



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR MARITIME AFFAIRS AND FISHERIES

The Director-General

Brussels, 18 AOUT 2011
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Ms Béatrice Gorez
CFFA Coordinator
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Subject : Request for access to documents held by EU Institutions to Regulations (EC) N° 1049/2001 of the European Parliament and of the Council of 30 May 2001 regarding public access to European Parliament, Council and Commission documents; and Regulation (EC) N° 1367/2006 of the European Parliament and of the Council of 6 September 2006 on the application of the provisions of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters to Community institutions and bodies

Dear Ms Gorez,

Thank you for your letter of 29 July 2011 requesting access to a case study on Papua New Guinea commissioned by us.

I would like to clarify that DG MARE commissioned a general study on preferential rules of origin for fisheries and aquaculture products to Oceanic Development. By consequence, special rules of origin set up in the context of the interim Economic Partnership Agreement (EPA) with Papua New Guinea are also, but not exclusively, considered in this framework.

Considering that the part concerning Papua New Guinea is a separate section of the study which develops neither policy lines nor trade strategies, please find in annex the documentation requested. Please, bear in mind that the transmitted information (being part of an external study) represents solely the views of its author and can not in any circumstances be regarded as the official position of the European Commission.

Concerning the remaining part of the study we consider that is it covered by one of the exceptions provided for by the policy relating to access to documents under Regulation (EC) No 1049/2001 regarding public access to European Parliament, Council and Commission documents and therefore cannot be made publicly available. Its disclosure would risk to undermine international relations and, in particular, the possible outcome of free trade agreement negotiations involving the EU in the area of preferential rules of origin for fishery products. Disclosure of the document could also seriously undermine the Commission's decision making process in this context.

If you would like this position to be reviewed, please write to the Commission's Secretary-General at the address below, confirming your initial request. You have fifteen working days in which to do so from receipt of this letter, after which your initial request will be deemed to have been withdrawn.


The Secretary-General will inform you of the result of this review within 15 working days from the registration of your request, either granting you access to the document or confirming the partial refusal. In the latter case, you will be informed of how you can take further action.

All correspondence should be sent to the following address:

**The Secretary-General
European Commission
B-1049 BRUSSELS**

In conclusion, I must remind you that the transmitted document cannot be reproduced or disseminated for commercial purposes unless the Commission has first been consulted.

Yours Sincerely,


J. MALLET
DS Lowri EVANS abent

Enclosure: 1

3.3. Global sourcing for 1604/1605 products: Papua New Guinea case study

End of 2007, The European Union and two Pacific ACP States, Papua New Guinea and Fiji, initialled an interim Economic Partnership Agreement. In terms of trade, this interim economic partnership agreement provides for a duty free access to the EU market for originating products. One of the major features of this iEPA is that it includes a derogation from rules of origin by disposing that any processed fishery products of headings 1604 and 1605 manufactured in on-land premises in the State from non-originating materials of Chapter 03 that have been landed in a port of that State shall be considered as sufficiently worked or processed (art. 6 § 6 of Protocol II defining the concept of originating products). This is called the global sourcing. Papua New Guinea notified the Commission of its intention to use the global sourcing possibility in March 2008.

As from May 2010, Fiji was not authorised to export to the EU due to non-compliance with SPS requirements. Papua New Guinea could export to the EU and had three tuna processing plants operating in the country with additional capacities to be developed according to press releases.

The EU tuna industry raises its concerns with regard to this derogation on the ground that it could jeopardise the interests of the industry and open the door for massive imports into the EU of products from doubtful origins.

The present section has the objective of providing an independent assessment of the impact of the global sourcing for both PNG and the EU (including EU interests in the tuna sector in third countries, notably in other ACP and GSP+ countries). The information presented has been collected during a mission in PNG organised between 2nd and 9th May 2010 with support of the Delegation of the European Union in Port Moresby and of the National Fisheries Authority (NFA), the PNG authority responsible for managing the fishing sector. During the mission, discussions have been held with the main public Authorities involved in Port Moresby (NFA, Department of Trade and Foreign Affairs, Investment Promotion Authority). Trips to Madang and Lae have also been organised to visit two of the private companies operating tuna processing plants.

3.3.1. The PNG Tuna Industry

Foreword

Most of this report will focus on purse seine tuna catches, with fewer considerations on other catching methods. This is because the supply of the canneries worldwide relies essentially on catches of such vessels which catch tuna swimming near the surface using encircling nets and freeze them onboard in brine tanks. Fish caught by this fishing technique are unsuitable for direct human consumption. Supply of canneries can also originate from other fisheries (line fishery, pole and line fishery), but the quantities concerned are low (a few percent of total catches). By contrast, tuna caught by longliners (series of baited hooks set in deeper layers of the ocean) are placed mostly on the sashimi for direct consumption market and are therefore not used by the canning industry, to the exception of albacore tuna used to produce white meat tuna cans but in much lower quantities. Generally speaking, purse seiners are large industrial boats that can be 100 m in length and more, while longliners are smaller fishing vessels on average.

The waters under sovereignty of PNG

The following map shows the waters under sovereignty of PNG. The main particularity of PNG waters is the presence of archipelagic waters, a large portion of ocean (640,000 km²; i.e. greater than the EEZ of Namibia for example) comprised within the baselines. These internal waters, the territorial sea (12 miles from the baselines) and the EEZ (200 miles from the baselines) cover an area of 2.5 million km², one of the largest EEZ worldwide.

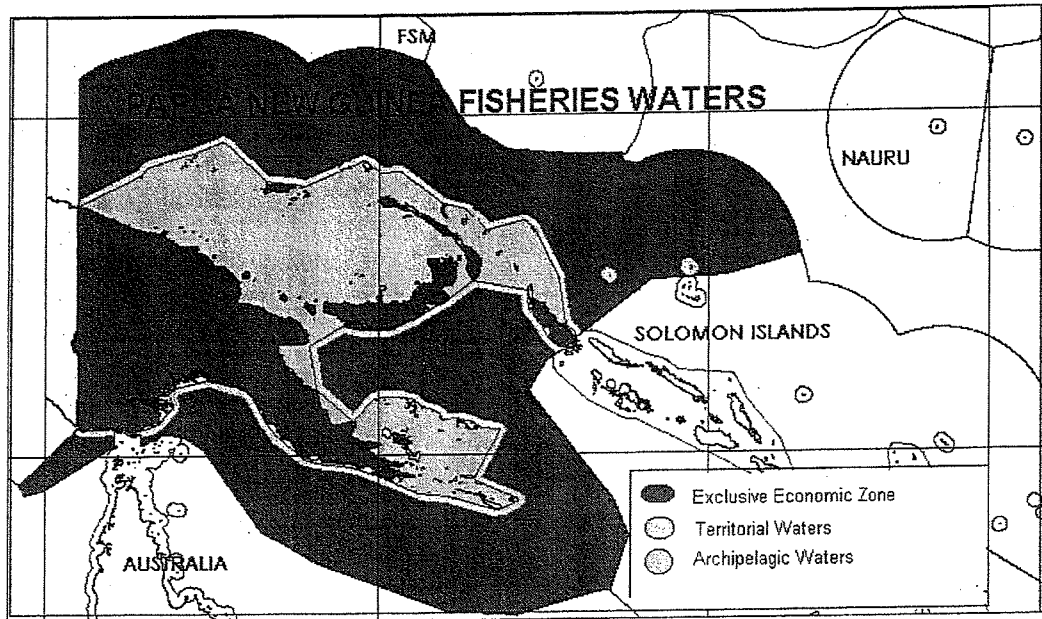


Figure 13: Map showing the waters under Sovereignty of PNG. Source: NFA

From a RoO perspective, catches taken from the archipelagic waters and territorial waters are automatically considered as originating from PNG without any requirement on the fishing vessel at the origin of the catches (flag, ownership, etc ...). However, compliance with EU SPS regulations and IUU regulation is still mandatory.

The catching side

Purse seine fleets operating under the competency of PNG

According to PNG National report to WCPFC 2009 Scientific Committee²⁹ corroborated by findings during the mission to PNG, the purse seine fleet operating within the limits of the EEZ of PNG comprises a mix of both domestic and foreign access vessels. The domestic fleet includes purse seiners flagged to PNG and PNG chartered vessels which support onshore processing activities. The PNG chartered vessels fish both inside and outside PNG waters, especially the purse seiners licensed under the FSM Arrangement.

As of 2009, there were 9 purse seiners flagged to PNG out of which 7 are reported active. These vessels fish principally in PNG waters (in the archipelagic, territorial waters and in the EEZ) and offload their catches to supply the processing plants. Most of these vessels are medium capacity purse seiners measuring around 50 m in length.

The fleet of chartered vessels, also called domestically based foreign vessels, numbered 33 in 2009. About half of the vessels are flagged to Philippines. They fish principally in PNG waters (including archipelagic waters). The other half of the chartered fleet includes purse seiners almost all flagged to Vanuatu except three flagged to China and Taiwan. This fleet fish in the EEZ of PNG but also widely throughout PNA waters under the FSM arrangement. The Philippines chartered fleet comprises mostly small purse seiners measuring 50 m and below. By contrast, the Vanuatu chartered fleet includes larger ocean going purse seiners between 70 and 90 m in length. The chartered vessels have obligation to offload their catches in PNG for further processing and are allowed to export their catches to other destinations (e.g. Thailand) only if the shore based processing plants cannot absorb the catches. Being considered as local vessels, the chartered purse seiners obtain discounted access fees reportedly much lower than the full access fees imposed to other access vessels.

²⁹ Report referenced WCPFC-SC5-AR/CCM-18

Both the PNG flagged vessels and the chartered vessels are crewed by foreigners (Filipinos mostly). This is explained by the fact that it is not possible to recruit crew in PNG as there is no tradition of high sea fishing in the country. PNG crewmen are reported not to withstand long period at sea, resulting in high turnover rates and poor working efficiency. Another question that arises is why the PNG rely so much on chartered foreign flagged vessels instead of nationally flagged vessels. According to NFA, this is the result of a complex legislation (tax, labour, maritime) in PNG that would impose unworkable conditions and increased operating costs on vessel owners wishing to reflag to the country.

The fleet authorised to fish in the EEZ of PNG under bilateral access agreements comprised nearly 130 vessels in 2008. This group includes by decreasing order of importance purse seiners flagged to Japan (35), Taiwan (33), Korea (27), Philippines (20), China (10) and Vanuatu (3). The access fees collected by NFA are reported to vary between USD 15 million and USD 20 million annually, with an average cost of access for a single purse seiner that can be approximated between USD 150,000 and USD 180,000 for an annual licence. In addition to the fleet operating under bilateral agreement, US purse seiners (40 units) have access to the PNG EEZ under the Multilateral Treaty concluded between USA and Pacific Islands, and the purse seine fleet from other PNA home parties (12 purse seiners) operating under the FSM arrangement. The purse seiners composing the access fleet are large industrial boats measuring between 70 and 100 m, with individual catching capacity that can be estimated to vary around 8,000 tonnes per year.

