Chapter 3

Adapting to Graduation within Global Value Chains: Potential Increases in Trade Costs Associated with the Tuna Industry in the Solomon Islands*

3.1 Introduction

Solomon Islands has recently been recommended to the United Nations Committee for Development Policy (CDP) for graduation from least developed country (LDC) status. The impacts of graduation are far-reaching, but this case study considers the tuna industry specifically. This is because of the large estimated trade cost increase that may arise through the tariff preference loss induced by graduation.

The quantitative analysis presented in our draft inception report for this assignment, estimated that Solomon Islands might experience a rise in trade costs of around €15 million as a result of the trade shifts that are expected to occur through a loss of tariff preferences. While this analysis is informative, there are limitations to basing policy recommendations on a purely quantitative approach, particularly given the assumptions of perfect substitutability and elasticity, which may not accurately reflect the tuna industry and its organisation within a global value chain (GVC). As such, this contribution to the impact assessment of graduation from LDC status applies a qualitative assessment framework, which draws on GVC analysis.

This case study is organised as follows. Section 3.2 provides an overview of the Solomon Islands economy and LDC graduation; Section 3.3 considers the tuna GVC overall and the position of Solomon Islands within the networks of vertically integrated firms; Section 3.4 provides information on the tuna export industry in Solomon Islands and considers the perspectives of the local private sector and international buyers and competitors; Section 3.5 considers the financial implications of LDC graduation; Section 3.6 offers alternative mechanisms to cope with lost tariff preferences; Section 3.7 reviews additional related issues related to graduation. Finally, Section 3.8 concludes.

3.2 Solomon Islands' economy and LDC graduation

Solomon Islands, as a small island LDC, shares many of the challenges of other small island developing countries in its reliance on a few natural resources (primarily logging) and its exposure to natural disasters and external shocks. In the past 10 years, growth has ranged between 2 and 10 per cent, incidence of poverty has declined and there has been a sizeable increase in per capita income. However, unemployment is prevalent, and the economy is dominated by informal and subsistence activities.

In 2017, real gross domestic product (GDP) growth was approximately 3.5 per cent, driven predominantly by services (2.5 per cent), agriculture and fisheries (0.7 per cent) and industry (0.3 per cent). Despite the slight decline in logging in 2017, growth remained positive and relatively ambitious. Inflation reached 1 per cent in 2017, up from 0.6 per cent in 2016, with the price of oil driving the reduction on the estimated figure. The Balance of Payments was 3.9 per cent of GDP with the trade balance down to US$50 million owing to the decline in log exports. Estimates of GDP growth in 2018 are similar but the anticipated continued decline in logs, coupled with the reduced fishing activities given the decline in the number of days allocated under the Vessel Day Scheme (VDS), may cause growth to slow.

Solomon Islands is in a tight fiscal position as cash reserves have fallen and buffer stocks have been depleted. The current budget has made significant cuts, but there is concern that major financing programmes remain in place, with little to no return for the economy as a whole. The government has initiated a programme of tax reform, which is widely regarded as fundamental to attracting foreign investment and creating a more competitive economy.

There appears to be general recognition that the lack of diversification and unsustainable practices in the extractive industries are hampering long-term growth prospects, but thus far there have been few initiatives to tackle these issues and identify sources of growth with the potential not only to replace the current output from log resources but also to ensure that the gains are dispersed more equally. Access to finance is also a major barrier preventing opportunities for diversification, coupled with inadequate infrastructure to support economic growth.

The context in which Solomon Islands is graduating from LDC status, specifically the indicators it has met, is pivotal to forming a more comprehensive picture of how it may adapt. In 2015, Solomon Islands met two of the three eligibility thresholds for LDC graduation – namely, gross national income (GNI) per capita and the Human Assets Index (HAI). The CDP in its March 2015 report found that Solomon Islands' GNI per capita was US$1,402, above the eligibility threshold of $1,242, and its HAI was 71.7, above the eligibility threshold of 66 (ECOSOC, 2015). The Ministry of Foreign Affairs and External Trade (MFAET) raised a number of important issues in this regard, specifically around the presence of the Regional Assistance Mission to Solomon Islands (RAMSI)[1] following the period of civil 'tensions' from 1999 to 2003, which has likely inflated income statistics; as well as the main industries in the economy, which are predominantly extractive, tending to concentrate substantial income earnings in the hands of a few.

Where there is greatest cause for concern, however, is with regard to economic vulnerability, evidenced by the score achieved in the March 2015 CDP report, which found Solomon Islands' Economic Vulnerability Index (EVI) to be 50.8, well above the graduating threshold of 32. As a small island developing country at the forefront of the fight against climate change, and with limited diversification, the country is highly vulnerable to external shocks and natural disasters. Exports of round logs, for example, which comprise approximately 20 per cent of government revenue, reached peak output in 2016 and are predicted to decline rapidly in the coming years.

According to the Central Bank of Solomon Islands (CBSI), loss of this income stream would be catastrophic for the local economy. Reforestation initiatives are underway but inadequate, at least in the short run.

Furthermore, government coordination remains a challenge. Responsibility for coordinating LDC graduation lies with the Ministry of Development Planning and Aid Coordination (MDPAC), which does not appear to have initiated preparations. The National Development Strategy 2016–2035 is focused predominantly on alignment with the Sustainable Development Goals, failing to mention LDC graduation. MDPAC has recognised the need to address this and is currently developing the Solomon Islands Integrated Financial Framework (SIIFF) to incorporate LDC graduation preparation, in coordination with development partners, to ensure bilateral and regional assistance is aligned with domestic priorities. The SIIFF should include additional support to tackle issues related to economic vulnerability.

Despite the centrality of trade to the LDC graduation process, it appears that consultation with MFAET has been inadequate. In order to avoid an increase in trade costs as a result of lost tariff preferences to the EU and other markets, trade must play a central role, linked to the broader objectives of sustainable growth, economic transformation and diversification.

3.3 Overview of the canned tuna global value chain

This section provides a high-level overview of the canned tuna GVC. It considers the importance of the Pacific in the tuna value chain, the key players, market power structures and the main challenges facing the industry.

3.3.1 Importance of the Pacific in the tuna value chain

Over the past few decades, the canned tuna industry has experienced substantial growth in vessel numbers, catching capacities and total catch, coupled with an increasingly complex structure, resulting from an array of factors including resource sustainability, regulations, increased operating costs, developing consumer demand and changing preferential market access regimes (Hamilton et al., 2011a). The Western and Central Pacific Ocean (WCPO), where Solomon Islands is located, hosts the largest number of industrial-scale tuna purse seine fishing vessels in the world. In 2015, total catch in WCPO was 2.7 million metric tonnes, or 57 per cent of global catch.[2] From 1970 to 2007, the proportion of global catch from WCPO remained fairly constant, between 41 and 52 per cent, but since 2007 catch rates have increased to around 56–58 per cent of total global catch. In 2015, skipjack accounted for the highest volume and value of catch, at 1.82 million metric tonnes and US$2.3 million, or 68 per cent of total catch and 48 per cent of total value of all species caught in WCPO. This is followed by yellowfin (23 per cent volume and 32 per cent value), big eye (5 per cent volume and 13 per cent value) and albacore (4 per cent volume and 8 per cent value). Since 1997, skipjack catch has been the highest in volume; in only two years (2000 and 2003) has the catch value of yellowfin exceeded that of skipjack in WCPO. Skipjack is therefore the most important species for the region, in terms of both volume and value.

Although the EU industrial purse seine fleet is the largest in the world, there are currently no vessels operating in WCPO except in Cook Islands. The main reason for this is that EU vessels did not want to sign an agreement that incorporated the Vessel Day Scheme (VDS). The EU's presence is predominantly in the Western Indian Ocean and Eastern Central Atlantic. However, the importance of WCPO to EU-based canning firms cannot be underestimated. Under the current arrangements, Solomon Island processed frozen tuna "loins" qualify for duty-free quota-free (DFQF) access to the EU market. Tuna loins reflect the international division of labour and the system of tariff protection in canned tuna production in the EU and the USA. To save on labour costs, EU industry imports pre-cooked, frozen loins to be canned using predominantly capital-intensive machinery. These are largely imported from developing country suppliers where labour is relatively less costly and has access to tuna fisheries. This enables EU firms to source raw materials at low cost, despite the generally higher costs of doing business in Europe.

3.3.2 Players in the tuna global value chain

Tuna trading companies

Tuna trading involves the procurement of raw materials from multiple fishing vessels and coordinating the transhipment of catches for sale and delivery to tuna processors. Canning grade tuna trading companies have grown to a position of relative dominance in the supply chain, primarily because of the effectiveness of the services offered to vessel owners and processors. Tuna trading reaps relatively small profits per shipment so trading companies rely on economies of scale to trade high volumes of product. In WCPO, two major trading companies dominate the market: Tri Marine and FCF Fishery Co. Ltd. FCF handles the largest volume of raw material and is the most prominent tuna trader in WCPO, but Tri Marine International (TMI) has a much stronger global presence, especially in the EU market, with a more vertically integrated business model. The two tuna trading firms have a well-established presence in WCPO that is unlikely to be challenged given the significant barriers to entry present (Hamilton et al., 2011b).

It is worth briefly discussing TMI, as the owner of local fishing company, National Fisheries Development (NFD), and the majority shareholder of SolTuna. As mentioned, its core business is tuna trading, although it is also involved in all aspects of the canned tuna supply chain (end-to-end management) – namely, fishing, trading, logistics, processing and marketing. The global and vertically integrated nature of the company enables it to support these operations effectively, ensuring a reliable and economic supply of raw material and tuna products to its major brand clients. TMI has canned tuna brand partners in the USA (Chicken of the Sea and Star Kist) and Europe (Bolton Group) and also supplies a considerable volume of raw material to tuna packers in Thailand and elsewhere. It has a long-standing contract with Bolton Group to supply high-quality yellowfin loins, as well as small volumes of skipjack loins for the Rio Mare and Saupiquet canned tuna brands, which are processed in Bolton Group's Italian factory (i.e. defrosted and packed into cans). The high-quality specifications of the processed tuna are important points to consider in the context of the increased trade costs through a loss of tariff preferences that would come from LDC graduation for Solomon Islands. However, as the value chain is driven on cost, ultimately if the costs are too high, the tuna will be transhipped to be processed elsewhere.

Tuna processors

The developing world is now the leading location for global canned tuna production – that is, from raw material (whole round fish) to finished product. The leading locations are in Southeast Asia, especially Thailand, the Philippines and Indonesia, and increasingly Vietnam; and in Latin America, especially Ecuador and Mexico. China is also emerging as a major player in this industry, supported in part by a growing and highly subsidised Chinese-owned tuna fleet. The other locations, such as in the Western Indian Ocean and West Africa, are focused almost entirely on the EU market and are propped up by the EU system of tuna preferences. Except for Thailand, all of these locations are in close proximity to major fishing grounds and have access to productive and lower cost labour, and in some cases preferential access to the major consumer markets of *both* the EU and the USA (historically Ecuador). Similar to the tuna fishing industry, the canned tuna processing industry is complex, with global operations influenced by the increasing cost of raw materials and other production inputs, sustainability issues, overcapacity, complex tariff regimes, stricter standards and changing consumer preferences. Thailand is the world's leading producer of canned tuna and the global market price leader for canning grade whole-round frozen tuna. The industry is dominated by five branded processors, which own the leading canned tuna brands in the EU and North America – that is, Thai Union, Dongwon, Princes (owned by Mitsubishi), Bumble Bee (owned by Lion Capital, a private equity group) and the Bolton Group, which owns a minority interest in TMI.

