



The Potential Impacts of a Free Trade Agreement with the European Union on the Philippine Fisheries Sector

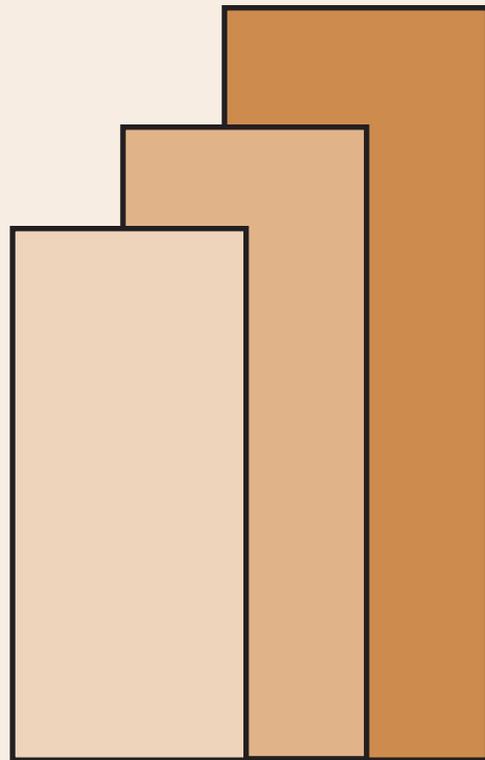
Danilo C. Israel

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The Potential Impacts of a Free Trade Agreement with the European Union on the Philippine Fisheries Sector

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Abstract

This study assessed the likely economic, distributional and fisheries resource impacts of a potential free trade agreement (FTA) between the Philippines and EU on the fisheries sector of the former. The study used secondary data from institutional sources and results and findings of past studies. Among others, the study found that a) the elimination of tariffs will likely increase fisheries outputs and exports as well as help reduce poverty in the fisheries sector and the general population; b) the elimination of tariffs will likely diversify the currently limited country destinations and number of exported fisheries products of the Philippines to the EU; c) other than tariffs, there are non-tariff measures (NTMs) that significantly impede freer flow of fisheries products from the Philippines to the EU that need to be considered; d) some participants in the Philippine fisheries sector will gain from an FTA while others will lose but the net benefits to the sector and economy is not known; and e) increase in fisheries exports due to the FTA will likely worsen fisheries resource overexploitation although the inflow of cheaper imported fish will tend to reduce the overexploitation. The study concludes, among others, that if a Philippines-EU FTA materializes it should not only reduce or eliminate tariffs in fisheries products but also the NTMs. It also argued that the government should provide safety nets for the fisheries participants who are going to be disadvantaged by the FTA and implement the needed resource and environmental management that will allow sustainable exploitation of fisheries resources even with increased trade.

Keywords: Philippine Fisheries Sector, Philippines-EU Free Trade Agreement (FTA), Fisheries Trade, Fisheries Tariffs, Fisheries Non-Tariff Measures, Economic, Distributional and Resource Impacts

The Potential Impacts of a Free Trade Agreement (FTA) with the European Union on the Philippine Fisheries Sector

Danilo C. Israel¹

I. Introduction

1.1 Background

Fisheries products are important and growing components of the exports of the Philippines to the European Union (EU)². The share of fisheries exports (particularly fish, crustaceans, molluscs, aquatic invertebrates +meat, fish and seafood food preparations not elsewhere specified) to total Philippine exports to the EU rose from a mere 8.85 percent in 2001-02, to 12.96 percent in 2005-06, and then to a substantial 27.77 percent in 2009-10 (Cororaton and Corong 2012). For one product, specifically canned tuna, US\$253 million worth was exported by the Philippines in 2009, 57 percent of which landed in the EU market (FFA 2010).

To further promote its economic gains from international trade, the Philippines in recent years has been exploring the possibility of free trade agreements (FTA) with selected countries. In the case of the EU, a Framework Partnership and Cooperation Agreement (PCA) has been drafted between the two parties already and formal negotiations are expected to commence soon.

In light of the aforementioned development, the question of what impacts a potential FTA between the Philippines and the EU will have on the former naturally arises. Will an agreement lead to positive and significant net economic benefits for the country? Specifically, for the Philippine fisheries sector, will an FTA result to increased fisheries trade balance between the two parties and the fairer distribution of benefits among the different participants in the

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² The twenty-seven EU member states are Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Portugal, Poland, Romania, Slovakia, Slovenia, Spain, Sweden and United Kingdom.

sector? What will be the likely effect of an FTA on fisheries resources and stocks? Which fisheries participants will be the likely gainers and losers?

1.2 Objectives

This study assesses the economic, distributional, and fisheries resource impacts of a potential FTA between the Philippines and EU on the fisheries sector of the former. The main objective is to provide relevant data and information that will help support the Philippine position in the coming FTA negotiations with the EU, particularly related to fisheries. The specific objectives of the study are to: a) provide an overview of the Philippine and EU fisheries sectors including the development issues and constraints that they face; b) discuss fisheries trade between the Philippines and the EU over time; c) explain the fisheries trade issues between the Philippines and EU; d) determine the likely economic, distributional and fisheries resource impacts of a potential FTA between the Philippines and EU on the Philippine fisheries sector; e) identify the gainers and losers in fisheries and its associated sectors resulting from a potential FTA; and f) suggest fisheries-related recommendations relevant to a potential Philippines-EU FTA.

II. Methods and Review of Literature

2.1 Methods

To meet objectives (a), (b), and (c), secondary data and information will be used. These will be taken from the institutional fisheries data sources and past relevant literature. To measure the likely economic, distributional, and fisheries resource impacts of a potential FTA between the Philippines and EU (Objective d) and its gainers and losers (Objective e), results and findings of Cororaton and Corong (2012) will be used mainly. This study has conducted simulations and scenarios based on assumption of zero tariff between the Philippines and EU using three interacting models: the Global Trade Analysis Project (GTAP) model; Philippine CGE model; and the Philippine micro-simulation model for distributional and poverty analysis. For a detailed

explanation of the three aforementioned quantitative models, please refer to Cororaton and Corong (2012, 2011). Another study that will be used in the discussion is Kurien (2004) which assessed the impacts of free trade in fisheries products in selected countries including the Philippines.

2.2 Review of related literature

Measuring the economic, distributional and resource impacts on the fisheries sector of the Philippines of a potential FTA with a trading partner and subsequently determining the gainers and losers from it has precedence. Kurien (2004) examined the international trade in fishery products and found that the: a) impact of international fish trade on the Philippine economy was positive and significant; b) impact on fishers was negative but small; c) impact on fish workers was both positive and negative but small; d) impact on fish consumers was negative and small; and e) impact on fish stocks and resources was negative and large.

Boumellassa, Decreux and Fontagné (2006) studied the economic impacts of a potential FTA between the EU and Association of Southeast Asian Nations (ASEAN) in general and found that a) the gains from an agreement accruing to ASEAN members are very large, adding up to more than 2 percent of GDP in 2020; b) the potential agreement would also have an enormous impact on trade, production and welfare, as compared to other episodes of trade liberalization; c) the bulk of the gains from a potential FTA which is three quarter of the gains accruing to the ASEAN are associated with the liberalization in services; and d) for the Philippines, an FTA between the EU and the ASEAN would not be profitable for the Philippines unless liberalization of trade in goods is accompanied by a substantial liberalization in services as well.

Cororaton and Corong (2012) evaluated the economic effects of the bilateral reduction in tariffs due to an FTA between the Philippine and EU on the economy of the former. It found that the bilateral elimination of tariffs between the Philippines and the EU will result in real GDP improving by 0.15 percent and prices declining by 0.12 percent. It also explained that real wage of labor improves and real returns to capital declines slightly. This, together with the decline in consumer prices, increase real income of households and decrease the poverty incidence from

26.3 percent to 26 percent with households far below the poverty threshold benefit the most. The effects of a Philippines-EU FTA on the Philippine fisheries sector specifically will be discussed in the relevant section below.

