

Tuna Supply and Sustainability Report

NFD: Project No. 38435

This Tuna Supply and Sustainability Report is an updated version of the original report prepared under SolTuna Project No: 32053. The figures therein have been updated when new, more recent data became available or when the situation on the ground has become materially different.

Executive Summary

Stock assessment

- The tuna stocks of the Western and Central Pacific Ocean (WCPO) are scientifically monitored by the Oceanic Fisheries Program of the Secretariat of the Pacific Community (SPC). SPC receives and aggregates fisheries data from fishing nations to determine stock, catch and effort, and to recommend conservation and management measures for regional and national fisheries managers to maintain tuna stocks at sustainable levels. SPC also conducts direct scientific assessment of stock through tagging and a series of other measures.
- SPC's Oceanic Fisheries Program is widely recognized for the high quality of the assessment, monitoring and advice it provides regarding the management of the WCPO tuna stocks. All recommendations by its Scientific Committee, derived from SPC assessments, are reviewed at each annual session of the WPCFC, though not all are adopted.
- The WCPO stocks of skipjack, yellowfin and albacore are assessed as being fished within sustainable limits, i.e. the stocks are not overfished and overfishing is not occurring.
- In contrast, the only occurrence of overfishing is for bigeye, though not in waters under the control of the Solomon Islands Government (SIG), and SPC thus recommends that fishing mortality be reduced by 36% from the average levels for 2008–2011.
- In 2014, tuna catches in Solomon Islands represented 3.2% of the WCPO total for purse seine and 15.1% of the WCPO total for longliners. The Solomon Islands stock of skipjack, yellowfin and albacore are regularly assessed by SPC and the current levels of fishing effort for these species are considered to be sustainable for these stocks in the long term.

Management of WCPO

- Fisheries management in the region is regulated by the Western and Central Pacific Fisheries Commission (WCPFC), which sets overarching conservation and management measures for the tuna stocks within the WCPO. The Commission uses a variety of conservation and management measures, which have tended to become more restrictive as instances of overfishing have increased, and include temporary bans on the use of FADs, more restrictions on fishing in areas of the high seas adjacent to EEZs, and stricter catch limits. Competing interests, principally between Pacific Island countries and distant water fishing nations, sometimes prevent the WCPFC from implementing all of the scientific recommendations put forward by SPC to conserve tuna stocks (because of a de facto requirement for consensus decisions, any individual state can effectively exert veto power, which has hindered progress on enhancing the sustainability of bigeye fisheries for a number of years).
- Some Pacific Island countries have recognized these shortcomings and, in order to improve the management of tuna stocks, are implementing more stringent measures that go beyond those of the

WCPFC. The Parties to the Nauru Agreement, of which Solomon Islands is a member, have opted to strengthen the conservation and management measures enacted by the WCPFC, including by negotiating access to tuna stocks in their exclusive economic zones (EEZs) through the so-called Vessel Day Scheme (VDS).

Management by the Parties to the Nauru Agreement

- The PNA group of nations, which control 55% of the tuna supply in the WCPO, have implemented a range of measures throughout their EEZs but also in some adjacent areas of the high seas, specifically to limit fishing effort as a measure to restrict catches to within sustainable limits.
- The measures enacted by the PNA are somewhat more stringent than those taken by WCPFC in the rest of the WCPO.
- One of the most interesting aspects of the work of the PNA is that, through coordinated negotiation (through the VDS), the member states have seen the price of a day of fishing more than quadruple since 2010. In addition, most, but not all, of them are now in a position to insist that parties intent on purchasing a vessel day actually refrain from fishing on the high seas, an area where from a strictly legal perspective they do not have jurisdiction. It is a sign of how successful the regime set up by the VMS is that a day of fishing is so valuable to a distant water fishing nation that they are willing to abide by stricter conservation and management measures than legally called for.
- In 2012, the sustainability of the fishery under the PNA regime was recognized through MSC certification of purse seine-caught tuna.

Solomon Islands Tuna Fishery

- Annual catches fluctuate from year to year, but have increased considerably since 2000 to peak in 2010 at 186,260 MT. Since then, catches were 175,097 MT in 2011, 97,415 MT in 2012, 127,197 MT in 2013, and 153,660 MT in 2014.
- Solomon Islands is progressively moving to a licensing regime that aims to restrict access and effort (where this is required) and to provide preferential licensing to domestic fleets – including NFD - and those that land catches in-country for local processing.

The management measures recently implemented, along with those proposed in the Solomon Islands Tuna Management and Development Plan (TMDP), and were rewarded with MSC certification for the pole and line and purse seine (unassociated sets of anchored FADs) fishery for skipjack and yellowfin tuna in July 2016 (<https://www.msc.org/track-a-fishery/fisheries-in-the-program/certified/pacific/solomon-islands-skipjack-and-yellowfin-tuna-purse-seine-and-pole-and-line>).

Tuna Supply to SolTuna

- NFD supplies over 90% of the tuna for SolTuna's operations. Tuna caught in excess of SolTuna's requirements are sold to other parties. SolTuna has indicated that much of the increase in processing volume will come from longline landings, predominantly albacore, and from the addition of the new purse seiner. NFD's existing fleet of five purse seine vessels and two pole and line vessels (one or two more may be re-commissioned) will continue to supply SolTuna.

- As of 2016, SolTuna has budgeted a throughput of just under 110 MT/day (24,280 MT for 222 production days). NFD has secured longline licenses for vessels that are landing albacore, and is attracting other longline vessels to land their albacore catch for processing by SolTuna. In 2016, NFD held and leased 30 licenses to Taiwanese vessels, out of the 85 total licenses issued by SIG.
- About 95% of NFD's catch from its own fleets is from within the waters of the Main Group Archipelago (MGA), where commercial tuna fishing is reserved for domestic vessels landing tuna for local processing.
- NFD's catch fluctuates from year to year, but from 2013-2015, NFD has consistently landed between 25,000 and 31,000 MT from its purse seine, pole & line and long-line operations, and expects to catch 25,600 MT of tuna in 2016.

NFD's commitment to sustainability

- NFD is a full partner with Ministry of Fisheries and Marine Resources (MFMR) in implementing the Tuna Management and Development Plan (see Appendix 2), including developing a plan for shifting the longline fishery to the VDS scheme, participation in the shark conservation plan and the FAD management plan.
- NFD is in full compliance with limits set under the PNA scheme.
- Works with WCPFC on FAD closure periods and Bigeye catch limits.
- Fully participates in data collection and sharing.
- Works with baitground owners who supply the pole and line fishery with bait¹ (though the MSC certification for the pole and line fishery does not cover the bait fish fishery).
- Secured MSC certification for capture in MGA in July 2016 and certification for the chain of custody (post-harvest).
- Is pursuing a phased expansion plan: maintain or improve longline supply (aims to secure more than the 30 LL licenses it currently holds out of the total 85 issued by SIG), and achieve viability for two existing pole and line vessels before considering expansion.