Thailand's tuna processors import almost all of their raw material needs, around 90 per cent of which is sourced from WCPO through trading companies. Given Thailand's processing capacity, global competitiveness, industry know-how and market share, it will continue to dominate the global canned tuna processing industry. The EU also has a canned tuna processing industry but, given the higher price of labour and other inputs, greater attention is paid to the size of the fish, with canneries typically sourcing large whole-round fish to boost labour productivity. Investment in processing facilities in the developing world is a central component of the business model of EU firms, which is closely connected to EU tariff preferences. The survival of EU firms is based to a great extent on protection from relatively low-cost imports via high tariffs and their ability to source raw materials from countries that qualify for preferential access into the EU market (Hamilton et al., 2011a,; Campling, 2016).

Principal canned tuna markets

Canned tuna is a popular low-cost source of protein traded as a global commodity product typified by high volumes and low profit margins. The major markets are the EU and the USA but, with consumption levels stable, there is an increasing focus on consumers in emerging markets such as the Middle East, Latin America, Eastern

Europe and South Africa. It is the supermarkets in the EU and USA that dominate canned tuna retail sales and therefore command the greatest market power in the value chain (Hamilton et al., 2011b).

Supermarkets drive competition to such a degree because of their vast buying power. Often, canned tuna is sold on promotion by the large supermarkets to draw customers into the store, who will then go on to purchase their weekly shops. The oligopolistic nature of the value chain means supermarkets have the greatest market share and sales density, with firms' buyers of canned tuna able to exert significant pressure on the value chain upstream on price and other areas of competition, including product and process standards (Campling, 2017).

Interestingly, in the canned tuna industry, the supermarkets are able not only to squeeze the smaller producers in the value chain but also to disadvantage some of the larger companies that own canned tuna brands, deepening competition among the major suppliers, regardless of their market size. Supermarkets are able to play big brands off of each other, increase their overall sales and use private labels to capture a bigger profit margin. The increasing market share of the largest retailers reflects the market power that a consolidating retail market generates. Big retailers fight for market share by drawing customers in with promotions and lower prices, the costs of which are passed on to suppliers (Havice and Campling, 2017). This translates into lower profit margins further down the chain, such as firms canning for brands or private labels and loining plants.

The increasing influence of private label tuna, as opposed to national brands, is having a further impact on the power structure in the canned tuna GVC. Private label tuna is taking an increasing share of key EU markets and, with no marketing or branding costs, supermarkets are able to offer their own label at a lower price, squeezing branded firms even further. There are important differences between EU markets. Italy remains led by the big brands, which are believed to be in a position to capture high brand rents (Campling, 2013). This is important for Solomon Islands, given that the vast majority of its tuna loins are processed in Italy for the domestic market.

3.3.3 Retaining and expanding market power

There is significant heterogeneity in the branding and manufacturing nodes of the canned tuna supply chain, and each company will have its own logistics and tactics for survival in an attempt to differentiate itself from its competitors. For example, some firms are focussed on trying to secure long-term strategic access to tuna fisheries by making onshore processing investments; others are arms-length from fishing and are focused on branding and marketing; yet others deploy a combination of the two.

There are two main categories of branded firms: branded manufacturers that are often integrated backward into fishing and rely in large part on their own manufacturing for supply and source part of their products from non-branded manufacturers;

and marketing companies that rely on non-branded manufacturers to supply their branded product and focus on marketing and total supply chain management, deriving their profits from brand rent. There are also two main categories of non-branded manufacturers: co-packers, which receive contracts to produce private label and/or branded products according to buyer specifications, and which are sometimes integrated backward into fishing; and contract processors, which generally do not own the fish and are paid a processing fee by tuna trading companies or branded firms, which coordinate procurement, product specifications and sales of finished product. The major issue for the processing node of the supply chain is that it is highly overcapitalised, creating problems for non-branded manufacturers, which rely on high volumes to generate profit in a low-margin industry. Smaller developing countries like Solomon Islands tend to be at the bottom of the hierarchy in the international division of labour in canned tuna production. SolTuna is a contract processor, producing frozen tuna loins, which are an intermediate product procured by canneries in high-cost locations of tuna production. This means that companies like SolTuna are not in a position to capture brand rents – they are price takers.

For Solomon Islands and other Pacific Island Countries (PICs) supplying the tuna market, processing activities that are directly connected to global corporate activity must increasingly fit into the overall business strategies of the large companies driving the industry worldwide. There is a widespread view that canned tuna is too cheap, given the way it is marketed and sold across supermarkets in the EU and US. In order to increase the price, and therefore the profit margins that can be funnelled down the value chain, supplier countries could attempt to restrict supply. PICs, as the owners of the world's largest canning-grade tuna resources, are in a strong position to drive up the price of canned tuna, by putting in place effective limits on fishing activity and controlling supply (Hamilton et al., 2011b).

3.3.4 Issues in the tuna global value chain

Overcapacity in both fishing and processing is a significant issue in the tuna GVC, and any new investments are only likely to exacerbate the issue. The cost of raw materials is increasing, mainly because of tightening of supply, which could lead to the closure of marginal processors. The industry is also facing increased inputs and operating costs, such as in energy, cans, oil and labour, which puts pressure on profitability. As such, firms are increasingly looking for ways to streamline their business models. Furthermore, the sustainability of tuna stocks is of paramount concern not just to tuna processors but across the supply chain. Biological limits have nearly been met in the bigeye and yellowfin species, which has major implications for long-term access to raw materials. Coupled with shifting demand for sustainable seafood in European and US markets, processors are under increasing pressure to source supply sustainably (Adolf et al., 2015; Havice and Campling, 2017). Pertinent to this study, changes in tariff preferences are also likely to have significant effects on developing country processors and suppliers as the rise in free trade agreements (FTAs) and the resultant erosion of tariff preferences reduces the competitiveness of those countries that rely on these to a great extent (Campling, 2016).

3.4 Tuna export industry in Solomon Islands: Incorporating the global value chain perspective

3.4.1 Importance of the tuna industry in Solomon Islands

For Solomon Islands and the Pacific region as a whole, fishing represents the backbone of society and a way of life preserved for generations. Across WCPO, tuna stocks are abundant, and currently supply approximately 50-60 per cent of the world's total tuna stocks. Tuna represents a major source of income for the region and, provided it is managed appropriately, will continue to do so into the future. Despite the strategic importance of tuna for the region, its ability to command a fair price has been a consistent challenge, given the structure of the value chain, as evidenced above. Ensuring the region can command a price that is on a par with the importance of the resource is vital.

Tuna represents an important employment and wage industry, made all the more imperative given the limited economic diversification signalled by the reliance on exports of round unprocessed logs, the and minimal participation of the majority of the population in the formal economy. In a country with significant levels of unemployment and underemployment, the presence of onshore processing and canning plants, which are highly labour-intensive, is crucial.

The fisheries sector accounts for 5.2 per cent[3] of Solomon Islands GDP. The total catch in the national waters of Solomon Islands of all types of vessels – longline, pole and line and purse seine – was 136,365 tonnes in 2015, or US$318 million. Although an increase on 2014 catch and value, this is lower than the 2010 high of 186,510 tonnes ($347 million). In 2015, the national fleet comprised 127 vessels[4] and total catch was 61,670 tonnes. The majority of foreign purse seine vessels fishing in Solomon Islands under access agreements are from Korea, Taiwan, Japan, Vanuatu and FSM. It terms of contribution to GDP, government revenue from foreign vessels access fee payments in 2015 was $41 million, of which the majority ($26.5 million) was through purse seine bilateral and other agreements, such as the VDS. Onshore processing in 2015 was 38,501 tonnes and total employment was 2,356. Employment earnings were estimated at $12 million, with the value of local purchases at $23 million. The multiplier effect of the onshore processing industry in terms of employment and income generation from ancillary goods and services provision is considerable.

Solomon Islands has one processing and canning plant, based in Noro, Western Province, which currently employs over 2,000 workers, 67 per cent of whom are women (IFC, 2016). However, women are highly concentrated at the operational level and significantly under-represented across all levels of management. As the largest employer in Solomon Islands, SolTuna has a strong commitment towards ensuring equal rights and opportunities for women and men in the workplace, with non-discrimination policies and practices in place, as well as targeted initiatives to increase the number of women in typically "male" jobs (forklift driving) and efforts to tackle gender-based violence (GBV) in the community. This is extremely important in a country where gender inequality and GBV are rampant.

Expansions in purse seine fishing activity and processing capacity in the WCPO region are being driven by PICs exercising their legitimate goal of deriving greater economic benefit from their tuna resources. They are doing this by enhancing linkages between fisheries access and onshore investment and development in their local economies (Hamilton et al., 2011b). However, PICs need to strike a balance between achieving domestic development aspirations through using fisheries access to leverage onshore investment in processing facilities, and tuna resource sustainability. Any new plants that are proposed will typically come with requests for additional fishing licences, which, if not managed adequately, will introduce additional fishing effort into the WCPO purse seine fishery and place considerable pressure on already fragile stock levels (Ibid.).

3.4.2 Tariff preferences

As a LDC, Solomon Islands is eligible to receive tariff preferences from all preference-offering countries. The majority of preference schemes are not utilised by Solomon Islands for processed tuna loins or canned tuna, given the minimal duty preference on offer coupled with the cost of transporting the goods to market.

By far the most important preference scheme to Solomon Islands is that offered by the EU market, which for LDCs is known as Everything But Arms (EBA). As well as the EU Generalised System of Preferences (GSP), this study also briefly considers the US and Japanese preference schemes.

European Union

The tariff preferences offered by the EU are based on historical factors such as the colonial domination of key tuna-producing countries by European countries. Once fish stocks in Europe had vastly depleted, French and Spanish boats looked to their colonies for resources and secured duty-free access for inputs for their processing plants (Campling, 2012). For local producers, the ability to access the EU market duty-free is a considerable factor in overcoming the principle challenges they face in exporting, including geographical isolation, cost of transportation, limited infrastructure, high cost of utilities and limited potential for diversification.

The EU employs a tariff escalation policy on tuna products imported into the common market, whereby tariff levels increase with the level of processing. In other words, as extra-EU products come into direct competition with those produced in the EU, the cost of importing those products increases, to reduce the competitive pressure on EU producers. The EU, specifically Italy, represents a significant market for Solomon Islands' exports of processed tuna loins. On average, over the period 2006 to 2015, Italy accounted for 2.4 per cent of total exports from Solomon Islands and 82 per cent of the total value of all exports of processed tuna. The value of tuna exports to Italy was around US$6 million.[5]

EBA, although a non-reciprocal trade arrangement offering almost complete product coverage, has highly restrictive rules of origin (ROO), particularly for processed tuna. Qualifying tuna from Solomon Islands must be caught by an EU- or Solomon

Islands-flagged vessel, which must also be at least 50 per cent owned by a company or nationals from the EU or Solomon Islands. Given that the EU tuna fleet is largely inactive in WCPO and that tuna vessels are very expensive, this is a challenge for a small economy with limited available capital. The EU also demands that imports of fish and fish products comply with strict sanitary and phyto-sanitary standards (SPS) and a regulation on illegal, unregulated and unreported (IUU) fishing.