III. Overview of the Fisheries Sectors of the Philippines and EU

3.1 Philippine fisheries

The Philippines is an archipelago composed of about 7,110 islands with vast aquatic resources. These include a coastline of 36,289 kilometers which is the fourth longest in the world, marine waters with a total territorial area of 2.2 million square kilometers inclusive of the Exclusive Economic Zone (EEZ), and inland waters of about 750,000 hectares including swamplands, fishponds, lakes, rivers and reservoirs. With its abundant resources, the Philippine fisheries sector has contributed significantly to fisheries output at the worldwide level. It was reported for instance that in 2008, the country posted a total fish output of 4.4 million metric tons which was approximately 3.2 percent of world fisheries production and already the 8th largest (FAO n.d.).

At the national level, the annual share of fisheries Gross Value Added (GVA) to the Gross Domestic Product (GDP) from the 1980s to the present ranged from about 3.5 percent to 5.0 percent (BFAR Various Years). The GVA in fisheries in constant terms grew from 1980 to the present at an average annual rate of about 4.0 percent. Over time, the fisheries sector had been a significant contributor to the GVA in Agriculture, fishery and forestry at the range of about 15 to 24 percent annually in constant terms and was second only to agricultural crops.

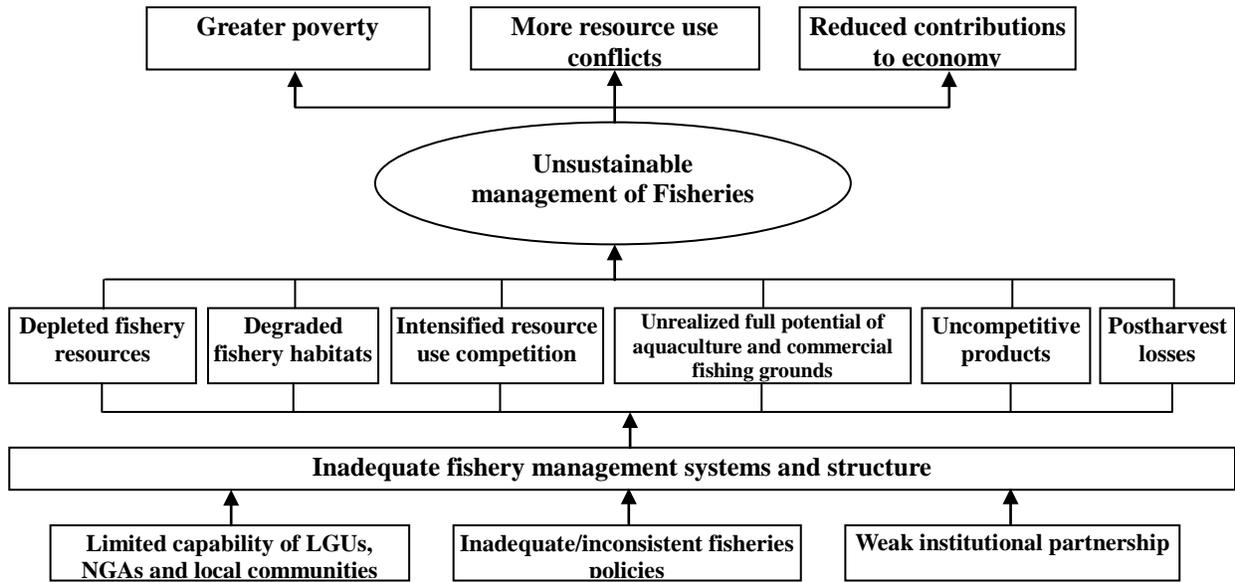
In international trade, from the middle 1980s to the late 1990s, fisheries imports generally exceeded exports which resulted to a negative trade balance in fish in the Philippines. In the 2000s up to the present, on the other hand, the country alternated from being a net exporter to net importer of fish. Overall, however, while the country generally has been a net importer of fish in terms of volume it has been a net exporter in terms of value in recent years indicating that the fisheries sector has positively contributed to the generation of foreign exchange for the national economy.

In recent years, the top three fishery exports of the country were tuna, seaweeds and shrimp and prawn. Approximately 70 percent of the tuna exports were processed in the forms of prepared/preserved, smoked, and fresh/chilled/frozen products. More than 80 percent of the seaweed exports were processed in the forms of carrageenan and eucheama chips while the rest were in fresh/chilled and frozen form. Almost all of the shrimp and prawn exports were in fresh/chilled/frozen forms. The top three fishery imports of the Philippines, on the other hand, were chilled/frozen tuna, mackerel and sardines, prawn feeds, and flour, meals and pellets of fish and seafood. Some of the chilled/frozen fish imports were used in the domestic fish processing industry which re-exports its products while the others were utilized for domestic consumption.

Approximately 60 to 70 percent of Filipinos live in the coastal areas and many are employed in the fisheries sector. Most of the employment in fisheries was in municipal fisheries which accounted for almost 85 percent of the total while aquaculture and commercial fisheries added 14 percent and 1 percent, respectively. While direct employment in the fisheries sector was only about 4 percent to total employment in the country, approximately 12 percent of the national population derived their livelihood from fisheries-related activities (Trinidad et al. 1993).

Over time, the fisheries sector of the Philippines has been facing key development challenges (BFAR and FISH 2005). The central problem in the sector is the unsustainable management of fisheries which leads to greater poverty, more resource use conflicts over the dwindling resources and lower contributions to the national economy (Figure 1). The direct causes of this central problem are a) depleted fishery resources; b) degraded fishery habitats; c) intensified resource use competition; d) unrealized full potential of aquaculture and commercial fishing grounds; e) uncompetitive products and f) post-harvest losses. These causes are further directly traceable to the institutional constraint of inadequate fishery management systems and structures caused by the limited management capability of local government units (LGUs), non-government agencies (NGAs) and local communities; inadequate/inconsistent fisheries policies; and weak institutional partnership. Based on these aforementioned challenges, problems and causes, therefore, it is imperative that the institutional constraints are given priority and immediately addressed by the government to help attain sustainable development in the fisheries sector.

Figure 1: Key Development Challenges in the Philippine Fisheries Sector



Source of data: BFAR and FISH (2005)

3.2 EU fisheries

The EU contributes about 4.4 percent to global fisheries and aquaculture production and is the fifth largest producer worldwide (EU 2012). Within the EU, the three largest fisheries producers in terms of volume are Spain, Denmark and the United Kingdom. The fish catches of the EU are taken primarily in the Eastern Atlantic and the Mediterranean but the European fishing fleet operates worldwide. The catches are mainly made up of sprat, herring and mackerel. The leading fishing countries are Denmark, Spain, the United Kingdom and France, which together account for around half of the catches. For the last 19 years EU fishing fleet capacity has declined at a fairly steady annual average rate, at a little below 2 percent, in terms of both tonnage and engine power (EU 2012).

The employment in the saltwater fishing sector of the EU, measured in full-time equivalents, tends to be concentrated in a handful of countries. Spain alone accounts for a quarter of employment and the three countries with the highest levels of employment (Spain, Greece and

Italy) account for around 60 percent. Aquaculture, which is a major fisheries activity, produces about 1.3 million tons valued at €3.2 billion (EU 2012). This represents 20.4 percent of the total volume of EU fisheries production. Processing, which is another important activity in some EU countries, has an overall value of output of amounts to around €20 billion. Spain, the United Kingdom, France, Germany and Italy are the leading countries in terms of processing production. This sector present consists of nearly 3 700 companies for total employment of around 120,000 persons. The mainstay of EU fisheries processing production is conserves and preparations of fish, crustaceans and molluscs.

Along with Japan and the United States, the EU is one of the world's top three importers of fisheries and aquaculture products. Norway, China, Iceland and Vietnam are the EU's main suppliers. Within the EU, Spain, France and Italy are the leading importing states while Denmark, the Netherlands and Spain are the leading exporting states.

The Common Fisheries Policy (CFP) is the current fisheries policy of the EU. It was created to manage fish stocks for the EU based on Article 38 of the 1957 Treaty of Rome which that there should be a common policy for fisheries for EU. It has been argued, however, that the CFP has not brought about sustainable fisheries in the EU countries but instead has resulted to depleted fish stocks, lost productivity, unwanted impacts on the marine environment and economically inefficient fisheries that are more vulnerable to financial shocks (POST 2010). According to Grieve (2001), among the important weaknesses of the CFP and EU fisheries are the following: a) many stocks are outside safe biological limits, especially demersal fish stocks such as cod, hake and whiting; b) available fishing capacity of fleets far exceeds that required to harvest fish in a sustainable manner; c) overfishing and overcapacity have resulted from setting total allowable catches (TACs) which were higher than those proposed by the Commission based on scientific advice; and d) stakeholders do not feel sufficiently involved in the management of policy and many believe there is no level playing field in terms of compliance and enforcement.