World Bank Support to SIG for Sustainable Fisheries

- PROP Project: Since 2015, the World Bank has implemented a project in support of four of the eight Parties to the Nauru Agreement. Under the project, SIG is receiving US\$11 million in support of both its oceanic (tuna) fisheries and its coastal, artisanal fisheries. The project is designed so that the funds can only be disbursed if SIG meets its obligations under the PNA, thus reinforcing the incentive to ensure a sustainable approach to the fisheries.
- The Bank has also initiated a related project designed to support the work of the regional Forum Fisheries Agency (FFA) and other organizations in support of sustainable fisheries in areas beyond national jurisdiction.

Environmental Aspects of SolTuna's Tuna Supply

¹ Even though NFD has achieved the targets that had been set in the SolTuna operation, there are still concerns with the sustainability of the bait fishery.

A number of sustainability and environmental issues relating to tuna had originally been identified during the appraisal of the first SolTuna project. The key issues that had been identified at the time were:

- The robustness of regional and national measures to conserve tuna stocks and the level of coordination between Pacific island countries to sustainably manage a highly migratory stock. This issue is now widely addressed, including through the successful approach of the PNA and the VDS;
- Bycatch of non-target species by the southern longline fishery, which targets albacore (some of the bycatch is retained) and to a lesser extent, bycatch of non-target species by the purse seine fleet;
- Overfishing of bigeye and the challenge of a coordinated regional response to reduce bigeye mortality by 30%;
- Purse seine fishing on fish aggregating devices (FADs) which is implicated in an increase in juvenile bigeye mortality. This issue has now widely been addressed, at least in SI waters, through the recent MSC certification; and
- Management of bait fish stocks (essential for the pole and line fishing).

These issues were logged and actions identified to mitigate impacts were included in the Environmental and Social Action Plan (ESAP).

With the recent MSC certification for skipjack and yellowfin in Solomon Island archipelagic waters (beyond the existing PNA certification in the EEZ), ALL pole and line and purse seine caught tuna now falls under the MSC regime, except for sets on unanchored FADs. This represents a marked improvement from the previous sustainability assessment (carried out in preparation for the SolTuna operation).

A range of NGO stakeholders were consulted during the appraisal and invited to provide feedback on the project. Key issues raised by stakeholders included:

- The imperative to restrict effort and overall catch with key management recommendations of the implementation of reference points and harvest control rules. Whilst most NGOs are of the view that skipjack, yellowfin and albacore stocks are healthy, their status could change if effort is not reduced;
- Bycatch of non-target species, particularly by longline tuna vessels;
- Concern over the overfishing of bigeye and greater effort directed to a coordinated approach to reducing bigeye mortality; and
- The importance of Marine Protected Areas (MPAs) and that some areas should be off limits to fishing.

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Background

1. The Pacific Islands Tuna Fishery

1.1 The Pacific Islands tuna fishery is part of a connected set of resources and harvesting operations dispersed across the larger Western and Central Pacific Ocean (WCPO), a region defined by the biological range of the tuna populations within it. The WCPO tuna fishery is the world's largest and most valuable. It accounts for nearly 60% of global tuna production and has a value of around US\$4.5 billion annually.



1.2 Tuna taken within Pacific Island country waters account for around 45% of the WCPO catch by volume and provide around 25% of the world's canned tuna supply. But only 20% of this catch is taken by Pacific Island fleets and only 10% is processed locally. The benefits that Pacific Island countries derive from tuna fisheries mostly comprise fishing access fees, but until recent times these fees have historically represented only about 6% of the first landed value of the catch.

1.3 Although access fees equate to only a fraction of the catch value, such revenues are of critical economic importance for many Pacific island economies in a region where the total land mass is only 550,000 km² spread across 180 million km² of ocean, or about 36% of the earth's surface, and where the potential of marine resources typically outweighs other resources by orders of magnitude. This is particularly true for the smaller island and atoll states, most of which have few other opportunities for sustainable economic development. The following table highlights the importance of all fisheries for World Bank member countries in the area.

Country	Estimate of fishing contribution to GDP (local currency ,000)	Estimate of fishing contribution to GDP (%)	Year
Fiji	27,761	1.7	2007
Kiribati	44,965	53.4	2007
Marshall Islands	41,763	26.7	2007
Palau	9,573	6.1	2006
Micronesia	23,750	10.0	2006
Papua New Guinea	153,910	3.1	2006
Samoa	85,043	6.1	2007
Solomon Islands	236,448	6.8	2007
Tonga	24,188	5.1	2006
Tuvalu	1,258,622	10.3	2002
Vanuatu	696,350	1.3	2007
Extracted from: <i>Fisheries in the Economies of Pacific Island Countries and Territories</i> (ADB, 2009)			

1.4 At the same time, Pacific fisheries face serious and complex challenges. Tuna resources are coming under pressure from overcapacity in fishing fleets, the impacts of onshore development and population growth, and changes in coastal and oceanic systems, including the growing effects of climate change. A 2009 study by the World Bank and FAO, *The Sunken Billions*, estimates that the foregone economic benefits lost in the tuna fisheries of the Pacific Islands through overfishing and overcapacity amounted to US\$3.4 billion annually. There is thus a real and growing need to improve governance, develop a globally competitive private sector, and enhance the participation of Pacific islands in the value chain.

1.5 These challenges are recognized in the implementation by the World Bank of a major program in support of sustainable fisheries in four Pacific island countries: the Republic of Marshall Islands, the Federated States of Micronesia, Tuvalu, and Solomon Islands. The Pacific Regional Oceanscape Program (PROP) marks the resumption of the Bank's fisheries work in the Pacific and is organized around three main sets of activities, support to the management of oceanic tuna fisheries, support to coastal, nearshore fisheries, and the conservation of critical fishery habitats, including through support for large-scale marine protected areas (MPAs).

1.6 There is emerging awareness too among Pacific island countries and some fishing industry operators that the fisheries are not exploited at sustainable or optimal levels. In addition, in order to realize the potential benefit of fisheries in the face of these challenges, there is a need to add value to existing catches rather than to increase current volumes. This growing realization extends to US and European markets where demand for sustainably produced tuna products is steadily increasing.

1.7 There is also an emerging determination on the part of Pacific governments to exert their sovereignty over tuna resources to ensure their sustainability and to keep a greater share of the benefits of the fishery. This was articulated in the landmark 2007 *Vava'u Declaration* by Pacific Islands Forum Leaders, which

committed Forum member states to safeguarding tuna resources through better management in order to ensure enduring economic, social and cultural benefit.

1.8 Pacific Island countries thus increasingly attempt to limit access to their tuna resource to those operators who are prepared to invest in the region and to align fully with sustainability standards. The response by private sector operators anxious to secure long term access to tuna is reflected in the more than US\$300 mm in planned, new investment in the Pacific tuna processing sector.