There are no EU vessels licensed to fish in the PNG EEZ. An application from a Spanish association has been reportedly refused by NFA on the ground that the purse seiners concerned had no intention to offload their catches in PNG, compounded by the fact that the EU fleet is a relatively newcomer in the WCPO area compared to Asia and USA interests that PNG has to accommodate. The EU purse seine fleet operates in the EEZ of Solomon Islands and Kiribati under EU bilateral agreements³⁰, in the EEZ of Nauru and Tuvalu under private agreements, and in the international waters of the tropical Pacific (both Eastern and Western).

There are few infrastructures in PNG for purse seiners. Local vessels or chartered vessels that offload catches direct to the canneries use private wharves built and maintained by the processing units. The access fleet uses ports of PNG to unload directly the catches onto reefers. The main transshipment ports in PNG are Rabaul, Wewak and Madang.

Catches of the purse seine fleet under competency of PNG

Total catches by purse seiners licensed to fish in PNG waters include catches by access foreign vessels, catches by PNG flagged purse seiners and catches by chartered domestically based purse seiners. According to NFA data submitted to WCPCF, total catches in the PNG EEZ amounted to 425,000 t on average over the 2006-2008 period. This represents 25% of total purse seine catches in the WCPO area³¹. While the majority of the catches in PNG waters (66% on average over the 2006-2008 period) are taken by access foreign vessels, the National fleet (5%) and the chartered fleet (28%) catch an average of 140,000 tonnes in the PNG EEZ. As concerns the separation between catches in the archipelagic waters and the areas beyond, there are no data available. However a reasonable assumption would be that catches in the archipelagic waters represent around 50,000 t per year. Only PNG flagged vessels and the smallest chartered vessels have access to these internal waters. Foreign access purse seiners are not allowed to fish in this area.

Table 35: Catches of purse seiners in the PNG EEZ by access regime. Source: NFA report to WCPCF

(tonnes)	2005	2006	2007	2008	Average 2006-2008
Access Foreign Catches in EEZ of PNG	174 785	276 173	320 132	249 866	282 057
Catches by PNG flag in PNG waters	21 620	19 538	21 494	24 723	21 918
Catches by chartered PNG in PNG waters	89 522	126 348	124 752	112 286	121 129
TOTAL	285 927	422 059	466 378	386 875	425 104

³⁰ The protocol of agreement with FSM has not been renewed after its expiration early 2010. However, the Fisheries Partnership Agreement is still ongoing. That is, EU vessels have currently no fishing possibilities in the FSM EEZ

³¹ i.e. less than the 40% commonly cited by PNG Authorities to emphasis the productivity of the EEZ

In addition to catches in the EEZ, PNG is also accountable for catches made by PNG flagged vessels and chartered vessels in areas of the WCPO located outside the EEZ. As shown below, these catches outside the PNG EEZ amounted to 75,000 t on average over the 2006-2008 period. These catches originate mostly from chartered vessels, and more precisely from the Vanuatu flagged vessels operating under the FSM arrangement.

Table 36: Catches of PNG purse seiners outside the EEZ. Source: NFA report to WCPCF

(tonnes)	2005	2006	2007	2008	Average 2006-2008
Catches by chartered vessels outside PNG EEZ	105 630	79 399	80 030	65 901	75 110
Catches by PNG vessels outside PNG EEZ	1 228	178	513	0	231
TOTAL	106 858	79 577	80 543	65 901	75 341

In total, catches from PNG flagged vessels and PNG chartered vessels both inside and outside the EEZ represent on average over the 2006-2008 period almost 220,000 t of tuna per year, of which roughly 2/3 are caught within the limits of the EEZ and 1/3 outside. These catches represent the raw material currently potentially available to the PNG shore processing industry as the very reason for having domestic and domestically based chartered foreign vessels in PNG waters is precisely to supply the PNG tuna processing industries.

3.3.2. The PNG tuna processing industry

Current tuna processing capacities

At the time of the mission in PNG, there was three tuna processing plants in operation, one in Madang, one in Lae and one in Wewak (see following map). The following sections present basic information on these three plants.



Figure 14: Location of the three tuna processing plants in operation in May 2010

- RD Tuna Cannery Ltd is located in Madang (created in 1997). The company is owned by RD Group, a major Filipino company in the agrofood business. The plant can process tuna into

cans or loins. It has an utilised 150 t / day processing capacity into cans and loins (eq. to ≈ 37,000 t per year), with possibility process up to 200 t / day. The raw material used is supplied by 14 purse seiners operated by an associated company (RD fishing) that unload using a private wharf located 23 km away from the plant. The supplying fleet is composed exclusively by Filipinos chartered vessels fishing in the archipelagic waters and within the limits of the EEZ. The processing unit employs 3,000 workers. The workforce includes 70 Filipino expatriates for management and supervision tasks, the remainder being PNG citizens, essentially women used for the canning operations. According to the company, about 30% of the production is sold on the domestic market under local brands, the rest (70%) being exported to the EU exclusively. The main destinations are Spain for frozen tuna loins and Germany and the United Kingdom for tuna cans. The cans are manufactured for EU hard-discount chains under the terms of contracts that specify the products requirements and the prices. RD Tuna was on the SANCO list as of May 2010. The company had been delisted in 2008 and could resume operations only in early 2009 after completion of major works.

- Frabelle (PNG) Ltd is located in Lae (created in 2006). The company is owned by Frabelle, a Filipino company involved in fishing and processing. The current processing capacity is 80 t / day (≈ 20,000 t per year). The associated fishing fleet includes 8 domestic vessels (6 PNG flags plus 2 Philippines flags under charter) plus 8 Filipinos purse seiners operating in PNG under a bilateral access agreement (access vessels). Domestic vessels have access to the archipelagic waters unlike access vessels which have to fish beyond the limits of the territorial sea. Fish used for processing is unloaded using a private wharf built along side the cannery compound. The company employs 1,500 workers, with a small percentage of expatriates and the bulk being PNG citizens (women). Approximately 20% of the production is sold on the local market under a private brand. The rest is exported exclusively to the EU. The markets (Germany, United Kingdom, Netherlands) and the type of cans exported (hard-discount products) are similar to that of RD Tuna canners. Frabelle (PNG) Ltd was on the SANCO list as of May 2010. The plant survived the FVO inspection in 2008 and could maintain operations. The company has ongoing investments to expand processing capacity up to 120 t / day and to rebuild a wharf plus quays for unloading.
- South Seas Tuna Corporation Ltd is located in Wewak³² (created in 2004). The company is controlled by Taiwan interest linked to FCF, a large Taiwanese tuna trading company. The processing unit specialises on tuna loins with a 100 t / day processing capacity (≈ 25,000 t per year), although it is reported to process only 70 t / day. Supply of raw material is guaranteed through 14 chartered purse seiners flagged to Vanuatu and granted a licence under the FSM arrangement, plus associated Taiwanese access vessels. The company employs 1,200 workers, mostly PNG women. SST Ltd was not on the SANCO list as of May 2010. The company had been delisted in 2008 after the FVO inspection and could not obtain new authorisation to export. The plant exports its loins production to the US.

Current output of the PNG tuna processing industry

The output of the industry is approached by the volume of imports into the EU, the major destination of PNG products at present. The industry produces also tuna cans for the domestic market, and some loins that are exported in the USA.

Exports to the EU

According to COMEXT data, the imports of tuna cans into the EU were slightly in excess of 14,500 t in 2009, with 1,700 t of loins. A first observation is that the provisional entry into force of the iEPA and of the possible derogation to rules of origin following the notification of PNG Authorities in March 2008 has had so far no visible effects on the intensity of exports of processed tuna products to the EU. The evolution of the quantities imported shows that the 2009 level is slightly equivalent to the level observed in preceding years. The dramatic increase in imports between 2008 and 2009 should be analysed taking into account the temporary closure of two of the three existing processing plant over the most part of 2008.

³² Contrary to RD Tuna Canners and Frabelle (PNG), SST plant could not be visited during the mission. The information on the company has been obtained indirectly.

In fact, the volume of imports from PNG in 2009 is broadly equivalent to the volume of imports over the 2005-2007 period. Compared to existing processing capacities, this is rather surprising as only one company (RD tuna canners Ltd) was operating in these years as opposed to 2 in 2009 (the same plus Frabelle (PNG) Ltd). The other surprising fact is that the equivalent raw material processed for export into the EU in 2009 ($\approx 26,000$ t) is less than half the announced processing capacities (RD tuna : 150 t per day and Frabelle 80 t / day = 230 t / day equivalent to 57,500 t per year). Some of the difference may be attributable to processing for the domestic market, which represent for both companies 20 to 30% of sales, but a gap remains, suggesting that the two plants do not work at full capacity.

The comparison with catch data from the PNG flagged and chartered purse seine fleet (220,000 t per year over the past three years) shows also that only roughly 25% of the catches made by this fleet is currently processed in PNG (assuming 57,000 t processed locally), meaning that the PNG domestic fleet exports to other foreign processing industries 75% of its catches, presumably mostly to Thailand and Philippines.

In terms of value, the imports of processed tuna products into the EU represent a value of nearly € 42 million. The increase in value is explained by slightly higher average price for tuna cans, and an increase in export of loins, a commodity of higher unit value.

Table 37: Imports of tuna cans and tuna loins into the EU. Source: COMEXT

(in '000 EUR)	2003	2004	2005	2006	2007	2008	2009
Canned tuna*	23 926	25 840	37 521	26 348	34 961	27 672	35 120
Tuna loins**	0	0	1 091	4 549	2 858	2 171	6 653
Total value	23 926	25 840	38 613	30 898	37 819	29 843	41 773

(in tonnes)	2003	2004	2005	2006	2007	2008	2009
Canned tuna	12 534	13 904	18 217	12 718	16 299	8 739	14 566
Tuna loins	0	0	338	1 413	763	511	1 767
Eq. Raw material***	18 801	20 856	28 137	22 468	26 279	14 335	26 089

* positions 16041411 (tuna in brine); 16041418 (tuna in oil) and 16042070 (other cans)

** position 16041416

*** Estimated on the basis of 1.5 kg raw material translate into 1 kg cans and 2.4 kg raw material translate into 1 kg loins

Overall, PNG canned tuna has currently a small share of the EU market for tuna cans, equivalent to 3% in value. The main suppliers of the EU are Ecuador (20% of the EU market in value on average between 2007 and 2009), Thailand (14%), Seychelles (13%), Mauritius, Philippines, Ivory Coast (10% each), Ghana (4%) and Columbia (3%). The countries mentioned plus PNG provide 91% of total imports of tuna cans into the EU. The EU trade statistics confirm that the main EU Member States importing PNG canned tuna are Germany, United Kingdom and Netherlands. These three Member States are the destination of 88% of PNG exports on average over the 2007-2009 period. Exports to other EU Member States are anecdotal. According to discussions held with private operators during the mission, the tuna cans manufactured in PNG are basically products for European hard-discount chains, i.e. with fairly low margins and minimal quality requirements.