IV. Philippine-EU Fisheries Trade

4.1 Total Fisheries trade between the Philippines and EU

The fisheries exports of the Philippines to the EU rose at an average annual rate of 32.7 percent, from \$16.9 million in 2000 to \$173.3 million in 2010 (Table 1). On the other hand, the fisheries imports of the country from the EU decreased from \$11.0 million in 2000 to \$0.8 million in 2010 but the average annual rate was positive at 50.6 percent (due to large increases in some years particularly between 2003 and 2004). The Philippines incurred balance of trade surpluses in its fisheries trade with EU for all years during the period and the balance of trade surplus rose by an average annual rate of 54.5 percent. In terms of balance of trade, therefore, the trade in fisheries products between the Philippines and the EU has been advantageous to the former.

4.2 Fisheries trade between the Philippines and EU, by country

From 2000 to 2010, the largest share of Philippine fisheries exports to the EU went to Germany (34.5%) followed by the United Kingdom (17.4%) and Spain (10.3%) in that order (Figure 2). The largest share of Philippine fisheries imports from the EU came from Spain (72.6%) followed by the United Kingdom (13.2%) and Portugal (4.9%) in that order (Figure 3). Thus, the most important trading partners of the Philippines in fisheries in the EU are Germany, United Kingdom and Spain. The trade in fisheries products has been less than 10 percent of the total for the rest of the EU countries which implies that trade is concentrated only in a few countries only.

The fisheries exports of the Philippines to Germany rose from \$3.7 million in 2000 to \$47.3 million in 2010 (Table 2). The exports have been erratic as they increased in some years and fell in other years but overall, exports rose at an average annual rate of 41.4 during the period. On the other hand, the fisheries imports of the country from Germany increased from \$1.5 thousand in 2000 to \$34.2 thousand in 2010. As in the case of exports, imports have been inconsistent as they rose in some years and decreased in other years but overall the average annual rate was positive and high at 218.6 percent (due to large increases in some years particularly between 2000 and 2001). The Philippines incurred balance of trade surpluses in its fisheries trade with Germany for all years during the period and the balance of trade surplus rose at an average annual rate of 41.3 percent. The aforementioned performance suggests that as in

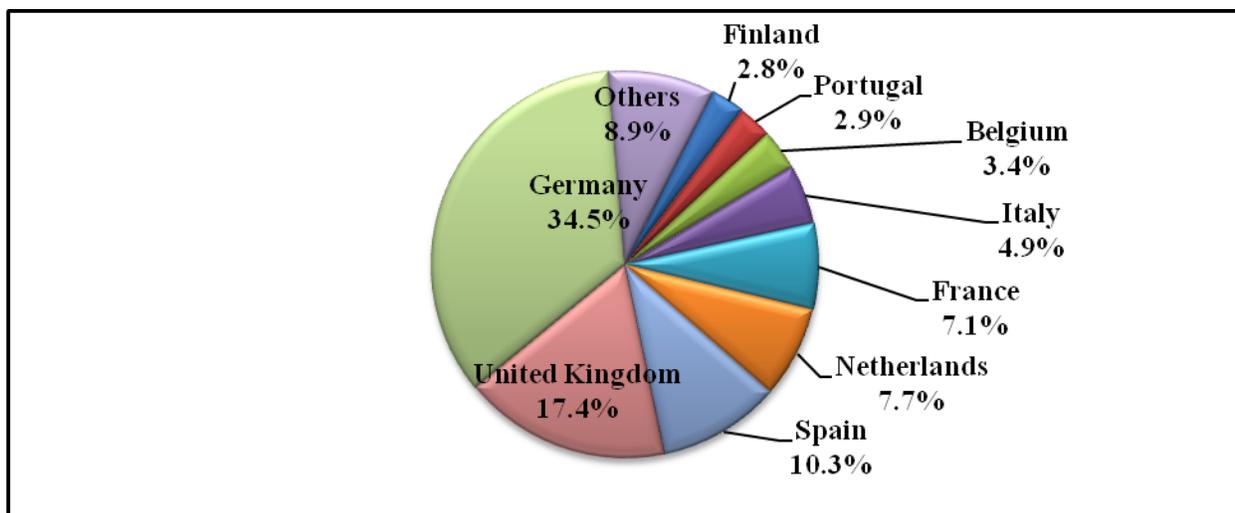
the case with EU as a whole, trade in fisheries between the Philippines and Germany has been advantageous to the former during the period.

Table 1: Total Philippine Fisheries Exports, Imports and Balance of Trade with EU, 2000-2010 (Thousand US\$)

Year	Exports	% Growth Rate	Imports	% Growth Rate	Balance of Trade	% Growth Rate
2000	16,905.00	-	11,000.30	-	5,904.70	-
2001	26,413.10	56.24	6,850.58	(37.72)	19,562.50	231.30
2002	44,067.30	66.84	12,555.07	83.27	31,512.30	61.09
2003	54,172.60	22.93	721.58	(94.25)	53,451.00	69.62
2004	43,930.60	(18.91)	4,676.32	548.07	39,254.30	(26.56)
2005	33,534.50	(23.66)	496.54	(89.38)	33,038.00	(15.84)
2006	63,495.60	89.34	504.38	1.58	62,991.20	90.66
2007	95,079.20	49.74	1,111.49	120.37	93,967.80	49.18
2008	177,276.00	86.45	897.41	(19.26)	176,378.60	87.70
2009	166,154.90	(6.27)	1,031.24	14.91	165,123.70	(6.38)
2010	173,272.10	4.28	804.75	(21.96)	172,467.40	4.45
Average	81,300.08	32.70	3,695.42	50.56	77,604.68	54.52

Source of data: United Nations Commodity Trade Statistics Database

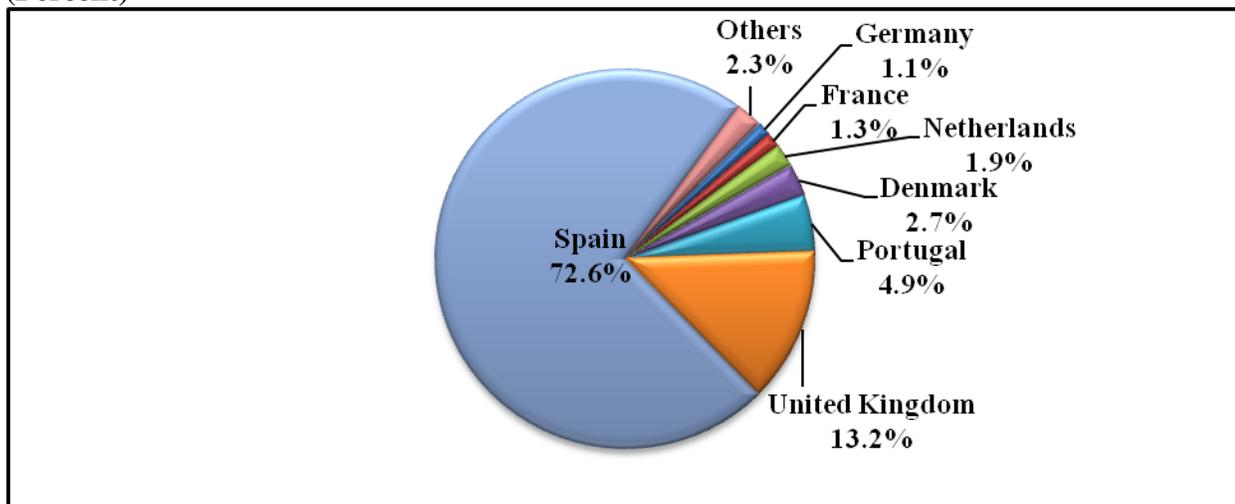
Figure 2: Share of Philippine Fisheries Exports to EU Countries, 2000-2010 (Percent)



Note: Others include Luxembourg, Estonia, Hungary, Bulgaria, Latvia, Austria, Slovakia, Romania, Cyprus, Lithuania, Malta, Slovenia, Ireland, Poland, Denmark, Greece, Czech Republic and Sweden.