2. Status of Western and Central Pacific Ocean tuna stocks

2.1 Of the four tuna species in the Western and Central Pacific Ocean (WCPO), overfishing is occurring only with bigeye. Scientific advice from the Secretariat of the Pacific Community (SPC) to the UN-mandated Regional Fisheries Management Organization, the Western and Central Pacific Fisheries Commission (WCPFC) is that bigeye catch should be reduced by 36%. Yellowfin is neither overfished nor is overfishing occurring, but the WCPFC Scientific Committee has recommended no increase in fishing mortality in the Western Equatorial Pacific (waters around Indonesia and the Philippines).

2.2 Skipjack and albacore stocks are viewed by SPC as being in a healthy state, though there has been a significant increase in the albacore catch in the southern fishery which includes Solomon Islands waters.

2.3 Rather than setting catch limits, tuna fisheries in the WCPFC region are managed by input controls that seek to manage catch, and, if need be, limit overall catch by restricting fishing effort. For this to be effective, the conservation and management measures set by the WCPFC, those agreed by regional bodies such as the PNA, and any additional national regulations, need to be comprehensive and complementary, such that total catch is in line with scientific advice on level of harvest the resource can sustain.

2.4 The total average tuna catch (2008-2011 average) in the WCPFC was 2,207,710 t² and reached 2,627,696 MT in 2013, its second highest level after the record catch of 2,662,538 MT in 2012. The catch in the WCPFC has risen significantly since the 1980s, largely due to the growth of the purse seine skipjack fishery, as shown below (Note: Data for 2013 are preliminary).

2.5 The interconnected and complex nature of tuna fisheries in SE Asia and the Pacific Islands is recognized through the Western Central Pacific Fisheries Convention, and the subsequent establishment in 2004 of the WCPF Commission (WCPFC), which is a Regional Fisheries Management Organization as defined by the United Nations Convention on the Law of the Sea and called for in the UN Agreement on Straddling and Highly Migratory Fish Stocks.

2.6 Solomon Islands, all of World Bank's Pacific island member countries, as well as other PICs, are participants in WCPFC, along with some 20 other nations with declared fishery-related interests in the region. WCPFC provides a mechanism for stakeholders in the region's tuna fishery to debate and eventually agree on fishery management measures that all members are then obligated to enforce through national legislation and action. As might be expected, the interests of PICs and foreign fishing nations are often at odds, and agreement may be elusive or require considerable compromise.

2.7 The WCPO tuna fishery is now reaching the limits of sustainable exploitation, and this provides both threats and opportunities for PICs. The threat is that, if uncontrolled, the fishery will decline, reducing the

² The abbreviation MT for metric tonnes is used throughout this report.

actual and potential economic benefits that PICs derive. However, the fact that the fishery is becoming limited by supply rather than by demand provides leverage for PICs in regard to conditions of fishing access by foreign fishing nations.

2.8 While the total catch has increased, skipjack, yellowfin and albacore are not overfished and overfishing is not occurring. Overfishing of bigeye is occurring, and the stock is undergoing overfishing as shown below.

Species	WCPO Stock Status	SPC's summary comments on stock status and recommendations for stock management
Skipjack	No overfishing and fishing mortality levels are sustainable, but continuing increase in fishing mortality and decline in stock size	Recommends action to avoid further increases in fishing mortality and keep stock around current levels
Yellowfin	Fishing mortality has increased but no overfishing and stock is not overfished	Catch should not increase from 2012 levels, which exceeded MSY, and measures should be implemented to maintain current spawning biomass levels
Bigeye	Fishing mortality has increased and overfishing is occurring. Rebuilding spawning biomass will require a reduction in fishing mortality	Reduce mortality by 36%, though fishing mortality varies spatially with high mortality in the tropical Pacific Ocean. Spatial management approach is recommended
Albacore	Fishing mortality has increased but no overfishing and stock is not overfished	Given recent expansion of the fishery, recent declines, and importance of maintaining catch rates, longline fishing mortality should be reduced to maintain economically viable catch rates

Summary of SPC's assessment of stock status of the WCPO tuna species. Source: Western and Central Pacific Tuna Fishery: 2013 Overview and status of stocks (SPC)

Management of WCPO Tuna Fisheries

3. Secretariat of the Pacific Community

3.1 The tuna resources of PICs are scientifically monitored by the Secretariat of the Pacific Community (SPC). SPC's Oceanic Fisheries Programme (OFP), a program within the division of Fisheries, Aquaculture and Marine Ecosystems (FAME), collects and collates catch and effort data, observer reports and other information on oceanic fisheries from SPC member countries and foreign fleets fishing under license, and provides analyses and stock assessments to them. The OFP is the science service provider to the WCPFC.

3.2 An Independent Expert Review (IER) of SPC was conducted in June 2012. The IER made the following findings in relation to FAME: "This Division is well regarded across all stakeholders – its programs are given high priority in the region and it was the Division that was most often referred to and complimented in the client consultations. The oceanic program plays a key scientific role in leading stock assessments on tuna, the region's most valuable oceanic source. Reflecting the importance of its work, this unit attracts over one million CFP units (equivalent to approximately AU\$1 million) per year in cost recovery resources. While it works in a somewhat crowded institutional environment, the IER discerned that a coordination mechanism is in place across SPC and other fisheries institutions, and the other agencies do not have the capacities to do the key scientific work that FAME leads. In addition, FAME is the only regional organization working on coastal fisheries and, given the role coastal fisheries play in regional livelihoods, its work is key to the Pacific's development efforts."

3.3 SPC provides the WCPFC, PNA, and national management bodies such as MFMR high quality scientific data and advice on stock status and trends. As a result, the Commission, PNA and PICs are in a position to implement conservation and management measures to conserve tuna stocks based on sound scientific advice. Any delay with implementing action is not due to paucity of data but rather to political disagreement between the Pacific islands countries and the distant water fishing nations within WCPFC.

4. Parties to the Nauru Agreement

4.1 Recent actions by sub-regional groups of resource-owning PICs with common interests demonstrate a clear intention to capitalize on these changes to the tuna fishery landscape. A group of eight PICs, including Solomon Islands, the Parties to the Nauru Agreement (PNA), control over 14 million square kilometers of the WCPO, territorial waters that supply 55% of the tuna caught in the region (30% of global supply), with an estimated value of US\$5.5 billion.

4.2 The PNA is a driving force for improving the management of the region's tuna resource, and collectively have introduced measures to improve the management of the resource, increase member country's control of the resource, and improve economic returns from the fishery. The initial focus of the PNA has been purse seine fishing but it is likely they will also introduce greater controls for longlining. Some of these changes and initiatives introduced by the PNA for the purse seine fishery include:

- The development and implementation of the Vessel Day Scheme (VDS)
- Seasonal fish aggregating device (FAD) closures
- Closures of high seas areas to fishing
- 100% observer coverage on purse seine vessels
- Catch retention requirements
- A ban on sets on whale sharks
- Requirement that all fishing vessels have activated locator transponders while moving between high seas and Pacific EEZs

4.3 The rise of the PNA as an influential and effective body in the WCPO tuna sector that is seeking greater control of their tuna resources aligns well with IFC's agenda for Pacific tuna fisheries and provides considerable scope for collaboration.

