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Solomon Islands

Population: 521,000
Land area: 28,896 km²
Sea area: 1,300,000 km²

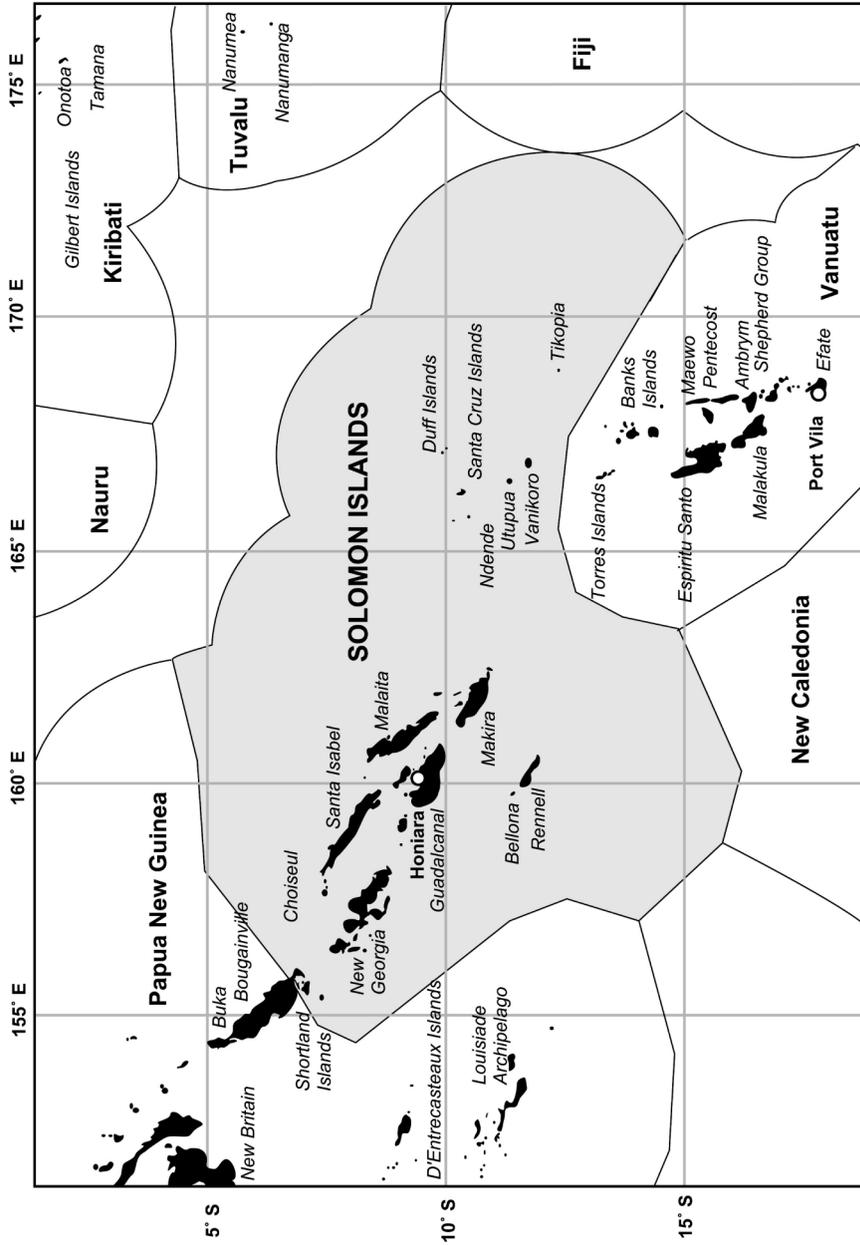
Solomon Islands is made up of a double chain of six main islands surrounded by many smaller ones, and several groups of outlying islands, stretched over 1,300 kilometres. The large islands are volcanic with fertile soil and plentiful fresh water sources, while some of the smaller islands are atolls with less rich soil and limited supplies of fresh water.

When the British Solomon Islands Protectorate was granted independence in 1978, most of the economy was still non-cash and based in village production. In 1999, about 85 per cent of the population lived in rural areas, while 12 per cent lived in the capital, Honiara; the remainder lived in small provincial towns, representing a trend of rural–urban migration since 1986. The population density is low at 13 people per square kilometre. With its good natural resource base, including the potential for a wider range of agriculture, forestry and some mining, the country could support a much larger population at a higher standard of living (Government of Solomon Islands 2003). The country has struggled to develop a successful capitalist economy and thus has been heavily dependent on aid.

Solomon Islands was on the whole a peaceful society for the first two decades after independence. Then, in late 1998, long-running dissatisfactions about the lack of economic development in some areas on Guadalcanal flared along ethnic lines, with Guale militants targeting Malaitan settlers and economic installations such as Goldridge Mine and Solomon Islands Plantations Limited's oil-palm plantation. Malaitan militants responded. Sporadic incidents increased in frequency during 1999 and 2000, culminating in the overthrow of the government in June 2000. During 2000, all major industries closed or scaled down, 8,000 jobs were lost (about one-quarter of these in tuna industries) and 30,000 people were displaced. GDP declined in real terms by 14 per cent, the balance of payments nosedived to the point where there were foreign currency reserves for only two months' worth of imports, and government expenditure far outstripped revenue (CBSI 2001).

This period is commonly referred to as the 'Tensions'.¹ Law, order, justice and security broke down and, despite Australian attempts to broker a peace agreement in October 2000,

Map 8.1 Solomon Islands



Source: Youngmi Choi, Secretariat of the Pacific Community, Noumea, New Caledonia.

the security situation remained dysfunctional until 2003, when the Regional Assistance Mission to Solomon Islands (RAMSI), led by Australian police and military personnel, re-established order.

The Tensions further set back an already challenging economic environment. All major formal-sector businesses closed or scaled down operations for a time. Infrastructure fell into even worse disrepair. Crime rates increased. Public services were not funded or protected from gangs. The informal economy also suffered from militant and gang activities, with smallholders unable to take produce to market. Since the low point in the early 2000s, there has been significant recovery in overall GDP and economic growth indicators (CBSI 2005). Nonetheless, at 2005 rates of recovery, it would take Solomon Islands 19 years just to recover to 1999 levels (Chand 2005a). In addition, social indicators of development had not yet improved, there were widening wealth disparities and increasing levels of poverty (Beseto, pers. comm.; Government of Solomon Islands 2003; Roughan, pers. comm.).

History of tuna fisheries development

Tuna, especially skipjack, has always been a culturally significant, highly valued and nutritionally important fish in Solomon Islands. In the old days, it was often caught with *kastom* hooks made from oyster shell, turtle shell and hand-spun string, trolled from dugout canoes. In recent times, it has become more common to use synthetic handlines and steel hooks from a fibreglass canoe powered by an outboard motor.

Solomon Taiyo Limited

Commercial tuna fisheries started in Solomon Islands in 1971. The British Solomon Islands Protectorate government was thinking about independence for the Solomons and saw tuna as having the potential to be one of the industries on which to base an independent Solomon Islands economy. Expressions of interest were entertained by several international tuna companies, but the responsible officer at the Western Pacific High Commission in Suva preferred the scheme put forward by Taiyo GyoGyo of Tokyo because it included the development of a shore base that would add value in-country and employ locals. Japanese fishing companies were looking for Pacific island joint-venture partners at this time as a way to deal with the declarations of the 200 nautical mile Exclusive Economic Zones (EEZs) that were closing off previously open fishing grounds.

In 1971, Taiyo GyoGyo started commercial pole-and-line fishing as part of an 18-month survey of fishing conditions under the Memorandum of Understanding signed by the Governing Council (Hughes 1987). The fishing turned out to be excellent and a joint-venture agreement between Taiyo GyoGyo and the Governing Council was ratified by Parliament in 1973, giving rise to Solomon Taiyo Limited.

Solomon Taiyo had a fleet of about 20 small to medium pole-and-line vessels, and one group seiner. Originally based in Tulagi near Honiara, Solomon Taiyo moved its base to Noro in the Western Province about 1990. The shore base included a cannery, a smoking plant, brine-freezing and ice-making facilities, cold storage and wharf facilities, a wastewater treatment plant, a fish-meal plant, a boat-repair yard and a clinic.

Soon after starting operations in the 1970s, the company began employing large numbers of Solomon Islanders, the numbers increasing until, by 1999, Solomon Taiyo employed about 2,500 Solomon Islanders, and only about 60 expatriates in senior management, executive positions in crews and some technical supervision roles. Only about 10 per cent of the working-age population has ever been engaged in formal employment (CBSI 2005), and unemployment, especially among youth, has historically been considered a major social problem.

The fleet was never particularly profitable but continued for several reasons. The Japanese company Taiyo Gyogyo (which changed its name to Maruha in 1993) established trading relationships with UK supermarket chains, including Sainsbury's, which were willing to pay a premium price for pole-and-line-caught canned tuna because of its quality, the method's environmental friendliness and the large numbers of Solomon Islanders employed by Solomon Taiyo (which meant the product was considered socially responsible). Solomon Taiyo's inclusion as an Africa Caribbean Pacific (ACP) country product under the Lomé Convention (precursor to the Cotonou Agreement) also meant the product avoided the 24 per cent tariff incurred by competing products from Southeast Asia. In addition, there seems to have been a moral commitment by the Japanese partner company to the pole-and-line method—for the sake of Solomon Islands, the manufacturer of the vessels in Japan and the Okinawan fishers who worked on the fleet.²

Solomon Taiyo produced 'fancy' white-meat tuna exported mostly to the United Kingdom as an ACP product under the Lomé Convention. The dark meat used in the 'Solomon Blue' product was marketed locally. The company also produced smoke-dried skipjack for the Japanese *katsuobushi* market under an agreement with a small subsidiary company of the large *katsuobushi* company Yamaki. Solomon Taiyo also exported a portion of its catch frozen to be processed elsewhere, often in Thailand. In 1999, 65 per cent of Solomon Taiyo's catch was canned, 20 per cent exported frozen and 13 per cent smoked, and 2 per cent made into fish meal (Government of Solomon Islands 1999).