Export to the US

According to data published by the United State International Trade Commission (USTIC), some imports of processed tuna products originating from Papua New Guinea have been recorded. The figures displayed in the following table indicate that imports from PNG into the US consist in tuna loins, with fairly low exports of tuna cans. However, exports of tuna cans in 2008 have increased, mirroring the decrease of exports to the EU. This suggests that RD Tuna that was not authorised to export to the EU this year managed to find an alternative outputs on the US market, albeit the quantities concerned are lower.

The increase in trade with the US coincides with the start of the SST Corporation plant in 2004. The equivalent raw material processed and exported to the US has been fairly low until 2006 (less than

5,000 t of whole tuna). Over 2007-2009, the equivalent raw material processed and exported to the US increased to \approx 12,000 t. This is what a processing (loining) plant with a capacity of 50 t / day would produce. Here again, there is a gap between the processing capacities announced (100 t / day) and the output measured through exports.

Table 38: Imports of tuna cans / pouch and tuna loins into the US. Source: USITC

<i>In '000 USD</i>	2003	2004	2005	2006	2007	2008	2009
Canned or pouch tuna*	2 165	165	0	148	1 239	9 195	213
Tuna loins**	0	2 002	3 985	6 639	14 438	13 247	17 279
Total value	2 165	2 167	3 985	6 787	15 678	22 442	17 493

<i>In tonnes</i>	2003	2004	2005	2006	2007	2008	2009
Canned or pouch tuna	1 228	83	0	67	551	3 641	97
Tuna loins	0	707	1 379	2 306	4 390	2 949	5 109
Eq. raw material***	1 842	1 822	3 310	5 635	11 363	12 540	12 409

* Heading 160414 except 16041440

**Position 16041440

*** Estimated on the basis of 1.5 kg raw material translate into 1 kg cans and 2.4 kg raw material translate into 1 kg loins

PNG has a small market share of the US market (2% in value in 2009) for processed tuna products. The main suppliers of this market are Thailand (48% of imports in value in 2009), Philippines (10%), Ecuador (10%) and Fiji (9%). PNG has a better ranking on the US market for tuna loins, representing 10% of all imports of loins in 2009. The three leading suppliers of loins for the US market are Fiji (41% in value in 2009), Thailand (22%) and Mauritius (14%).

Globally, the US market for imported processed tuna products represents a total quantity of 220,000 t of finished products, while the EU market for similar products is in excess of 500,000 t of finished products.

PNG Trade data

It could not be possible to collect detailed trade data in PNG during the mission. However; according to NFA, total exports of tuna products were in the region of USD 143.6 million in 2008. Exports of tuna loins and tuna cans amounted to USD 53.3 million in 2007 and USD 58.6 million in 2008. While the NFA reported 2007 export value for tuna cans is equivalent to the value of imports into the EU in 2007 as reported by COMEXT suggesting that almost all exports were to the EU, there is a large difference for 2008 confirming that the PNG tuna processing companies, delisted from SANCO list of authorised establishment this year, could find alternative export markets.

Table 39: Tuna fishery exports in value. Source: NFA

USD million	2004	2005	2006	2007	2008
Chilled tuna	10.4		7.5	6.1	6.2
Frozen tuna	17.9	32.9	33.1	54.8	74.5
Canned tuna	38.9	41	42.3	40.9	48.3
Tuna loins	1	8.3	10.3	12.4	10.3
Fish meal	1.5	1.5	3	2.8	2.6
Shark meat	0.5	0.5	0.7	0.8	0.9
Shark fins	0.7	0.8	0.8	0.8	0.8
Total	70.9	85	97.7	118.6	143.6

Export of whole frozen tuna remains the largest tuna commodity exported (USD 74.5 million in 2008). This includes the tuna caught by domestic and chartered purse seiners that has not been processed onshore. Quantities concerned are in the region of 45,000 t. Exports of fishery products other than tuna are low by comparison.

The competitiveness of the PNG tuna processing industry

It is well known that tuna canning industry is a high volume low margin industry.

The following graph details the breakdown of production costs of a tuna can. Data represent the average costs of producing in Thailand, Ghana, Ecuador and Seychelles, four of the main suppliers of the EU market. It shows that raw material represents around 60% of the final product, with cans being the second and labour & utilities the third.

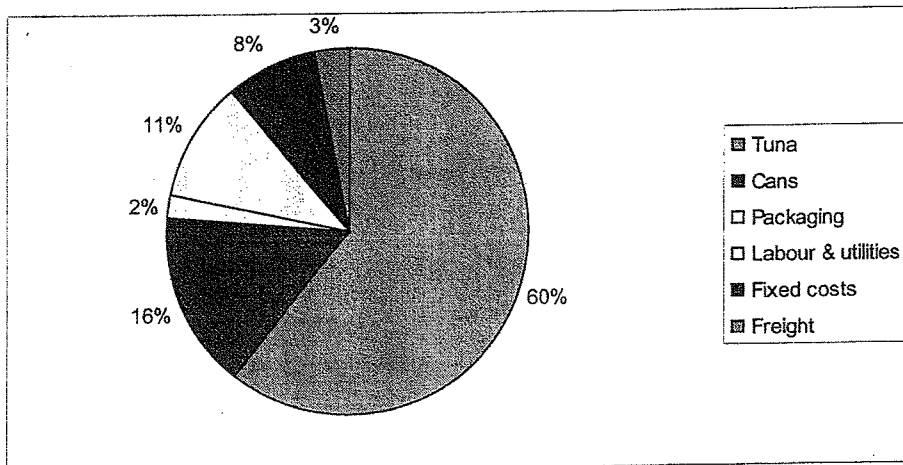


Figure 15: Breakdown of production costs of a tuna can. Source: Infofish 2008 tuna conference

The following table summarises the main strengths and weaknesses of the PNG fish processing industries with respect to costs of producing. The qualitative and quantitative information presented in the table has been obtained through interviews of key representatives of the public and private sector in PNG during the mission.

Table 40: Strengths and weaknesses of the PNG tuna processing industry

	Strengths	Weaknesses
Raw material	<p>PNG as one of the richest EEZ of the WCP, itself being the main tuna producing ocean</p> <p>Proximity to the fishing grounds</p> <p>Availability of fishing licenses at discounted prices</p> <p>Possibility to fish in the archipelagic waters and to qualify for a licence under the FSM arrangement</p> <p>While ex-vessel price of tuna is more or less identical to Bangkok prices, PNG shore industry saves on the price of transport of fish to canneries (Thai operators have to bear additional transport charges from fishing grounds to canneries)</p>	
Cans		<p>High cost of imported steel sheets (no rebates on volume)</p> <p>High cost of freight for importing</p> <p>The same applies to vegetable oil used to prepare the cans that has to be imported from third countries (Australia mostly)</p>
Packaging		Cartons and labels have to be imported
Labour	Availability of unemployed labour	<p>Minimum wage of PGK 2.29 per hour reported higher than in Asia³³</p> <p>High absenteeism (35%)</p> <p>High turnover (50%)</p> <p>Low efficiency (one Filipino worker would be as productive as three PNG workers)</p>
Utilities		<p>High cost of electricity and unreliability of supply forcing companies to have backup generators</p> <p>High cost of fuel (monopoly)</p>
Freight		<p>Reported to be very expensive due to relatively low volume of freight</p> <p>Increased freight cost compared to Thailand (USD 3,600 for a 40' container to Europe compared to USD 2,000 sent from Thailand to Europe) with price differential even higher for freezer containers used for loins</p>
General business environment	Willingness of Authorities to support the development of the sector (PMIZ, policy for license allocation)	<p>Poor quality of infrastructure (wharves, roads)</p> <p>Unstable legal framework and perceived high corruption level</p> <p>Frequent problems arising from traditional ownership of land in the country</p> <p>Administrative capacity</p>

In summary, the main advantage of operating in PNG is access to the resource, both in terms of availability and predictability of fishing licences and in terms of proximity from fishing grounds. Concerning costs and ease of doing business, all operators indicate that the PNG tuna processing industry suffers from many competitive disadvantages compared to similar operations in Thailand or Philippines. On balance, the PNG tuna industry can compete with these two countries on the EU market only because the products enjoy a duty free treatment while similar products exported from Thailand and Philippines are subject to a 20.5% (GSP) or 24% (MFN) tariff duty. An illustration is that the PNG tuna processing industry is unable to compete with Thai and Filipino products on the

³³ PGK 2.29 / hour is equivalent to USD 0.82 / hour (or EUR 0.62 / hour). Thai cannery wages are in the range of USD 0.65- USD 0.75 / hour (15-20% lower).

neighbouring market of Australia. Thai and Filipino products enjoy a duty-free treatment on this market under the AANZ FTA, like PNG under the SPARTECA non reciprocal trade agreement.

Overview of the tuna processing development projects in PNG

In addition to the current shore tuna processing facilities, there a number of new investment projects at different stages. The following presents information that could be obtained:

- **Majestic Seafoods Corporation:** This project is a joint venture between three major players in the tuna business: Thai Union of Thailand, one of the largest tuna processing company worldwide, Century of Philippines, one of the largest tuna processing company in operation in Philippines, and Frabelle of Philippines. The factory is to be built in Lae where land area has already been secured. The investment plan foresees an initial processing capacity of 120 t / day, increased to 350 t / day in later stages of the project (i.e. requiring \approx 30,000 t up to 90,000 t of raw material per year). Employment generated is expected to start with 1,800 workers, increasing to 5,000 as the project develops. Supply will require additional fishing licences for purse seiners (chartered) with FSM arrangement licences, plus support from associated access fishing vessels. According to NFA, fishing licences will be granted when the project is 75% completed. It is not clear whether those licences will replace existing licences or will be additional to current licence stock. The vessels would use wharf facilities currently being built by the existing Frabelle (PNG) Ltd company. Production will include tuna loins and tuna cans targeted for export to the EU market. According to NFA, the Majestic project is in an advanced stage, with a draft MoU being finalised. A groundbreaking ceremony in scheduled to take place before mid 2010. The investment would be worth USD 50 million.
- **International Fisheries Corporation Ltd:** IFC is already a processing plant in operation in Lae. IFC processes small pelagics into cans, but has expressed willingness to switch to tuna processing. According to NFA, IFC projects an initial capacity of 40 t / day, expanding to 120 t / day. IFC would need 4 fishing licences increasing to 12 when full capacity in reached. Given the processing capacity envisaged, the plant would need 1,000 workers and up to 3,000. IFC already employs local staff. IFC is currently not on the SANCO list of establishments authorised to export to the EU.
- **New cannery in Madang (PMIZ site):** this new project would be a joint venture between RD (Philippines), TriMarine (Singapore) and FairWell (Taiwan). The project targets an initial processing capacity of 100 t / day, doubling to 200 t / day (25,000 t to 50,000 t per year). The project would create 1,000 to 1,500 new jobs for PNG workers. According to NFA, the MoU is being drafted. The start of the project is also linked to the completion of the PMIZ. The investment budget would be around USD 30 million.
- **New cannery in Madang (PMIZ site):** this project is driven by the Chinese company Zhousan Zhenyang. The project would consider a 200 t to 300 t / day capacity employing 4,000 workers. Little additional details are available. According to NFA, the project remains at the stage of an announcement, with no formalisation of any kind so far.