4.4 PNA also initiated a successful effort to have part of the WCPO purse seine fishery for skipjack tuna certified to Marine Stewardship Council standards. The positive economic effects of the Vessel Days Scheme is beginning to emerge, with recent figures showing the cost of a single day of fishing has quadrupled from US\$1,500 in 2010 to US\$6,000 in 2014, and now ranges from US\$8,000 to US\$12,000, depending on who does the fishing, where and when.

4.5 Under the PNA Vessel Days Scheme for purse seine fishing, Solomon Islands is allocated 2,961 fishing days, which it can sell to foreign fishing vessels to fish in its waters. In June 2011 that allocation was exhausted and on notification by the PNA the SIG closed its tuna fishery. It subsequently negotiated with another PNA member, Marshall Islands, to purchase an unused portion of that country's allocation so that fishing could resume, in line with provisions of the scheme.

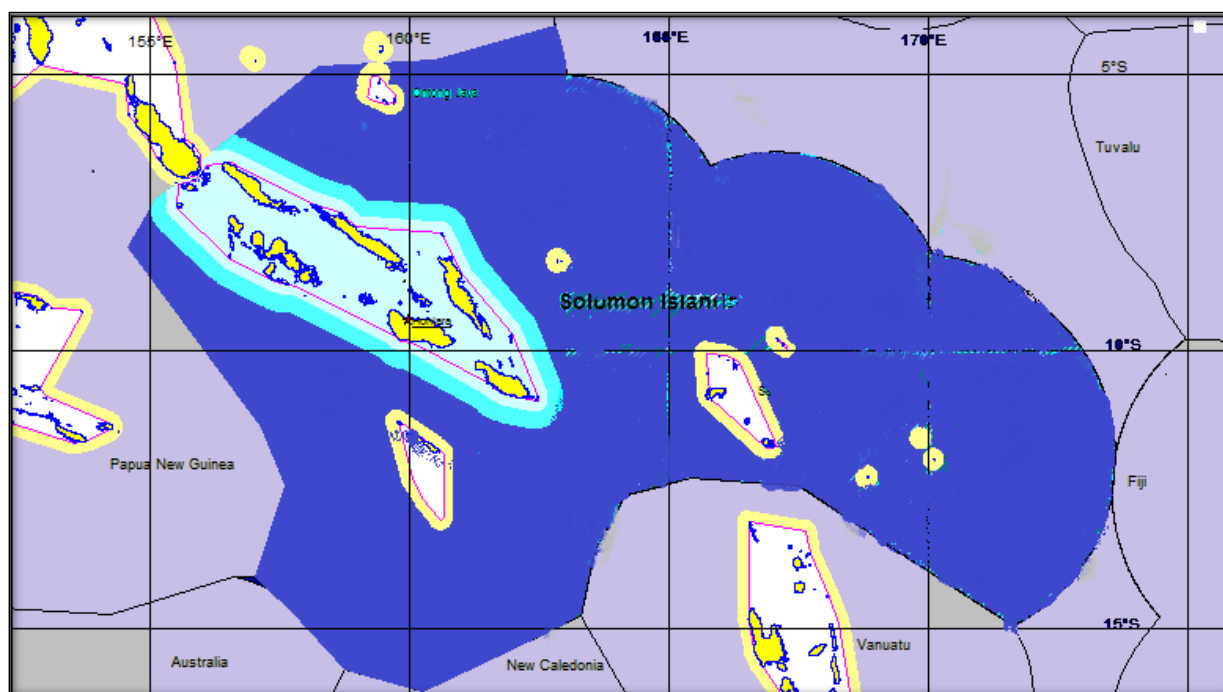
Solomon Islands Tuna Fisheries

5. Overview

5.1 Tuna taken in Solomon Islands accounts for around 7% of the total catch from the Western and Central Pacific Ocean, about equal to the catch from the Federated States of Micronesia, but well below the most productive Pacific island zones of Kiribati at 14% and Papua New Guinea at 18%.

5.2 The Solomon Islands Exclusive Economic zone (EEZ), 1.34 million km² in extent, is about half the size of the adjacent PNG EEZ. The mean annual catch of tuna in Solomon Islands waters between 2008 and 2011 was 156,102 MT with an estimated value of US\$180 million, and in 2014 (latest year for which data are available), the total catch reached 153,660 MT. The bulk of that catch was taken by foreign fishing vessels and taken elsewhere for processing.

Map of the Solomon Islands EEZ showing the archipelagic waters



5.3 Foreign purse seine vessels fishing in the Solomon Islands EEZ under access agreements took in excess of 87,000 MT in 2009, with the Korean, Taiwanese, Japanese, Vanuatu and other fleets accounting for the majority of the catch. Foreign longliners (China, Japan and Taiwan) caught around 16,000 MT, with a small catch (365 MT) by Japan long-range pole and line vessels.

5.4 Solomon Islands presently derives direct benefit from the foreign fleet tuna fishery through access fees, but these benefits have represented only about 5% of the landed value of the catch.

5.5 NFD is the single largest Solomon Islands based industrial-scale fishing operator. It operates a fleet of five small purse-seine vessels (350 MT capacity each) and two pole and line vessels (65 MT capacity each), which supply the single local tuna processor, SolTuna. The present operation aims to finance the addition of one more purse seiner, with an increased capacity of 980 MT and much wider range that will allow it to fish beyond the archipelagic waters, throughout the country's EEZ. Because fishing in the EEZ is regulated under the VDS, the expected additional catch by NFD, estimated at 8,000 MT, will be covered under days of fishing purchased by NFD, from SIG. As a result, the new NFD catch will displace that of another, foreign vessel but will not increase the total catch allowed under the VDS.³

³ There is no interest for SIG to exceed the number of days allowed under the VDS as it would undermine the whole structure of the scheme, and thus jeopardize increasing revenues. In addition, the Solomon Islands can only receive funds from the Bank's PROP Project if they are in full compliance with the terms of VDS, as verified periodically by outside auditor.

5.6 Solomon Islands is classified as a Least-Developed Country, so it enjoys preferential market access to the EU under the “Everything But Arms” (EBA) Initiative. However, strict rules of origin (RoO) apply where raw material must be sourced from Solomon Islands or EU-flagged vessels to benefit from the 24% import duty exemption. In order to qualify for “global sourcing” RoO Solomon Islands will need to sign onto the EU Interim Economic Partnership Agreement (IEPA).

5.7 The Solomon Islands Government (SIG) is still considering whether or not to sign an IEPA. In the absence of an IEPA, locally-based tuna loining/canning plants need to source raw material from domestic (or EU-flagged) vessels in order to benefit from duty free access to the EU under the EBA concession.

5.8. In December 2014, SIG was sanctioned by a so-called “yellow flag” by the EU, a procedure under which a country intent on exporting fish products to the EU is threatened with an import ban because it has failed to take sufficient measures to fight illegal, unregulated and unreported (IUU) fishing. Since the imposition of this yellow card, the SIG has been participating in a formal dialogue with the European Commission to demonstrate that it is in the process of improving its enforcement regime, and thus meet the conditions set up for access to the EU market. If SIG continues its progress in meeting the conditions set up by the EU, it is expected that the yellow card could be lifted by June 2017.