In the late 1990s, about 20,000mt a year of the total catch of 50–75,000mt (higher in 1998) was being processed in Solomon Islands; 15,000mt was being canned and 5,000mt was being smoked, both by Solomon Taiyo. The government wanted to increase the amount of processing done in-country, and was thinking of using access agreements to require distant water fleets to build shore-based facilities and/or employ locals (Government of Solomon Islands 1999). In 1999, Solomon Taiyo had 21 pole-and-line vessels 'operating on narrow margins' because of the age of vessels (most were more than 20 years old) (Government of Solomon Islands 1999).

National Fisheries Development

In 1978, another domestic pole-and-line company, National Fisheries Development (NFD), was started as a joint venture between Solomon Taiyo (25 per cent shareholding) and the Solomon Islands government (75 per cent shareholding) to conduct training-oriented activities (Hughes 1987). The company had several pole-and-line boats and sold its catch through Solomon Taiyo. NFD hosted an Asian Development Bank-funded project

in ferro-cement boat building and ended up making and using some of these vessels for pole-and-line operations (not very profitably). In the early 1990s, NFD also operated two longliners under a Japanese aid project (Hughes 1987). In 1984, the shipbuilding and repair side of the business split from NFD and was renamed Sasape Marina. In 1988, NFD started operating two purse-seiners in addition to its small pole-and-line fleet, and started selling some of its catch outside Solomon Taiyo (Grynberg et al. 1995). During the 1980s, Solomon Taiyo relinquished its shareholding in NFD, leaving it a wholly government-owned operation; then, in 1990, the company was privatised. The first private owner was British Columbia Packers, then it was taken over by the Singapore-based company Trimarine. In 1999, NFD finally decided pole-and-line fishing was uneconomical so it divested its pole-and-line fleet to concentrate only on purse-seining. Since being taken over by Trimarine, NFD has been financially viable and a much stronger company than it was when it was government owned.

Longline fishery

The Solomon Islands longline fishery was limited to a total allowable catch (TAC) of 15,000mt, which was split among sectors—there was an amount for domestically based companies, an amount for by-catch from longliners targeting shark and an amount for distant water fleets. There was a licence limit of 120 for longlining, including 34 licences for large freezer vessels, which could be exchanged ‘two for one’ with non-freezer vessels. Licence allocation for longliners was to prioritise the distant water access agreement vessels, then the remaining licences were to be allocated according to a points system that favoured local ownership and management of vessels (Government of Solomon Islands 1999).

During the 1990s, there was only one tuna longline company operating out of Honiara, largely because airfreight was expensive, infrequent and the times did not always line up conveniently for getting fish to market in optimal condition. In addition, wharf facilities in Honiara limited fleet expansion potential and Solomon Islands sashimi was relatively low value. Prices might improve with better handling and increasing quality levels, but tropical tuna has always been valued lower than colder-water tuna in the Japanese sashimi market.

Since the 1990s, a Japanese-owned company Solgreen operated a few longline boats from Honiara, and flew chilled sashimi fish out by chartered freight plane to Australia to catch passenger flights to Japan. Solgreen also supplied Honiara restaurants with fish for sashimi. Solgreen had always been entirely private, and was also considered less ‘domestic’ than either NFD or Solomon Taiyo because it employed a much lower proportion of Solomon Islanders, preferring to source crews from China, Indonesia and the Philippines (Hamagawa, pers. comm.). Solgreen vessels were registered in Taiwan and Honduras (Gillett 2003).

Purse-seine fishery

The Tuna Management and Development Plan set a limit of 78 vessels for the offshore area. Numbers of purse-seiners in the offshore area were to be limited to less than 50 per cent of the limit set under the Palau Arrangement to prevent stock depletion, to fit within

management capacities of the Fisheries Division and prevent overcrowding of vessels (Government of Solomon Islands 1999). In addition, 'a limited purse-seine fishery will be permitted, by licence endorsement, in selected parts of the Inner MGA [main group archipelago area]'. The Director of Fisheries, acting on the advice of the Tuna Management Committee, was to decide how many endorsements to issue (Government of Solomon Islands 1999). Managers from the pole-and-line company (Solomon Taiyo, now Soltai) complained about purse-seining in the MGA because they felt it scared the fish away from the surface, making it more difficult to catch with the pole-and-line method; they thought the government should show its commitment to the pole-and-line method by banning purse-seining in the MGA.

Bait fishery

Solomon Islands' pole-and-line fishery relied on an associated bait fishery. The bait fishery has been a significant source of income for rural communities whose reefs were frequently used by pole-and-line vessels, such as the Maroon Lagoon. Reef-owning communities were paid a royalty per night per vessel (Table 8.1).³

The data collection and bait-fish royalty payment systems were changed during the first 10 years of the fishery to improve accuracy by using the most appropriate measure of catch per unit of effort (CPUE), and also to remove the incentive for under-reporting (Blaber et al. 1993; Blaber and Copland 1990). The sudden jump in CPUE from 1981 was probably due to the introduction of a system of bait-fishing maps, logs and observers that made the records more accurate than before, rather than an increase in capacity. Statistics on bait fish held by the Fisheries Division included a caveat that figures from 1973 to 1980 were raised by a factor of 1.87 to compensate for the under-reporting of catches during those years.

The bait fishery had always been managed by the Fisheries Department in Honiara, even though jurisdiction for these coastal areas legally lay with the provincial governments. The Tuna Management and Development Plan envisioned responsibility being devolved back to the provinces (Government of Solomon Islands 1999).

Trans-shipping, service and supply

A policy to encourage and improve services for trans-shipping vessels started in 1993 after a Forum Fisheries Agency (FFA) ban on trans-shipping on the high seas. In 1994, Solomon Islands hosted 94 trans-shipments that generated S\$700,000 in revenue (Government of Solomon Islands 1995). In the late 1990s, Honiara became a prime choice for trans-shipping in the central western part of the Pacific. Under the Tuna Management and Development Plan, the service and supply sector for trans-shipping was slated as a priority for development. Mothership operations were to be banned, as was bunkering at sea (Government of Solomon Islands 1999).

November to March was the peak season for trans-shipping activity in Solomon Islands. During this season, Honiara was busy with crew spending money in hotels, restaurants, pubs and clubs. The vessels also bought a lot of fresh produce from the central Honiara

market. According to Fisheries Department staff, the trans-shipping vessels' crews complained that Honiara did not have enough for them to do. (Government of Solomon Islands, pers. comm.).

Skipjack stocks in particular follow a three to four-year cycle of being available for surface fisheries in Solomon Islands' EEZ (Government of Solomon Islands 1999). These fluctuations are probably due to the oceanographic effects of El Niño and the Southern Oscillation Index and mean that in some years purse-seine vessels do not fish near Solomon Islands and do not trans-ship in Honiara. Longline fleets (not a surface fishery) were generally more stable.

Table 8.1 Solomon Islands: bait-fishery catch, 1973–98

	Nights fished	Buckets hailed	Buckets per night per boat	Hauls per night	Buckets per haul	Catch (mt)
1973	1,722	118,808	69.0	0	0	488.8
1974	1,503	91,371	60.8	0	0	375.9
1975	1,563	130,587	83.5	0	0	537.2
1976	1,967	167,685	85.2	0	0	689.9
1977	2,913	225,076	77.3	0	0	926.0
1978	3,597	238,965	66.4	0	0	983.1
1979	4,858	303,741	62.5	0	0	1,249.6
1980	4,903	325,645	66.4	0	0	1,339.7
1981	4,892	645,811	132.0	10,580	61.0	1,420.8
1982	5,335	672,203	126.0	14,525	46.3	1,478.8
1983	6,844	895,631	130.9	17,543	51.1	1,970.4
1984	6,548	813,570	124.2	18,167	44.8	1,789.9
1985	7,593	1,015,539	133.8	20,024	50.7	2,234.2
1986	8,150	1,075,263	131.9	21,878	49.1	2,365.6
1987	7,372	956,323	130.0	21,671	44.1	2,103.9
1988	8,008	1,135,289	142.0	21,251	53.4	2,497.6
1989	7,347	968,301	132.0	19,281	50.2	2,130.3
1990	6,638	863,163	130.0	18,923	45.6	1,899.0
1991	7,866	1,043,811	133.0	23,261	44.9	2,296.4
1992	6,757	901,224	133.0	23,261	38.7	1,982.7
1993	6,008	881,537	147.0	18,389	47.9	1,939.4
1994	7,202	942,509	138.0	20,794	45.3	2,182.3
1995	-	1,005,973	-	20,792	48.4	2,213.4
1996	-	948,017	-	17,848	53.1	1,896.0
1997	-	405,596	-	8,468	47.9	892.3
1998	-	766,403	-	13,288	57.7	1,686.0

Notes: One bucket of bait was approximately 2.2kg wet weight of bait fish. These figures include Solomon Taiyo-owned vessels, Okinawan-owned vessels and NFD vessels from 1979. The bait-fishing season was usually nine or 10 months a year. Shorter or longer seasons account for some yearly fluctuations in catch size. For example, the 1988 bait-fish catch total was up 394mt on the 1987 total of 2,104mt because the fishing season in 1988 was 8,008 nights, while in 1987 it was only 7,372 nights (Government of Solomon Islands, 1989. Fisheries Division Annual Report 1988, Fisheries Division, Honiara, Solomon Islands.)

Sources: Solomon Islands Government Fisheries Division.