Source of data: United Nations Commodity Trade Statistics Database

Figure 3: Share of Philippine Fisheries Imports from EU Countries, 2000-2010 (Percent)



Note: Others include Italy, Finland, Belgium, Hungary, Austria, Ireland, Poland, Greece and Czech Republic.

Source of data: United Nations Commodity Trade Statistics Database

Table 2: Philippine Fisheries Exports, Imports and Balance of Trade with Germany, 2000-2010 (Thousand US\$)

Year	Exports	% Growth Rate	Imports	% Growth Rate	Balance of Trade	% Growth Rate
2000	3,741.20	-	1.48	-	3,739.70	-
2001	10,478.30	180.08	30.81	1,979.15	10,447.50	179.37
2002	10,971.90	4.71	33.90	10.02	10,938.00	4.69
2003	12,292.70	12.04	29.41	(13.25)	12,263.30	12.12
2004	16,409.40	33.49	62.85	113.71	16,346.60	33.30
2005	13,513.30	(17.65)	32.68	(48.00)	13,480.70	(17.53)
2006	32,040.60	137.10	41.02	25.50	31,999.60	137.37
2007	36,098.10	12.66	56.81	38.49	36,041.30	12.63
2008	64,892.20	79.77	35.77	(37.04)	64,856.50	79.95
2009	61,212.20	(5.67)	101.45	183.64	61,110.80	(5.78)
2010	47,260.30	(22.79)	34.17	(66.32)	47,226.10	(22.72)
Average	28,082.75	41.37	41.85	218.59	28,040.92	41.34

Source of data: United Nations Commodity Trade Statistics Database

The exports of fisheries products of the Philippines to the United Kingdom increased from \$3.5 million in 2000 to \$39.4 million in 2010 (Table 3). As in the case of Germany, exports have been erratic as they increased in some years and fell in other years although on average it rose at an annual rate of 47.3 during the period. On the other hand, the fisheries imports of the country from the United Kingdom fell from \$2.4 million in 2000 to \$98.4 thousand in 2010. The imports have been inconsistent as well but they dramatically rose by an average annual rate of more than 1.4 thousand percent during the period (due to very large increases in some years particularly between 2003 and 2004 and between 2008 and 2009). The Philippines incurred balance of trade surpluses in its trade with the United Kingdom for all years during the entire period and the balance of trade surplus rose at an average annual rate of 79.9 percent. Hence, as in the case of earlier results for the EU and Germany, the trade in fisheries products between the

Philippines and the United Kingdom has been advantageous to the former during the period.

Table 3: Philippine Fisheries Exports, Imports and Balance of Trade with United Kingdom (Thousand US\$)

Year	Exports	% Growth Rate	Imports	% Growth Rate	Balance of Trade	% Growth Rate
2000	3,534.80	-	2,412.69	-	1,122.10	-
2001	5,016.60	41.92	73.08	(96.97)	4,943.50	340.56
2002	8,780.20	75.02	77.76	6.41	8,702.40	76.04
2003	6,925.80	(21.12)	19.41	(75.04)	6,906.30	(20.64)
2004	5,687.40	(17.88)	2,331.90	11,912.06	3,355.50	(51.41)
2005	4,888.30	(14.05)	114.51	(95.09)	4,773.80	42.27
2006	7,643.10	56.35	44.56	(61.09)	7,598.50	59.17
2007	6,492.90	(15.05)	3.91	(91.23)	6,489.00	(14.60)
2008	27,553.80	324.37	6.31	61.29	27,547.50	324.53
2009	39,481.30	43.29	171.32	2,617.15	39,310.00	42.70
2010	39,375.30	(0.27)	98.35	(42.59)	39,277.00	(0.08)
Average	14,125.41	47.26	486.71	1,413.49	13,638.69	79.85

Source of data: United Nations Commodity Trade Statistics Database

The fisheries exports of the Philippines to Spain rose from \$109.9 thousand in 2000 to \$27.4 million in 2010 (Table 4). As in the case of Germany and the United Kingdom, exports to Spain have been erratic as they rose in some years and fell in other years. However, exports rose at a high average annual rate of 247.06 percent during the period (due to large increases in some years particularly between 2001 and 2002). On the other hand, the fisheries imports of the Philippines from Spain fell from \$8.1 million in 2000 to \$305.3 thousand in 2010. The imports have been inconsistent as well but it rose by an average annual rate of more than 122.3 percent during the period. The Philippines incurred balance of trade surpluses in its trade with Spain in some years and trade deficits in other years but during the whole period the balance of trade rose by an average annual rate of 159.5 percent. Hence, while the balance of trade has been rising and

falling over the years between the two countries, the exchange of fisheries products between the Philippines and Spain generally has been economically favorable to the former in the period also.

Table 4: Philippine Fisheries Exports, Imports and Balance of Trade with Spain (Thousand US\$)

Year	Exports	% Growth Rate	Imports	% Growth Rate	Balance of Trade	% Growth Rate
2000	109.90	-	8,058.81	-	(7,948.90)	-
2001	753.10	585.26	6,372.67	(20.92)	(5,619.50)	(29.30)
2002	9,530.80	1,165.54	11,149.77	74.96	(1,619.00)	(71.19)
2003	14,728.00	54.53	312.40	(97.20)	14,415.60	(990.40)
2004	1,912.00	(87.02)	1,997.75	539.49	(85.80)	(100.60)
2005	960.80	(49.75)	20.54	(98.97)	940.20	(1,195.80)
2006	1,885.40	96.23	83.23	305.11	1,802.10	91.67
2007	10,879.30	477.03	547.35	557.67	10,331.90	473.33
2008	15,294.70	40.59	438.08	(19.96)	14,856.60	43.79
2009	8,515.30	(44.33)	238.62	(45.53)	8,276.70	(44.29)
2010	27,421.90	222.03	305.33	27.95	27,116.60	227.63
Average	8,362.84	246.01	2,684.05	122.26	5,678.77	(159.52)

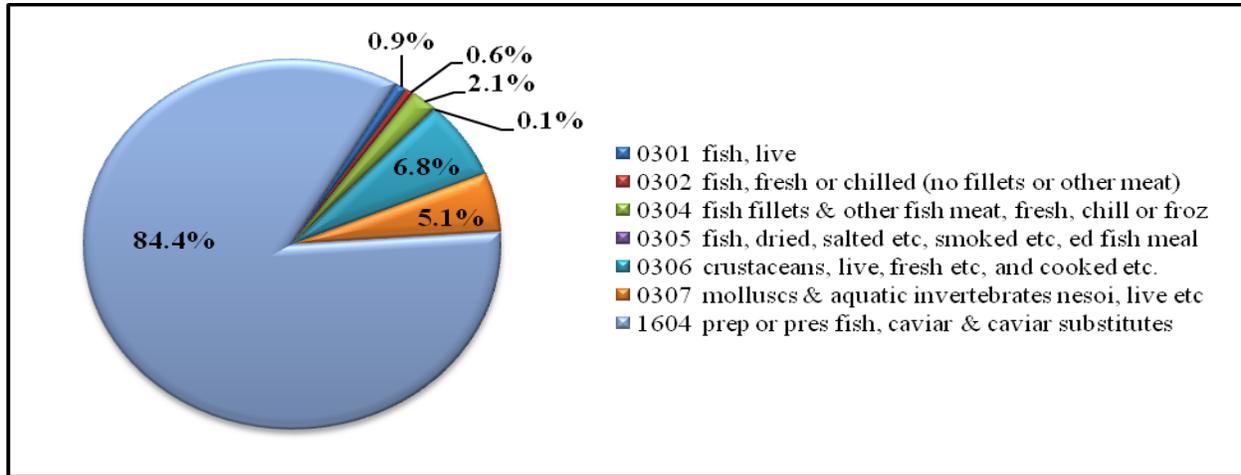
Source of data: United Nations Commodity Trade Statistics Database