Although IUU regulations are a burden in terms of compliance, IUU fishing is a major contributor to the depletion of fish stocks globally and undermines conservation and management efforts to improve the long-term sustainability of fish resources. The IUU Regulation establishes a certification scheme to enhance the traceability of fish products through the various stages of the supply chain. Fisheries products from third countries into the EU must be accompanied by a catch certificate issued by the competent authority of the flagged state country of the fishing vessel, which verifies that the fish have been caught in accordance with the applicable national, regional and international laws, regulations and conservation and management measures. If implemented effectively, measures to tackle IUU fishing will be beneficial to the PICs, in terms of enhancing fisheries sustainability. But the additional administrative arrangements required to comply with the regulations lead some to label them a non-tariff barrier, if countries have difficulties meeting the requirements (Hamilton et al., 2011b).

Solomon Islands is already suffering from tariff preference erosion, which is only going to worsen as the EU signs more FTAs with competitor countries. Many major competitors, both in the region and globally, are also able to export tuna products to the EU duty-free – Papua New Guinea (PNG) signed the Interim Economic Partnership Agreement (IEPA) with the EU in 2007 to retain access following expiry of the Cotonou Agreement; Madagascar, Mauritius and Seychelles have been a party to the East and Southern Africa Economic Partnership Agreement since 2009, granting it zero duty on canned tuna and tuna loins; and Ecuador joined the EU's Trade Agreement with Colombia and Peru in 2017 granting it zero duty on tuna products.[6] The EU Single Duty Loins Quota (introduced in 2004) is another source of preference erosion. This allows a predetermined quantity of pre-cooked tuna loins to enter the EU duty-free from third countries on a "first come first served" basis (in 2014 the quota was 22,000 metric tonnes). Typically, this quota is fully utilised by the end of the first quarter. However, in 2014 the quota was exhausted just 10 days after opening – likely taken up mostly by Thai processors, who are otherwise subject to pay 24 per cent duty on loins (Campling and Havice, 2014). The quota has negative trade diversionary consequences for preference-dependent economies *vis-à-vis* cost competitive processors in Southeast Asia.

Japan

Solomon Islands has preferential access to the Japanese market as an LDC. Japan began to grant zero tariffs to LDCs in 2000 and increased the list substantially in 2005. Similarly, Japan differentiates between developing countries and LDCs, offering the latter DFQF on all products. Under the GSP, preferential treatment is provided for selected agricultural and fishery products in 408 items (Harmonised System (HS) Chapters 1-24) and for selected industrial products in 3,151 items (HS Chapters 25-97). Japan offers DFQF for LDCs for both processed and whole tuna and, under the GSP, offers various reduced tariff rates for processed tuna, ranging from 6.4 to 7.2 per cent, down from 9.6 and 10 per cent, respectively.

Distinct from the EU market, Solomon Islands exports only whole tuna to Japan, used in the sashimi industry, rather than the lower grade skipjack used for canning. In 2016, Solomon Island exports of HS heading 03 to Japan valued just under US$1 million, which represented around 2.5 per cent of all exports of that heading.[7] Upon graduation, Solomon Islands will lose its preferential access to the Japanese market for whole tuna, where it will be required to pay a duty of 3.5 per cent. The margin on offer, however, is insignificant, so LDC graduation is unlikely to present an issue or result in the same competitiveness challenges as in the case of the EU. Moreover, Solomon Islands authorities were unaware as to whether the Japanese DFQF access was utilised, potentially indicating the insignificance of the preference scheme to the tuna industry.

United States of America

Solomon Islands exports processed albacore loins and cans for the US market, but these represent only a fraction of the total production of SolTuna. As an LDC, Solomon Islands is able to export albacore loins and cans, both in oil and not in oil, to the USA duty-free. Following graduation, canned albacore in oil would be subject to a tariff rate of 35 per cent and the equivalent not in oil would be subject to a 6 per cent duty rate. Currently, the US market comprises less than 5 per cent of SolTuna's total exports of both processed loins and canned tuna. The impact of a loss of preferences would be fairly insignificant, and it may be able to offset the loss in other markets into which it is hoping to expand.

Australia and New Zealand

It is worth considering briefly the markets of Australia and New Zealand, which may provide alternative sources of demand for Solomon Islands tuna. Australia is the largest trading partner[8] of Solomon Islands and New Zealand is also a significant trade partner, though not quite so big. While Solomon Islands is able to export to both countries through their LDC preference schemes, it is also a party to the South Pacific Regional Trade and Economic Cooperation Agreement (SPARTECA), which provides non-reciprocal DFQF access to Australia and New Zealand. PACER Plus, a reciprocal FTA, will replace SPARTECA once it enters into force, continuing to offer Solomon Islands duty-free access on all exports – provided ROO are met – into Australia and New Zealand. Should Solomon Islands graduate, this access would not be affected. However, the preference for tuna products under SPARTECA and the successor to the Pacific Agreement on Closer Economic Relations (PACER) (PACER Plus) is commercially insignificant (both countries apply a Most-Favoured Nation (MFN) tariff of 5 per cent), and low-cost high-volume competitors such as Thailand already have duty-free access to Australia and New Zealand for canned tuna under FTAs.

It is evident that the loss of tariff preferences to the EU market will have the greatest impact on Solomon Islands exports of tuna products.

Alternative markets

Campling (2015) also sought to identify potential alternative markets for processed tuna from the PICs, given the mature nature and complex export requirements into the EU and US markets. The study took into account five factors: the dynamics of market demand, existing suppliers, tariffs and duty available to PICs, non-tariff measures and freight costs. The conclusion reached was that, based on these five dynamics, no alternative market to the EU exists for PIC exporters of canned tuna and limited opportunities may exist for pre-cooked loins. Each of the alternative markets studied is supplied by a cheaper competitor in terms of freight costs. The proximity PIC producers have to the raw material is countered by the costs of doing business in the region coupled with lower levels of productivity.

The critical importance of the EU market to PIC producers cannot be underestimated; it appears to be the only sizeable market with high demand and a high price/quality ratio that PIC processors can competitively supply. The trade preferences offered under EBA, IEPA and the GSP+ (the EU's Special Incentive Arrangement for Sustainable Development and Good Governance) continue to be the most commercially viable competitive advantage, particularly when factoring in the relaxed ROO in the IEPA (for more see below). In light of this assessment, it is critical that PIC governments continue to dedicate adequate resources to ensure compliance with the EU's strict regulatory requirements for on-going market access (Campling, 2015).

3.4.3 Tuna production in Solomon Islands

The two major firms in Solomon Islands' tuna fisheries industry are NFD and SolTuna. The ownership structure of both NFD and SolTuna makes for a highly integrated fishing, processing and canning operation in Solomon Islands and is a major strength of the local tuna industry.

NFD's main business is in fishing and it supplies the majority of its catch to SolTuna, with the remainder shipped straight to Thailand for processing, apart from a small amount of ultra-low temperature (ULT) freezing of whole tuna that is sold in the lower-grade Japanese sashimi market. NFD currently owns seven purse seine boats, five smaller and two larger vessels, and fishes in the archipelagic waters and Exclusive Economic Zone (EEZ) of Solomon Islands, as well as outside under the Parties to the Nauru Arrangement (PNA). In longline fishing, NFD has 30 of the 100 licences provided to Solomon Islands under the quota scheme, with the remainder taken up principally by Taiwan. In pole and line fisheries, NFD owns three vessels and is in the process of purchasing a fourth, although at present this is a marginal fishing activity. Of the four fishing mechanisms, purse seine fishing offers NFD the greatest premium, given the Marine Stewardship Council (MSC) Certification.

SolTuna operates the local brand with the processing and canning plant in Noro. At present, 70 per cent of SolTuna's operations are in loins, the majority of which go to the EU, and 30 per cent in cans, which go predominantly to domestic and regional markets. This structure of production has changed significantly over the past five years: it was previously 85 per cent loining and 15 per cent canning. In the loining business, where SolTuna is a contract processor, with this part of the business is the foundation for the company in terms of scale and overheads. The plant's canning operations are where the greatest profit potential lies, but only because of the foundation provided by the loining base. While international volumes contribute, it is the local and regional markets that bring in the most revenue. SolTuna also supplies albacore to the US market, in the form of cans for the brand Ocean Naturals and cooked loins to the two US-based canneries. Despite the preferential access of Solomon Islands to the US market as an LDC, sales comprise less than 5 per cent of SolTuna's total processing operations.

The EU is the most important market for Solomon Islands and the lead export destination of processed tuna loins, with the tuna canned and sold predominantly in Italy and Spain. Solomon Islands' tuna is considered to be of higher quality, which consumers in Italy and Spain demand to a much greater extent than Northern European consumers. This facet is explored further in the sections below on characteristics and value addition. Despite the integrated nature of the fishing and processing in Solomon Islands, the power structure of the supply chain and the marginal quantities supplied mean local firms in the domestic economy are unable to influence the price at which they can sell their tuna.

Costs

Tuna fishing, processing and canning face considerable costs of production in Solomon Islands. NFD's main operating cost for fishing vessels is fuel, duty on which was raised by more than 100 per cent in early 2018. Energy costs are also considerable, coupled with the labour costs of management, which make up 10 per cent of the total work force. SolTuna identified energy as the major cost in its operations, which is substantially higher than that paid by firms in other countries, primarily Southeast Asian firms. Currently, SolTuna is a standalone operation and does not source power from Solomon Power, the state-owned energy provider, as it cannot meet the company's requirements. SolTuna generates the power it requires to run its operations and provides minimum transmission and distribution far more efficiently than Solomon Power. SolTuna is considering other sources of energy, such as renewables, as a way to reduce input costs, particularly as expansion plans are put in place.

Additional costs highlighted by SolTuna include testing to ensure compliance with EU health and safety regulations. Presently, fish samples are sent to New Zealand for testing, which is very costly and risky, as the samples must be packaged and shipped correctly and quickly. The National Public Health Laboratory in Solomon Islands is receiving support from the Standards and Trade Development Facility of the World Trade Organization (WTO) and the United Nations Food and Agriculture Organization to secure accreditation as a competent authority, which will enable testing to be done onsite. This should reduce the costs involved in exporting processed loins to the EU market. Reducing costs such as these is vital because of the structural costs related to small island economies as locations of manufacturing (Winter and

Martins, 2004; Campling and Havice, 2007), such as ocean-going freight costs – an issue raised in the survey of tuna product buyers (Section 3.4.5).