Fishing crews, especially those that have been at sea for months, are well known for enjoying a few drinks and the company of women when they are in port. In Honiara, there is a growing poverty problem and strong patriarchy means some women have extremely limited life opportunities, so some women and girls engage in prostitution or 'befriending' of fishermen. The Fisheries Department licensing officer, Selina Lipa, who visited trans-shipping vessels saw many young women on board (Government of Solomon Islands pers. comm.).

Needless to say, this causes a range of social problems, including unwanted pregnancies and unprotected sex with multiple partners in the context of an extremely limited health system, and with no domestic screening and treatment program for HIV/AIDS. Some of the women involved are extremely young; many have limited literacy and are ostracised (sometimes violently) by their families (Chiota, pers. comm.). There have been health awareness campaigns conducted by the Health Department targeting the port due to concerns about HIV/AIDS, but government health and welfare services need to be improved in a range of areas to cope with the social issues generated by international ports.

The Tensions: damage to tuna-industry development

In 1999, Solomon Islands had the largest domestic-based tuna industry of all the Pacific island countries in terms of volume and value. There were large long-running locally based companies engaged in pole-and-line, purse-seine and longline fishing, with a large long-established canning factory and a smoking plant exporting *katsuobushi* to Japan. More than 8 per cent of total formal employment was in direct tuna fishing and processing industries (Government of Solomon Islands 1999).

In 1999, Solomon Taiyo employed about 3,000 people, including about 800 women in the cannery (SPPF 1999), which was the only significant source of cash employment for rural women. This employment was connected to human resources development and training for Solomon Islanders in fishing, business administration and technical trades. The Solomon Taiyo base in Noro, with its large number of employees, generated spin-off businesses in consumer retail, wholesale, banking, fuel sales, transport, hardware sales and hospitality services, as well as a thriving fresh produce market (Noro Town Council 2004).

Thirty per cent of Noro tuna production was consumed nationally (Government of Solomon Islands 1999), replacing imports of canned mackerel and consequently assisting with the balance of payments in domestic sales as well as boosting exports. For the three decades up to 2000, the export value of tuna was 20–46 per cent of total exports in an economy whose only other major export was unsustainably high numbers of hardwood logs (Government of Solomon Islands 1999). Tuna industries generated revenue for a cash-strapped government; Solomon Taiyo alone generated about S\$10 million in revenue in 1999 (SPPF 1999). A comprehensive Tuna Management Plan addressing the major issues was in place and was supported by the national government. The future of domestic tuna industries in Solomon Islands looked bright.

Then, the entire formal economy (except logging) was derailed by the Tensions. At the same time, average world prices for frozen skipjack fell from US\$980 a metric tonne in

1998 and US\$550 in 1999 to US\$326 in 2000 (CBSI 2001). Domestic companies Solgreen and Solomon Taiyo closed operations, at least in part due to the Tensions, and NFD scaled down operations.⁴ The formal fisheries sector contracted by 42.4 per cent (CBSI 2001). Fish production plunged by 55.9 per cent to 21,163mt, the lowest catch since commercial fisheries started in Solomon Islands (CBSI 2001). The temporary closure of Solomon Taiyo and Solgreen coupled with dwindling prices meant the value of fisheries exports plummeted by 77 per cent in 2000 (CBSI 2001). Access agreements also suffered. One reason for this was that the general breakdown of law and order, combined with inadequate government procedures, meant that not all of the fees were getting through to consolidated revenue (*Solomon Star* 2005; SIBC 2005a, 2005b; *Islands Business* 2005).

Unlike Goldridge Mine and Solomon Islands Plantations Limited, tuna businesses were not major targets for militants, but tuna companies were part of the capitalist system in Solomon Islands, which was perceived by some as generating an inequitable distribution of benefits, and as such were part of the cluster of factors contributing to the Tensions (UNDP 2004a). These problems were recognised to an extent before the Tensions, with the Tuna Management and Development Plan recommending awareness and public relations strategies (Government of Solomon Islands 1999). Unfortunately, with governance and revenue problems still not sorted out in the aftermath of the Tensions, most of the plan's recommendations were not pushed forward. As of 2005, the government had not initiated any strategies to improve the social acceptability of the capitalist sector, including tuna businesses.

Tuna developments since 2001

After tuna prices recovered in 2001, the domestic industry started rebuilding (Table 8.2). Solomon Taiyo had to adjust to the departure of its Japanese partner company. In 2000, Maruha pulled out and the company then reopened in 2001 with S\$8 million in grant aid from Taiwan as the wholly government-owned Soltai Fishing and Processing (see above).⁵ Of the 21 vessels, only 12 were useable in 2001. The national government retained its 51 per cent shareholding through the Investment Corporation of Solomon Islands (ICSI), while Maruha's 49 per cent shareholding was promised to the Western Province government. The fully nationalised company struggled to find its financial feet. Less than 10 of the company's vessels have been operational at any one time. In 2004, a senior management team from the Fisheries Division went to Noro to talk with a visiting Japanese group about aid for Soltai. They reached an agreement for two new vessels to be built at a cost of S\$70 million (Diake, pers. comm.).

Soltai had record high catch rates from 2001 to 2003, but in 2003 rates fell, due in part to the seasonal fluctuations that reduce the amount of surface-swimming skipjack in the Solomon Islands EEZ in certain years.⁶ In 2004, mechanical difficulties compounded the unfavourable fishing conditions, causing a 35.7 per cent drop in catches from 2003 (CBSI 2005). As of 2005, only seven of the vessels were licensed to operate (Government of Solomon Islands pers. comm.), with a couple undergoing repairs and two more retired. reopened commercial operations as Soltai Fishing and Processing. Only nine or 10

Table 8.2 Solomon Islands: indicators of domestic development, 2001

	Locally based vessels active	Cannery/ loining facilities	Sashimi packing facilities	Nationals jobs on vessels	Nationals jobs on shore	Frozen tuna exports (mt)	Fresh tuna exports (mt)	Canned tuna (cases)
Soltai	12 PL	1	0	380	368	0	0	8,800
NFD	2 PS	0	0	39	6	11,700	0	0
Solco	8 LL	0	1	45	40	0	1,200	0
Other	0	0	0	0	8	0	0	0
Total	12 PL, 2 PS, 8 LL	1	1	464	422	11,700	1,200	8,800

Notes: LL: longline. PS: purse-seine. According to the Central Bank (Central Bank of Solomon Islands [CBSI], 2001. Annual Report 2000, Central Bank of Solomon Islands, Honiara) in 2000, Solgreen (Solco) had 14 longline vessels and employed 120 people (including 50 expatriates).

Source: Gillett, R., 2003. Domestic tuna industry development in the Pacific islands. The current situation and considerations for future development assistance, FFA Report 03/01, Pacific Islands Forum Fisheries Agency, Honiara, Solomon Islands. Islands:176-77.

The main reason Solomon Taiyo had managed to stay viable in competition with cheaper purse seine caught product was that supermarket chains in the UK such as Sainsbury's had a policy of buying high quality and environmentally 'friendly' product (the pole-and-line method is environmentally friendly) and selling it for a premium price. Around 2000 this policy changed, with UK buyers wanting the same quality and environmental friendliness but for more competitive prices. In any case marketing to the UK had always been handled by Maruha, and Soltai did not have access to those trading networks. So Soltai had difficulty finding markets that would pay a higher price to enable its fishing fleet to compete with purse seiners.

Soltai's financial problems were solved partly by developing a new product: vacuum-packed frozen loins, sold by arrangement with NFD's owner company, Trimarine. Trimarine had set up a marketing arrangement with a buyer in Italy to buy the loins free on board (FOB), which meant Soltai did not have to manage the freighting process. Soltai loins were sold in Italy as ACP product and thus escaped the 24 per cent tariff under the Cotonou Agreement. Soltai managers were happy with the loining arrangement with Trimarine, apart from losing the margin on the fish it bought from NFD.⁷

Even with the loining arrangement with Trimarine, in 2005 Soltai was facing a possible sale of assets for defaulted loan repayments to the National Provident Fund. Soltai employees could see it was going to be tough for the cannery and vessels to achieve EU certification enabling the company to continue exporting loins to Italy, with an inspection team due in late 2005 or 2006.

Soltai's is the last surviving fleet of pole-and-line vessels based in a Pacific island country.⁸ Solomon Islands' pole-and-line catch peaked in 1986 with 38,000mt (Reid 2005), when the fleet numbered more than 30 vessels. In 2006, the fleet was less than 10 vessels. Adrian Wickham, after running NFD's pole-and-line fleet for several years, said he did

not think the kind of pole-and-line fishing Soltai conducted could be profitable, because of the extra costs of labour and running a large shore base required by that kind of fleet—at least when compared with purse-seining (Wickham, pers. comm.). Soltai managers also expressed doubts that the Soltai fleet in its current form could be profitable, suggesting instead that it be subsidised by government and aid donors because of the social benefits the fleet brought to Solomon Islands (Kukui, pers. comm.; Sibisopere, pers. comm.).

In 2004, the Earth Island Institute (EIS) created a problem for the export of loins to Italy. The Solomon Islands Fisheries Department had given a licence to a company to catch 100 dolphins for live shows. There is an indigenous dolphin fishery that kills hundreds of dolphins a year in Solomon Islands, so the Fisheries Department did not think a live export fishery would be a problem. However, when the EIS discovered that Solomon Islands was exporting live dolphins it started a campaign in Italy against the Italian company buying Soltai loins. Because of the bad publicity, the buyer stalled one shipment of loins from Soltai. The dolphin company had caught only 26 or so dolphins, but the government decided to cease the export of live dolphins at that time (Ramohia, pers. comm.; Diake, pers. comm.).