4.3 Fisheries trade between the Philippines and EU, by product

For the entire period from 2000 to 2010 and by four digit classification, Philippine fisheries exports to the EU was dominated by prepared or preserved fish, caviar and caviar substitutes (84.4%) followed by crustaceans, live, fresh etc. and cooked etc. (6.84%) and mollusks and aquatic invertebrates nesoi, live etc. (5.1%) (Figure 4). On the other hand, the largest Philippine fisheries imports from the EU was also prepared or preserved fish, caviar and caviar substitutes (45.6%) followed by mollusks and aquatic invertebrates nesoi, live etc. (33.0%) and crustaceans, live, fresh etc. and cooked etc. (8.9%) (Figure 5). Therefore, in the case of the EU, the most important fishery products are prepared or preserved fish, caviar and caviar

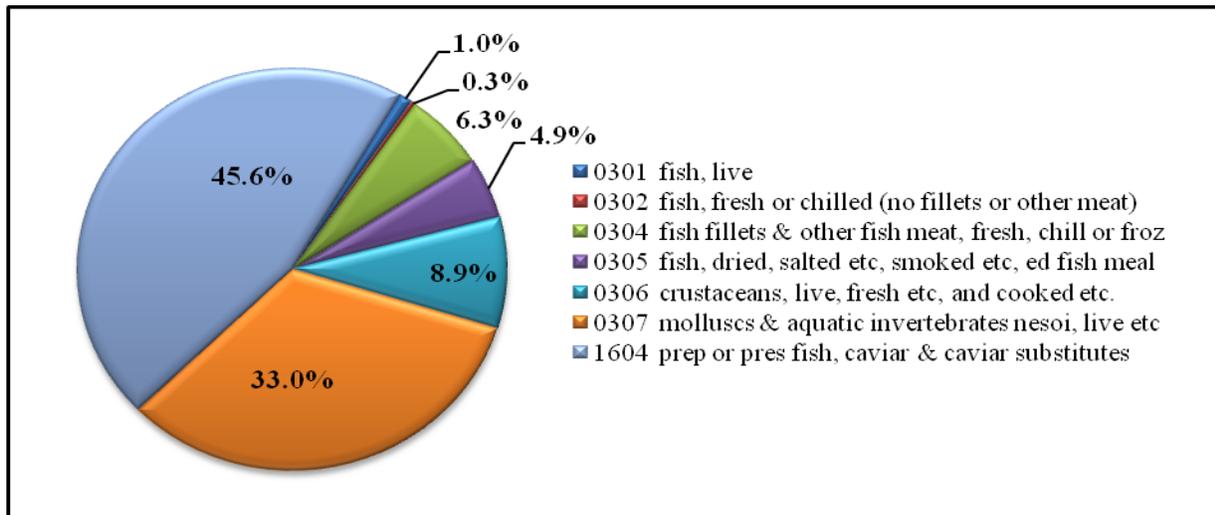
substitutes; crustaceans, live, fresh etc. and cooked etc.; and mollusks and aquatic invertebrates nesoi, live etc. The other fishery products, in terms of exports or imports, shared less than 10 percent of the total products traded which imply that by four-digit classification, the trade has been concentrated only in selected product groups.

Figure 4: Share of Philippine Fishery Exports to EU, by Product, 2000-2010 (Percent)



Source of data: United Nations Commodity Trade Statistics Database

Figure 5: Share of Philippine Fishery Imports from EU, by Product 2000-2010 (Percent)



Source of data: United Nations Commodity Trade Statistics Database

For the entire period from 2000 to 2010 and by six-digit classification, the top five Philippine fisheries exports to the EU were tuna, skipjack, bonito, prepared/preserved, not mince (160414); tuna (yellowfin) frozen, whole (030342); sardine, brisling, sprat prepared/preserved, not mince (160413); fish fillet or meat, fresh or chilled, not liver, roe (030410); and tuna (yellowfin) fresh or chilled, whole (030432). Exports of tuna, skipjack, bonito, prepared/preserved, not mince comprised about 92 percent of the total fisheries exports to the EU during the period while the rest of the fisheries products comprised less than 10 percent. This means that by six-digit classification, fish exports of the Philippines to the EU have been concentrated only in a few commodities, particularly processed products especially tuna.

For the entire period from 2000 to 2010 and by six-digit classification, the top five Philippine fisheries imports from the EU were anchovies, prepared or preserved, not minced (160416); tuna, skipjack, bonito, prepared/preserved, not mince (160414); sardine, brisling, sprat prepared/preserved, not mince (160413); salmon, Pacific, frozen, whole (030310); and fishes, prepared or preserved, not minced (160419). Unlike exports, imports are more evenly distributed among different fisheries products. Also, tuna, skipjack, bonito, prepared/preserved, not mince are also imported by the Philippines from the EU although at lower amounts than exports indicating some product reciprocity in trade.

V. Philippines-EU Fisheries Trade Issues

5.1 Tariffs

Tariffs are duties levied by a country on its imported products. Among industrialized countries in the world, the EU is second only to Korea in having the highest tariffs for the fishery products it imports (Table 5). These high tariffs imposed by EU are a major issue in fisheries trade because they are seen as stifling the competitiveness of the fishery products the Philippines exports to EU markets.

Table 5: Average Type of Tariff in Industrialized Countries, by Type of Seafood

Type of Seafood	EU	Japan	US	Korea	Canada
Raw Fish	10.4	4.3	0.6	15.3	0.6
Intermediate Seafood Products	4.0	2.0	1.0	33.0	3.0
Processed Seafood	16.3	9.0	3.3	20.0	2.6

Sources: Ahmed (2006) and Roheim (2003)

A specific tariff issue between the Philippines and the EU is that related to tuna, the main species exported by the former to the latter. At present, although the imports of raw tuna by the EU for further processing enter duty-free, its imports of canned tuna from the Philippines pay a high tariff of 24 percent on average. This is in contrast to the 0 tariff rate imposed by EU for canned tuna imports from the Africa, the Caribbean and the Pacific (ACP) countries and the average 15 percent tariff rate imposed by the Philippines for processed tuna products from EU.

With the current high tariff, canned tuna exporters in the Philippines understandably have been clamoring for a lower EU tariff. A Philippines-EU FTA which will reduce the tariff of canned tuna from 24 percent to a much lower rate, or even zero rate, would be an important improvement that would be welcomed by the local tuna industry. Furthermore, if a quota on processed tuna exports by the Philippines to the EU will be imposed under the FTA, a much higher level of quota than 9,000 tons per year (which was implemented from 2003 to 2008 and easily supplied within weeks by the Philippine tuna industry) should be pursued by the national government in the FTA negotiations. This being said, the non-imposition of any quota is preferred if this is possible.

5.2 Non-tariff measures (NTMs)

NTMs generally include measures other than tariffs which are used by trading countries

to restrict their imports. The World Trade Organization (WTO) groups NTMs into the following: a) government participation in trade and restrictive practices tolerated by the government; b) custom and administrative entry procedures; c) technical barriers to trade (TBTs); d) sanitary and phyto-sanitary (SPS) measures; e) specific limitations; f) charges on imports; and g) others (Pasadilla and Liao 2007). Of the aforementioned, custom and administrative entry procedures, TBTs, and SPS have the highest incidence of use among countries and are thus discussed further below. Even before that, it should already be emphasized that the number of fishery products exported by the Philippines to the EU which were identified as facing NTMs are reportedly several (Table 6).

5.2.1 Customs and administrative entry procedures

Customs and administrative entry procedures imposed by importing countries include rules of origin, import licensing, customs valuation and customs formalities and classification and can present significant non-tariff barriers to international trade between countries (ICTSD 2006). These procedures are summarized as follow:

Country of origin

This rule, which is imposed by the EU, stipulates that the product imported is labelled in terms of country of origin. For fisheries products, the label must contain information such as whether the product is “farmed,” “cultivated” or “caught in the wild,” the country where it was processed, and the commercial name of the seafood species (Ahmed 2006). Such mandatory requirements pose a particular challenge to the fisheries sector of an exporting country like the Philippines since fish are traded in raw, semi-processed and processed forms and are caught by multiple vessels operating in many parts of the world (ICTSD 2006; OECD 2003). A Philippines-EU FTA should therefore explicitly lay out simplified procedures for the operationalization of the country of origin rule and then impose it equally between the two parties.