Employee retention and attendance are further costs facing SolTuna. On average, workers are absent for unexcused and unknown reasons 18 per cent of the time. Absence of a reliable workforce leads SolTuna to employ far more workers than is necessary, increasing costs further. Reducing the level of controllable absenteeism could significantly improve SolTuna's productivity and cut staffing costs. The International Finance Corporation (IFC, 2016) estimates that bringing absenteeism down to 15 per cent each day[9] would mean SolTuna could earn an additional US$1.58 million in annual revenue. Gender-related issues and responsibilities are significant factors in retention issues and absenteeism, and the company has ramped up efforts to improve equality as well as additional strategies to improve healthcare and childcare, tackle GBV and expand career pathways (ibid.).

Investment

The recognition of the tuna industry's importance to the local economy, in terms of employment and growth, is driving the government's commitment to boosting onshore investments, particularly outside the capital, Honiara. The government recognises the success achieved in Noro, which it would like to replicate in other areas. Current operations are below capacity; NFD reports that between 25,000 and 30,000 metric tonnes are landed per year at the processing plant and cannery in Noro, but, according to the Ministry of Fisheries and Marine Resources (MFMR), Solomon Islands has the capacity to supply 100,000–170,000 metric tonnes per year.[10]

Two sites were identified for their potential a number of years ago and investors had expressed interest in developing onshore operations in exchange for access licences and other concessions from the government. However, these investments fell through, as a consequence of the challenges of acquiring the land. The majority of land in Solomon Islands is customarily owned, which often creates insurmountable challenges when identifying property rights. One site in particular, however, is considered worth the time and effort required to secure, provided the land issues can be resolved. Bina Harbour, located in Malaita, has long been recognised as an ideal location to build a canning and processing plant, given the natural harbour and location along the major shipping routes. This would provide much-needed employment in the province and create value addition opportunities through canning to the local market, as well as competition for SolTuna, which would lead to further gains. MFMR hopes to secure the land by 2018, but there was little indication as to how this would be achieved and the different approach that may be adopted.

The challenges of land, infrastructure and the cost of utilities is a serious impediment to investment in Solomon Islands, hampering progress significantly. The Forum Fisheries Agency (FFA) stressed that Solomon Islands could take an additional one or two processing plants but, for any new investment in Noro, space, energy and limited labour supply would be major challenges. SolTuna faces significant challenges finding experienced productive workers, which, coupled with the high turnover and absentee rate, adds further costs to any investment. While SolTuna and

NFD would welcome more competition, they recognise that any onshore investment needs to provide social and economic benefits. SolTuna takes a more cautious view of additional investments, noting that, as the VDS is fully embedded, foreign investors do not need to invest onshore to access fishing licences, as these can be purchased directly from the government. The experience of other countries in the region, such as PNG, where processing plants in Lae are operating well below capacity, provides further reason for caution when considering expansion opportunities in processing and canning operations.

3.4.4 Characteristics of Solomon Islands' tuna and value addition prospects

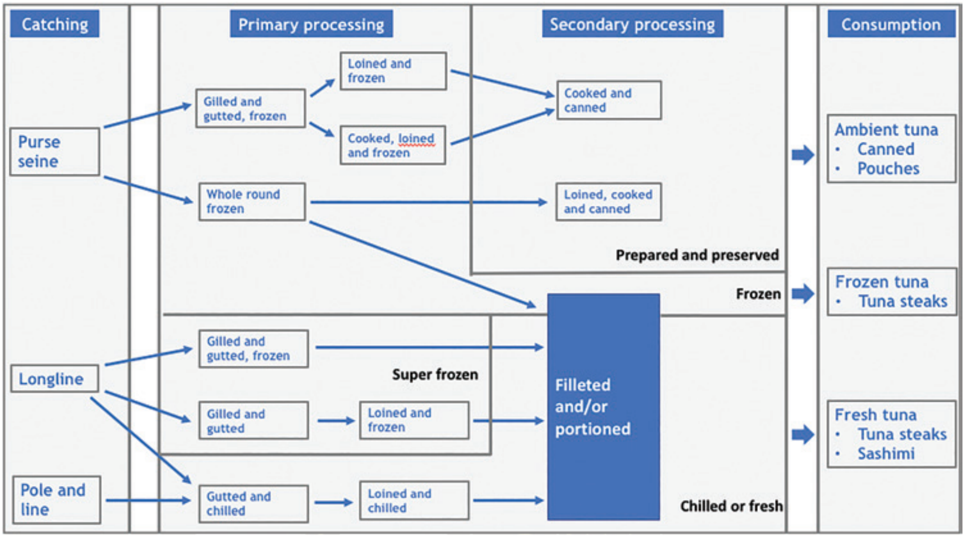
The impact of a change in the price of Solomon Islands' tuna will depend on whether demand for the good is based primarily on its price or on the quality of the product. To determine whether Solomon Islands can continue to supply tuna to the EU following a loss of tariff preferences, it is important to consider the characteristics of the product.

To set the scene, Figure 3.1 details the forms of catching, processing and consumption of tuna. Ambient tuna is the cheapest product, followed by frozen steaks. The highest quality, and therefore more expensive, tuna is that in fresh form, sold as either steaks or sashimi.

The majority of Solomon Islands' tuna exports to the EU are caught by purse seine vessels, and cooked, loined then frozen. Once landed in the EU, they are put into cans and sold in the regional market.

Canned tuna is identified as a commodity product, directly competing with various other sources of canned fish and, in some markets, with canned meat too, and, as such,

Figure 3.1 Overview of Tuna Value Chain in the Solomon Islands



price is typically the most important factor determining demand in end markets. On first glance, canned tuna appears relatively homogeneous, but this simplification neglects the differences in species and the tastes and preferences of consumers in end markets. There is considerable difference across the main canning species (i.e. albacore, skipjack and yellowfin) in terms of quality and therefore price. In order to identify whether value chains are price- or quality-driven, it would be useful to assess each species' value chain in turn and consider what impact changes in price have and where in the production chain the cost changes will be felt. Although this is beyond the scope of this study, it is important to consider the composition of tuna species and the end markets, as these offer valuable insights into the product differentiation that occurs within the EU market.

One of the major branded buyers of SolTuna's product is Rio Mare, which is owned by the Bolton Group and is number one in the Italian market. The Italian and, to a certain extent, Spanish markets demand high-quality yellowfin tuna in olive oil, distinct from the Northern European market, which typically demands lower-quality canned skipjack tuna in brine or vegetable oil. As the majority of Solomon Islands' tuna is sold to Italian canneries and then on the local market, SolTuna product could have certain advantages of quality. However, both local industry experts and international tuna buyers agreed that there would be limited room for manoeuvre on the price, regardless of the higher-quality product on offer, which would not make up for the 24 per cent duty rate that Solomon Islands' tuna would incur upon graduation.

In addition to product characteristics, it is worth noting the potential value addition opportunities highlighted by NFD and SolTuna. NFD has recently started exporting sashimi tuna that has undergone ULT freezing to Japan. Although sashimi tuna is of a much higher quality than the processed loins exported to the EU, it is not considered a "high-grade" product in Japan. NFD is hoping to own its own longline fleet to further tap into this market, and there is reportedly potential to expand this to the Chinese market, although the room for growth in China has frustrated many sashimi grade suppliers (Campling et al., 2017). Despite NFD's intentions, the growth potential in this value addition activity is restricted. The main suppliers of sashimi ULT products to Japan are Korea and China, using their large and subsidised fleets. Furthermore, there are only three or four major buyers of the product in Japan, which makes it a very difficult market to tap into. Coupled with the high energy costs involved in ULT processing facilities and distribution (e.g. ULT containers), it seems unlikely that the sashimi market will ever offer Solomon Islands' tuna a replacement for the EU processed loins market, especially in terms of the employment generated.

SolTuna intends to diversify its product selection beyond processed loins, and 2017 saw the first export of canned tuna to the US and UK markets, the latter branded under the name Reel Fish. SolTuna has reported that these have been well received and, given the price premium that these cans attract, there is potential for further increasing the proportion of canning to loining as consumers pay closer attention to the source of their food to support local sustainable production.

There are additional opportunities in the New Zealand market, where SolTuna is hoping to sell own branded tuna with a focus on the "Solomon Islands tuna story" as a way to attract the more socially conscious consumer who may be more willing to pay a premium for a product that is sustainably caught and supports responsible fishing and labour practices. SolTuna is hoping to work with Pacific Trade and Invest to support initiatives in New Zealand such as trade fairs and other marketing activities to increase brand exposure. There is also potential to expand SolTuna-branded cans to the UK market.

To adjust to the increase in canning operations, SolTuna has reconfigured its whole processing layout in Noro, to increase throughput. At present, the plant operates at a maximum of 120 tonnes a day and 110 tonnes on average. New equipment should increase the maximum capacity to 150 tonnes a day, with an average of 135 tonnes. The additional capacity would likely shift to the canning side of the plant, to supply the potential new markets in New Zealand and the UK.

An additional value addition opportunity is in fair trade, as well as the MSC certification in the purse seine and eventually in the longline industry. As consumers become more conscious of where products originate and the labour practices around their production, fair trade certification could create additional value addition opportunities for SolTuna and NFD, as well as ensuring local fishers receive a fair wage. FFA is currently considering initiatives with regard to the application of labour terms and conditions to all boats licensed in the Pacific, in addition to the monitoring and tracking devices that are required to obtain licences under the PNA system. This initiative is intended to ensure that labour is not squeezed following any price increases and could provide the market advantage to target more socially conscious consumers.

Growth in the domestic and regional canning markets could further contribute towards offsetting the increased trade costs through loss of tariff preferences. SolTuna has captured almost 100 per cent of the local market and, according to local industry, the domestic market is still growing. Across the region, SolTuna is highly regarded; growth in Vanuatu, for example, could provide opportunities to expand.

Nevertheless, opportunities in the canning sector, although greater than in previous years, require far greater volume requirements, which SolTuna will be unable to meet. Furthermore, the domestic and regional canning markets will be unable to compensate for the loss of the EU market. In spite of these diversification and value addition initiatives, it is unlikely that there will be a massive shift towards canning and away from processing loins. As such, the EU market will remain the most important market for Solomon Islands tuna products. Despite the country offering higher-quality tuna, local industry and FFA made clear that the loss of tariff preferences will lead to a cost increase that would be too large for buyers to be willing to absorb and alternative products and markets that would be unable to make up the revenue shortfall.

3.4.5 Local private sector perspective

The companies involved in tuna fishing and processing in Solomon Islands are acutely aware of the tariff preferences in processed loins on offer through the EU market, given the centrality of this access to their business models. These are considerably more important than the preferences on offer by other nations, given the size of the EU tuna market. The local industry is sufficiently concerned about the loss of tariff preferences that would arise through LDC graduation if the IEPA is not signed or GSP+ acceded to.