5.9 SIG believes that better management of fishing capacity and access and increased onshore processing activities will generate employment opportunities, increase export income and create domestic industries servicing the fishing and processing sector.

5.10 To this end SIG has committed to a program to enhance tuna fishery development and management by improving the policy and investment environment, improving licensing arrangements, controlling illegal fishing and expanding domestic tuna fishing and processing capacity, including linking foreign fishing access to the establishment of shore based facilities in Solomon Islands.

6. Resource management

6.1 In common with other PICs, the Government of Solomon Islands recognizes that fishing overcapacity and open access constrain better resource management and leave the resource at risk. SIG recognizes too that sustainable future benefits will rely on increasing the value of existing (or possibly diminished) catches and the profitability of fishing and processing operations. SIG’s recent implementation of a long-standing policy to issue longline fishing licenses only to operators that land their catch locally, and progress with developing a fully considered tuna management plan (see Appendix 2: SIG Tuna Management and Development Plan V6), and an investment strategy, indicate progress towards better management practices. In particular, the adoption of this plan, which includes vessel day limits in archipelagic waters that is compatible with the PNA VDS that applies in the EEZ, a testament to SIG’s alignment with the PNA and to its new determination to play a responsible part in regional tuna management.

6.2 As with other jurisdictions within the WCPFC region, the tuna fisheries in Solomon Islands are managed by input controls that seek to limit catch levels by limiting fishing effort. As the fishery has approached its sustainable limits, the SIG has introduced measures (and has others planned) to manage effort. These include:

- Participation in the PNA Vessel Day Scheme (VDS) for the purse seine fleet operating in Solomon Islands' EEZ. The VDS limits the number of fishing days allowable, with vessels buying days in the scheme to enable them to fish.

- A reduction in longline licenses from 242 in 2011 to 172 in 2012, to 85 in 2016 in response to stock assessments that the southern albacore stock was at risk of overfishing.

- A proposal to introduce a VDS for the longline fishery, which has now been approved and is being implemented for 2017.

6.5 Solomon Islands' Ministry of Fisheries and Marine Resources (MFMR) has responsibility for management and development of the nation's tuna resources, including management of varying fishing access regimes for different parts of its EEZ; the Main Group Archipelago, for instance, which comprises the waters enclosed by the six main islands, is by policy reserved for subsistence and domestic industrial fishing.

6.6 MFMR is challenged in this task by inadequate institutional capacity and limited human resources. In recognition of this, and the social and economic importance of tuna for Solomon Islands, various development partners have provided MFMR with ad hoc and long term technical assistance, including the attachment of technical advisers. The most significant recent assistance is being provided by New Zealand under the Mekem Strong Solomon Islands Fisheries program.

6.7 MFMR has also received regular support from the Pacific Islands Forum Fisheries Agency (FFA), which is headquartered in Solomon Islands. FFA supports PICs in their negotiations with foreign fishing interests, mediates the development of regional treaties and access arrangements, maintains a regional register of fishing vessels in good standing, and operates a regional vessel monitoring system. FFA also promotes domestic fishery development and investment, as well as supporting its member countries in developing fishery management initiatives and participating effectively in the WCPFC.

7. The Tuna Catch

7.1 There are three industrial scale tuna fisheries in Solomon Islands; purse seine, longline and pole and line. Purse seine and pole and line fisheries target skipjack and yellowfin, while the longline fishery targets albacore with a secondary catch of yellowfin and bigeye.

7.2 The total catch of skipjack, yellowfin, bigeye and albacore in the Solomon Islands has increased significantly since 2004, reaching a peak of ~175,000 MT in 2011, to stabilize around 153,000 MT in 2014. Skipjack is the dominant species, followed by yellowfin, albacore and bigeye. In particular, albacore catch in the Solomon Islands has increased significantly over the last ten years, from 330 MT in 2001 to 16,132 MT in 2011. 7.3 Tuna taken in Solomon Islands accounts for around 7% of the total catch from the Western and Central Pacific Ocean, about equal to the catch from the Federated States of Micronesia, but well below the most productive PIC zones of Kiribati at 14% and Papua New Guinea at 18%.

7.4 The commercial tuna fishery has two zones, that part within the waters of the MGA and the remainder of the EEZ out to the 200 nm boundary. The MGA is reserved for the domestic fleet landing fish for on-shore processing and for domestic artisanal and subsistence fishing. The domestic fleet also fishes in the EEZ along with foreign fleets, principally from China and Taiwan (longline) and Korean, Taiwan, US and

PNG (purse seine). The active domestic fleet comprises five purse seine and two pole and line vessels operated by National Fisheries Developments Ltd.

7.5 Fish Aggregating Devices (FADs) are an important tool for some purse seine fleets, including the Solomon Islands domestic fleet, which predominantly fishes on anchored FADs within Solomon Islands' MGA. Tuna tend to gather near FADs, which are typically floating rafts anchored to the seabed in deep water, and thus are more easily found and taken by purse seine vessels, as opposed to the vessels having to search for free swimming schools of fish.

7.6 Two distinct but overlapping longline fisheries operate in Solomon Islands waters, the tropical longline fishery, which essentially targets large yellowfin and bigeye tuna, and the southern longline fishery, which essentially targets albacore tuna. The catch of bigeye has increased substantially in Solomon Islands waters over the last ten years due to increased effort in the longline fishery. The Solomon Islands catch of bigeye increased from 620 MT in 2001 to 6,870 MT in 2011. In response to concerns regarding the stock of bigeye and advice from SPC that catch should be reduced by 36%, Solomon Islands has implemented measures that will go some way to address overfishing of bigeye, including seasonal FAD closures in their EEZ in line with practices of other PNA nations (to reduce catch of juvenile bigeye) and in 2012 by restricting longline effort by reducing the number of longline fishing licenses issued, which is expected to reduce the overall longline catch, including the catch of adult bigeye. The failure of recent WCPFC meetings to fully adopt the advice of the Commission's Scientific Advisory Committee on other measures to reduce bigeye mortality means that it is unlikely that these measures will be enough to reduce overall WCPO bigeye mortality to recommended levels. This is relevant to SolTuna as its increased landing of longline caught tuna will inevitably lead to increased landings of bigeye at Noro, even though the overall bigeye catch from Solomon Islands' waters is likely to be reduced.

7.7 The total purse seine catch from Solomon Islands waters in 2014 was 153,660 MT comprising skipjack (40%), yellowfin (39%), bigeye (4.5%), and albacore (16%). The longline catch was 45,486 MT comprising 24,617 MT albacore (54%) with a secondary catch of yellowfin (34%) and bigeye (10%). Longlining is conducted within the EEZ, but is excluded from the MGA. Pole and line fishing, which NFD restarted in Solomon Islands in 2011 in response to premium market demand for pole and line catch, is undertaken almost entirely within the MGA with a total catch of 649 MT in 2014 (82.5% skipjack and 17.5% yellowfin).