Table 6: Philippine Fisheries Exports Facing Non-Tariff Measures in the EU

Product Code	Description
030110	Ornamental fish
030199	Other live fish: -- Other
030269	Other fish, excluding livers and roes: -- Other
030379	Other
030410	Fresh or chilled
030420	Frozen fillets
030490	Other
030549	Smoked fish, including fillets: -- Other dried fish, whether or not salted but not smoked
030559	: -- Other
160290	Fish, whole or in pieces, but not minced: --
160414	Tunas, skipjack and bonito (<i>Sarda spp.</i>)
160419	Fish, whole or in pieces, but not minced: -- Other
160420	Other prepared or preserved fish
160590	Other

Source: Pasadilla and Liao (2007)

Import licensing

Import licensing is the practice of requiring documentation, other than that required for customs purposes, for the importation of a good into a customs territory (ICTSD 2006). However, the need for supporting documents and the lack of transparency in the import licensing process can substantially delay the importation process. Such delays are problematic for imports of perishable commodities, such as fishery products shipped from the Philippines to the EU.

It would be important that in a Philippine-EU FTA, the WTO's Import Licensing Agreement is adhered to. Among others, this agreement a) requires governments to publish sufficient information for traders to know how and why licenses are granted; b) specifies that

import licensing procedures must be simple, transparent and predictable and calls on countries to notify the WTO upon the introduction of new import licensing procedures or a change in existing procedures; and c) requires that license requests are processed in a limited timeframe. Any requirements imposed outside of the WTO agreement should be negotiated and applied equally between the two parties.

Customs valuation

Customs valuation rules can act as trade barriers if prices are overestimated for customs purposes (ICTSD 2006). The WTO attempts to control potential negative by-products of customs rules through its Agreement on Customs Valuation (formally known as the Agreement on Implementation of Article VII of GATT, 1991). This Agreement aims for a fair, uniform and neutral system for the valuation of goods for customs purposes that conforms to commercial realities and outlaws the use of arbitrary or fictitious customs values. The WTO agreement should be adhered to in a Philippine-EU FTA. In theory, however, an overestimation of prices for customs purposes should be significantly reduced if not totally eliminated with freer trade between the two parties that results to the lowering or elimination of tariffs and other import dues.

Customs formalities and classification

Other customs related concerns include inconsistent and varying customs classification which together with excessive customs formalities can cause unnecessary delays and increase the transaction costs that exporters face to access some markets (ICTSD 2006; Fliess and Lejarraga 2005). Further, customs requirements regarding minimum import quantities can also constrain the ability of exporters, particularly from developing countries like the Philippines, to trade in small quantities of goods. These problems should be reduced or eliminated in a Philippines-EU FTA and whatever requirements which are left should also be enforced equally between the two parties.

5.2.2 Technical barriers to trade

TBTs include technical regulations, quality and composition standards, labelling, and source and origin information requirements (Ahmed 2006). In 1995, the Agreements on the Application of Measures on TBTs and SPS were established and entered into force during the Uruguay Round of Multilateral Trade Negotiations of the WTO to address the emerging debate over the use of standards in international trade (Chamsai and Siriraksophon 2011). Nations were asked to apply only those measures that are based on scientific principles, and only to the extent necessary and not constituting a disguised restriction on international trade. On TBTs, the agreements state that the technical measures applied by countries should not create unnecessary obstacles to international trade and have a legitimate purpose, and their cost of implementation should be proportional to the purpose of the measure. Furthermore, the agreements encourage the use of international standards consistent with the Codex Alimentarius Commission (CAC) food standards, guidelines and other recommendations or Codex. Below are TBTs which are potential constraints in the trade of fisheries products.

Traceability

Traceability or product tracing is “the ability to follow the movement of a food through specified stage(s) of production and processing and distribution” as defined by Codex (Chamsai and Siriraksophon 2011, ICTSD 2006). A traced product could offer information on the origin of materials and parts, processing history, and the distribution and location of the product at various points in its production. Among others, product tracing makes it easy to pinpoint the source of a food safety problem very quickly. For instance, if there is product contamination, authorities can quickly determine exactly where the contaminated products originated. Without traceability it can take weeks to find the source of the problem and lengthy food safety scares can result. This in turn can lead to large recalls, unnecessarily discarded food and reduced consumer confidence.

Recently, governments and organizations around the world have been developing different systems on seafood traceability (Chamsai and Siriraksophon 2011). An example is Trace Fish or “Traceability of Fish Products” which was a project funded by the EU. The objectives were to bring together companies and research institutes to establish common views

with respect to what data should follow a fish product through the chain from catch/farming to consumer.

In developing countries, however, there is concern that traceability requirements may involve significant compliance costs on their part. This concern is particularly valid among exporting small and medium fishery enterprises in the Philippines. If Tracefish or a similar product trading system is to be implemented in a Philippines-EU FTA, demand for adherence on the part of Philippine exporters of fish products should be mindful of the financial costs to be incurred on their part. Efforts should be exerted to reduce the cost of compliance for instance through the provision of technical assistance on the part of the EU particularly to Philippine small-scale fish exporters.

Eco-labelling

Eco-labels are certifications given to products that are deemed to have fewer impacts on the environment than functionally or competitively similar products (ICTSD 2006). Eco-labelling usually links fishery products to their production processes and relies on life-cycle assessments of the environmental impacts of products. It is of special interest in international fish trade as is a potential tool to stimulate more responsible fisheries and aquaculture practices and hence improving sustainability (Chamsai and Siriraksophon 2011). However, although eco-labeling principles are consistent with the sustainability concepts, there are concerns that it is a barrier to trade due to the high compliance cost, lack of capacity to comply, and burden of compliance which fall on fisheries producers in exporting countries. These issues should be seriously considered in the drafting of a Philippines-EU FTA so as not to unduly burden Philippine fish producers and exporters.

5.2.3 Sanitary and phyto-sanitary measures

SPS aim to ensure that human and animal food is safe from contaminants, toxins, and diseases and covers all relevant laws, decrees, regulations; testing, inspection certification and approval procedures; packaging and labelling requirements directly related to food safety (Chamsai and Siriraksophon 2011). As in the case of TBTs, the Agreements on the Application

of Measures on TBTs and SPS suggest the use of the Codex as well in the case of SPS. The agreements further state that where a WTO member considers that a higher level of sanitary protection than afforded by Codex is necessary, it will have to produce the scientific evidence to support its position based on valid and internationally accepted risk assessment techniques.

Fish exporting countries face far more stringent SPS restrictions from the EU than from other markets (Ahmed 2006). In the past, for instance, the EU had imposed bans on seafood imports from developing countries citing food safety concerns in processing or contamination prior to catch. In aquaculture, in particular, the EU was strict on traces of chemicals such as antibiotics and fungicides that remain in the fish, and disease outbreaks among farmed animals. The EU continues to raise its SPS standards in recent years, for instance, through stricter residue monitoring for veterinary medicines and heavy metal contamination as well as more extensive labelling requirements.

There are important SPS related issues that should be considered in a Philippine-EU FTA. Firstly, the EU delegates authority for the implementation and enforcement of its food safety standards to the exporting country. This creates significant paper trails and other requirements that pose a major challenge especially to small local exporters in developing countries like the Philippines.

The second SPS related issue in the fisheries trade between EU and the Philippines is the 0.02 parts per million (ppm) in lead content in tuna and other fishery exports that the EU requires Association of southeast Asian Nations (ASEAN) to comply with. For some years now, ASEAN countries have been lobbying for the application of a 0.03 ppm maximum allowable lead content as specified in the Codex.

The third SPS-related issue is the use of Hazard and Critical Control Point (HACCP) method. This method was chosen by the Codex for ensuring the safety of a wide variety of foods provided on a commercial scale, including fisheries products. HACCP implementation, however, requires several substantial technical and economic resources (ICTSD 2006). Specifically, the science-based approach of HACCP to monitoring requires worker training and monitoring equipment and the internal auditing of HACCP-based systems also demands comprehensive

record-keeping and the continuous integration of new technologies as they develop. The technical and economic requirements for HACCP may not be affordable particularly to small and medium fisheries enterprises in developing countries like the Philippines without outside assistance.