SolTuna made clear that, should preferences to the EU market be lost, although the diversification and energy-saving initiatives underway have the potential to generate sizeable returns, loss of EU market access would close down its operations, as it would be unable to absorb the cost increase given the small and very costly nature of processing operations in Solomon Islands. Most, if not all, of the 2,000 plus workers would lose their jobs and the knock-on effect across the local economy of Noro would lead to the closure of those services reliant on the processing plant, compounding the negative impact by increasing unemployment further. Government revenues would also take a severe negative hit, at a time when they can ill afford to. SolTuna reiterated that the domestic market would be unable to fill the gap and, without the loining, it would be unable to produce sufficient canned product for the local market, known as dark flakes.[11] Solomon Blue, as the dark flakes are known, is a staple diet in the Solomon Islands, and an important source of food security in times of natural disasters, which hit the islands regularly. Without a domestic supply of tuna, local consumers would need to import tuna from across the region, which is likely to be of higher in price. The end result could be an increase in food insecurity.

SolTuna also predicted that TMI would be unable to absorb the cost further up the supply chain, despite its vertically integrated nature, and would pull out of Solomon Islands, given the general expense involved in processing operations and its ability to source the product far more cheaply elsewhere. This is supported by the responses from the buyers' survey detailed in Section 3.4.6. For the fishers, not only would NFD face a significant reduction in demand for its tuna catch but also the additional services provided, such as haulage, transport and stevedoring, would all disappear with the loss of preferences. The highly integrated nature of the supply chain means both companies are highly reliant on each other. The knock-on impacts on employment would be considerable, for those directly related to the industry activities as well as those in service provision in and around the plant.

3.4.6 International buyers' perspective

In an effort to develop an outsiders' view of the commercial prospects of export-oriented tuna processing in the Solomon Islands, we undertook a survey of buyers. This was administered to all of the world's leading canned tuna companies, both branded firms and major non-branded processors. The five responses that we received provide a number of important insights on the types of pressures buyers themselves are under, their perspectives on Solomon Islands as a location of tuna processing, including in relation to competitors, and their views on the commercial viability of Solomon Islands.

The design of the survey drew in part on the Comparator Questionnaire for Multinational Firms in Keane (2018), with several tuna industry-specific questions incorporated. The survey was administered online and was followed up with telephone interviews and/or email correspondence. The respondents included two of the world's leading canned tuna branded-processors, and three major non-branded processors/traders. All of whom have direct experience with investments in the Pacific Island Countries, including the Solomon Islands, and as such benefit from local-contextual as well as global insights.

It is worth reiterating that SolTuna is the sole tuna processor in the Solomon Islands currently utilising the EBA preference. The firm exports canned tuna, mainly within the sub-region but also, in early 2018, to the UK, under the Reel Fish brand, but this activity is *dependent* on its main business, which is the contract processing for frozen tuna loins for TMI. SolTuna loins are predominantly used for canning in Italy for the Italian market. Tuna loins are an intermediate product procured by canneries, generally in higher-cost locations such as the EU, the USA and Japan, but also by Thailand and American Samoa (Campling et al., 2007; Campling, 2015). In short, loining companies like SolTuna are price-takers.

All buyers agreed that the principal **overall strengths and opportunities** of SolTuna were 1) duty-free access to the EU and 2) Solomon Islands' position in the WCPO purse seine fishing ground and the relative abundance of tuna stocks in the area. In fact, across 11 questions comparing the Solomon Islands with buyers' other suppliers, the sole factor where it was perceived as "better" was "access to tuna fisheries". (In relation to all other factors, Solomon Islands was ranked "worse" or "the same".)[12] Connected, access to a relatively steady supply of yellowfin tuna is an advantage because it is in high demand in the Italian market, which SolTuna supplies, as well as Spain, throughout the year. Loining plants that process only skipjack are at a disadvantage to those that can offer yellowfin loins too, but demand for yellowfin is low compared with skipjack. However, as in all industrial yellowfin tuna fisheries, continuity of supply is an issue, at least compared with skipjack, which tends to be caught all year round.

Other strengths noted by buyers were that SolTuna is recognised as producing a good-quality product. TMI is widely seen in the global tuna industry as a supplier of high-quality product with good control of the supply chain. It has worked closely with SolTuna on this issue, including recruiting and assigning permanent staff and consultants to maximise SolTuna's quality standards and the provision of on-going training programmes for all of its workers on quality, safety and social programmes such as financial literacy. These types of support were noted by buyers as being common interventions among their suppliers in other countries too, especially on techniques and operational processes for the cleaning of fish to improve yield and quality. In the case of SolTuna, because of its long history in Solomon Islands, it has a relatively productive and experienced workforce, including management, although, as discussed above, it does suffer from high rates of absenteeism.

Connected, it was recognised that SolTuna had the advantage of being integrated with the supply chain of Bolton Group-TMI. Unlike most canned tuna firms, Bolton-TMI is unique because it is completely vertically integrated, from fishing vessels to retail brands. This provides access to crucial marketing support from related companies within the Group. It also means that SolTuna has access to working capital and operational support from TMI. TMI was crucial in getting MSC certification for the Solomon Islands skipjack and yellowfin tuna purse seine and pole and line fisheries. Buyers also noted the very strong local canned tuna brand, which is widely known in the Pacific Islands region, and is currently exported to Australia too.

All buyers agreed that the overall weaknesses and challenges were to do with the Solomon Islands' economy overall. This includes the high costs of doing business owing to remoteness, a lack of economies of scale, weak infrastructure and logistics capabilities and the face that all non-fish inputs into processing are imported. Government bureaucracy was noted as challenging for both current and potential investors. As already noted in Section 3.4.4, government procedures related to EU shipments are seen as slow, which can result in delays and problems with shipments. All of these factors combine to produce a higher cost structure compared with competitors, especially in China and Indonesia.

Buyers also noted the relatively low volume of output compared with competing loin producers as an important issue specific to SolTuna. The expansion of production has been noted as a potential here – that is, to meet buyer demands for volume and consistency of supply and to achieve better economies of scale. However, it was suggested that the costs of expansion for the Noro plant were high. It would require investment in a wide range of physical and social infrastructure, such as the unloading wharf, cold storage, power, water, logistics and, crucially, labour. This degree of investment is necessary because, even if the plant were expanded, it is not automatic that more fish would be landed for processing. This is because wharf space determines the number of vessels that can call to unload fish at one time. Further, given that each purse seine vessel expects to unload at least 250-300 metric tonnes per day, having two boats at the same time would mean that the plant would need to take 500-600 metric tonnes per day, and, if turnaround time were less than this, vessel owners would not want to sell to the plant.

Buyers compared SolTuna with companies based in several other countries, including China, Colombia, Ecuador, PNG, Indonesia, Thailand and Vietnam. For each of the five indicators of supplier performance, SolTuna was ranked less highly than the buyers' comparator suppliers (Table 3.1). By design, tuna loins are a highly standardised product and, as such, new demands tend to be minimal – but if they *are* required it introduces a degree of risk (e.g. the potential for mistakes to be made).

It is worth considering buyers' views on **ocean-going freight** in a little more depth as it is a competitive disadvantage, both identified directly and implied indirectly within the "weak" and "average" relative rankings in Table 3.1 (especially price, response time and punctual delivery). On a per tonne basis, a refrigerated (reefer) container from Solomon Islands to Europe costs around US$260, while from China, Thailand and Vietnam it is $70–80. For East and Southeast Asian producers, sitting on the East-West sea-freight "superhighway" and being in or close to port-based logistics hubs is a direct benefit; for PICs, it is an outcome of being dependent on infrequent, feeder routes. To get a further sense of the very high cost of freight from Solomon Islands and comparable countries (Fiji and PNG), Table 3.2 compares freight rates for

Table 3.1 Tuna buyers' perceptions of SolTuna compared with competitors

Indicator	Very weak	Weak	Average	Strong	Very strong
Regular and reliable product quality		1	3		
Price		1	3		
Response time		1	3		
Punctual delivery		2	2		
Responding to new demands		4			

Note: One of the five respondents did not complete this section of the survey.

a full refrigerated container of frozen loins to two alternative markets – Thailand and American Samoa. The data indicate two trends. First, they reiterate the cheapening effect on freight of the huge volumes associated with the main East-West route, even for intra-regional trade in Southeast Asia. Second, they show the costs of sending loins to and from isolated Pacific Islands, as outward cargo from Fiji, PNG and Solomon Islands is very high (although Fiji benefits from its position as a regional hub), and inward cargo to American Samoa is similarly high for all countries.

The issue here is not just freight prices but also the length of supply lines, which has negative implications for reliability and response times, and the costs of maintaining higher inventory. The long supply chain to Europe is a roughly 60-day transit, plus production and storage time, which means that SolTuna's buyer needs to keep buffer stocks in Europe. Until recent years, TMI addressed the lack of freight to Noro by loading loins on its own carriers to Bangkok, where they were shifted into refrigerated containers and loaded onto a container liner. Since then, TMI has invested in container handling facilities at Noro and used this to attract Maersk line to operate a regular feeder service to and from Noro. This has served to reduce cost, vastly improved shipping efficiencies and allayed EU concerns around preservation of the cold chain. This suggests two things. First, big firms like TMI with its parent Bolton have relative leverage by way of their high volume of freight purchasing, which makes negotiation

Table 3.2 Freight cost Comparison for 40 foot refrigerated containers of frozen loins (US$/container)

	Lae, PNG	Noro, Solomon Islands	Suva, Fiji	Bangkok, Thailand	Jakarta, Indonesia	General Santos, Philippines	Ho Chi Minh City, Vietnam
Bangkok, Thailand	5,200	4,800	4,000	N/A	1,450	2,950	800
Pago Pago, American Samoa	5,000	5,500	3,700	6,000	6,000	6,200	6,250

Source: Campling (2015) citing rates from major shipping lines and freight forwarders – various, April 2015.

possible. Second, SolTuna is vulnerable to shifts in Maersk's business strategy. TMI is reportedly currently investing more to make Noro a container transhipment hub, which would help solidify against the second issue.

All five buyers agreed that **tariff preferences are essential** to tuna processing in small island economies in general and to Solomon Islands in particular. It is worth reporting verbatim buyers' views on this issue:

- "Losing duty free access would likely result in closure of the factory."
- "For a commodity like tuna, duty can be a big cost and [the tariff preference] plays a big role in buyers' decision-making."
- "Solomon Islands needs this [duty-free access to the EU] to compensate for its higher costs of operation. It will never become competitive with its scale of processing volume."
- "Duty is an important consideration in sourcing loins and canned tuna. Buyers are interested in the duty-paid cost of the loins or canned tuna. The duty on loins and canned tuna for the EU is generally 24 per cent. If buyers have to pay 24 per cent on the imports of tuna loins or canned tuna from Solomon Islands, they wouldn't source from Solomon Islands. It's as simple as that."
- "SolTuna is built on the EU export market. It would have to close in the absence of the EU preference. The loss of LDC/EBA would be a disaster for Solomons. The EU market is the lynch pin of tuna processing in Solomons. Yes – there is a local and regional market for canned tuna, but it is also very competitive, and SolTuna couldn't operate viably as a local canner only."
- "Solomons needs the duty-free privileges in order to offset its higher costs of conversion, supplies and logistics."

The view on the issue of a lost preference for export-oriented tuna processing in Solomon Islands is unequivocal. Buyers also noted the parallel impact of preference erosion, specifically in relation to the increasing numbers of FTAs signed by the EU with competing exports of tuna products and the increasing volume of the EU Single Duty Loins Quota noted in Section 3.4.2.