Soltai generated less spin-offs than Solomon Taiyo did, having reduced production by about two-thirds, and also because it no longer contracted local small businesses to provide services, such as transport and security. Since Soltai reduced its operations, NFD has been the largest domestic company in terms of catch since 2001, although Soltai was still the largest employer in the tuna sector, with about 800 workers. NFD employed a sixty-Solomon islander crew (three vessels were operating in 2005, with a fourth on order) and one non-national engineering manager on shore.

During 1999 and 2000, flights from Honiara international airport were disrupted periodically by militants, so the longline company Solgreen suffered financially from the Tensions and apparently changed its name to Solco about this time. Solgreen/Solco recovered in terms of production after the Tensions. In 2004, the company landed 986mt (CBSI 2005). By mid 2005, however, the company had closed and its vessels were tied up.

Since 2001, several new 'locally based foreign' companies have started up in Solomon Islands: Global, Tuna Pacific, Mako and Warken. Fisheries Department interviewees said that compared with Soltai and NFD, which they described as being 'really domestic', the others were 'more foreign than local' (Government of Solomon Islands pers. comm.). Of these, Tuna Pacific had its status changed from locally based foreign to distant water by the Fisheries Department in 2004, and Mako and Warken actually agents for distant water fishing fleets (Korean and Taiwanese respectively) rather than fishing companies in their own right. Global Investment Ltd had purse seining operations based in Tulagi (Table 8.3).

Distant water fleets

The longline and pole-and-line distant water fleets operating in Solomon Islands remained fairly stable during the 1990s, but the numbers of purse-seine vessels climbed steeply from only 31 in 1992 to more than 70 by 1998 (Government of Solomon Islands 1999) (Table 8.3).

Table 8.3 Solomon Islands: indicators of tuna development, 2004–2005

Company	Domestic vessels: no. and type	Processing facilities: no. and type	Jobs for nationals: no. and type	Annual exports: volume and type	Annual domestic sales: volume and type
Soltai	7 pole-and-line 1 carrier	1 cannery/loining plant 1 katsuobushi smoking plant 56 engineering 80 smoking 94 office	330 fleet and cold store 93 cannery/loining packs (7.5kg) frozen cooked loin	215 cartons canned tuna 270,614 plastic fishing vessels	261,928 cartons canned tuna discards from
NFD	3 purse-seine 1 carrier	0	60 fleet 15 shore base	whole frozen skipjack	-
Global	2 pole-and-line 31 longline 4 purse-seine 1 carrier	0	-	-	-
Mako	5 purse-seine 2 longline 3 carrier 4 bunkering vessels	0	0	-	-
Warken Total	2 purse-seine 9 pole-and-line 33 longline 9 purse-seine 6 carrier, 4 bunkering	0 1 cannery 1 katsuobushi smoking plant	0 >928	- Cans, cooked loins, whole frozen fish	- Cans, whole frozen fish

Notes: In 2005, only seven of Soltai's vessels were licensed. Two new vessels funded by Japanese aid were delivered in 2006. NFD had purchased a fourth purse-seine vessel, which at the time of writing was awaiting a licence and therefore was not operational. Mako and Warken were officially 'domestically based foreign' but, according to Fisheries Department staff and managers of the companies themselves, they were more like agents for the distant water fleets of Korea and Taiwan respectively. Of Global Investment's longliners, three targeted shark rather than tuna.

Sources: Government of Solomon Islands (pers. comm.); Sevillejo, Alfredo, 2005. Finance Advisor, Soltai Fishing and Processing. Interview, 19 July. Noro, Solomon Islands. Kukui, Asery, 2005. Manager of Human Resources and Administration, Soltai Fishing and Processing. Interviews, Soltai office, 19–22 July. Noro, Solomon Islands. Wickham, Adrian, 2005. CEO, National Fisheries Development. Interview, NFD Office, 15 July. Honiara, Solomon Islands.

In January 2004, a bilateral agreement with the European Union for longline and purse-seine vessels was signed (Government of Solomon Islands 2005a), but no EU-flagged vessels were recorded by the Fisheries Department as being licensed to fish in Solomon Islands' waters in 2004 or 2005.

Trans-shipping, service and supply

From 2001 to 2003, no trans-shipping was documented for the Solomon Islands. Apparently fleets preferred not to use Honiara during the Tensions, and even in 2005 fisheries officers said they felt some vessels were still choosing not to come to Honiara because of law and order concerns (Ramohia, pers. comm.). Trans-shipping had been re-established in November 2003 after the RAMSI intervention. Between then and April 2004, 144 trans-shipments took place in the designated ports of Honiara, Tulagi and Noro.

Distant water fleet access fees are an important source of revenue, added to by attracting distant water fleets to trans-ship in country. As of 2005, a trans-shipment levy of US\$2 per metric tonne of fish was charged. This usually amounted to S\$10–15,000 per purse-seiner. From January to April 2005, there were 34 trans-shipments from Mako purse-seine vessels in Honiara. This generated trans-shipment levy revenue of US\$47,682 (Government of Solomon Islands 2005a). There were also port entry fees of S\$100 per vessel. Other costs included payment for the private security company that operated around the wharf, plus costs for water, fuel and other supplies bought in port.

Fish aggregating devices (FADs)

The Tuna Management and Development Plan included a comprehensive management plan for FADs, which were seen as crucial for the domestic pole-and-line and purse-seine fleets being able to operate year round in the Main Group Archipelago (MGA) waters. Foreign vessels were to be prohibited from setting anchored FADs, and FADs set for the domestic purse-seine fleet in the inner MGA were to be restricted. Anchored FADs were to be maintained on a register kept by the Director of Fisheries. FAD catches were to be monitored, and they were to be marked with the name of the company that owned it and equipped with radar reflectors. Floating FADs were to have radio beacons (Government of Solomon Islands 1999). The limited number of resources in the Fisheries Department since the Tensions has stalled the implementation of this plan.

Table 8.4 **Solomon Islands: bait-fishery catch, 2000–2004**

	Total hauls	Total buckets	Total catch (mt)	Days fished	CPUE
2000	325	126,679	278.69	781	0.4
2001	133	102,220	224.88	807	0.3
2002	306	376,406	828.09	3,289	0.3
2003	238	328,043	721.69	2,543	0.3
2004	126	198,193	436.02	1,543	0.3

Source: Government of Solomon Islands pers. comm.

Table 8.5 **Solomon Islands: distant water access fleet and fees, 1994–2005**

	Fee (\$ million)	Number of vessels	Composition of fleet
1994	S\$7.3 US\$1.5	131	16 purse-seine (USA) 16 longline (Taiwan) 66 longline (Japan) 33 pole-and-line (Japan)
1998	S\$8.8 124 US\$1.9	3	5 purse-seine (USA) ~ 40 purse-seine (?) 18 longline (?) 31 pole-and-line (Japan)
2004	S\$29.1 ~190 US\$3.9	-	
2005	SB\$30–40 US\$4–5.4 (target for 2005 negotiations)	194	27 purse-seine (Japan) 11 pole-and-line (Japan) 19 longline (Japan) 27 purse-seine (Korea) 37 purse-seine (Taiwan) 29 longline (Taiwan) 40 purse-seine (USA) 4 purse-seine (New Zealand)

Notes: The figure for 1998 included licence fees from domestic as well as foreign fleets (Government of Solomon Islands, 1999. Tuna 2000: towards a sustainable fishery for the next millennium, National Tuna Management and Development Plan, Honiara, Solomon Islands). Although 40 vessels were licensed under the multilateral treaty with the United States, less than half this number fished in the region in recent years, and not all of these necessarily fished in Solomon Islands' waters.

Sources: Diake, S., 2005. National tuna status report for Solomon Islands for 2004, First Meeting of the Scientific Committee of the Western and Central Pacific Fisheries Commission, Noumea, New Caledonia. Government of Solomon Islands, 1999. Tuna 2000: towards a sustainable fishery for the next millennium, National Tuna Management and Development Plan, Honiara, Solomon Islands. Government of Solomon Islands, 2005a. Department of Fisheries and Marine Resources Annual Report 2004, Honiara, Solomon Islands. Central Bank of Solomon Islands (CBSI), 2005. Annual Report 2004, Central Bank of Solomon Islands, Honiara:20.

Table 8.6 **Distant water fleet licensed in Solomon Islands, 2005**

Japan	27 purse-seine 11 pole-and-line 19 longline	Japan Far Seas Purse-Seine Association, Japan Tuna Fishing Association, Japan Kinkatsukyo Fishing Association
Korea	27 purse-seine	Korea Deep Sea Fishing Association
Taiwan	37 purse-seine 29 longline	Taiwan Tuna Boat Owners and Exporters
USA	40 purse-seine	American Tuna Boat Owners Association
New Zealand	4 purse-seine	New Zealand Fishing Association
Fiji (Tuna Pacific)	17 longline	
Total	135 purse-seine 11 pole-and-line 65 longline	

Source: Licensing Section, Department of Fisheries and Marine Resources.

Canned/loined tuna

The cannery at Noro came online in about 1990. In 1999, it was upgraded to improve hygiene and employee amenities as part of the requirements for continuing exports to the United Kingdom. By 2005, most of the equipment was old and in need of renovation or replacement. The waste-water processing facility had not functioned properly since 2000, and untreated waste flowed directly into the harbour. The fish-meal processing equipment was no longer operational. Cold storage was insufficient and, in combination with infrequent freight, this was greatly inhibiting production.

There was a good market for loins and Soltai could have sold a lot more to the Italian buyer, except that lack of capital for factory repairs and new equipment were holding Soltai's production back.