5.3 Other trade related issues

5.3.1 Fisheries subsidies

The EU is one of the subsidizers of the fishing industry among countries in the world (Coffey 2011). These subsidies have promoted the massive overcapacity of the European fishing fleet which is now two to three times greater than what is needed to fish sustainably. These also distort trade because they lower the cost of production of the EU fishing industry allowing it to trade fish at lower prices and giving it unfair advantage over international competition. While the Philippines has its own fisheries subsidies, they greatly pale in comparison to those of the EU.

A review of EU and Philippine fisheries subsidies is in order for Philippines-EU FTA purposes. In general, fisheries subsidies contributing to sustainable fisheries as well as to people's livelihoods and poverty alleviation should be permitted in both countries while those that promote unsustainable fisheries and over-exploitation as well as trade distortion should be abolished (Chamsai and Siriraksophon 2011).

5.3.2 Fish dumping

Dumping is defined in the WTO Anti-Dumping Agreement as the exporting of produce at less than production cost to the material detriment of competitor industries in the importing country (Ahmed 2006). Under the Anti-Dumping Agreement, WTO members can impose anti-dumping measures (ADMs) on other members after an investigation is carried out and it is determined that dumping has occurred. There is no known incidence of dumping in the conduct of fish trade between the Philippines and the EU in the past. Nevertheless, effective measures should be put in place in the Philippines-EU FTA that would prevent this from happening in the future.

5.3.3 Fisheries access agreement

Coastal states or groups of states, like the Philippines and EU, have the discretion to allow the entry of foreign fishing fleets contingent into their fishing domains based on a number of conditions including reciprocity. At present, the EU has such agreements with several countries such as Norway, Iceland, the Baltic States, and the ACP countries under which it offers partners fishing opportunities in return for equivalent opportunities (ICTSD 2006). A fisheries access agreement between the Philippines and EU may not be important given the very far distance between the two parties. However, if a fisheries access agreement is to be negotiated as part or outside of an FTA, the Philippines has to be mindful in putting the interest of its fishing communities and the sustainability of local fisheries resources above EU investments and other perceived gains.

5.4 *Domestic constraints*

5.4.1 Limited fisheries trade infrastructure

To enhance its international trade position, the Philippines at present sorely needs improvements in its trade-related fisheries infrastructure, such as clean landing centers, good coastal roads, reliable electricity supply, telecommunications and efficient road transportation. It would be of great assistance if bilateral and multilateral aid agencies including those from the EU can help develop and invest in fisheries trade related infrastructure in the Philippines to assist the country in adequately meeting the quantity, quality and other trade requirements of the EU and other countries.

5.4.2 High cost of compliance to standards

As already emphasized earlier, complying with international and export market standards in fisheries products may imply significant costs on the part of Philippine exporters. This in turn may have the unwelcome effects of undermining the competitive advantage of the country as well as result in insurmountable barriers to trade for new Philippine exporters especially since regulations often shift the burden of responsibility to them (Ahmed 2006). Again and along this

line, the EU can help Philippine exporters particularly the small and medium enterprises lower the costs by providing technical and other forms of assistance in meeting the standards and requirements.

5.5.3 Inappropriate domestic fisheries policies

Some fisheries policies in the Philippines may be inappropriate when international trade, such as those with the EU, is being promoted. For one, export restrictions on milkfish fry, whether from the wild or hatchery-bred, may restrict local milkfish hatchery operators from producing milkfish fingerling for export as bait to EU and other importing countries. As a result, the market is now captured by neighboring milkfish fry producing countries such as Indonesia and Taiwan. This and other relevant fisheries policies should be reviewed to determine the possibility of allowing the exportation of hatchery-bred milkfish fry and promote the international fisheries trade position of the country.

VI. Impacts of Potential Philippine-EU FTA

6.1 Economic impacts

Cororaton and Corong (2012) analyzed the impacts of a reduction in tariffs under a potential Philippines-EU FTA by assuming that a) all sectoral tariff rates on Philippine products entering the EU market were zero; b) all sectoral tariff rates on Philippine products sold to the rest of the world were fixed; c) all sectoral tariff rates on EU products entering the Philippine market were zero; and d) all sectoral tariff rates on products from the rest of the world entering the Philippine market were fixed. The results and findings of the study for the entire economy of the Philippines were summarized earlier in the review of relevant literature conducted for this work. The results and findings specifically for the Philippine fisheries are presented below (Table 7).

A mutual elimination of tariffs between the Philippines and EU due to the FTA would result to increases in the quantity and exports of fisheries products (seaweeds, ocean fishing including fish corals, shrimp, prawn and other aquaculture including marine culture) and

industrial products (fish processing). These increases will be beneficial for the Philippine economy particularly in terms of improved production and balance of trade. Among the fisheries subsectors, seaweed farming, fish processing and ocean fishing in particular will benefit the most while aquaculture and pearl farming and gathering will benefit the least from the mutual elimination of tariffs.

Table 7: Effects of Mutual Elimination in Tariffs in Fisheries Products Due to a Potential Philippine-EU FTA (% Change)

Product Description	Quantity of Output	Quantity of Exports	Quantity of Imports
<i>Fisheries products</i>			
Seaweeds	0.7975	0.7998	0.4474
Ocean fishing (including fish corals)	0.2164	0.0000	0.0000
Shrimp, prawns and other aquaculture (including marine culture)	0.1489	0.3325	-0.3528
Pearl culture and pearl shell gathering	0.1383	0.3375	-0.1768
Inland and coastal fishing	0.0894	0.0000	-0.0444
<i>Industrial products</i>			
Fish processing	0.4781	1.9262	1.6568

Source of data: Cororaton and Corong (2012)

On the other hand, a mutual elimination in tariffs between the Philippines and EU due to the FTA will have mixed results in terms of fisheries imports. Imports of aquaculture, pearl culture and pearl gathering products will decrease which improve the balance of trade. However, imports of processed fish products and seaweeds will increase which will lower the balance of trade. In percentage terms, the fall in imports of fisheries products is highest among aquaculture products while the increase in imports is highest for processed products. Thus, processed

products will benefit most from the FTA while aquaculture products will be disadvantaged the most.

It should also be mentioned that an elimination of tariff that will reduce the prices and increase the quantities of fisheries products exported to the EU as predicted by Cororaton and Corong will likely diversify the countries within the EU importing these products beyond the current list dominated only by a few countries. It will also likely diversify the fisheries products exported to the EU which is presently dominated only by processed products particularly tuna. This is because the lower prices and higher quantities will make the fisheries products more affordable to more people in more countries within the EU.

6.2 Distributional impacts

Cororaton and Corong argued that overall in the Philippines, a bilateral reduction in tariffs in the RP-EU FTA that reduces commodity prices also increases real household incomes. As a result, the overall poverty incidence will decline from 26.3 percent to 26 percent indicating that the FTA may be poverty reducing. Furthermore, Cororaton and Corong asserted that the decline in the poverty gap and poverty severity will be higher than the poverty incidence, which implies that those households which are far below the poverty threshold benefit the most from the bilateral tariff reduction under the Philippines-EU FTA.

For his part, Kurien (2004) argued that in general, the effect on freer trade of fisheries products had a negative albeit insignificant impact on Filipino fishermen. It stated that small-scale fisheries, in particular, did not get the full benefits because of the monopsonistic structure of the chain of custody of procurement particularly for tuna exports. Furthermore, of the commercial fishers who were the primary suppliers of tuna for export processing, very few were owner operators and the rest got merely the crew share or wages which were not necessarily raised because some of their catch was exported. Kurien further explained that fish imports had the most adverse impact on the commercial fishers due to the similarity of the imported products to their catch. In the case of shrimp farmers, on the other hand, Kurien explained that this subsector initially made significant gains from international trade but their incomes have been declining recently.

Kurien further argued that the effect on freer trade of fisheries products had an insignificant and positive or negative impact on workers in the Philippine fish processing industry where many workers were women. On the negative side, because of the hot and humid conditions, the work in the canneries is tiring and involves long periods of standing which may have health implications particularly for the women. The importation of fish further affect another group of women fish workers, those selling locally caught fish in the wet markets. The imported fish may compete with the local fish sold by them so as a result the women may have to bear the loss from unsold fish as a consequence.