The general consensus on the possibility of other incentives or investments to **offset the cost** advantage to SolTuna should it lose duty-free access to the EU was pessimistic. Any such intervention was seen as unlikely to offer sufficient competitiveness because of the current high operating costs. Two elements were noted:

1. An elimination or substantial reduction in VDS fees if the fish were to be processed for export domestically. "If the government is to shoulder some of the losses by reducing the VDS costs and other benefits, companies might be interest to have a processing plant there." But buyers explicitly disagreed on the potential of this.
2. A direct processing subsidy, such as PNG's recent rebate scheme allocating US$400 for every metric tonne of tuna processed locally caught in PNG waters

(see Havice et al., 2017). This was developed precisely in response to the documented failure of subsidised access to ensure onshore investment at full capacity (i.e., even if a plant was built in return for heavily discounted licences, it would send fish caught by its boats to be processed in other countries).

Both options place very significant demands on the already fiscally squeezed Solomon Islands government and as such would not appear to be viable options. Further, it is worth reiterating that tuna loining and canning is a brutally competitive global industry based on high volumes and small margins. SolTuna rarely records a profit and is vulnerable to rising energy costs. The company would not be able to absorb the cost of duty loss. At the same time, tuna buyers procure from numerous suppliers and SolTuna supplies a relatively small part of global demand: as such, it would not be difficult to substitute its supply of loins with that from competing processors. Given that the big end buyers – brands and supermarkets – are *primarily* price-focused (and *secondarily* concerned about factors such as sustainability), they look for the least expensive products that meet their quality standards.

In relation to the potential of SolTuna to produce a greater volume of canned tuna, it would be necessary for it to command a high price premium, which MSC certification does not often provide, and the issues to do with the reliability of shipments would need careful working out. Given the current situation, buyers of loins hold inventory in cold stores and defrost for packing into cans when required. Should SolTuna switch to canned tuna production, it would need to hold inventory in Europe as a buffer stock (which incurs cost) to avoid the risk of an interruption to supply (which is most costly). As such, without close collaboration with a seller of canned tuna, SolTuna would be likely to face difficulties.[13]

Despite the benefit of the EU preference, EU GSP **ROO** were recognised as a constraint. (Note that the same rules apply to EBA as to GSP+, should Solomon Islands government decide to apply to this scheme.) EU ROO mean that the raw material supply for SolTuna's exports to the EU are limited, except for those fish that are caught in national archipelagic waters and those caught by its own flagged vessels – the NFD fleet. It is also worth noting that some respondents recognised that leading tuna buyers – branded firms and supermarket buyers – capture revenue gains from tariff preferences through rigid bargaining. As one industry representative put it, buyers are "able to shift the advantage to them by creating cut throat competition between and among suppliers".

There was some ambivalence around the potential of "global sourcing" ROO should Solomon Islands choose to sign the Pacific IEPA. Buyers did not agree that it would change raw material supply dynamics in the region. Some thought it would improve supply available to SolTuna; others noted existing constraints such as the need to increase the fish unloading rate. All agreed that signing the IEPA would *not* change their thinking of Solomon Islands' competitiveness as a tuna processor, not unless large-scale investment was forthcoming. But, somewhat contradictorily, three buyers noted that it *might* change their thinking on investing in tuna processing in Solomon Islands.

The view of buyers on the relationship between **the price-driven and quality-driven** aspects of the trade in frozen tuna loins was unanimous. Quality is a given: there is no market for bad loins. There is some differentiation in product type between single-, double- or triple=cleaned loins, depending on buyers' requirements, and the price is higher for greater levels of cleaning. Some brands – and even national markets, such as Italy – are known for high quality, whereas others compete entirely on price (and thus require only single-cleaned loins). In short, all buyers agreed that the supplier that could meet buyer specifications and delivery times at the lowest price would always win the orders.

3.4.7 Impact of lost tariff preferences on the competitiveness of the Solomon Islands tuna industry

Based on the stakeholder interviews in the domestic tuna fishing, processing and canning industry and the perspective sought from international buyers, a loss of tariff preferences to the EU market through LDC graduation, provided that no other arrangement were put in place, such as the IEPA or GSP+, would result in the closure of SolTuna and a significant scale-back of NFD operations. The cost incurred is deemed too great for both local firms and international buyers to absorb, primarily because of the higher costs of production in Solomon Islands compared with for competitors in Southeast Asia and the Indian Ocean.

3.5 Financial support and LDC graduation

Solomon Islands has a significant task ahead of it to prepare for LDC graduation. Securing additional financial support is imperative to mitigate some of the costs involved. It received US$41.9m of Aid for Trade support in 2015, an increase of approximately $39 million on 2002. Almost 50 per cent of this support is channelled into transport and storage. Further improvements to the infrastructure necessary to improve trade facilitation are vital. The recent upgrade and expansion to Honiara Port has likely reduced the wait time for shipping container vessels; however, further investment is needed in storage solutions at the wharf, to store goods waiting to be cleared, and infrastructure related to customs administration, such as implementation of the Single Window. Whether Solomon Islands will be able to tap into traditional aid funding channels following graduation is an important consideration. If the funding available reduces, Solomon Islands will need to identify private sector financing mechanisms to plug the gap.

At the time of writing, Solomon Islands had not yet ratified the Trade Facilitation Agreement (TFA). As an LDC, Solomon Islands is eligible for special and differential treatment to enable it to comply with the provisions of the Agreement, which includes additional time and technical assistance. To ensure Solomon Islands is able to access this support, particularly for transport, storage and related trade infrastructure, the TFA should be ratified imminently.

As a LDC, Solomon Islands has been receiving support under the World Trade Organization's (WTO's) Enhanced Integrated Framework (EIF) facility since 2007. To date, support has focused on the agriculture and tourism sectors, recognised as potential drivers of economic diversification. Solomon Islands prepared a Diagnostic Trade Integration Study (DTIS) in 2009, which is set to be updated shortly. Support through Tier 1 of EIF will end in September 2018 and the government has since applied for a phase 2. This has been approved but no funds have been dispersed. It is widely recognised that EIF support to Solomon Islands has created real opportunity but progress has been slow, with many activities yet to be implemented. The recent approval of the Tier 2 agriculture project targeting cassava and taro production for export will help local producers tackle the significant SPS issues faced when exporting to the Australian and New Zealand markets, but it may take some time to reap the benefits.

As Solomon Islands prepares for LDC graduation, this will have impacts on its ability to access support, which is technically not available for non-LDC countries. However, given that a number of current EIF beneficiaries will be graduating over the next five years, the EIF has recognised the need to ensure support does not stop abruptly, and that a transition period is agreed. Cabo Verde, Maldives and Samoa are all EIF beneficiaries that have transition periods, agreed through an informal decision or understanding with the EIF during their transition from LDC status. The EIF Board has since reached the decision that all LDCs graduating in the future can continue to access EIF benefits for five years following graduation, which includes access to Tier 2 funding, and it will consider whether after this five-year limit they can continue to benefit from some capacity-building activities (e.g. participating in regional workshops). In addition to the transitional support, graduating counties are entitled to funding for feasibility studies used to seek support directly from development partners.

Samoa in particular undertook significant preparation for LDC graduation, which Solomon Islands could replicate. Although not all of the preparatory work was initiated through the EIF, EIF support was harnessed effectively – such as by aligning the DTIS update with requirements for LDC graduation. As Solomon Islands approaches graduation, it should ensure the continuity of EIF support to undertake the necessary preparations and identify opportunities to promote export diversification.

3.6 Alternative mechanisms to mitigate competitiveness challenges

There are a number of ways Solomon Islands can confront the competitiveness challenges of LDC graduation. The EU offers a transition period of three years for countries graduating from LDC status, during which time they may access the EU market under EBA arrangements. It should be possible for Solomon Islands to request an extension, which requires the government to submit a request to the EU, well in advance of graduation, outlining the need for a transition period to ensure adequate preparations are in place. Furthermore, the government can utilise its network of current and potential trade agreements to mitigate the costs of graduation. It is imperative that the country explore how its trade policy and the resulting trade agreements it chooses to sign – and, importantly, the extent of the development support it receives through these agreements – will reduce the level of vulnerability.

This section reviews the trade agreements in place or under negotiation that Solomon Islands should consider in LDC graduation preparation.

Solomon Islands has signed the Melanesian Spearhead Group Trade Agreement (MSGTA), the Pacific Island Countries Trade Agreement (PICTA), the Pacific Agreement on Closer Economic Relations (PACER) and its successor, PACER Plus. Despite this prevalence of trade agreements, implementation is limited, given the considerable supply-side capacity constraints faced in the economy. There is an increasing emphasis on the need to go beyond traditional trade agreements and ensure the intractable constraints facing the economy are being addressed through sufficient means, including development cooperation and support to address key SPS and technical barrier to trade issues that have so far prevented the economy from utilising the preferential access to its key markets.

3.6.1 Interim Economic Partnership Agreement (IEPA)

Solomon Islands has the option of acceding to the EU-IEPA, for which the government is currently undertaking preparations. The network of interim and comprehensive economic partnership agreements (EPAs) between the EU and African, Caribbean and Pacific (ACP) states enables developing countries in the ACP regions, particularly those that have graduated from LDC status, to retain preferential market access to the EU market on a reciprocal basis. In the Pacific, Fiji and PNA have signed an IEPA with the EU in order to retain access to the latter's market for sugar and tuna, respectively. The IEPA offers Solomon Islands a way to retain preferential access for processed fish and fish products but crucially grants more flexible ROO through global sourcing. Global sourcing relaxes the originating rules, enabling tuna that has been processed onshore in Solomon Islands to qualify for DFQF entry to the EU regardless of the vessels' flag and ownership, subject to that vessel complying with SPS and IUU regulations. This will increase the availability of qualifying raw material, reduce fluctuations and smooth out the supply of tuna to the loining plant, which can then be exported to the EU market. There are wider considerations at play for Solomon Islands in its decision to accede to the IEPA, such as the revenue implications and reduced policy space, but certainly the benefits to the tuna industry are well understood.

The inclusion of the ROO derogation in the IEPA was initially anticipated to have a positive developmental impact on beneficiary countries. Hamilton et al. (2011b) look at this issue for the PNG economy in an attempt to identify what impact, if any, this derogation had on long-term income and employment generation and whether it had led to effective conservation and sustainable management of fishing resources, including compliance with SPS and IUU regulations. The study found that the impact of global sourcing on the development of the PNG economy had been negligible since 2008, mainly because existing canners had not taken advantage of the derogation. Additional investments are planned that will likely take up the derogation, following which the developmental impacts can be assessed. In addition, the derogation could contribute to improved working conditions for employees in the processing and canning industry. Greater investments will lead to increased demand for labour and, in trying to attract labour, plants may be more likely to offer favourable working conditions as well as additional benefits. The opportunity for wider indirect benefits is also possible, although this will require coordination not just between firms in the industry but also across national and provincial governments (ibid.).