There may be additional projects as one of the objectives underpinning the creation of the PMIZ is to stimulate the creation of up to 10 processing projects (with 2 identified as above). Assuming these 8 additional projects are created with a processing capacity of 200 t / day (1,600 t / day on aggregate), this would require an additional 400,000 tonnes of tuna per year, which seems unrealistic.

Note that all current investment projects are driven by foreign operators originating from Asian countries. There are no investment projects stemming from PNG nationals reflecting the low entrepreneurial skills in the country (visible as well in all other sectors of the economy).

The following table summarises these different projects and how they would develop under a tentative timetable established under the most realistic assumptions that can be made at present.

Table 41: Projections on PNG processed tuna outputs based on investment projects identified so far, plus hypothetical projections should all projects in the PMIZ materialise.

		Present 2010	Short term 2012	Medium term 2015	Long term 2020
RD Tuna Cannery Ltd (Madang)	Capacity (t/day)	150	200	200	200
	Employment	3 000	3 000	3 000	3 000
Frabelle (PNG) (Lae)	Capacity (t/day)	80	120	120	120
	Employment	1 500	2 200	2 200	2 200
SST (Wewak)	Capacity (t/day)	70	70	70	70
	Employment	1 200	1 200	1 200	1 200
Majestic Seafoods (Lae)	Capacity (t/day)		120	120	350
	Employment		2 000	2 000	5 000
International fishing corporation (Lae)	Capacity (t/day)		40	120	120
	Employment		1 000	2 000	2 000
RD / Trimarine (Madang PMIZ)	Capacity (t/day)		100	200	200
	Employment		1 500	2 500	2 500
Chinese project (Madang PMIZ)	Capacity (t/day)				250
	Employment				4 000
TOTAL	Capacity (t/day)	300	650	830	1 310
	Employment	5 700	10 900	12 900	19 900
8 additional projects in the PMIZ	Capacity (t/day)				1 600
	Employment				20 000
Hypothetical total	Capacity (t/day)				3 000
	Employment				40 000

Overall the current processing capacities would be more than quadrupled in the long term. There would be almost 15,000 jobs created in Lae and Madang in equal proportions. In terms of raw material, the need would increase from less than 57,000t currently, to 165,000 t in the short term and 330,000 t in the long term, and even 750,000 t under the assumption that all projects in the PMIZ materialise. In terms of finished products (cans and loins), assuming that 70% of the production would be tuna cans and the other 30% tuna loins, the output of the PNG industry would be in the region of 77,000 t of tuna cans and 20,600 t in the short term and up to 154,000 t of tuna cans and 41,250 t of tuna loins in the long term. Under the hypothetical most optimistic scenario, production of finished products could reach \approx 220,000 t of can and 150,000 t of loins. For reference purpose, current imports of tuna cans into the EU are in the region of 420,000 t per year and imports of loins just below 100,000 t per year (2008-2009 level, source COMEXT).

The PMIZ project

The Pacific Marine Industrial Zone (PMIZ) is a central element of the development strategy of the tuna processing sector. The PMIZ is a 215 ha area of land located 25 km from Madang. The objective is to create a dedicated area to install fish processing companies and associated service companies (net mending, can making, worker housing, etc.) in order to reach a critical mass of industries to achieve economies of scale and improve the competitiveness of the PNG industry. The creation of the PMIZ is expected to offset additional costs generated by high costs of freight, infrequent shipping calls, and increased costs of imported inputs. The PMIZ would also be given a specific status of Special Economic Zone with specific fiscal incentives similar to a Free Trade Zone. According to PNG Authority, the ownership of land is now secured, despite continuing interventions of NGOs. The total investment budget is estimated at USD 75 million. The PMIZ site could be visited: the area is now fenced and some cleaning works are in progress. The Government has still to build the basic infrastructures (road, energy and water supply, worker housings, wharves for unloading) and would be negotiating support funding from external donors. Negotiation for a loan from China would be ongoing. Environmental and social impact studies are reportedly being carried out. Concerning the fiscal status of the area, the Authorities indicated that they are in the process of drafting a bill to define the legal framework of Special Economic Zone that does not exist as yet in PNG. The PMIZ is expected to attract as much as 10 new investment projects in the long term.

On the basis of what could be discussed during the mission, it is clear that the PMIZ project is an ambitious project that the PNG Authorities are committed to complete according to plans. This project will require funding resources and administrative capacity, and above all time. The best guess estimate is that the PMIZ basic infrastructure works will be completed within a 5 year time frame, with progressive implementation of fish processing capacities after. There are also risks that the timetable

could be further delayed if NGOs take the Authorities to Court given the perceived detrimental environmental and social impacts, and possible conflicts with traditional landowners.

3.3.3. Trade related instruments

Rules of origin

The global sourcing possibility granted to PNG under the iEPA removes all constraints on origin of supply without prejudice to requirements stemming from other trade related instruments (SPS regulations and IUU regulations, see next section). The next table discuss what issues the definition of wholly obtained products adopted in the iEPA would have raised in the absence of derogation.

Table 42: Definition of wholly obtained status in the iEPA and comments on what impact it would have on the PNG tuna processing industry.

	iEPA definition	Comments
Origination	<p>The fish must be 'wholly obtained'. This applies if is caught anywhere by 'qualifying vessels'. If caught in 'territorial waters' (12 mile zone) origin is automatic, regardless of which vessel caught it.</p> <p>Territorial waters include archipelagic waters, which provide an important tuna fishing area in PNG, Solomon Islands and Fiji.</p>	<p>For purse seiners operating in the archipelagic waters (≈ 640,000 km²), which include both PNG flagged vessels and Philippines flagged chartered vessels, PNG originating status is automatic irrespective of vessels conditions. Fishing in that area concerns approximately 50,000 t of tuna landed in PNG for which the originating status is automatic. However, fishing possibilities in those particular waters cannot be expanded as the PNG Authorities want to limit the size and the number of boats to minimise as much as possible interactions with local fishermen. There are already complaints from locals about the high number of FAD in the zone and the <i>de facto</i> privatisation of fishing around them.</p>
Qualifying Vessels	<p>Vessel must be <u>registered</u> in and <u>flagged</u> by an EC state or PACP state that has signed an EPA</p> <p>At least 50% <u>ownership</u> by nationals of a EC or EPA state, or by a company with its head office and their main place of business in an EC or EPA state; and at least 50% owned by an EC Member State or EPA state, public entities or nationals of that State.</p>	<p>PNG flagged purse seiners meet those conditions, unlike the chartered purse seiners (owned by interests not meeting these requirements). The four EU purse seiners operating in the WCPO area are not currently a source of supply for the PNG processing industry as they sell their catches to the Spanish co-owned canneries located in Central America (Ecuador, Columbia, El Salvador). Therefore, qualified vessels would only have been the few PNG flagged vessels.</p> <p>Consequently, this rule would limit dramatically the potential sources of supply, and is probably the reason why a derogation was sought.</p>
Crew Requirements	Deleted from Cotonou rules	<p>If not deleted, the crew rules would have been difficult to meet. PNG Nationals are reluctant to engage in high sea fishing for cultural and historical reasons.</p>
Leased or Chartered Vessels	<p>The EC shall recognize, upon request of an EPA State, that vessels chartered or leased by that State be treated as 'their vessels' to undertake fisheries activities in its EEZ provided that:</p> <p>a) the EC has been offered the first right of refusal [presumably to engage in similar arrangements];</p> <p>b) it has been accepted by the Special Committee on Customs Cooperation and Rules of Origin as providing adequate opportunities for developing the capacity of the EPA State to fish on its own account and in particular as conferring on the EPA State the</p>	<p>The PNG purse seine fleet is limited and is not likely to expand in a near future. Consequently, the PNG tuna processing has to charter foreign vessels to supplement their fleets. It could be noted during the mission that PNG manages these chartered vessels as closely as National vessels (VMS, reporting, observers).</p> <p>As thing stands, it seems unlikely that the EU vessels would accept a charter arrangement with PNG as it would limit catch disposal possibilities. In addition, the procedure of having to first offer charter arrangements to EU vessels (which ones, how, and</p>

	responsibility for the nautical and commercial management of the vessel at its disposal for a significant period of time.	how long for) could be a real administrative problem. The rule on chartered vessels limits fishing to the EEZ. This would pose a problem to PNG as a number of chartered vessels are granted access to all the WCPO area through the FSM Arrangement. This is probably a strong incentive for foreign operators to conclude charter arrangement.
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Rules defining the wholly originating status would therefore limit supply possibilities, in particular those pertaining to the definition of qualifying vessels and the chartering of vessels. There are however some cumulation possibilities in the iEPA with other ACP States or EU OCTs, conditional however to the conclusion of bilateral administrative cooperation arrangements. Concerning other ACP States, there are only a few purse seiners flagged to other Pacific States (except Vanuatu). Marshall Islands and FSM reported 5 purse seiners active in 2008, Solomon Islands 3, Kiribati 1, and no purse seiners in other Islands. So far, those purse seiners never landed catches in PNG, having each their own arrangements with National (Solomon Islands) or international trading companies. Concerning OCTs, only two French OCTs (New Caledonia and French Polynesia) have tuna fleets, but specialising on longlining with no purse seiners. New Caledonia reports 23 longliners for a production of 2,400 t, French Polynesia a fleet of 68 longliners for a production of 5,000 t. Catches are sold on the local market or exported fresh to the EU market.

Overall, cumulation possibilities are not likely to be of use to expand significantly supply sources for the PNG industry.