Table 1 Total Tuna Catch - Solomon Islands Waters (Mt): 2011-2014 (Source: SPC Catch & Effort Database, 1 June 2015)

Gear Type & Flag	2011					2012					2013					2014				
	SKJ	YFN	BET	ALB	TOTAL	SKJ	YFN	BET	ALB	TOTAL	SKJ	YFN	BET	ALB	TOTAL	SKJ	YFN	BET	ALB	TOTAL
PS - SI Flag	16,686	7,900	933	0	25,520	17,115	8,854	531	0	26,500	15,608	8,381	763	0	24,752	20,908	19,117	646	0	40,670
PS - Foreign/Charter	104,703	21,474	4,135	0	130,312	36,421	8,097	1,485	0	46,003	62,962	17,537	2,737	0	83,237	40,063	25,222	1,571	0	66,855
PL - SI Flag	722	149	0	0	871	1,877	258	0	0	2,135	1,389	277	0	0	1,666	535	114	0	0	649
LL - Foreign/Charter	115	5,904	1,950	10,426	18,394	43	9,353	1,714	11,668	22,777	96	4,873	1,120	11,452	17,542	362	15,738	4,769	24,617	45,486
TOTAL	122,226	35,428	7,018	10,426	175,097	55,456	26,562	3,729	11,668	97,415	80,056	31,068	4,621	11,452	127,197	61,867	60,190	6,986	24,617	153,660

8. Tuna Stock Status

8.1 SPC's Oceanic Fisheries Program conducted a stock assessment of the four tuna species in the Solomon Islands in 2011. Its findings are that:

- The biomass of the four species has declined in recent years and are at historic lows, however the biomass for skipjack, yellowfin and albacore are estimated to be at levels that will support maximum

sustainable yield. Current levels of fishing effort for these species are considered to be sustainable for these stocks in the long term. The bigeye stock is estimated to have declined and current regional levels of fishing effort, including that in the Solomon Islands, are not considered to be sustainable in the long term. SPC has recommended a minimum 32% reduction in fishing mortality of bigeye.

- The tuna fishery in the MGA is not covered by the effort limits set for the EEZ. Given the stock move freely between these management zones, there is the risk that increased effort in the MGA could impact on the stock in the EEZ (and vice versa).

- Any catch or effort limits within the MGA should consider purse seine and pole & line together as these fleets exploit similar resources.

Tuna Supply to SolTuna

9. National Fisheries Developments Ltd

9.1 All the tuna processed by SolTuna Ltd. is supplied by the Solomon Islands fishing company National Fisheries Developments Ltd (NFD), which is owned and operated by Tri Marine, one of the three major global tuna trading companies. Tri Marine is also the majority shareholder of SolTuna.

Purse seine fishing

9.2 NFD operates five purse seine vessels and two pole and line vessels (with two others under refurbishment). It also handles tuna landed to its Noro base by foreign longline vessels, which are also provided to SolTuna.

9.3 NFD's purse seine vessels are relatively small by WCPO standards, with a carrying capacity of 350 MT. In contrast, large purse seine vessels typically have a carrying capacity of around 1,500-2,000 MT.

9.4 Most of the NFD purse seine catch is taken in Solomon Islands' Main Group Archipelago (MGA) where most sets are made on fish aggregation devices (FADs). Currently, NFD is the only major domestic fleet fishing within the MGA. Licenses have been issued for a Western Province and Filipino joint venture to also fish in the MGA.

	2011		2012 (to 30 Oct)	
	FAD (anchored and drifting)	Free school	FAD (anchored and drifting)	Free school
Skipjack	89.7%	10.3%	93.9	6.1%
Yellowfin	93.1%	6.9%	95.2	4.8%

9.5 Some NFD FADs are used by local fishing communities, usually in cooperation with NFD (i.e. local fishermen report damage to FAD so that NFD will repair it, and maintain its presence to local fishermen's benefit). However, NFD also reports some damage to FADs through community use.

9.6 With ~5% of the purse seine catch free-school, it is reasonable to assume that setting on free schools is done opportunistically should these be sighted as vessels travel between FADs.

9.7 NFD flagged that juvenile bigeye are caught on FADs, however these are very difficult to distinguish from yellowfin and therefore recorded in the catch data as “bigeye mix”. From examining one example of a Captain’s trip report (F/W Solomon Pearl Trip No. 10-12SP) the volume of “bigeye mix” is recorded and this data is also recorded on the SPC/FFA Regional Purse Seine logsheet. What is not known, due to the difficulty of distinguishing juvenile bigeye from yellowfin, except by a trained observer, is the volume of each species in this mix. For this trip, 0.12% of the total catch was “bigeye mix”, which assuming is an average bigeye bycatch from their purse seining on FADs, would equate to annual bigeye mix catch of 24 MT entering SolTuna’s supply chain from purse seining. To put this in perspective, the 2014 overall bigeye catch in Solomon Islands waters was 6,986 MT.

9.8 NFD’s General Manager reports that juvenile bigeye are more associated with floating FADs, rather than the anchored FADs that NFD uses. Preliminary results from research carried out by SPC through MFMR has shown that the bigeye catch on FAD-associated sets in Solomon Islands averages 2.8%, whereas the average for FAD-associated sets in the remainder of the WCPO is 7.3%. This in turn confirms that capture of bigeye juveniles is not as much of a concern for NFD as it is for the rest of the fleets in the WCPO.

9.9 Setting on cetaceans and whale sharks is prohibited under Solomon Islands fisheries regulations and purse seine license conditions and this requirement is documented on MFMR’s trip reports that the captain signs at the completion of each trip. NFD advised the IFC appraisal team that other bycatch such as turtles and sharks are removed from purse seines prior to brailing the fish onto the vessel, typically by letting the side of the net down and guiding the turtle/shark out from the enclosure when possible. The purse seine vessels have 10 wells allowing for physical segregation of fish by species or fishing method, e.g. separating free school from FAD-caught tuna.

9.10 Solomon Islands require that all purse seine vessels operating in its waters accommodate fisheries observers, when allocated. MFMR used to prioritize observer allocation to foreign purse seine vessels fishing under license in the Solomon Islands EEZ, but there is now a MFMR office in Noro, with an observer debriefer and NFD indicates that they are now at or near 100% coverage on purse seiners.

9.11 NFD’s purse seiners are manned by Solomon Islanders, with the exception of the fishing masters who are expatriates. NFD clearly prioritizes training and career advancement for its local employees. NFD is the only company operating in the Western Pacific that has one boat crew (including the fishing master) who are all Pacific Island nationals.

Pole and Line Fishing

9.12 Solomon Islands previously had a sizeable pole and line fishery, reaching a peak in 1988 with 34 vessels catching a total of 37,688 MT. The fishery declined rapidly from this peak as effort shifted to purse seining.

9.13 NFD has the only pole and line vessels operating in the Solomon Islands, having recommenced pole and line fishing in 2011. NFD’s pole and line vessels are crewed entirely by Solomon Islanders.