It is worth noting that global sourcing has created a considerable source of tension among the canning EU member states, such as Italy and Spain. The EU industry fears, although these fears have not yet played out, that IEPA signatories could become a platform for Southeast Asian firms wanting to bypass the MFN duty rate of 24 per cent. Should this occur, this would likely erode the commercial logic of the EU's presence in WCPO, with the logic of the preference collapsing with it, given that it no longer supports an EU industry. The end result could be that the tariff is liberalised across the board, eroding completely the preference margin offered to countries trading under the EU's preference schemes (Hamilton et al., 2011a). The mandatory three-year review periods as part of the IEPA may lead to the conclusion that global sourcing rules be removed – an important consideration for Solomon Islands' authorities to factor into their decision-making.

Domestically, both SolTuna and NFD stressed that the IEPA would deliver significant benefits for their production processes through global sourcing, which should help level out supply and increase the amount of tuna available for processing.

3.6.2 Pacific Agreement on Closer Economic Relations Plus (PACER Plus)

In June 2017, Solomon Islands signed the PACER Plus trade agreement between Australia, New Zealand and nine PICs. Compared with the IEPA, PACER Plus is a comprehensive FTA covering services, investment and development cooperation. Solomon Islands is eligible to receive support from Australia and New Zealand both prior to and following ratification through the Readiness Package and the Work Programme. The Readiness Package covers support to update customs procedures (implement HS2017), mitigate revenue loss as a result of liberalisation, update legislation and raise awareness of the agreement. Activities under the Work Programme will target supply-side capacity and export diversification, as well as tackling some of the primary issues that have prevented Solomon Islands from accessing the Australian and New Zealand markets thus far.

Included in both FTAs, however, is a MFN clause that states that, if a party to either agreement enters into an FTA with a third party (that is either a developed or a large developing country), access that is more favourable must also be given to the other party. Under PACER Plus, Solomon Islands has offered greater market access than that offered as part of the IEPA – 85 per cent product coverage compared with 80 per cent under the IEPA. However, PACER Plus offers a longer transition period, up to 25 years following graduation from LDC status, or 2027, whichever is later. If PACER Plus is signed first, the shorter transition period offered to the EU on signing the IEPA will also have to be given to the PACER Plus parties. Likewise, if the IEPA is signed first, the greater product coverage should be given to the EU once PACER Plus is signed. Timing is, therefore, crucial, and the government will need to decide between offering the EU more product coverage and potentially reducing the transition period on select imports from PACER Plus parties.

Mitigating the challenges associated with small island developing states requires a careful balancing act between trade liberalisation and effective government policy to ensure sufficient economic diversification to reduce associated economic vulnerabilities. Participation in international trade through signing of FTAs has the potential to help stem the cost impacts of LDC graduation, particularly in the EU case as evidenced here, but commitment on the part of the government and development partners is required to support the private sector to access third country markets and enable the economy to cope with the wider ramifications of graduation.

3.6.3 Special Incentive Arrangement for Sustainable Development and Good Governance (GSP+)

Should Solomon Islands wish not to enter into a trade agreement with the EU but to maintain current levels of access to the EU market on graduation, it should prepare for accession to the EU's GSP+. The GSP+ scheme provides an alternative avenue for Solomon Islands to retain duty-free access to the EU market provided that it ratifies a number of international treaties on human rights, and others. It may be possible for the government of Solomon Islands to request legal assistance to transition from EBA to GSP+, to help ratify the outstanding treaties required to qualify for this preference scheme.

Our analysis suggests that Solomon Islands has already ratified a number of the treaties required to join GSP+. However, it still needs to ratify some specific GSP+ treaties, notably[14] the International Covenant on Civil and Political Rights (1966) and the Convention Against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment (1984).

The GSP+ regulations require continuous monitoring of beneficiaries' obligations, to ensure the country is abiding by its commitments to maintain ratification of the international conventions covered by GSP+, and that they are effectively implemented and reporting requirements are complied with. Importantly, beneficiary countries must accept regular monitoring and cooperate with the European Commission to provide all necessary information.

Ratification of the 27 international conventions is the first step and precondition for countries to become eligible for GSP+. Subsequently, the EU is ready to guide the eligible country through the process of GSP+ application. Once a country has submitted an official application, the Commission has six months to take a (positive or negative) decision. There is no option to delay that decision (e.g. if the application is not complete), so it is strongly advised that countries informally discuss their application with the Commission before the official submission.

Based on correspondence with the Commission, it takes around another two to four months for the Council and the Parliament to give their assent to the decision. Once the country has become a GSP+ beneficiary, it is subject to an on-going monitoring process to ensure it maintains its obligations under GSP+ (this is a process that can be demanding in terms of administrative capacity of a country). The EU makes an effort to fund projects in targeted GSP+ beneficiaries, for example implemented by the International Labour Organization to support effective implementation of the latter's conventions.

It is important to note that the EC's current GSP Regulation[15] will apply until 2023. Thereafter, a new GSP Regulation will apply. In view of the likely graduation trajectory of Solomon Islands, whereby graduation from LDC status will effectively begin in 2021, it is recommended that the process of informally discussing the application for GSP+ with the Commission begin now. Even if a transitional arrangement whereby EBA market access is granted for an extension of three years post-graduation from LDC status, securing GSP+ membership before 2021 would provide an assurance that market access will remain post-graduation, because Solomon Islands has upgraded to a new preferential trade regime with the EU, built on its achievements related to economic, social and environmental progress (as indicated by its ratification of the GSP+ conventions).

3.7 Additional considerations of LDC graduation

3.7.1 Services waiver

The services waiver for LDCs allows WTO members to grant preferential treatment for services and service suppliers from LDCs. In order to take advantage of the waiver, a country must submit a notification that specifies the preferential treatment, the sectors concerned and the timeframe for the preferences. Despite some efforts to encourage LDCs to utilise the waiver, there has been limited take-up across the board.

Solomon Islands has yet to submit any notifications, or consider the potential impacts the waiver may generate for the domestic economy. Loss of access to the waiver as a result of LDC graduation is therefore uncertain, but it removes a potential channel Solomon Islands can explore in expanding its services sector, which is integral to boosting economic diversification. The opportunity costs of the loss of the services waiver and interaction with the maritime sector deserve more careful attention and analysis.

3.7.2 Intellectual property

The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), which came into effect on 1 January 1995, is to date the most comprehensive multilateral agreement on intellectual property. The areas of intellectual property that it covers include copyright and related rights, trademarks, geographical indications and industrial design, among others. The three main features of the TRIPS are standards of protection to be provided by each member; enforcement of general principles applicable to all intellectual property rights enforcement procedures; and dispute settlement.

WTO members recognise that LDCs need continuing technical and financial cooperation in order to realise the cultural, social, technological and other development objectives of the intellectual property system. LDCs are provided with maximum flexibility in implementing laws and regulations in the domestic economy, with the objective of enabling them to create a sound and viable technological base.

Solomon Islands is currently drafting an Intellectual Property Strategy, which has yet to be written into legislation. It is also considering becoming a member of the World Intellectual Property Organization in order to receive related technical assistance to improve legislation, but as of yet this has not happened. The impact of LDC graduation has not been fully explored or analysed from an intellectual property perspective by the government, so it is unclear to what extent the loss of support will have. However, there will be much greater pressure on Solomon Islands to comply with the provisions of the agreement and with far less technical and financial support to do so.

3.8 Conclusion

The recommendation of Solomon Islands for graduation from LDC status merits recognition of the progress the country has made in the face of considerable adversity, given the challenges of geography, size and reliance on highly vulnerable primary commodities. As the country is forced to shift away from exports of round logs, it must identify the sectors with the greatest potential to deliver substantial growth, contribute to employment generation and diversify the economy's export base. Tuna offers one such channel through which these goals can be achieved, provided that the government can proactively support the industry and ensure the right conditions are in place to allow it to grow sustainably.

Loss of tariff preferences to the EU market through graduation, without the security of continued access of Solomon Islands' tuna products through FTAs or participation in GSP+, would likely result in the closure of the domestic fishing industry, loss of the largest employer, and removal of a major source of protein nutrition in the country. There could be severe economic ramifications. To avoid this scenario, the government must prepare the country for graduation and ensure that access to the EU market for Solomon Islands' tuna is retained following a likely transition period.

At the current time, the main issue seems to relate to sequencing. While an intention has been signalled to ratify the IEPA, within the interim period and ahead of LDC graduation by 2021 on the current trajectory, it would seem most fortuitous to proceed to secure GSP+ ahead of 2021. Conversations with the European Commission could begin now, to signal the intention to upgrade to GSP+ while preparations for the IEPA continue. Politically, this movement signals progress on social and environmental indicators, along with the economic progress as indicated by graduation from LDC status.

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Notes

* This case study has been prepared by Dr Liam Campling, Queen Mary University of London, and Ms Victoria Allard, Economic Adviser, Department for International Development. The views expressed are those of the authors and not the Commonwealth Secretariat.

1 The mission began in 2003 and formally ended in June 2017. Although there is still an international police presence (Australia and New Zealand) in Solomon Islands, this is significantly smaller than in previous years.

2 https://www.ffa.int/node/2050

3 Data from Ministry of Finance and Treasury, Solomon Islands. Figures for 2017.

4 Domestically flagged and locally based foreign charters.

5 Data from Ministry of Finance and Treasury, Solomon Islands (source: UN Comtrade).

6 Ecuador represented 21 per cent and 28.2 per cent of total extra-EU imports of canned tuna, respectively, between 2013 and 2015.

7 UN Comtrade data, 2016.

8 Australian exports account for the largest share of imports into Solomon Islands; China is the largest recipient of Solomon Islands' exports.

9 Current levels are 20 per cent on Monday and Friday, 17 per cent on Tuesday and 16 per cent on Wednesday and Thursday.

10 Feedback from MFMR, Honiara.

11 Dark flakes are a by-product of loins and command a much lower price than premium product.

12 See Annex 3.3, Buyer Survey, Question 5.

13 It is worth briefly noting Solomon Taiyo's prior experiences in export-oriented production of canned tuna. Sainsbury's, the UK's leading supermarket in the 1980s and 1990s, purchased 70–80 per cent of Solomon Taiyo's canned product at relatively high prices because, at the time, the UK market price for canned tuna was relatively high compared with alternative markets and fish was caught using labour-intensive pole-and-liners (which Sainsbury's retailed at a premium because of the reduced environmental impacts). However, in the late 1990s, Sainsbury's put a price squeeze on first-tier suppliers of several of its own brand products, including canned tuna, as part of a bitter battle for share of the UK grocery market. As one industry insider exclaimed. "Sainsbury's always showed us a good price, but at the end of the day they didn't … US$34 per case became $21!" Price pressures generated through competition in the UK retail market had a devastating impact on Solomon Taiyo, which was already contending with the higher costs associated with production in small remote economies, despite its 24 per cent preference margin offered through EU trade policy. As a result, Solomon Taiyo was forced to "downgrade" into loin production (Havice and Campling, 2013).