Soltai's productivity was not competitive with the benchmark, Thailand, but it was similar to the level Solomon Taiyo had achieved in the 1990s, and that had improved a great deal.⁹

Smoked tuna

Arabushi, literally 'rough loin', is hot smoked loins of skipjack that are treated with a special mould to become *katsuobushi*, a widely used condiment in Japanese cuisine. Solomon Taiyo had an *arabushi* plant from the start of operations in Tulagi in the early 1970s. The Noro plant was the largest factory producing *arabushi* outside Japan. Since the 1980s, Solomon Taiyo's *katsuobushi* production had been managed under contract to a subsidiary of the *katsuobushi*-manufacturing giant Yamaki which, through a small contractor company, managed the smoking process and bought total production. Japanese managers employed by Maruha withdrew in 2000, but Yamaki's contractor company decided to continue the contract with Soltai.

Katsuobushi production capacity remained largely unaffected by Soltai's financial travails, because its requirements were simple and easily maintained. Two of the crucial inputs for *katsuobushi* are skipjack with a low body-fat content (skipjack swimming through the warm waters around the Solomons have low body fat), and timber that burns hot for the smoke-drying process. The Noro factory utilised mostly two types of local coastal timber—*qema* (*Pometia pinnata*) and *buni* (*Calophyllum spp.*) (Kukui, pers. comm.).¹⁰ After being smoked for five to seven days, the loins—then referred to as *arabushi*—had to be kept in reefer containers at temperatures of less than -18° Celsius, then shipped to Japan where the final curing of the loins resulted in finished *katsuobushi*.

Before the Tensions, Solomon Taiyo produced 17 to 18 containers a month of *arabushi*. In 2005, with the low fish supply, production was eight to 10 containers a month. *Arabushi* production peaked in 2002 when the catches were good and there were limitations on cannery production, so more of the catch was going to smoking; up to 35 metric tonnes of frozen fish a day. Production average in 2005 was 10–20 tonnes a day.

Small-scale coastal

At the National Fisheries Workshop in Honiara in July 2005, Johann Bell (Worldfish Centre, Noumea) and Mike King (a coastal marine resource management specialist) said that although there were not enough data to say conclusively that coastal marine resources in Solomon Islands were overfished, the available evidence indicated that most coastal areas could produce no more fish than they currently were; indeed, harvesting might need to be decreased. Fisheries are important to Solomon Islands as a source of protein. On average, in 2005, each person consumed about 35kg of fish a year (Government of Solomon Islands 2005b), and, with a rapidly growing population, more fish would surely be needed. Coastal fisheries were also economically important because of income derived from selling fish. A precautionary approach to coastal fisheries would see food fisheries reorient from reef fish towards relatively healthy tuna stocks. Current tuna catches were neither abundant nor cheap enough to supply mass consumption needs.

Local fishers all say it is harder to catch tuna now than it was in the past; they have to go further from shore and fish for longer to get the same catch. They often blame commercial tuna fisheries for depleting tuna stocks, although provincial fisheries officers note that increasing population pressure, overfishing and unsustainable fishing practices are involved in coastal resource depletion (Government of Solomon Islands 2005).

In Solomon Islands, the small-scale village-based fisheries, including tuna, were similar to small-scale village-based fisheries in other Pacific island countries covered in this report. There were difficulties getting fish to the market cost effectively, and there were safety issues in fishing for tuna from small vessels. As with other Pacific island countries, production was not reliable, because fishers did not fish full-time but engaged in a range of economic activities.

Fisheries centres

Solomon Islands, like the other Pacific island countries studied for this report, had a long history of fisheries centres in rural areas falling victim to a familiar cycle. Established under aid projects, these centres were unable to sustain themselves and fell into disrepair after the end of the project. They were then periodically refurbished by new aid projects. The Japanese Overseas Fisheries Cooperation Foundation (OFCF) was particularly engaged with fisheries centres in Solomon Islands. The centres were supposed to be the responsibility of provincial fisheries departments, but these departments had neither the resources nor the capacity to maintain them. The centres had thus failed to generate much activity for small-scale fisheries even in terms of nutrition—their main aim—so there was a groundswell of opinion in favour of commercialising or privatising the fisheries centres (Atu, pers. comm.).

Problems with commercialising/privatising fisheries centres mainly revolved around how to make the centres work for local communities without skills and experience in sustaining commercial fish trading.

Determinants of success

The Central Bank of Solomon Islands cited fisheries as one of the sectors with the greatest potential to contribute to economic development in Solomon Islands (CBSI 2005). Total earnings from fisheries exports (mostly tuna but also *bêche-de-mer*, reef fish, trochus and shark's fin) had climbed steadily since the trough during the Tensions and the collapse of world tuna prices in 2000. In 2004, fisheries exports totalled S\$132.1 million, representing 18.2 per cent of total exports, due largely to increased tuna-loin exports and rising international tuna prices (CBSI 2005). The potential of tuna industries, however, has been constrained by the government's inability to establish an environment conducive to business development, and by economic, social and political sustainability issues highlighted by the Tensions.

In terms of resource availability, Solomon Islands did have a comparative advantage, but in terms of cost structures it has not been competitive against the other major producer countries in Asia. In 2005, less than 30 fisheries businesses were operating. General economic constraints inhibited fisheries businesses in the same way as any other sector in Solomon Islands. For these reasons, the Foreign Investment Board was not actively promoting investment in 2005; these institutional problems needed to be rectified before Solomon Islands could be attractive to investors (Aihari, pers. comm.). To become competitive, Solomon Islands needs to reduce the costs of operations, and this requires that taxation and industrial policies complement fisheries policies. One of the main problems is that inconsistent policies undermine investor confidence.

Constraints to investment in tuna industries in 1999 listed in the Tuna Management and Development Plan (Government of Solomon Islands 1999) included

- poor infrastructure
 - lack of airport facilities restrict longlining export possibilities
 - insufficient port facilities, especially in Honiara, restricting expansion
 - existing wharf and cold-store facilities at Noro and Tulagi in urgent need of upgrading and maintenance; new facilities needed
 - roads poor
 - power expensive and unreliable
 - telecommunications expensive
- government systems obstruct investment
 - lack of transparency in administrative processes
 - chronic under-resourcing of the Fisheries Department
- freight expensive and difficult to organise
- lack of skilled human resources
 - low education and training levels
 - lack of business management experience/skills
- lack of ancillary services (such as repair, maintenance and supplies)
- lack of investment capital
- lack of land available reliably and at reasonable prices
- taxation structures inhibit investment.

Credit

By 2005, a liquidity boom temporarily alleviated prevailing credit problems in the Solomon Islands economy (CBSI 2005). NFD had no problems obtaining commercial finance locally (Wickham, pers. comm.). Soltai, however, because of its poor profitability record, did not have access to commercial finance (Sibisopere, pers. comm.). It is likely that new companies with no business track record in fisheries would also have difficulties obtaining finance through banks.

Freight

Freight has always been a major constraint for Solomon Islands' tuna-processing industry. The main competitor is Thailand, which has large ports with carrier vessels coming and going daily, meaning competition brings the price of freight down and shipments can be made easily whenever necessary. Freight to and from Solomon Islands is infrequent and expensive (Hughes and Thaanum 1995). In 2005, Soltai's production was frustrated by freight problems. Specific infrastructure requirements for fisheries development include infrastructure for freight—especially wharves and roads—and access to land (Government of Solomon Islands 2003).

Government ownership of enterprise

Soltai's status as a state-owned enterprise could be characterised as a constraint on industry development. Elsewhere it has been argued that Solomon Taiyo, while not as efficient as a fully private company, as a partially government-owned venture nonetheless offered a number of development benefits to the Solomon Islands economy (Barclay 2000). As a fully government-owned venture, however, Soltai has suffered from the lack of an experienced private-sector partner with capital and international marketing and trading expertise. Through reduced production, Soltai has contributed less to the economy and, in 2005, lack of financial viability was threatening its existence (Barclay 2005). Privatisation of some kind, connecting to established commercial expertise and trading networks, seems the best strategy for Soltai.

Governing tuna industries

Fisheries management in Solomon Islands has suffered from a lack of resources, a lack of consultation in decision making and problems with transparency and accountability. No annual report was published on fisheries between 1994 and 2004 (the Fisheries Division was still compiling them until 1999, but didn't have the resources to print them). The Fisheries Division continued to collect data for the SPC and the FFA but there was no internal reporting. Before 2000, there were 10 staff in the research section of the Fisheries Department; in 2005, there were only three (Ramohia, pers. comm.).

In the early 1990s, Solomon Islands politicians had entered into a spate of joint ventures with overseas fishing interests, which suddenly hiked up the potential catch to about 700,000mt, despite an SPC-recommended TAC of about 130,000mt. Fortunately, 700,000mt

was never caught in a year; the national catch peaked at 130,000mt (domestic and foreign) in 1998 (Reid 2005). The joint ventures demonstrated that the system of management was unclear and lacked enforcement. This gave rise to a review of the 1972 *Fisheries Act* and the development of a tuna management plan facilitated by the FFA utilising funding from the Canadian government's CSPOD-II. A change of government in 1997 spurred on these reforms, including a restructuring of the Fisheries Division, new customs procedures, increased licence fees and a requirement for local involvement in purse-seining. A new *Fisheries Act* materialised in 1998 (Government of Solomon Islands 1998) and the Tuna Management and Development Plan was ratified in early 2000 (Government of Solomon Islands 1999), although it was never given legislative force.

In 2003, revenue-earning government departments, including Fisheries, were audited as part of the RAMSI measures, and it was revealed that millions of (US) dollars from distant water access fees had 'disappeared into someone's pocket' (*Solomon Star* 2005a; *Islands Business* 2005). In 2005, these cases were being investigated by the police. A new permanent secretary was appointed and departmental funding became dependent on planning documents, budget estimates and reporting procedures being in place for transparency and accountability. Annual reports were restarted (Government of Solomon Islands 2005a) and a national fisheries workshop was held as part of a planning exercise in July–August 2005 (Government of Solomon Islands 2005b). In 2005, the New Zealand government was intending to fund a project to review, restructure and build capacity in the Fisheries Department. Global Environment Facility (GEF) funding through the FFA was also to be used for capacity building and infrastructure developments in fisheries (Wickham, pers. comm.).