SPS regulations

Background

PNG is on the list of countries of countries authorised to export to the EU. The FVO carried out a mission in March 2007 to assess whether the Competent Authority (CA) of PNG (the NFA) is capable of guaranteeing that the special conditions governing imports into the EU of fisheries products originating from PNG are respected. At that time, 6 land based and 41 freezer vessels were on the list of establishments authorised to export to the EU (as opposed to 2 land based and 26 freezer vessels as from March 2010). The FVO mission recorded many deficiencies and concluded that the CA in PNG is not in position to deliver the guarantees as per EU SPS legislation. The FVO noted that such a situation leads to consider that imminent and serious risks for consumer health cannot be excluded with regard to fishery products imported from Papua New Guinea. The CA presented an action plan in response to FVO recommendations

FVO organised a follow-up mission in February 2008 to assess to what extent the corrective action plan submitted by PNG had been executed. FVO noted that while there have been some improvements vis-à-vis the previous inspection mission, the current system of official controls in place in PNG does not fully ensure that fisheries products exported to the EU comply with EU requirements. FVO noted that longstanding problems still occur particularly those related to follow-up of deficiencies and enforcement of action plans in establishments and vessels and the updating of the consolidated list of freezer and reefer vessels approved for export to the EU. As one of the consequence of the findings of the mission PNG delisted two of the three tuna canning factories, with only one being relisted since.

Since then, the PNG Authorities have received considerable technical assistance from EU experts under the EDF funded SFP programme. Several missions have been deployed in the country to support both the PNG Authorities and the private sector in meeting SPS regulation requirements. According to SFP technical assistance reports, control of sanitary legislation is improving in PNG. As an indicator, no new notification of health risk stemming from PNG products has been reported through the RASFF framework since a histamine case notified in January 2008 concerning tuna cans.

Operational consequences on the PNG tuna processing industry

The main operational constraint of SPS regulations is that the PNG tuna processing industry can only export to the EU tuna products caught by freezer purse seiners on the SANCO list of approved establishments.

As of March 2010, there were 26 freezer vessels on the list of PNG authorised establishments (list published on 16 December 2009) while the total number of purse seiners flagged to PNG or chartered is approximately 40. The vessels on the PNG list of authorised establishments are flagged to PNG (7 units) or to Philippines (19 units)³⁴. The list of authorised establishments includes a majority of purse seiners and some carrier freezer vessels. None of the Vanuatu, Taiwan or Chinese chartered vessels is on the current SANCO list of authorised establishments. In a recent past, some Vanuatu chartered purse seiners were approved by PNG and put on the country list of approved establishments, but this was not legal as Vanuatu is not a country authorised to export fisheries products to the EU. Consequently, these vessels have been delisted.

Therefore, the current potential supply of PNG shore tuna industry is not as important as the number of chartered vessels and the production thereof (\approx 220,000 t per year) would suggest. In fact, since a substantial part of the production of the chartered fleet originate from the larger chartered Vanuatu purse seiners operating under the FSM Arrangement, the SPS eligible supply from chartered vessels is most probably below 100,000 tonnes, realistically close to 80,000 tonnes per year. At company level, the fleet chartered by RD Tuna Cannery Ltd is the one that has most authorised vessels. Concerning Frabelle Ltd, the number of SANCO authorised vessels is lower. The company has therefore to source supply from other purse seiners (probably purse seiners operated by the parent company Frabelle Fishing Corporation of Philippines). Concerning South Seas Tuna Corporation, none of its chartered vessels (flagged to Vanuatu, China and Taiwan) is on the list of authorised establishments. The processing unit is not authorised either to export to the EU, but in the event it is relisted, it would have to obtain its eligible supply from purse seiners other than its chartered fleet.

During the mission, PNG stakeholders repeatedly emphasised that obtaining supply from SPS compliant purse seiners is a problem. Some companies tried to source raw material from other fleet, but have had major difficulties to find supply for vessels that have at the same time catches available for sale and a valid agreement to export. According to the PNG stakeholders, compliance with SPS regulation is a major bottleneck in the supply chain and is likely to limit the scope of the global sourcing.

The IUU Regulation

As per Reg (EU) 1005/2008 (the IUU Regulation), only flag states that have their notification accepted by the Commission are authorised to export fisheries products directly to the EU or indirectly after processing in another third country.

PNG has notified its competent authorities to the Commission in accordance with the IUU regulation, nominating NFA as National institution. The notification has been accepted on 4th February 2010. Concerning the chartered fishing vessels, it remains the responsibility of the flag state to validate the catch certificates. The notification of Philippines, the flag of most of the chartered vessels in PNG, has been accepted on 15th January 2010, nominating the Bureau of Fisheries and Aquatic Resources as principal authority. According to representatives of the PNG processing industry, procedures have been implemented for approval of the catch certificates in Philippines. The procedure is reported to run smoothly but requires additional delay (two weeks) and bureaucracy to have all papers in good order. Taiwan (notified 1st January 2010) and China (notified 1st January 2010) which flag a few chartered vessels operating in PNG are also in a position to validate the catch certificates submitted by their vessels. So far, only chartered vessels flagged to Vanuatu cannot have their catch certificates validated as this state has not notified its competent authorities to the Commission. A notification process would have been started but has not been accepted as yet.

Most of the States that flag purse seiners operating in the WCPO have successfully notified the Commission according to the IUU regulation. The notable exceptions are Vanuatu (see above), FSM, Marshall Islands and Kiribati which all flag each a limited number of purse seiners. The DWFN which flag most of the purse seine fleet operating in the region (Korea, Japan, Taiwan, China, Philippines,

³⁴ In the case of the Philippines flagged vessels, the PNG competent authority can in principle include these purse seiners on its list of authorised vessels as Philippines is also a country authorised to export fisheries products to the EU. One of the associated conditions is that a joint communication is in place, under which the inspection authority is delegated from the flag (Philippines) to port (PNG) state Competent Authority.

USA) have successfully notified the Commission and can export fisheries product to the EU without prejudice to the requirements of the SPS regulation.

Overall, the IUU regulation is not likely to limit significantly the sourcing of raw material for the PNG tuna processing industry as most flag States have designated competent authorities. It is however likely that the terms of this regulation will pose problems for Vanuatu fishing vessels (around 20 purse seiners and 30 longliners operating in the WCPO), noting that freezer vessels flagged to this country are not able to supply the EU market anyway because of non compliance with the SPS regulations (no approved competent authority in Vanuatu).

3.3.4. How can PNG take advantage of the global sourcing derogation ?

Raw material availability

Catches in the WCPO

With the global sourcing derogation, PNG Authorities expect to take full advantage of the availability of raw material caught in the WCPO and become a major provider of the EU market. If processing capacities are built in the country according to plans, the major issue for PNG operators will be to secure supply of the raw material needed by the processing plants to manufacture the products (tuna cans and tuna loins).

Total tuna catches in the Western Central Pacific Ocean have increased dramatically over the two last decades, from slightly less than 1.5 million tonnes in 1990 to nearly 2.5 million tonnes in 2008, the highest production recorded ever. This increase is largely driven by an increase in purse seine catches, from 750,000 tonnes in 1990 to almost 1.8 million tonnes in 2008. Detailed catch data for 2009 will not be available until end 2010.

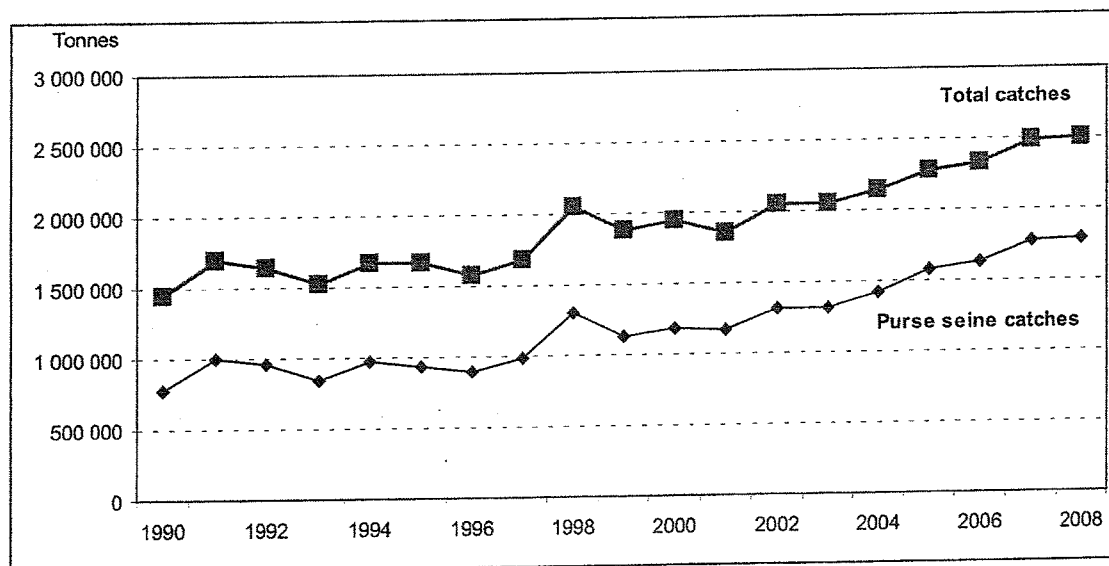


Figure 16: Total catches and purse seine catches in the WCPO. Source: SPC

On average over the last three years, purse seine catches represented 71% of total tuna catches in the WCPO, ahead of longline catches (12% of total catches, 290,000 tonnes) and pole and line catches (8%, ≈ 180,000). The catches from these two other fishing segments remained fairly stable over the past few years, even decreasing for pole and liners.

In terms of species, purse seine catches in the WCPO are dominated by skipjack. This species represents 82% of total purse seine catches on average over the last three year, with yellowfin ranking

second with 15% of total catches and bigeye 2%. Catches of other species are minimal reflecting the selective pattern of purse seine fishing.