14 See http://indicators.ohchr.org/

15 http://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A32012R0978

Annex 3.1 Interviewees

SolTuna – Adrian Wickham, Managing Director

NFD – Frank Wickham, Managing Director

British High Commission in Solomon Islands – HE David Ward, High Commissioner

MFAET – George Tuti (Director), Jenny Barile (Deputy Director), Natalia Patternot (Chief Trade Officer), Tracey Choko (Senior Trade Officer), Kevin Meplu (Senior Trade Officer), Nigel Sandy (Senior Trade Officer)

MDPAC – Nicola Kaua, Samuel Wara, Roy Mae, Shadrach Fanega, Darling Ramo

MFMR – Edward Honiwala, (Director Fisheries), Francis Tofuakalo (Deputy Director Offshore), Ronnelle Panda (Deputy Director, Principal Policy Planning Management), Rieka Kwalai

Ministry of Infrastructure Development – Jimmy Nuake (Permanent Secretary, acting)

Central Bank of Solomon Islands – Donald Kiriau (Acting Chief Manager, Economics Research and Statistics Department), Louisa Baragamu (Acting Manager, Economics Research and Statistics Department), Doreen Monogari (Debt Unit Analyst, Currency and Banking Department)

Ministry of Finance and Treasury – Courtney Cleary (Adviser), Margaret Leoa (Senior Policy Analyst) and Kevis Kimasaru (Senior Policy Analyst)

FFA – Leonard Rodwell (Fisheries Development Advisor), Peter Cusack (Regional Coordinator, Pacific Islands Regional Ocean scape programme), Mike Batty

World Bank and Asian Development Bank – Guido Rurangwa (Resident Representative, World Bank), Dalcy Tozaka (Senior Country Coordination Officer, Asian Development Bank)

Ministry of Foreign Affairs and Trade, New Zealand – Don Higgins, High Commissioner to Solomon Islands

EIF, WTO – Jonathan Werner, Country Coordinator for Samoa

TMI – Phil Roberts, Managing Director

Annex 3.2 Interview questions

Questions for NFD, SolTuna and FFA

Firm-level organisation:

1. Which are the main firms involved in the tuna industry in Solomon Islands? Which of these would you say is the most important and why? How much of the domestic and regional (if applicable) market does this firm capture?

2. What processing is carried out in Solomon Islands? What are the products that Solomon Islands firms produce? What are the inputs that go into the products and how much of these are imported?

Costs of production:

3. What are the main costs of production for SolTuna and other firms in Solomon Islands in the fisheries industry?

Markets:

4. Which tuna products are exported from Solomon Islands and where do the exports go?
5. Are these products transformed into other products, e.g. from cooked loins to canned tuna? In which countries are the consumers of the final goods located?
6. Who are the buyers of Solomon Islands tuna products? Are there different buyers for different products? Where and to whom do the buyers sell the products to?
7. Are Solomon Islands firms able to influence the price they can charge for their produce when selling to buyers, or do they take the price offered?

Value addition:

8. Where are Solomon Islands producers located along the tuna GVC? Do you think it is possible for Solomon Islands producers to upgrade along the value chain and move into higher value-added production? What might they do? Why do you see this as being an improvement?
9. If it is possible to upgrade, what do you think might influence that decision?

Trade preferences:

10. Are you aware of any tariff preferences? If so, which are used? Why are some not used, e.g. Japanese preferences? Do these matter for local firms?
11. How important is the EU market for Solomon Islands producers?
12. If it is important, how important is this tariff preference?
13. Are you aware that Solomon Islands might graduate from LDC status and potentially lose its tariff preferences to the EU market?
14. If so, has there been a consideration of the potential impact this might have for the Solomon Islands tuna industry? What are these? Do you think graduation will lead to downgrading risks for Solomon Islands' producers?
15. What course of action should SolTuna and other firms exporting to the EU from Solomon Islands take if they lost preferential access to the EU market?

Product differentiation:

16. Is Solomon Islands tuna different to tuna produced and sold in other parts of the Pacific? In other parts of the world? How, for example, does tuna from Solomon Islands compare with tuna from Ecuador, Seychelles or PNG?

17. Is Solomon Islands tuna able to be distinguished from that produced in other countries?
18. Do the strategies of regional competitors (PNG, Kiribati) have an impact on SolTuna's business model and exporting strategies? Are these countries the direct competitors for Solomon Islands or would it be other processors such as Ecuador, Thailand?

Effects of trade policy changes:

19. If the price of Solomon Islands tuna exported to the EU increased, would SolTuna and other local firms be able to absorb the cost? If so, how; and if not, why not?
20. If not, what would be the impact on the local economy, in terms of employment and government revenue? Would it have an impact on planned or potential investments, both by incumbent and potential firms in Solomon Islands?
21. Do you see a role for the government to mitigate indirect negative socio-economic impact of the loss of tariff preferences?

Additional challenges:

22. What are the additional challenges firms in Solomon Islands face in exporting, specifically to the EU market and also in general (capacity challenges, supply constraints, product testing, etc.)?
23. Would signing the IEPA be a positive step for the Solomon Islands tuna fishing industry? What would be the impact of signing the IEPA on the business models of local firms?

Questions for MFAET

1. Status of EPA and Trade Com support.
2. Aid for Trade package through the EPA – involvement of development partners.
3. Investment promotion in fisheries?
4. Status of PACER Plus – MFN clause contained in both agreements – has Solomon Islands analysed which to sign first?
    a. How could they leverage both agreements; what are the linkages between them?
    b. Look at the text and the market access offers
5. Has the government started preparations for LDC graduation; what is the process and is the government planning on seeking an extension or delaying graduation? Analysis of the impact?
6. What is the current status of the DTIS update and which sectors are highlighted as being of importance to the economy? Is there potential for diversification of exports in the economy and to what extent will the DTIS tackle the constraints faced?
7. Services waiver and the potential for Solomon Islands to take advantage of it.

8. Future trade agreements and the other development partners – Japan, Korea – what is Solomon Islands position on these?

Ministry of Finance and Treasury

1. What are the estimates of lost revenue as a result of LDC graduation from a trade perspective?
2. What is the process of tax reform in Solomon Islands?
3. Export data on fish exports.

Questions for MDPAC

1. What preparations have been done for LDC graduation; awareness of processes.
2. What are the implications on Aid for Trade commitments and receipts for Solomon Islands as a result of LDC graduation?
3. Revenue impacts of LDC graduation, competitiveness challenges, etc.?
4. Is there engagement with EIF to cover transition?
5. What alternative financing mechanisms are available for Solomon Islands once they have graduated?
6. Which ministry deals with the Global Environment Fund?

Questions for MFMR/FFA

1. Number of industrial scale tuna purse seine fishing vessels in WCPO and in Solomon Islands EEZ.
2. Size of the EU fleet and the number of EU vessels operating in WCPO; Solomon Islands EEZ specifically.
3. What is the contribution of the tuna industry to Solomon Islands GDP?
4. Confirm status of the additional investments and what these are contingent on?
5. Will the new processing plants come with requests for additional fishing licences?
6. What is the impact of IUU fishing in the region and is the government taking the necessary steps to ensure it does not get yellow carded again?

Questions for EIF

1. What support did EIF provide to Samoa during its transition phase from LDC status?
2. Would this support be available for Solomon Islands during its transition?
3. Did Samoa prepare another DTIS in preparation for LDC graduation and, if so, what was the focus of the report – diversification? Restructuring based around changing trade tariff preferences?

Annex 3.3 Buyer survey: Tuna-related impacts of Solomon Islands' graduation from LDC status

1. What is your title and principal role?
2. Are you aware of what SolTuna does?
3. What do you see as the strengths and weaknesses of this business?
    a. Strengths
    b. Weaknesses
4. Which countries are your main suppliers of tuna loins?
5. On a scale from 1 (much worse) to 5 (much better), if sourcing tuna loins from Solomon Islands, how does it feature compared to your main supplier?
    a. Volume
    b. Variety
    c. Price
    d. Reliability
    e. Access to tuna fisheries
    f. Productivity of labour
    g. Ease of doing business
    h. Infrastructure
    i. Compliance with import market government standards
    j. Freight costs
    k. Taxation
    l. Other (please specify)
6. *Who is the comparator supplier in Question 5?
7. On a scale from 1 (very weak) to 5 (very strong), how would you rank the supplier named in Question 6 in terms of the following indicators?
    a. Regular and reliable product quality
    b. Price
    c. Response time
    d. Punctual delivery
    e. Responding to new demands
    f. Other (please specify)

8. On a scale from 1 (very weak) to 5 (very strong), how would you rank Solomon Islands in terms of the following indicators?
   a. Regular and reliable product quality
   b. Price
   c. Response time
   d. Punctual delivery
   e. Responding to new demands
   f. Other (please specify)
9. In what aspects does the Solomon Islands need to improve most in the coming five years:
   a. Reliability
   b. Response time
   c. Quality
   d. Changes to orders
   e. Responding to new demands
   f. Other (please specify in following box)

   Please elaborate a little on your answer(s)
10. What is your view on the main challenges Solomon Islands is likely to face in the coming years?
11. Have you provided any assistance to suppliers in Solomon Islands in relation to the following?
    a. Achieving reliable quality, what/how:
    b. Upgrading technology, what/how:
    c. Speeding up response, what/how:
    d. Punctual delivery, what/how:
    e. Training for workers, what/how:
    f. Training for managers, what/how:
    g. Other (please specify):
12. Have you provided any assistance to tuna loin suppliers in relation to the following?
    a. Achieving reliable quality, what/how:
    b. Upgrading technology, what/how:

  c. Speeding up response, what/how:
  d. Punctual delivery, what/how:
  e. Training for workers, what/how:
  f. Training for managers, what/how:
  g. Other (please specify):

13. Do tariff preferences matter to buyers of tuna loins and canned tuna? (Please explain why)
14. If you are aware of the rules of origin for fish required for Solomon Islands to export to the EU, do you see any commercial disadvantages in these rules?
15. If Solomon Islands signed an IEPA with the EU and gained access to "global sourcing" ROO that allow processors to use fish from any boat (subject to sanitary and IUU regulations), would this:
    a. Change raw material supply dynamics in the region?
    b. Change your thinking of Solomon Islands competitiveness as a tuna processor?
    c. Change your thinking on investing in processing in this country?
    d. Other (please specify)?
16. Who do you think captures the commercial benefit of EU tariff preferences in the tuna industry (please explain your answers, including any evidence that you are aware of)?
17. Can the cost advantage conveyed to the Solomon Islands by duty-free access to the EU market be offset through other incentives or investments? (If so, please briefly elaborate)
18. Can the cost of losing duty-free access to the EU market be absorbed by:
    a. Domestically based processors?
    b. Tuna trading companies?
    c. Companies controlling tuna brands?
    d. Other (please specify in following box)
    e. Please elaborate a little on your answer(s)
19. Could you explain your perspective on the relationship between the price-driven versus the quality-driven aspects of the trade in frozen tuna loins?
20. What is your view on the strategic advantage of access to yellowfin tuna for a tuna loining plant?
21. Could links to resource access mitigate the loss of Solomon Islands' current tariff advantage?

22. Overall, what are your main motivations in terms of sourcing from:
    a. Solomon Islands (if applicable):
    b. The supplier noted in Question 6:
    c. Other suppliers:
23. Do you have any other additional comments in relation to any of the above questions and responses?