9.14 The pole and line vessels catch bait immediately prior to commencing a fishing trip. NFD has agreements with local communities to take bait in inshore bait grounds. Some of the bait grounds are within the Noviana and Vonavona lagoons that contain zones gazetted as Marine Protected Areas. Little is known about the stock status of the bait fish, or the level of fishing it can sustain. As bait fish is essential for pole and line fishing, a better understanding of the stock status is a priority as NFD increases its pole and line fishing operation.

Longline fishing

9.15 NFD also provides fleet management services for longline vessels now landing to the SolTuna plant at Noro under MFMR's newly-enforced policy of progressively restricting the issue of longline licenses to operators who will land and process catch onshore in Solomon Islands. As a result, NFD's allocation of longline results has fallen to 30 in 2016, from 50 in 2012. Other, unassociated longline vessels also landed their catch to NFD at Noro. Some of the unassociated vessels held albacore fishing licenses and others licenses to fish for yellowfin and bigeye.

9.16 Most of the longline vessels landing to NFD originate in Taiwan from a fishing port near Kaohsiung, where Tri Marine maintains an office. The fleet owners and captains, sometimes owner-captains, are generally well known to Tri Marine's Kaohsiung office. The owners/captains thus contact Tri Marine's Kaohsiung office to negotiate a price for tuna that they might land to NFD at Noro and this information is passed to NFD. NFD at Noro will then communicate directly with the vessel to schedule landing and other services required by the vessel.

9.17 NFD has markedly improved its fleet support services, including efficient ship repair and victualling, the provision of bait. It is still improving its bulk fuel supply capacity and has taken the initial steps to develop refrigeration capacity required to handle high-grade fresh and frozen tuna destined for sashimi markets. In support of this, NFD has established a longline fleet management office, which includes staff seconded from Tri Marine's Kaohsiung office, whose language ability enables them to deal more effectively with Taiwanese vessel captains. NFD may also negotiate directly with the captain for the purchase of any yellowfin and bigeye that the vessel may have caught. All these measures support the group strategy to source more needed tuna supply for SolTuna from longline-caught tuna. If NFD was not prepared to take all the species caught by longliners the captains could be inclined to land their entire catch to neighboring Fiji, where they had typically landed prior to Solomon Islands imposing its domestic landing policy, despite the risk that they may not be licensed in the future for failing to comply with their license conditions. Fiji has the important added attraction of being able to provide bunker fuel to vessels at significantly lower cost than NFD can presently (US\$1,100 MT vs US\$1,600 MT).

9.18 NFD began receiving longline catches at Noro in mid-May 2012. It is now assigned 30 of the 85 licenses handed out by SIG, and in 2015 landed 7,524 MT from its longline operations, out of a total of 45,486 MT caught in the whole of Solomon Islands waters. 9.19 In 2014, the last year for which disaggregated data are available, more than half of longline landings were for albacore (54%), followed by yellowfin (34%), bigeye (10%) and skipjack (8%)

9.20 The new tier-based licensing regime that has become fully implemented, and under which Tier 1 licenses have a condition of landing tuna in-country, means that vessels operating under an NFD license and other license holders have considerable incentive to land their catch at Noro if they seek to continue to fish in Solomon Islands waters.

9.21 NFD does not place any fishing controls on the longline vessel fishing under its licenses, beyond what is required by MFMR, the vessel owners, and the vessels' home country fisheries authority, nor are the vessels bound to sell their fish to NFD. Under the current license arrangements, NFD's securing of longline licenses enables it to provide access to the albacore resource, and incidental catches of yellowfin and bigeye, for vessel operators, who may or may not choose to sell any of their catch to NFD.

9.22 At the same time, vessel operators are aware that if they do not land at least their albacore catch to NFD they will be deemed to have not complied with the local landing policy under which the licenses were first allocated. In these circumstances vessels are typically landing their albacore catch to NFD, thus satisfying NFD and SolTuna's primary supply need, but are negotiating with NFD and others for the sale of yellowfin and bigeye.

9.23 To date, NFD has not purchased any non-tuna species caught by longline vessels incidentally, but on two occasions it shipped containers of such catch on behalf of the vessel owners. Both these vessels were fishing on NFD licenses.

9.25 NFD has limited data on bycatch (retained or discarded) for the longline vessels fishing under its licenses, which are transferred to MFMR but not aggregated. Most non-tuna is transferred to a carrier vessel in port, rather than offloaded at the NFD wharf. The only longline bycatch data available to NFD is for retained catch where the vessel owner has negotiated to sell this catch to NFD, or where NFD has acted as an agent to sell it on the owner's behalf. Since longline landings commenced in May 2012, only the two vessels shown in the table above have landed non-tuna retained bycatch at Noro. One of these vessels landed nearly 11 MT of shark along with 68 MT of albacore. Such a high proportion of shark is probably inconsistent with the catch of a longline vessel targeting albacore and this vessel may have targeted shark. With only 5% observer coverage of longline vessels operating in Solomon Islands waters it is possible that logsheet data provided to MFMR by longline vessels is inaccurate, particularly when fishing activities are not in compliance with license conditions.

9.26 Arguably the most significant environmental impact in SolTuna's supply chain is the bycatch levels of the longline vessels (NFD and other license holders) landing tuna at Noro. The low level of observer coverage, combined with a lack of conditions imposed by NFD/SolTuna, beyond the conditions set out in the license permit, and the practical difficulty NFD would have in monitoring fishing practices at sea, means SolTuna and NFD are almost unsighted on the extent of non-retained and retained bycatch for these vessels. The little data available would suggest that the retained bycatch of sharks could be substantial and there is the possibility that some of the vessels may be targeting sharks and/or finning and discarding sharks.

9.27 While the retained bycatch is not sought by SolTuna, it is being caught by vessels operating under an NFD license or by other vessels supplying NFD, and therefore forms part of NFD and SolTuna's "fisheries footprint" and consequently should be viewed as part of their supply chain. As NFD ramps up its fresh/frozen business and ancillary services to longline vessels, it is likely there will be a significant increase in the landing of non-tuna species at Noro that will either be purchased by NFD or handled by NFD as an agent on behalf of the vessel owner. This presents a reputational risk for Tri Marine, which publicly endorses a ban on shark finning at sea in light of concern about overfishing of some shark species, and for

their subsidiaries, NFD and SolTuna. The fact that a third party is fishing on their behalf does little to mitigate the reputational risk.

9.28 The transition to a tier-based longline licensing system, commencing in 2013, where licenses will be preferentially allocated to those vessels demonstrating compliance with the domestic landing policy, will give NFD leverage in setting and imposing good practice fishing conditions (bycatch mitigation [turtles and seabirds], bycatch retention, shark finning, crew conditions etc.) on vessels it deals with in the event this is deemed necessary to address a material risk.

9.29 Preliminary recent observation of NFD's handling of longline vessel crew impacts on the local community suggest that NFD is very well aware of potential negative impacts and is working to develop protocols to minimize them. This may be an area where IFC could assist by promoting firm/community collaboration (HIV/AIDS awareness etc.).