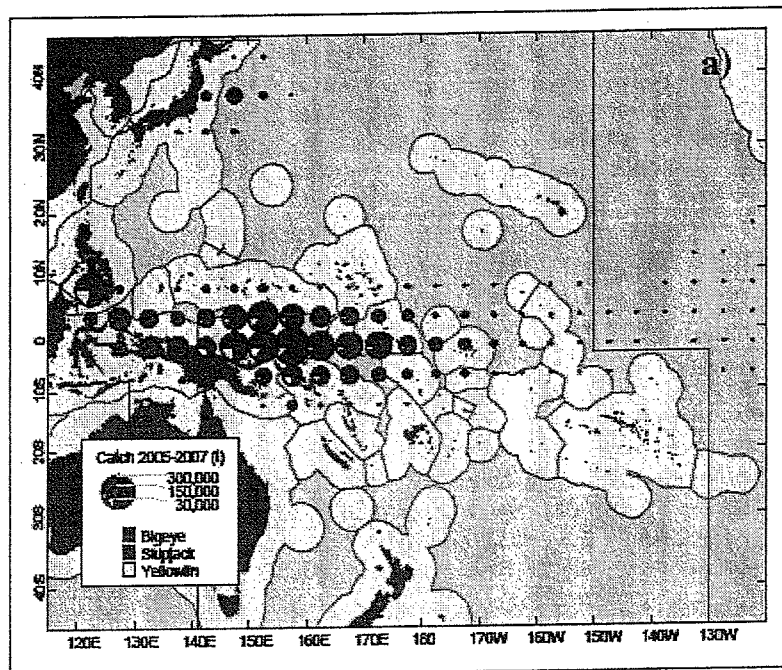


Figure 17: Distribution of purse seine catches in the WCPO (2005-2007 average). Source: SPC

The following table shows the purse seine catches by flag. The major fishing nations in the WCPO are, and have been historically, distant water fishing nations (DWFN) including Japan, Korea, Taiwan and the USA. These four flag countries comprised 61% of total purse seine catches over the 2006-2008 period (50% of total purse seine catches in 2008). Fleets of Pacific ACP States (Papua New Guinea, Solomon Islands, Kiribati, FSM and Vanuatu) represent an average of 314,500 tonnes over the last three years (18% of total purse seine catches in the WCPO). Papua New Guinea is the leading country with a production of 200,000 tonnes (70% of PACP catches), preceding Vanuatu (18% of PACP catches), Solomon Islands, FSM and Kiribati. Catches by this group have decreased dramatically in 2008 mirroring the reflagging of several Taiwanese-owned Vanuatu vessels to USA. As discussed in a foregoing section, catches attributed to PNG originate from catches made by PNG flagged vessels and from foreign flagged chartered vessels. Catches from other PACP are exclusively from National flag vessels. EU purse seine catches in the WCPO area represent a small share of total purse seine catches (less than 2%) but have increased significantly in 2008 compared to preceding years as a result of increased activities in the WCPO area of purse seiners that were mostly operating in the Eastern Pacific Ocean before and only on a part time basis in the WCPO.

Table 43: Purse seine catches (tonnes) in the WCP by flag. Source WCPFC

Flag	2005	2006	2007	2008	Average 2006-2008
China	48 672	52 757	54 949	55 562	54 423
EPO US	709	709	709	709	709
FSM	28 037	10 340	13 504	18 133	13 992
Indonesia	181 095	204 600	206 696	206 696	205 997
Japan	251 068	250 685	265 143	221 524	245 784
Kiribati	7 107	4 664	5 452	5 758	5 291
Korea	204 556	251 863	258 249	248 874	252 995
Marshall Isl.	56 174	42 358	59 410	32 884	44 884
New Zealand	24 162	24 682	36 628	28 723	30 011
PNG	231 896	229 150	226 900	202 891	219 647
Philippines	168 657	182 357	205 182	244 012	210 517
Solomon Isl.	16 432	22 511	17 310	14 845	18 222
Spain	3 432	10 862	19 747	35 483	22 031
Taiwan	195 132	210 252	232 624	204 062	215 646
USA	86 204	68 471	88 753	205 018	120 747
Vanuatu	74 746	61 913	71 292	38 729	57 311
TOTAL	1 578 079	1 628 174	1 762 548	1 763 903	1 718 208

Management and conservation issues

While the skipjack stocks in the WCPO are assumed to be in a good condition, there are concerns about the status of yellowfin and bigeye stocks. In 2005, the WCPFC adopted a resolution (CMM 2005-01, now replaced by CMM 2008-01) requiring parties to take necessary measures to ensure that purse seine effort levels do not exceed either 2004 levels, or the average of 2001 to 2004 levels, in waters under their national jurisdiction, beginning in 2006.

The response of the PNA countries has been to implement what is called the vessel days scheme (VDS) that limits the level of fishing effort measured in terms of days fishing to required levels. In summary, the arrangement operates by establishing an overall limit on the number of days³⁵ that can be fished by purse seine vessels operating in the EEZs of the Parties to the Palau Arrangement. The limit is based on the historical level of days fished in the EEZs of parties based on historical data. The VDS Management Scheme comprises three-year Management Periods and single Management Years, a calendar year. At the commencement of the Scheme a Total Allowable Effort (TAE) was set for the first Management Period, covering each of the first three Management Years. The initial TAE reflects the WCPFC recommendation of ensuring the purse seine fishing effort does not exceed 2001-2004 or 2004 level. Until WCPFC adopts another objective to adjust fishing effort for conservation purpose, the annual TAE will remain identical. Once allocated the Parties are free to utilise their allocated days as they see fit. Parties have a wide discretion as to how to employ allocated fishing days, including discretion as to which purse seine vessels are licensed to undertake fishing activities. The PNG policy is to favour purse seine fleets that bring additional benefits through shore investments. Note that the VDS does not apply to fishing in archipelagic waters. It does not apply either to US purse seiners operating under the multilateral agreement nor on the number of days that can be fished by purse seiners operating under the FSM Arrangement. However, according to PNG Authorities, PNA parties have agreed to limit FSM Arrangement effort to 3,100 days with no specific limit on the number of purse seiners that can use this effort envelope.

As concerns the high seas, CMM 2008-01 require the parties to take necessary measures to ensure that the level of purse seine fishing effort in days fished by their vessels in areas of the high seas does not exceed 2004 levels or the average of 2001-2004. However, the mechanisms to implement this resolution (a high seas VDS system comparable to the scheme developed by PNA parties) are still to

³⁵ For the purpose of the VDS, a fishing day is any calendar day, or part thereof, during which a purse seine vessel is in the waters of a Party outside a port (i.e. whether searching, catching, taking or harvesting fish). A special provision excludes counting days transiting through Party's waters, subject to specific conditions (fishing gear completely stowed).

be adopted. Meanwhile, the requirement to limit fishing effort in the high seas still applies. The response of the EU is to limit the number of vessels active in the WCPO to the number of vessels allowed under the bilateral fishing agreements concluded (Reg (EU) 23/2010), i.e. 4 purse seiners and 12 longliners as per the agreement with Kiribati.

The main consequence of the management and conservation rules adopted so far is that purse seiners catches of tuna in the WCPO are not going to increase indefinitely in a near future. They can be expected to remain at the current levels i.e. 1.7 to 1.8 million tonnes, which is already 25% higher than the desired 2004 catch level (1.4 million tonnes). Therefore, the working assumption is to consider that the quantities of raw material available for processing will not change dramatically and stand at current levels.

However, this working assumption can be challenged. Although fishing effort is supposed to be capped at 2004 levels (or average 2001-2004 level) through WCPFC and PNA management conservation and management measures; there are insistent rumours of new purse seiners being built in China, Taiwan and Japan with some of their older boats being islandised. In particular, China would increase its purse seine fleet from 12 to 20, with 4 new purse seiners already nearing completion. CMM are not really complied with and there has been no penalty yet for some of the blatant non-compliance. Most experts in the region consider likely an expansion of the purse seine fleet from \approx 225 currently to at least 240.

The VDS scheme adopted by PNA countries does not offer robust guarantees either. The process is not transparent and it is difficult to know precisely how the fishing effort has been managed by the PNA. In addition, there are numerous exceptions: the archipelagic waters (which cover large oceanic areas in PNG and in Solomon Islands) are not included in the scheme; there is no limit on effort for purse seiners operating under the FSM arrangement (although a maximum of 3,100 days would have been adopted internally), the US fleet is not constrained by the VDS and overshoot the initial effort allocation, and finally PNG succeeded to increase its VDS day allocation. Initially based on an average of 50% biomass and 50% effort, PNG could increase its initial allocation from 7,900 VDS days to more than 11,400 VDS (by choosing the most advantageous repartition key based on effort).

The driver for the expansion of the purse seine fleet is clearly the demand in raw material from canneries on the Pacific rim. There are the projects presented in PNG, but also forthcoming projects in Solomon Islands, and a new loining factory starting in Marshall Islands.

Current utilisation of catches

Purse seine catches from the WCPO are offloaded to canneries located on Pacific Islands and in countries on the Pacific rim.

The table on the next page presents the only information available on purse seine catch disposal by fleet based on 2007 figures. This table has been elaborated in the frame of the preparation of a tuna tagging scientific project to detect where tagged tuna were the most likely to be landed in the region. It gives therefore broad indications on the current (2007) flows, and does not pretend to be 100% accurate.

What is important to take into consideration is that Thailand is the destination for a large majority of purse seine catches in the WCPO (40%). Thailand has no fishing fleet and is supplied by purse seiners flagged to Taiwan, Korea, Vanuatu (with Taiwan interest behind), China and other fleets. In 2008, Thai canneries have exported nearly 430,000 tonnes of processed tuna (source Fishstat), requiring an estimated 650,000 tonnes of raw material. Approximately 500,000 t are caught in the WCPO, the remaining raw material being sourced from the Indian Ocean.

Philippines is the second destination of purse seine catches (17% of 2007 catches). The canneries of the country are supplied by a domestic fleet operating in the National waters, and by a long distance purse seine fleet (that includes Frabelle vessels). No other international fleets would supply the local canneries. In 2009, the Philippines government took strong measures to limit catches in the National waters, resulting in decrease of supply and closure of some canneries in General Santos.

American Samoa (Pago Pago) was the third destination of catches in 2007 with 14% of WCPO catches processed there. The main supplying fleets were those flagged to USA, Taiwan and Korea. However, one of the two Samoa plant (Chicken of the Sea) closed in 2009, and the second one (Starkist, owned by the Korean conglomerate DongWon) recently announced that it will reduce the company's territorial employment from its high of more than 3,000 in 2008 to less than 1,200 workers³⁶, suggesting that the company will keep only residual loining activities there.

Among the other canneries, those located in Japan and Korea are also an important destination of WCPO purse seine catches (5 to 8% each). The canneries in these countries are supplied by their own fleet, noting that the flag vessels are also important supplier of canneries located in Thailand and American Samoa.

³⁶ Starkist press release dated 13 May 2010

Table 44: Canneries receipts by source (purse seine fleets) in 2007. Source: SPC internal report on inferred product flows.

2006 PACIFIC OCEAN	P/SEINE Catch/fleet	2006											Total		
		Thailand	Pago	Japan	Philis	Korea	NZ	PNG	Indon	Sols	Vietnam	China			
China	52 700	39 000												50 000	120 600
FSM	9 600	7 100													7 100
Indonesia															248 000
Japan	233 900	50 600													41 000
Kiribati	4 700														3 000
Korea	248 100	85 500													3 200
Marshalls	41 200	19 500													
Neth Antil	10 000	3 000													
NZ	18 500	3 200													
PNG	209 200	88 500													
Philis DW	34 000														
Philis dom	120 000	3 000													
Philis I p/s	76 000	6 000													
Solomons	22 300	14 000													
Taiwan	210 200	157 000													
USA	66 700	6 900													
Vanuatu	61 000	61 000													
Vietnam															
	1 418 100	544 300	191 000	77 500	225 000	110 000	59 800	20 000	5 000	45 000	50 000				1 327 600

- 1) cannery receipts do not include white meat (albacore eg 30,000t for Pago, 35,000t for Bangkok)
- 2) Catches mostly from SPC 2006 Yearbook; purse seine catches by fleet do not necessarily add up to cannery receipts since not all is canned eg katsuobushi in Japan; does not include pole-and-line fish or longline fish either
- 3) about 105,000 t out of the total are shipped to Latin America, including catches from El Salvador, Ecuador and Spain

Implication for PNG

Raw material sourcing

Assuming catches of tuna in the WCPO will remain at current levels as a consequence of conservation and management measures adopted so far, the PNG tuna processing industry will be in a position to increase its production only if it can divert part of the existing flows of raw material. According to projections presented in Table 41, PNG raw material needs would be in the region of 165,000 t in the short term and 330,000 t in the long term to ensure adequate supply of the existing and projected canneries. Under the most optimistic figure (for PNG) raw material needs could even increase up to 750,000 t.