The original Tuna Management and Development Plan had not been taken forward by the government, partly because the Tensions made any government initiatives impossible for a while, and partly because the plan was complex and expensive relative to departmental capacity. In 2004, a review of the plan was commissioned (Aldous 2005). The review raised the possibility of turning the Fisheries Division into a statutory authority like the National Fisheries Authority (NFA) in Papua New Guinea, so that licence and access fees could be used to fund fisheries management. In light of Solomon Islands' difficulties with financial governance, however, instead of an authority it was recommended that a Tuna Management Unit be created within the Fisheries Department to govern tuna industries and implement the revised Tuna Management Plan (Aldous 2005).

Fisheries legislation needed updating as part of administrative improvements. The *Fisheries Act* had been under review since 2004. Some of the issues that needed to be taken into consideration in the review of legislation included harmonisation with Western and Central Pacific Fisheries Commission (WCPFC) obligations and community management plans for coastal, reef and lagoon areas with enforceable regulations to enable community control. Legislation was also needed to regulate for changes to policy introduced in the Tuna Management and Development Plan to better manage tuna industries, for resource conservation and industry development (Diake, pers. comm.).

Government services are among the first things needing improvement in order to enable private-sector development in Solomon Islands. This includes institutional strengthening, strong communication links and coordination of roles and responsibilities between agencies, which would require interagency cooperation, best facilitated at the ministerial level (Government of Solomon Islands 1999).

Investment approval

One of the main constraints listed by the Foreign Investment Board for the economy generally, as well as by the Tuna Management Plan for fisheries specifically, was the length of time investment approval processes took. Until 2005, the legislation did not allow for the Foreign Investment Board to work with other government departments so it had not been able to coordinate the various applications necessary for approval to start a business. The new *Foreign Investment Act*, intending to address this problem among others, was passed in November 2005.

Food safety regulation

Developing food safety and hygiene standards and systems is one of the important services needed for tuna-export businesses. In 2005, Solomon Islands was classified as a 'list-two' country, which meant Solomon Islands companies could export processed seafood to European countries only on a bilateral basis. In 2005, the Solomon Islands government signed a contract for a project with the European Union for a range of environmental health issues to do with fisheries, including building capacity such that the Solomon Islands Health Department could become a Competent Authority to approve the food safety of seafood products being exported to the European Union (for 'list-one' status, enabling free export to anywhere in Europe) (Beseto, pers. comm.).

Taxation

Solomon Islands' taxation system has inhibited fisheries development. An ADB study found in 1999 that the taxation regime worked counter to government aims of encouraging domestic industry over distant water fleets (Hand 1999). Domestic industry interviewees in 2005 still felt disadvantaged by the taxation and fee systems compared with foreign vessels. Incentive packages were implemented to offset some of the taxation costs, but even with the incentives, NFD management felt the amount of tax and other government fees it paid reduced its competitiveness considerably (Wickham, pers. comm.). As of 2005, no initiative had been made to rectify this situation for fisheries, although there was a board overseeing reform of the taxation system in general, including the introduction of a consumption tax, which could result in benefits for fisheries (Diake, pers. comm.).

The Central Bank of Solomon Islands advised that to galvanise the private sector, Solomon Islands must develop internationally competitive tax packages, streamline investment procedures and improve major investment infrastructure (CBSI 2005). Some interviewees felt government subsidies (incentives) were necessary to enable companies to be competitive because of the high-cost business environment (David Mamupio, pers. comm.).

Law and order

Since the Tensions, Solomon Islands' law and order problems could be considered a constraint to industry. In 2005, Solomon Islands became a member of the World Bank Group's Multilateral Investment Guarantee Agency (MIGA), which provides political risk insurance and technical assistance to potential investors (*Pacific Magazine* 2005). According to tuna-industry interviewees, however, law and order problems have not been a major problem in Solomon Islands. NFD managers said the Tensions did not disrupt operations. During and immediately after the Tensions, the police were 'completely ineffectual', but this was not a problem for Solomon Taiyo, partly because of the way the Tensions manifested in Western Province (Kukui, pers. comm.).¹¹ Since RAMSI began in 2003, the police force has been more effective. Soltai's security guards use neither guns nor attack dogs (both of which are usually deemed necessary in Papua New Guinea).

Land administration

Apart from a small amount of 'registered' (alienated) land, about 90 per cent of land in Solomon Islands is held under communal customary tenure, and is difficult to utilise for commercial purposes. The government sees the current land tenure system as an obstacle to development and has made it a priority to trace genealogies and codify them so as to avoid infighting and 'false' claims. This system has been further complicated by factors such as variations in matrilineal or patrilineal descent over time and across cultural groups. 'Even businesses on registered land are subject to harassment from landowners' (Diake, pers. comm.).

Monitoring, control and surveillance

Government monitoring and surveillance activities had been affected by lack of resources, but continued at a basic level. The FFA Vessel Monitoring System (VMS) continued to operate and the Australian government assisted with patrol-boat surveillance. Before the Tensions, port sampling was more regular (Ramohia, pers. comm.), but from 2000 to 2004, there was no port sampling program due to lack of funds (Oreihaka 2004). In 2004, port sampling was conducted with SPC funding during the first three months of the year, when most trans-shipping occurred (Government of Solomon Islands 2005a). In 2005, port sampling was still not conducted on all vessels; sampling staff were contracted by the Fisheries Department as funds became available (from the SPC, for example) and not employed when there were no funds (Ramohia, pers. comm.).

Role of government in enterprise

Perspectives on the role of government in enterprise varied. According to the National Economic Recovery and Reform and Development Plan (NERRDP), 'The presence of several inefficient state-owned enterprises [is] crowding out potential private investors' (p.111). This plan therefore recommended that the state-owned enterprises such as Soltai and the regional fisheries centres be privatised (Government of Solomon Islands 2003). NERRDP also included an objective to create 500 new jobs in the private-sector fisheries.

The Tuna Management and Development Plan specified that the private sector was to be the main engine for development, and that the government should move away from owning or trying to manage businesses (Government of Solomon Islands 1999).

On the other hand, the Central Bank of the Solomon Islands recommended protecting non-log-export oriented industries (which would include fisheries) as a general economic measure (CBSI 2005). Many interviewees saw a role for government ownership of enterprise as part of their aspirations for domestic development.

The development principles, visions, goals and objectives in the Millenium Development Policies planning document for Noro showed a mixed approach to the role of government in business. The private sector was described as the engine for commerce, industrial and urban development (Noro Town Council 2004), but then the document called for 'protected status' for fisheries industries because of their economic and social importance to Noro and the national economy (pp.5, 22, 26).

Consultative decision making

Domestic industry representative Adrian Wickham, head of NFD, was looking forward to the creation of a Tuna Management Unit in the Fisheries Department in the hope that it would improve government services. One of the improvements he saw as important was more transparency in the licensing regime; he wanted the government to publish a list of licence holders and the fees they paid (Wickham, pers. comm.). He also wanted communication between industry and government to improve.

The definition of stakeholders in Solomon Islands tuna fisheries is broad, since tuna industries have economic, social, cultural, political and ecological consequences. The Tuna Management and Development Plan called for cross-sectoral planning and budgeting to deal with cross-sectoral issues, as opposed to ministries doing their own budgeting and planning in isolation (Government of Solomon Islands 1999). In addition, the plan called for a Tuna Management Committee and a Tuna Management Impacts Review Committee with wide stakeholder membership, including the Ministry of Health, Women's Development Division, Environment Division, Fisheries Division, Department of Planning and Development, Department of Finance, Department of Provincial Government and Rural Development, Labour Division, a representative of an industry organisation and a representative of an NGO. The role of the review committee would be to facilitate monitoring and to develop strategies that mitigate and redress adverse social and environmental impacts.

In addition, consultative decision making could address some of the negative social impacts from tuna industries. Domestic tuna industries, as well as foreign fleets transshipping in Honiara, were seen as a magnet for social problems in Solomon Islands (Barclay 2004). Non-ethnic social problems did not directly constrain industry, but they were indirectly related in that they detracted from companies' good will.

The review committee was not mentioned in the post-Tensions review of the tuna plan (Aldous 2005), so it was unclear whether the Fisheries Department would go ahead with

such a committee. The review did recommend the employment of an industry liaison officer in the Fisheries Department (Aldous 2005). The original plan included a Fisheries Advisory Council to advise the minister on management and research (Government of Solomon Islands 1999). The review made no specific recommendation regarding this council, but implied that a Tuna Management Committee was the main first step in consultative decision making.

Aid dependency

Solomon Islands is heavily dependent on aid for all aspects of government, including fisheries management. From 1990 to 2000, Solomon Islands received 73 per cent of its Fisheries Department development budget as aid (van Santen and Muller 2000). In order to balance the national budget, the whole fisheries development budget for 2003–06 was to come through aid (Government of Solomon Islands 2003).

Japan has long been a major source of aid for Solomon Islands. In January 2005, the Japanese government committed US\$29.2 million in aid in the next few years. This included an upgrade to the Honiara power system and renovations of the Honiara International Airport (built with Japanese aid money in the 1990s) (SIBC 2005b). In 2005, Japanese aid money was being used to upgrade public water supplies in Honiara, Auki and Noro. As well as general aid, the Japanese government has given fisheries aid, administered by the Ministry of Agriculture, Forestry and Fisheries (MAFF), which sometimes had slightly different priorities from the mainstream aid program under the Ministry of Foreign Affairs (Tarte 1998).

