohibition of export of shelled mollusks.
198	2000	<ul style="list-style-type: none"> • Requirement for approval/clearance (permit) prior to the importation of fishing vessels • Requirement for license granted by the BFAR to operate a commercial fishing vessel
207	2001	<ul style="list-style-type: none"> • Ban on the importation and culture of live shrimp and prawn of all stages
210	2001	<ul style="list-style-type: none"> • Requirement of certification of processed fish products prior to export, as processed from fish processing establishments that have been duly certified by the BFAR as meeting standards; • Subjection of exports to specific product tests required by importing country (e.g., HACCP standards)

Source: DA-BFAR, 2002.