It is difficult to figure out what countries will loose supply. According to NFA policy, those flag states who do not contribute to onshore developments will be denied licences to fish in PNG waters. This would impact primarily Korea. PNG industries will also have to capture part of the current catches processed in Thailand and Philippines and part of the catches that were previously processed in American Samoa. New investment in PNG by investors from this country (Frabelle extension, new Thai Union / RD Cannery joint venture) could suggest that part of the raw material currently processed in these two countries may be processed in PNG when the plant are operating. The tension on raw material may be further exacerbated if the neighbouring State of Solomon Islands materialise its new investment projects in tuna canneries. According to FFA, there would be discussions for projects in Guadalcanal led by Korean interests and another cannery project led by ... Frabelle of Philippines. A loining plant operated by Chinese interests is also being started in Marshall Islands with a capacity of processing 25,000 t of tuna into loins per year.

EU interests in the WCPO operate purse seiners under the flag of Spain (≈ 35,500 t catches in 2008), the flag of Ecuador (≈ 7,500 t catches) and El Salvador (≈ 8,300 t). The catches (≈ 51,300 t in total) represent a low percentage of total WCPO catches (3%). The vessels operate both in the Western Central Pacific and the Eastern Pacific. The catches are shipped to Ecuador, El Salvador and Columbia where they are processed into cans and loins in canneries co-owned by Spanish operators. In the event PNG increases its processing capacities, it is unlikely that these catches will be used. The EU vessels and the other vessels they control are vertically integrated with the Latin America canneries.

Compliance with SPS regulations

One major limiting factor in obtaining supply will be the compliance with SPS rules. The only market possible for PNG processed product is the EU market as a result of the duty free tariff granted under the iEPA. On the two other major markets for processed (USA and Japan), PNG products fall under the GSP regimes and has therefore no specific advantage compared to competitors in the WCPO.

Therefore, the only source of supply possible will be freezer vessels present on the various flag countries lists of approved establishments.

In order to quantify what could be this SPS compliant purse seine fleet, we have compared two lists: the list of SPS compliant fishing vessels as published by DG SANCO for each flag state having purse seiners operating in the WCPO and the list of vessels in good standing published by FFA. The list of vessels in good standing includes all fishing vessels that have registered with FFA (including paying the registration fee) and that are estimated to be compliant with Minimum Terms and Conditions imposed (VMS reporting, catch declarations, etc ...). This FFA list is estimated to represent the fishing fleet active in the WCPO area. Both lists were updated as from March 2010.

The comparison of the two lists is a difficult exercise as this needs to be done on a vessel name basis (there are no common unique registration number between the two lists). Therefore, results below cannot be assumed to be 100% correct, but are estimated to represent a realistic picture of the situation.

The result is that there would be only 88 purse seiners (incl. 4 Spanish purse seiners) authorised to supply fisheries products to the EU out of a total fleet of 227 purse seiners registered with FFA (39%). Assuming an average production of 8,000 t per purse seiner, the EU eligible supply would be around 680,000 t, 38% of current catches. By flag, the comparison of the number of purse seiners operating in the WCPO and the number of purse seiners currently on the SANCO lists of approved establishment is as shown in the next table.

Table 45: Comparison between the number of active purse seiners and the number of SPS compliant purse seiner by flag. From a comparison between the FFA list of vessels in good standing and the SANCO lists of approved establishments.

Flag State	Number of purse seiners on the FFA register	Number of purse seiners on the SANCO register and on the FFA register	%
China	12	3	25%
Ecuador	7	7	100%
El Salvador	2	2	100%
FSM	7	0	0%
Japan	36	1	3%
Marshall Islands	6	0	0%
New Zealand	4	2	50%
Papua New Guinea	4	3	75%
Philippines	18	15	83%
Republic of Kiribati	4	0	0%
Republic of Vanuatu	19	0	0%
Solomon Islands	6	3	50%
South Korea	27	26	96%
Spain	4	4	100%
Taiwan	33	17	52%
Tuvalu	1	0	0%
United States of America	37	5	14%
TOTAL	227	88	39%

The results of the comparison show that the three major fleets in a position to supply the EU market are South Korea, Taiwan and Philippines. By contrast, fleets flying the flags of Japan, USA and Vanuatu are for various reasons not in a position to supply the EU market.

Considering that vessels flagged to Spain, Salvador and Ecuador (13 vessels) will continue to supply the Latin American country and Solomon Islands their own canneries, PNG will be able to increase its SPS supply base only from 72 purse seiners, with Korea, Taiwan and Philippines as major partners. These fleets currently supply processing units based in Thailand, American Samoa, Philippines and Korea. Thailand and Philippines are major exporters to the EU and will need to secure SPS compliant raw material as well to keep their market shares. The needs of SPS compliant raw material for Thailand and Philippines can be estimated close to 200,000 t per year³⁷.

Compliance with the IUU regulation

Table 45 below indicates that the most important flag states have notified the Commission and are therefore authorised to supply the EU market directly or indirectly. The only flag states that have not accomplished the notification process so far are ACP Pacific States (Marshall Isl. FSM, Kiribati, Tuvalu and Vanuatu). It may be only a matter of time before these state have their notification approved by the Commission, with however the notable exception of Vanuatu. Public information shows that Vanuatu is running an open registry for vessels, so it may take sometime before the country undertakes the necessary reforms.

³⁷ In 2008, Thailand exported 64,323 t of tuna cans to the EU plus 7,298 t of loins while Philippines exported 54,270 t of cans and 120 t of loins. The corresponding raw material is equivalent to \approx 195,000 t

However, whatever is the final decision concerning acceptance of these States notification according to the IUU regulation, they will remain prevented from supplying the EU market as long as they are not on the SANCO list of countries authorised to export.

Increasing market shares on the EU market

Assuming the PNG tuna processing industry can secure adequate raw material supply up to expectations, another challenge facing the industry will be to expand its share of the EU market for canned tuna. The current market share of PNG is low (3% in value), well behind market shares of its main competitors (Ecuador, 20%, Thailand 14%, Seychelles 13%).

The EU market for tuna cans can be broadly divided into two distinct segments: the branded products (*inter alia* Isabel, Calvo or Rianxera in Spain, Mareblu and Rio Mare in Italy, Saupiquet and Petit Navire in France, John West and Princes in the UK) and the "own label" products that bear the names of the supermarket distributing the cans (ex. Sainsbury's in the UK or Carrefour in France), or names of brands of temporary nature created specifically for commercial operations (promotions, premium prices). The next table shows that in the main EU Member States, branded products have the largest market shares. The notable exception is Germany where own labels dominate the market.

Table 46: Main characteristics of the leading Member States markets for tuna cans. Source: INFOFISH 2008 Tuna conference, presentation by A. Valsecchi

	Spain	Italy	UK	France	Germany	Netherlands	All EU
Weight (K tonnes)	134	115	102	73	47	4.6	546
Value (€ million)	859	995	438	461	204	25	3 600
Brands (% market)	46%	77%	64%	62%	28%	99%	
Own label (% market)	54%	23%	36%	38%	72%	1%	

From what could be seen during the mission, the PNG canning industry exports mostly to the EU "own label" types of tuna cans, produced under contracts with traders supplying EU hard-discount chains (Lidl, Aldi). The PNG industry will be in a position to expand significantly its market share on the EU market only if it can penetrate the larger and more profitable branded products market. This can be done only through a partnership with the owners of the brands requiring possible additional investments in technology to meet higher quality standards, as well as third parties certification on quality management, traceability, environmental and social responsibility. Ecuador, Seychelles, Ghana or Mauritius managed to secure high market shares because of their partnerships with EU Member States leading brands. Thailand remains positioned mostly on the own label segment, although some leading EU Member States brands have started some cooperation agreements there (ex. Saupiquet for France). If PNG cannot access the branded products market, it will have to compete with Thailand and Philippines on the own label segment with limited prospects of development given the lower size of this particular market and the competitive advantages of these two suppliers compared to PNG on a market segment where price is important, more than quality.

As a conclusion, it can be inferred from the above that the PNG tuna processing industry has many challenges ahead to expand its position on the EU market:

- It will have to find additional sources of raw material. Assuming the tuna catches in the WCPO will remain at current levels, PNG will have to divert some of the existing flows currently going to Asia competitors. This can be envisaged if investments by Thailand, Philippines or Taiwan operators materialise in a next future. However, the PNG Authorities will have to make sure that those investments are not an alibi to obtain fishing licences and still have most of the raw material caught by the licensed vessels being exported out of the country. The discrepancy between current catches by chartered vessels and the volumes processed in the country suggest that this already happens.
- That being said, the possibility that purse seine catches in the WCPO increase cannot be ignored. The conservation and management measures appear to be not complied with, and

some distant water fleet are currently increasing their purse seine fishing capacity. Increasing supply will ease the tension on raw material, but will threaten the sustainability of tuna stocks (yellowfin and bigeye that are caught by purse seiners targeting skipjack).

- The main constraint will be to secure provision of SPS compliant tuna, i.e. caught by fishing vessels present on lists of establishments authorised to export to the EU. Currently, it appears that only 38% of the purse seiners operating in the WCPO are in this situation. It is therefore far from certain that PNG processors would be able to source sufficient supplies of fish that is compliant with EU SPS measures.
- The PNG tuna processing industry will have to broaden the spectrum of tuna products manufactured. The current strategy of supplying the premium price segment cannot bring the expected results. If PNG wants to expand its market share, it will have to conclude partnership with EU owners of brands that control the market. This will require increased competitiveness and probably additional investments to meet the quality, environmental and social standards required by the brand owners, as a consequence of increasing EU consumer requests for environmental and social sustainability.
- Not least, the PNG tuna processing industry will have to improve its competitiveness. It has currently to bear additional costs mostly linked to the small size of the industry, preventing economies of scale, and its remoteness from the EU market. From what could be discussed during the mission, the PNG tuna industry manages to export to the EU market only because it is protected from Thailand and Philippines by the 24% tariff duty. It cannot export to other markets (Australia, USA) only because the country does not have any preferential trade treatment. According to the industry, only a small erosion of this tariff would lead to the closure of the PNG industry. The PNG stakeholders try to anticipate that through the creation of the PMIZ and the attraction of several investment projects with objective to achieve massive economies of scale. However, from what it could be observed during the mission, it will take time before these projects materialise, and probably even more time before maximum processing capacities announced are operational.