The OFCF was also active in Solomon Islands, funding equipment for many of the 29 or so fisheries centres in rural areas.¹² Rehabilitation work was planned for eight centres in 2004 (Government of Solomon Islands 2005a). The OFCF paid the salaries of two Japanese technical advisors working as managers for Soltai. In 2005, the Japanese government committed US\$9.5 million (S\$70 million) for the 'rehabilitation of domestic tuna fisheries' (SIBC 2005b), which meant the construction of two new pole-and-line vessels for Soltai.¹³

The extent of Solomon Islands' aid dependency meant fisheries policy could potentially be influenced. The contract for Soltai's new vessels was launched in a ceremony at a Japanese shipyard with the Soltai managing director and a Solomon Islands government representative in early June 2005, a week or so before the International Whaling Commission meeting in Korea. Australia and Japan apparently used their significant aid contributions to try to pressure the Solomon Islands government into voting with them in the commission (ABC 2005c). Solomon Islands' dependency on aid also influenced the commercial directions of Soltai. The two new gift vessels influenced Soltai's decisions about keeping the fleet in its current structure although that kind of fleet was arguably economically unviable (Wickham, pers. comm.; Kukui, pers. comm.).

Conclusion

Solomon Islands has some of the best resource potential of any of the Pacific island countries covered in this study, with a rich surface skipjack fishery and viable longline fishery. It also has more land and potable water than many other Pacific island countries, and a larger population. These factors contributed to Solomon Islands being more advanced than the other Pacific island countries in 1999 in domestic tuna industry development. There were three locally based tuna operations making profits, and prospects under a strong Fisheries Minister (Stephen Aumanu) were good. During the Tensions (2000–03), there was a breakdown in law and order, no effective government, rampant corruption, escalating costs and loss of confidence, which destroyed much of the industry. The period to 1999, however, showed a ‘proof of concept’ for viable domestic tuna industries in Solomon Islands (Table 8.7). By 2005, the government, in collaboration with RAMSI, began broad reforms, so there is hope that the business environment will improve and Solomon Islands will be able to make more of its resources in future (Table 8.8).

For three decades, Solomon Taiyo was the mainstay of the domestic tuna industry, and indeed of the whole cash economy, providing thousands of jobs and a substantial portion of Solomon Islands’ exports. Since that joint venture folded in 2000, Soltai has been less beneficial to the Solomon Islands economy. Clearly, it needs some experienced private-sector input, especially in trading, marketing and financial management.

Another point worth noting is the importance of environmental and social issues. Without good environmental management, development from tuna resources is not possible, and without good management of social issues arising from commercial developments the entire economy risks collapse.

Table 8.7 **Solomon Islands: domestic tuna production, 1997–2004**

	Total catch (mt)	Frozen tuna exports (mt)	Chilled tuna exports (mt)	Canned tuna total (cartons)	Canned tuna exports (cartons)	Smoke dried tuna (arabushi) (mt)	Fishmeal (mt)	Cooked tuna loins (mt)
1997	37,209	25,910	2,760	1,072,000	7,524	945	70	0
1998	41,158	37,292	2,153	-	1,446	149	118	0
1999	16,865	6,660	1,486	-	6,440	940	1,400	0
2000	4,680	670	804	-	2,349	504	353	0
2001	15,024	13,523	816	78,063	72	563	50	0
2002	11,283	7,750	1,385	254,224	72	1,480	596	0
2003	22,894	20,592	882	173,312	90	1,145	185	0
2004	27,496	23,331	1,116	262,144	215	574	225	2,035

Notes: According to NFD interviewees, NFD sold 5,282mt of its catch to Soltai in 2004 for processing as loins. The difference between the amount of tuna exported as frozen and the total catch is less than this, so there is a discrepancy between NFD and Fisheries Department figures.

Sources: Government of Solomon Islands (pers. comm.). Sevillejo, Alfredo, 2005. Finance Advisor, Soltai Fishing and Processing. Interview, 19 July. Noro, Solomon Islands. Wickham, Adrian, 2005. CEO, National Fisheries Development. Interview, NFD Office, 15 July. Honiara, Solomon Islands.

Table 8.8 **Tuna catches from domestic and foreign fleets by gear, 2000–2004**
(metric tonnes)

	Domestic PL	Foreign PL	Domestic LL	Foreign LL	Domestic PS	Foreign PS	Total
2000	2,777	0	1,197	835	2,365	3,885	11,059
2001	6,534	0	434	500	7,670	10,883	26,021
2002	9,787	0	907	1,267	6,783	10,883	29,627
2003	10,793	0	1,439	1,474	15,191	31,751	60,648
2004	6,882	0	1,174	619	16,094	70,184	94,953

Notes: LL: longline. PS: purse-seine. PL: pole-and-line. Licensing records indicate that a Japanese pole-and-line fleet was operating in Solomon Islands during this period, but the Statistics Section could not provide figures on the catch of this fleet since 1997. The fact that the 2002 and 2001 figures for 'Foreign PS' are exactly the same as the year before seems to indicate an error in the data provided by the Statistics Section for one of these years. NFD figures differ from the Fisheries Department figures for 'Domestic PS' for 2004; NFD interviewees reported their 2004 catch to be about 20,000mt, as did the 2004 Annual Report of the Central Bank of Solomon Islands (p.19), whereas the total domestic purse-seine catch recorded by the Fisheries Department figures is just less than 17,000mt.

Source: Government of Solomon Islands (pers. comm.).

Development aspirations and tuna

Overall aspirations

Solomon Islanders' overall aspirations for development for the mid 2000s were articulated in the National Economic Recovery, Reform and Development Plan (Government of Solomon Islands 2003). The key aim was 'to enhance and improve the quality of life and the living standards of all the people in Solomon Islands...increasing incomes and their equitable distribution' (p.6).

Another important thing to note is the emphasis placed on the distribution of development benefits across the various groups in Solomon Islands. This reflects concerns with island group rivalries, since antipathy between Malaitans and Guales was one of the contributing factors fuelling the Tensions.

Fisheries development aspirations were encapsulated in suggestions for a mission statement for the Fisheries Department put forward at the National Fisheries Workshop in Honiara in July 2005. Workshop participants were split into five groups and all came up with suggestions along the lines of managing fisheries resources sustainably for the benefit of all Solomon Islanders. The subtitle to the workshop—'Our sea resources, our livelihood'—also revealed the strong connection between the resources and the material well-being of Solomon Islanders. This dual aspiration was also cited as the main two objectives of the Tuna Management and Development Plan (Government of Solomon Islands 1999)

- to ensure that the tuna resources of the Solomon Islands are not exploited beyond their optimal sustainable yields
- within the limit set by the conservation objective, to harvest the resource in such a way that maximises the economic and social benefits received by the people of the Solomon Islands.

The lengthy Tuna Management and Development Plan (Government of Solomon Islands 1999) contained a plethora of aspirations in lists of development options, goals, objectives and strategies.

Goals

- sustainable stocks
- minimal environmental impacts
- increased domestic participation
- increased foreign revenue
- minimal social, cultural and gender impacts
- efficient (and effective) administrative services
- accountability.

Management strategies

- conservation management
- regional management and cooperation
- data collection and research
- monitoring, control and surveillance
- regulation of related fishing activities
- environmental impacts and by-catch
- domestic participation and development
- foreign access and investment
- social, cultural and gender impacts
- administrative support and licensing systems
- recovery of management costs
- accountability for management decisions.

An expression of aspirations for fisheries development in the 2004 *Fisheries Department Annual Report* was slightly different in that only economic objectives were included, with no conservation measures. The following objectives were listed

- to achieve and maintain self-sufficiency in supply of fish to the domestic market
- to improve cash income throughout the fisheries sector by assisting Solomon Islanders in developing their resources through self-employment
- to maximise participation of Solomon Islands nationals in commercial fishing and associated activities
- to improve the foreign-exchange position of Solomon Islands by encouragement of local processing of fisheries resources into value-added products
- to encourage farming of aquatic resources.

The National Economic Recovery, Reform and Development Plan (Government of Solomon Islands 2003) also specified specific aspirations for tuna fisheries

- facilitate the rational management and conservation of coastal fisheries and aquatic living resources through their sustainable utilisation

- rehabilitate and promote the privatisation and commercialisation of rural fisheries centres
- promote tuna fisheries development through foreign and local investment
- increase revenue through licensing of more tuna-fishing vessels under access agreements and domestic licensing arrangements
- improve the monitoring of fish catches, their exports and value and share such information with Customs, the central bank and related agencies
- review current fisheries legislation and formulate new legislation and fisheries management plans
- reform and rebuild capacity in the Fisheries Department.

Aspirations for development from tuna resources as embodied in these various government documents are not entirely consistent with each other. What is clear is that the paramount aspiration is to generate more wealth from tuna resources in the domestic economy.

Governance

Lack of transparency was also seen as one of the issues that needed to be addressed in order to foster an environment conducive to private-sector development. Improving governance in Solomon Islands will be a long battle. Notwithstanding efforts in the past few years by RAMSI, there were still indications that governance systems were weak and prone to abuse.

Governance is the key to being able to generate more wealth in the domestic economy from tuna resources. After the audit of the Fisheries Department in 2003, the amount of revenue generated from access fees improved dramatically in 2004 to make up 90 per cent of non-tax revenue (CBSI 2005). The National Economic Recovery, Reform and Development Plan included the general goals of 'good governance', 'revitalising the productive sector and rebuilding supporting infrastructure' (p.x) and overhauling and streamlining foreign investment legislation and governance (Government of Solomon Islands 2003). These general aspirations were similar to those documented as objectives in the Millennium Development Policies planning document for Noro: transparency, consultation and accountability (Noro Town Council 2004).