9.30 NFD also plans to develop a small fleet of handline vessels, which would be manned by Solomon Islanders, and target large yellowfin and bigeye on FADs for the fresh sashimi market. As fresh tuna are routinely flown to market this would largely be dependent on completion of the upgrade to nearby Munda Airport to international standard, which is underway under New Zealand sponsorship, as is upgrading and sealing of the Munda-Noro road. SolTuna has initiated a project to produce frozen sashimi-grade tuna, with a small but sophisticated ultra- low temperature (ULT) freezing and holding capacity. Ultimately, the goal is to process prime sashimi grade tuna onshore and deliver them to market in ULT reefer containers by sea freight.

Sustainability of Supply

10. Sustainability of SolTuna's projected increase in demand for tuna

10.1 SolTuna's production has almost doubled from 12,824 MT in 2012 to 21,541 MT in 2015. Yellowfin comprised most of this increase, from 7,170 MT in 2013, to 12,131 MT in 2015, though it should be noted that the share of skipjack is budgeted at almost 57% of the total production for 2016 (13,787 MT out of a total of 24,280 MT processed).

10.2 NFD's existing fleet of purse seine vessels and pole & line vessels is not anticipated to supply tuna beyond the historic annual catch. The proposed re-commissioning of two pole & line vessels would increase NFD's overall effort, as would any further expansion of the pole & line fleet (which is under consideration). Any further expansion of NFD's fleet would increase capacity and effort, and annual catch would likely exceed the 27,000 to 30,000 MT projected for the existing fleet. However, further expansion of the pole and line fleet, were it to occur, is likely to be viewed by stakeholders as a positive development given the environmentally benign nature of this gear type, and particularly if it is a shift of capacity from other gear types.

10.3 While NFD will increase its catch of skipjack and yellowfin tuna with the acquisition of the new purse seiner, it should be noted that this catch will only occur in the EEZ, and not in the MGA. Because catches are strictly limited in the EEZ under the terms of the VDS, NFD will be required to purchase some of the fishing days sold by SIG, thus displacing other, foreign vessels. As a result, catches in the EEZ will be reallocated to NFD but will not increase, thus staying within the sustainability criteria enshrined in the VDS.

10.4 SolTuna's projected increase in demand for albacore, from 1,178 MT processed in 2012 to 5,337 MT projected in 2019 will rely on NFD securing a greater proportion of the albacore caught in Solomon Islands waters. Given the steps already taken by the SIG to limit access and effort in the longline fishery, it is likely that total albacore catch over the coming years will not exceed the 2011 annual catch of 16,000 MT, and the annual catch is more likely to contract. Assuming albacore catch remains at 16,000 MT, SolTuna's share of this catch will increase from ~7% to ~33% in 2019. Should albacore catch contract to 12,000 MT in line with the 2012 reduction of longline licenses from 242 to 172, then SolTuna's share of the annual catch will be 44% of the total Solomon Islands 2019 albacore catch.

11. Recognized standards for sustainable natural resource management

11.1 The viability and value of tuna production in Solomon Islands is necessarily subject to the dynamics of the global tuna supply chain. Concerns over the health of tuna populations and resource sustainability have become a part of mainstream debates in the tuna sector in recent years. Several sustainability certification schemes have been initiated (i.e. various dolphin-safe labels, Marine Stewardship Council and Friends of the Sea), providing an eco-label that identifies a consumer product as ecologically superior to commercially similar products. The goal of these efforts is to tap into market-based incentives to improve fisheries management systems and contribute to sustainability of fisheries resources.

11.2 Several fisheries interest groups have developed sustainability recommendations designed to influence consumer buying patterns towards more sustainable products. While these are not eco-labels, per se, they offer consumers easily digestible recommendations on seafood products in three categories: those that are the best sustainability choices, those that are good and those that consumers should avoid.

11.3 In recognition of such sentiment IFC's Performance Standard 6 (Sustainable Natural Resource Management) seeks to have clients attain recognized standards of natural resource management.

11.4 The Marine Stewardship Council (MSC) is the most widely accepted independent third party fisheries standard and it has been applied to a range of fisheries, species types and fishing methods. There are 15 tuna fisheries globally either in assessment or certified to the MSC standard including skipjack, yellowfin, albacore and bigeye fisheries, and other tuna fisheries likely have undergone the confidential MSC pre-assessment.

11.5 A first component of one of the fisheries supplying SolTuna became MSC certified in 2009 when the whole free school skipjack fishery covered by the PNA was certified, but this certification originally only applied in the Solomon EEZ, and not its archipelagic waters. Since then, in July 2016, NFD secured similar MSC certification for its fleet operating within MGA waters for both pole & line and purse seine fishing – with the specific exclusion of sets on free floating FADs. In addition, NFD is now in the process of achieving the highest possible level of certification by applying for and awaiting certification for its post-harvest practices, throughout the value chain for fish caught as certified by the MSC.

Stakeholder Consultations

12.1 Organizations with an interest in the sustainability of tuna stocks and marine conservation were consulted as part of the original SolTuna project appraisal. They were further consulted in the margins of

the Conference of Parties of the WCPFC held in Bali in December 2015. These organizations raised the following issues relating to sustainability of tuna stocks and impacts arising from tuna fishing:

- The robustness of regional and national measures to conserve tuna stocks and the level of coordination between Pacific Island countries to sustainably manage a highly migratory stock. A number of stakeholders raised the importance of restricting effort and overall catch, and as a priority, the implementation of reference points and harvest control rules;
- In that regard, many NGO representatives expressed concern with the rules and procedures of the WCPFC, which effectively allow a single state to exercise a veto against any new management measures they deem too restrictive;
- Different access and management arrangements within Solomon Island waters, that add an additional level of complexity for management authorities to implement consistent and equitable stock management measures;
- Integrity of catch and bycatch data, particularly for the longline fishery where observer coverage is currently < 5 percent (mostly due to the near impossibility of having observers on board the vessels currently operating in Solomon waters);
- Bycatch of non-target species by the longline fishery (some of the bycatch is retained) and to a lesser extent, bycatch of non-target species by the purse seine fleet (i.e. sharks, rays, turtles);
- Overfishing of bigeye and the challenge of a coordinated regional response to reduce bigeye mortality by at least 36 percent;
- Purse seine fishing on some fish aggregating devices (FADs) and the higher rate of juvenile bigeye and yellowfin mortality than for free school fishing;
- Management of bait fish stocks (essential for the pole and line fishing); and
- The importance of Marine Protected Areas (MPAs) and that some areas should be off limits to fishing.

12.2 The following organizations were consulted as part of the original SolTuna project appraisal, some of which were consulted again during the Bali Conference of Parties of the WCPFC:

- Secretariat of the Pacific Community, Oceanic Fisheries Programme
- Pacific Islands Forum Fisheries Agency
- Ministry of Fisheries and Marine Resources, Solomon Islands
- Worldfish
- WWF
- Greenpeace
- The Nature Conservancy
- International Sustainable Seafood Foundation

- Pew Environment Group
- The David & Lucile Packard Foundation
- Marine Stewardship Council