Kurien further explained that the freer trade of fisheries products had an insignificant and negative impact on Philippine fish consumers. While fish imports have brought relief to consumers because of their cheaper prices, the real problem is the limited purchasing power particularly among the poor to access fish and all other foods produced locally. Thus, even fish farmers producing tilapia originally for domestic sale, for instance, may be looking for export markets following low domestic demand coupled with higher prices in the international markets.

6.3 Impact on fisheries resources

Kurien further argued that freer trade of fisheries products had a significant and negative impact on Philippine fish stocks and resources. Due to intense fishing motivated by exportation, the tuna stocks in the country have diminished due to excessive fishing of juveniles following extensive use of aggregating devices called *payao*. While this helps the fisher to catch easier, in the long run it harms the stock. Shrimp aquaculture driven by exportation has also led to destruction of over 300,000 hectares of mangroves which in turn has affected the nursery areas for all varieties of fish. Thus, increased exportation in the future brought about by the Philippines-EU FTA would likely exacerbate the ongoing overexploitation of fisheries stocks and resources if left unchecked.

In contrast, it should also be pointed out here that the increased importation of fish due to freer trade such as under Philippines-EU FTA will increase fish supply in the domestic market and per se help decrease the pressure on fisheries stocks resources. In this case, the substitution of imported fish for local fish would have a positive contribution to the conservation of fisheries

stocks and resources in the country.

6.4 Gainers and losers

Based on above discussions, the likely gainers in the Philippines from fisheries trade under a Philippines-EU FTA are the a) processors and exporters of fish who will benefit from an increased fish demand from the EU; b) fish consumers in general who will gain from lower fish prices driven by the supply of imported fish; c) overall economy which will experience increased fish production and exports as well as improved balance of trade; and d) the poor in the country, including those in fisheries, who will enjoy lower commodity prices, increased incomes and reduced poverty. On the other hand, the potential losers are the a) small-scale fishermen who will face lower prices for their catch due to increased competition from imported fish; b) small-scale fish processors and marketing agents, including women, who will also face lower prices for their products; and c) fish stocks and fish resources which will be abused even further if the increased fisheries trade brought about by the FTA results to unsustainably managed exploitation. The magnitudes of most of the aforementioned positive and negative economic, distributional and environmental impacts of a Philippines-EU FTA, however, were not estimated from past studies.

VII. Summary and conclusion

This study assessed the likely economic, distributional and fisheries resource impacts of a potential free trade agreement (FTA) between the Philippines and EU on the fisheries sector of the former. The study used secondary data from institutional sources and results of relevant past studies. Among others, the study found that a) elimination of tariffs will likely increase fisheries outputs and exports as well as help reduce poverty in the fisheries sector and the general population; b) elimination of tariffs will likely diversify the currently limited country destinations and number of exported fisheries products of the Philippines to the EU; c) other than tariffs, there are non-tariff measures that significantly impede freer flow of fisheries products from the Philippines to the EU; d) some participants in the Philippine fisheries sector will gain from an FTA while others while lose but the net benefits to the sector and economy still needs to be measured; and e) increase in fisheries exports due to the FTA will likely worsen further fisheries resource overexploitation but, on the other hand, the inflow of cheaper imported fish

will tend to reduce the overexploitation.

The study concludes that if a Philippines-EU FTA materializes, it should not only significantly reduce or eliminate tariffs in fisheries products but also the NTMs that currently impede the freer flow of trade and place the Philippine fisheries sector at a disadvantage. Furthermore, since in the event of an FTA there are likely losers in fisheries such as the local poor fishermen and other small scale players, the government should provide some form of safety nets for them. Thirdly, since freer trade could potentially worsen the exploitation of already overfished fisheries stocks and resources, the government must implement the proper resource and environmental management that will allow sustainable exploitation even with increased fisheries trade. Finally, to allow a better analysis of the impacts of free trade on the fisheries sector, research should determine not just the direction of such impacts but their magnitudes in totality, on the net, and individually for all the affected participants in fisheries and the whole economy.

References

- Ahmed, M. 2006. *Market Access and Trade Liberalisation in Fisheries*, ICTSD Natural Resources, International Trade and Sustainable Development Series Issue Paper No. 4, International Centre for Trade and Sustainable Development, Geneva, Switzerland.
- Bureau of Fisheries and Aquatic Resources. Various Years. Philippine Fisheries Profile.
- Boumellassa, H., Y. Decreux and L. Fontagné. 2006. Economic Impact of a Potential Free Trade Agreement (FTA) Between the European Union and ASEAN. Commission of the European Union – Directorate-General for Trade. 41 p.
- Chamsai, S. and S. Siriraksophon. 2011. Sub-theme 5.1 Addressing Emerging International Fish Trade Concerns to Support the Sustainable Development of Fisheries. Theme 5. The ASEAN-SEAFDEC Conference on Sustainable Fisheries for Food Security Towards 2020 “Fish for the People 2020: Adaptation to a Changing Environment” 13-17 June 2011, The Sofitel Centara Grand Bangkok Hotel, Thailand 10 p.
- Coffey, C. 2011. Reforming EU Fisheries Subsidies. A Joint NGO Discussion Paper and Technical Resource. World Wildlife Fund for Nature (Copyright). 34 p.
- Cororaton, C. B. and E. Corong. 2012. Analysis of the Economic Effects of the Philippine-European Union Free Trade Agreement ((RP-EU FTA). Draft. 47 p.
- _____. 2011. Proposed Specification of an Economic Simulation Model for Trade Policy Analysis in the Philippines. Trade Related Technical Assistance Project 2 (EuropeAid/126687/SER/PH), Philippines. 32 p.
- European Union. 2012. Facts and Figures on the Common Fisheries Policy Basic Statistical Data. 2012 Edition, Printed in Belgium. 47 p.
- Fliess, B. and Lejarraga, I. 2005. *Analysis of Non-Tariff Barriers of Concern to Developing Countries*. OECD Trade Policy Working Paper No. 16. Organisation for Economic Cooperation and Development. Paris. France. Food and Agriculture Organization. No Date. Fishery and Aquaculture Country Profile : Philippines.
- Food and Agriculture Organization. No Date. Fishery and Aquaculture Country Profile : Philippines.
- Forum Fisheries Agency. 2010. Fisheries trade-related regulation. FFA Fisheries Trade News. Volume 3: Issue 9 September 2010.
- Grieve, C. 2001. Reviewing the Common Fisheries Policy EU Fisheries Management for the 21st

Century. Institute for European Environmental Policy, Dean Bradley House, 52 Horseferry Road, London SW1P 2AG, United Kingdom, 35 p.

International Center for Trade and Sustainable Development. 2006. *Fisheries, International Trade and Sustainable Development: Policy Discussion Paper*. ICTSD Natural Resources, International Trade and Sustainable Development Series. International Centre for Trade and Sustainable Development, Geneva, Switzerland. 114 p.

Kurien, J. 2004. *Responsible Fish Trade and Food Security: Toward Understanding the Relationship Between International Fish Trade and Food Security*. Rome. 109 p.

Organization of Economic Cooperation and Development. 2003. *Liberalising Fisheries Markets: Scope and Effects*. Organisation for Economic Cooperation and Development. Paris. France..

Pasadilla, G. O. and C. M. M. Liao. 2007. "Market Access Limitations of the Philippines in the EU Market." PIDS Discussion Paper No. 2007-15, Philippine Institute for Development Studies, NEDA sa Makati Bldg., Makati, Metro Manila. 65 p.

POST. 2010. EU Fisheries Management. POSTNOTE, Number 357, May 2010, Houses of Parliament, Parliamentary Office of Science and Technology. 4 p.

Roheim, A.C. 2003. "Trade Liberalisation in Fish Products: Impacts on Sustainability of International Markets and Fish Resources." *Mimeo*. Washington, D.C.: World Bank.

Trinidad, A. C., R. S. Pomeroy, P. V. Cruz and M. Aguero. 1993. *Bioeconomics of the Philippine Small Pelagics Fishery*. ICLARM Technical Report No. 38, Makati, Metro Manila, Philippines.