3.3.5. Preliminary assessment of the impacts of the global sourcing derogation

Impact on the EU industry (including EU interests in other ACP and GSP+ countries)

Currently, the main positions of the EU tuna industry can be briefly depicted as follows:

- Tuna processing plants located in the Indian Ocean (Seychelles, Mauritius, Madagascar, Kenya) supplied by EU purse seiners flying the EU flag (France and Spain) and other ACP (Seychelles) or OCT (Mayotte) fleets;
- Tuna processing plants located in the Atlantic Ocean (Ghana, Côte d'Ivoire) supplied by the EU purse seine fleets operating in the Atlantic and in the Indian Ocean, plus other ACP flagged tuna fleets;
- Tuna processing plants located in Latin America (GSP+ countries including Ecuador, El Salvador or Colombia) supplied by purse seine fleets flying the flags of Spain and of these GSP+ countries and operating both in the Eastern Pacific Ocean and in the Western Central Pacific Ocean.
- Tuna processing plants located in Spain and Italy, the two major EU producers. Whilst the Spanish processing industry processes a mix of whole fish and tuna loins, the Italian industry relies almost exclusively on the processing of loins. Loins processed in Spain and Italy are supplied mostly by Latin America or Indian Ocean countries, whole tuna processed in Spain are from the catches of EU purse seiners operating in the Atlantic and Indian Oceans.

All these operations are integrated to various extents. The Spanish industry is the most vertically integrated, with the same groups owning the purse seiners (under EU flags or not) and the processing facilities. The French industry is less integrated with distinct interests owning the fleets and the processing plants. However, the French shipowners conclude supply contracts with processing industries associated with the EU distribution sector.

Consequently, the EU tuna industry has few strategic links with the WCPO tuna fisheries. There are about 4 EU purse seiners and other associated purse seiners from Ecuador and El Salvador fishing in the area but with the objective to supply the Latin America canneries. This fleet does not contribute to the supply of other canneries located on the Pacific rim.

Therefore, it appears that if the PNG processing industry was to expand its production thanks to the global sourcing derogation, this will have few direct impacts on the EU tuna industry. It will affect mostly the processing industries located in Thailand or Philippines as a result on an increased competition for supply of SPS compliant raw material caught in the WCPO and possibly tuna stocks sustainability if the management and conservation framework remains weak. The development of the PNG tuna industry will not draw on regular sources of supply of the tuna processing plants controlled by EU investors.

According to development forecasts (Table 41 page 105), the PNG tuna processing industry may be in the capacity to produce as much as 150,000 t of cans in the long term, equivalent to 1/3 of the current imports of tuna cans into the EU. If the PNG industry manages to export up to this forecast to the EU, this might have an indirect effect on the EU tuna industry in terms of decreased market shares that would affect the major current suppliers (Ecuador, Seychelles, Mauritius, Madagascar, Ghana or Côte d'Ivoire). This scenario may materialise only if the PNG tuna processing industry increases its competitiveness and is, as a result, in a position to supply the EU market with high quality products at competitive prices compared to these traditional suppliers. An associated condition is that the PNG tuna industry can conclude partnerships with the owners of the major leading brands on the EU market. Through the creation of the PMIZ and an increase of the number of processing plants in PNG, the industry can achieve economies of scale and increase its competitiveness. However, it will be difficult for PNG to overcome some of the structural problems that contribute to increase the costs of producing, including inter alia the low efficiency and high absenteeism of the workforce and its relative high wage level, the costs and availability of utilities (electricity, water), the poor quality of public infrastructures and the increased costs of freight linked to the remoteness of the country for Europe. It is therefore unlikely that the PNG tuna processing industry could be as competitive as similar industries in Thailand or Philippines even in the long term. Note that if the PNG tuna industry succeeds to narrow the competitive gap, it could also be able to penetrate and increase its market shares on the US market or the neighbouring Australian market³⁸, and even on other markets such as the Middle East countries. Such diversification of the export markets will also serve the interests of the PNG tuna industry as it is safer not to depend on access to one single market. As a conclusion, the perspective of having the EU market flooded by imports from PNG does not appear to be realistic.

Impacts on PNG

The main positive impacts of the global sourcing for PNG will be in terms of job creations. If the industry develops up to expectations, an additional 15,000 jobs may be created in Lae and Madang, mostly for female unqualified workers³⁹. According to the PNG industry, there is enough job demand to fulfil the industry needs. There will be also additional jobs created in downstream service industries like security (a recurrent problem in PNG), catering or transport. Concerning upstream industries, there will be fewer impacts in PNG. Most consumables (steel sheets, packaging, oil, ingredients) will still have to be imported from abroad.

In terms of direct economic returns, the impacts will be probably limited. As in most developing countries, foreign investors manage to export the products at prices close to the production costs and generate the margins as the product is passed through the distribution chain out of the country (the transfer pricing technique). Generally, the audited financial reports of the processing company reveal losses or limited profit, resulting in no or low taxable income.

³⁸ The US market is supplied by imports from Thailand, Philippines, Indonesia, Vietnam or Ecuador. Thailand and Philippines are also the main suppliers of the Australian market.

³⁹ In the tuna canning sector worldwide, and more generally in the fish processing industry, female workers are the preferred employed gender because of their comparative higher efficiency.

The detailed impact assessment studies of the development of the tuna industry are still to be carried out. According to NGOs met, the development of this industry may have detrimental environmental and social impacts:

- **Environment:** the concentration of processing industries may generate pollution of neighbouring fishing grounds used by local fishermen (potential discharge of organic rich effluents or poisonous contaminants). At regional level, there is a risk that some fishing nations do not take their responsibility and continue to increase the development of fishing capacities in violation of WCPCF and PNA management and conservation measures. This will have consequences on sustainability of exploitation of yellowfin and bigeye stocks.
- **Social:** as experienced in the past, migration to major city centres in the last decade has contributed to urban unemployment and social problems. The main concern is that the canneries would attract influx of outsiders to the area seeking jobs and business opportunities. Local communities are concerned that an influx of "outsiders" (i.e. people from other parts of the province and from other provinces) would cause many problems for local villages. This reflects the weight of the tradition in PNG, in particular those related to traditional landownership.

The magnitude of these impacts is yet to be identified precisely, as well as possible mitigating measures. NFA would be in the process of launching independent impact assessments. However, if the PNG tuna processing industry is to expand export to the EU market, it will be forced to demonstrate high environmental and social standards under the pressure of EU consumers for ethical purchasing decisions (sustainable fishing, fair trade⁴⁰). This may benefit to PNG by raising the employment standards.

3.3.6. Concluding remarks

The PNG tuna processing industry is still in its infancy and has not really taken up the global sourcing possibility so far. The current processing capacities remain at fairly low levels and managed to process domestically only 25% of the potential supply by National and chartered vessels. However, the concomitant conclusion of the IEPA and the PNG Authority decision to grant fishing licences only to those fleets that contribute to shore development recently triggered the announcement of at least three major investment projects that could lead to triple the National processing capacities in the long term.

To have these investments projects viable, the PNG tuna processing industry will have to improve its competitiveness. Compared to Thailand or Philippines, PNG has several competitive disadvantages linked to the limited scale of current operations (few processing industries spread in different locations) but also to structural problems (efficiency and cost of the workforce, utility costs, lack of locally produced inputs, lack of infrastructures). On balance, the PNG processing industry can compete on the EU market only because the products enjoy a duty free treatment compared to the 20.5% (GSP) or 24% (MFN) tariff imposed on similar Thai or Filipino products. With the creation of a dedicated special economic zone (the PMIZ) and the increase of the critical mass of industries, it appears possible to achieve the desired economies of scale in the long term. However, structural sources of increased costs may remain and it is likely that the PNG industry will have to bear additional costs of producing compared to competitors.

If the PNG tuna processing industry wishes to develop, it will have to secure additional raw material sources. Under the working assumption that catches in the WCPO will remain at current level due to management and conservation measures taken by the WCPCF and the PNA countries, the only solution will be to divert existing flows of raw material currently processed by competing countries (inter alia Thailand, Philippines, Solomon Islands, American Samoa). Another strong requirement will be to source SPS/IUU compliant raw material. This may prove challenging as only 38% of the WCPO

⁴⁰ For example, as concerns social accountability, the SA8000 accreditation system provides measurable international standard in working condition and practices. It includes provision of a free-of-charge literacy programme, free access to company doctors, free transport to and from working places, family and community company support. The UK brand Princes had its Mauritius cannery certified accordingly and uses this certification as a commercial argument.

purse seine vessels are currently authorised to export to the EU. Taking into account this non-negotiable constraint, the global sourcing is not as global as it could be inferred from the iEPA protocol on RoO.

The impacts of the global sourcing on the EU tuna industry are expected to be minimal. The growth of the PNG tuna industry will impact the current suppliers processing the catches taken from the WCPO fishery (Thailand, Philippines mostly) but will not impact the EU industry that has few strategic links with the WCPO. Most of the EU interests are located in the Atlantic and Indian Ocean. The EU interests located in Latin America (GSP+ countries) obtain the raw material from the Eastern Pacific Ocean and from the WCPO where they represent only 3% of total catches. It seems also unlikely that PNG will be able to flood the EU market for tuna cans thanks to the global sourcing derogation. The main reason is that the PNG tuna processing industry is not likely to reach the desired level of competitiveness compared to other ACP or GSP+ competitors. Additionally, PNG products will increase market shares only if they can establish partnership with the EU owners of the major commercial brands, requiring economic competitiveness and increased quality and ethical standards. In the event PNG products become competitive, the US and Australian markets may also prove valuable alternative export markets, meaning that not all the projected production will end up on the EU market.

The environmental, social and economic impacts of the global sourcing on PNG are still to be assessed precisely. The main perceived benefits for PNG will be in terms of jobs creation (15,000) for basic low qualified female workforce, and some additional jobs in downstream service industries. However, according to NGOs, this could give rise to environmental and social problems potentially difficult to mitigate due to the importance of traditions in the country. Considering that the global sourcing is a factor that contributes to increase the demand for tuna raw material, and that the current management and conservation framework of tuna resources in the WCPO does not offer sufficient guarantees to keep the level of fishing effort at desired levels, there is a risk that the global sourcing granted to Pacific State is one of the drivers of overfishing of some key tuna stocks in the region. Management and conservation measures referred to in the iEPA protocol on rules of origin (Art 6 § 6 point b) need to be strengthened, and the EU who is party to the WCPFC has clearly a role to play in this respect, being at the origin of the global sourcing.