'Transparency' and 'accountability' were two buzzwords used in many aspirations about Solomon Islands' tuna industries. The Tuna Management and Development Plan listed strategies to establish well-informed, transparent and accountable decision-making processes, including public reporting of important policy issues and ensuring compliance with laws and regulations. (Government of Solomon Islands 1999:1-2). Public reporting was to include providing an annual report from the Fisheries Department to the Minister and Cabinet. The report would be developed in conjunction with relevant management committees, which in 2005 were yet to be established. The plan specified that stakeholders and the public should also be kept informed about fisheries matters via the media (Government of Solomon Islands 1999).

Human resources development

The government hoped to promote ‘higher level employment in all sectors’ of the tuna industry, in part through targeted education and training programs for fisheries-related skills and management with the School of Marine and Fisheries Studies and the Solomon Islands College of Higher Education (SICHE), so as to replace expatriate employees with Solomon Islanders (Government of Solomon Islands 1999). With basic seamanship and safety skills, more Solomon Islanders could be employed on domestically based and distant water vessels. For Solomon Islanders to develop their own tuna-related small businesses, other types of training considered in the tuna plan included small-business skills, fisheries business-management skills, value adding, catch handling, quality control and small-scale commercial tuna-fishing methods (Government of Solomon Islands 1999). Some of the human resources development improvements cited as necessary in the plan included investment in targeted education and training programs, upgrading existing training facilities, developing courses and workshops, sponsoring students to undertake studies in relevant areas and upgrading the qualifications of teaching staff (Government of Solomon Islands 1999).

The human resources of government itself needed attention before any of these improvements could come to fruition. The capacity of the Fisheries Department, as with the whole of government in Solomon Islands, was simply insufficient to carry out many of the reforms needed. Increasing the numbers of staff and upgrading their educational qualifications were some of the suggestions for improving departmental capacity (Diake, pers. comm.; Ramohia, pers. comm.). Ongoing training existed in the form of short courses sponsored by aid donors and regional organisations, and working closely with counterparts in regional organisations such as SPC and FFA.

While fisheries science is important for understanding and participating meaningfully in regional stock-assessing activities, tuna fisheries management is most often defined by Pacific island countries as managing the resource in terms of conservation and managing fisheries for development purposes. Greater expertise would therefore be useful in public policy, marine resource economics and business management. Some kind of training in business negotiations might also be useful for the Fisheries Department staff who negotiate distant water access agreements.

Improving access fees

According to Fisheries Department official Sylvester Diake (pers. comm.), since the Tensions, Solomon Islands’ distant water access fees as a percentage of the market value of the total catch have been among the lowest in the region. The Fisheries Department saw this as due largely to the weak economic position of Solomon Islands in the aftermath of the Tensions, and envisaged that when the economy improved they would be in a better bargaining position, and fees would rise.

Industry representative Adrian Wickham suggested that distant water access negotiations could be more effective if they were conducted in Honiara rather than overseas, so that

the negotiating team could be made up of officials from all the relevant government departments (Wickham, pers. comm.). Another option would be for the negotiating team to include a specialist negotiator from outside, such as an official from the FFA, as had happened in the past.

Regional and international responsibilities

Meeting regional and international responsibilities is especially important for tuna-fisheries management because the migratory nature of the stocks means no one state can manage them alone. Solomon Islands' aspirations as outlined in government documents placed a high priority on cooperating with regional and international management initiatives. The Tuna Management and Development Plan cited the importance of domestic management being consistent with regional and international laws and agreements (Government of Solomon Islands 1999). In addition, regional cooperation was seen as a way to increase the amount of revenue collected from foreign fishing interests (Government of Solomon Islands 1999).

Environmental issues

Managing tuna resources in terms of conserving stocks was one of the most important concerns Solomon Islanders raised regarding aspirations for development from tuna, in interviews and in government documents. For World Wide Fund for Nature representative Stephen Kido Dalipada and Environmental Health Officer Tina Mamupio, ecological sustainability was the most important aspiration for development from tuna resources (Kido Dalipada, pers. comm.; Tina Mamupio, pers. comm.). The Town Clerk of Noro, David Mamupio, noted that if tuna stocks fell, industries would also fall, so he hoped the government would limit the number of fisheries licences issued to protect the stocks, and that purse-seiners would be prevented from fishing too close to islands so that stocks would be protected for village fishers (David Mamupio, pers. comm.). Fisheries Department staff felt that as one of the main sources of income for Solomon Islands, tuna stocks should be protected by careful monitoring. They feared that lack of resources in the department prevented monitoring and enforcement and they would like to be able to institute more regulations to protect stocks.

Social issues

Aspirations for development from tuna resources specified in the Tuna Management and Development Plan highlighted the need to limit adverse social impacts, for example, by respecting customary rights, Solomon Islands culture and traditional fisheries (Government of Solomon Islands 1999). The plan pointed out gender inequity in work settings and in decision making, and asserted that addressing gender inequity would solve some of the negative effects of tuna industries on social stability and health.

The sustainability of tuna industries in Solomon Islands is made up of linked social, environmental and economic components, because of the obvious risks to industries posed by episodes such as the Tensions. The Tuna Management and Development Plan

recognised that change through development of large-scale industry would bring positive and negative impacts, and the overall impact in terms of employment, nutrition, welfare and revenue needed to be considered. Equity of opportunity to participate was considered a prerequisite for sustainability, and government was responsible for identifying and addressing negative impacts such as prostitution and family/community disruption due to increased cash flow to rural settings (Government of Solomon Islands 1999). Government and industry were expected to share responsibility for adverse social and environmental impacts and 'undertake to minimise such costs'.

Concerns about social issues arising from tuna developments were often couched in terms of ensuring an 'equitable distribution of benefits' (Government of Solomon Islands 1999). This was defined in the tuna plan as being a balanced distribution of benefits across 'regions, communities, social groups and genders'. The government was to track revenue raised from tuna resources against the social and environmental costs and benefits associated with tuna industries, and institutionalise recurrent spending on services to mitigate negative social impacts.

Concerns about dissatisfaction over capitalist development becoming 'ethnicised'¹⁴ were part of discourses about 'equitable distribution of benefits' (Government of Solomon Islands 1999:22). Consolidation of tuna industries in any one place is seen as a social problem partly because the influx of young people (mostly men) from other parts of the country looking for work is considered a bad thing. Free internal migration is not seen as legitimate in Solomon Islands, except perhaps in towns, although even then the apparent preponderance of any particular migrant island group is seen as unacceptable.

The aspiration to spread development geographically for social reasons, however, is in direct conflict with economic aspirations, because consolidating industries helps with economic viability. Because of infrastructure costs, as well as economies of scale for freight, it would make more sense economically to consolidate shore bases in Noro or Tulagi. With NFD having moved to Noro, as well as the existence of other export industries nearby in logging and copra, Noro has been developing as an industrial hub. Even Noro, however, still does not have the infrastructure and government services to make it a competitive business environment.

Domestication

Solomon Islanders want locals to own commercial tuna-fishing vessels (Government of Solomon Islands pers. comm.). Building domestic tuna industries to replace foreign-owned and foreign country-based industries was the main way Solomon Islanders saw that wealth from tuna resources in the EEZ could be captured in the domestic economy. '[T]he government aims to expand the domestic industry with a long-term view of using local resources and replacing the reliance on foreign access' (Government of Solomon Islands 1999:20). Domestication was seen as beneficial in terms of factors such as employment and revenue.

The Tuna Management and Development Plan included an extensive array of strategies for developing Solomon Islands' domestic tuna industries, through

- encouraging small-scale harvesting
- facilitating expansion of domestic operations (sashimi longlining, the pole-and-line fleet, maintaining and upgrading infrastructure, working towards local ownership of vessels, incentives for business development)
- facilitating private-sector development of shore-based facilities (link fishing access to shore-based facilities development)
- encouraging the development of a supply and service sector (local bait supply service, stevedoring, net repairs, entertainment)
- encouraging value-added processing (canning/loining on a large scale, smoking and other kinds of processing on a smaller scale)
- investing in education and training programs (upgrade existing training institutions including qualifications of teaching staff, develop courses for key areas, sponsor students from industry including in business management)
- setting licence fees such that foreign fishing vessels would pay relatively more than locally based vessels
- giving preference to the domestic industry, especially those with substantial onshore assets employing large numbers of Solomon Islanders (Government of Solomon Islands 1999).

The pull-out of the Japanese partner company from Solomon Taiyo was seen by several interviewees as a positive move in terms of localising tuna industries, especially since Western Province became involved in running the company (Atu, pers. comm.; Ramohia, pers. comm.; Sibisopere, pers. comm.). The managing director of Soltai, Milton Sibisopere, felt that Soltai's status as a wholly nationally owned company was critical for national self-esteem, and, because it was eligible for donor assistance, it could better facilitate bilateral relations with Japan. He felt that any privatisation would inevitably mean becoming in some way a foreign company because 'the private sector in Solomon Islands is all foreign' (Sibisopere, pers. comm.).

Interviewees also noted, however, that under full domestic ownership, the Soltai base at Noro looked more run down than it did before, the fleet had shrunk and production had fallen (Atu, pers. comm.). Several casual observers met in the course of fieldwork expressed the opinion that they thought it would be better if 'the Japanese came back'. In the case of Soltai, it seems the aspiration for domestic development is conflicting with aspirations for development in general.

Foreign direct investment

According to the Foreign Investment Board, in the short term, foreign investment is needed in Solomon Islands—especially in tourism, fishing and aquaculture—to show locals how to develop the resources, as well as to provide employment and opportunities for technology transfer (Aihari, pers. comm.). NFD manager Adrian Wickham noted that

cash-rich investors were necessary in the volatile tuna industry because the nature of the industry, with fluctuating prices and catch rates, meant there were inevitably lean years. The Solomon Islands and Western Province governments as investors had not been able to support Soltai in this way, so private-sector foreign investors were the only alternative. According to Wickham (pers. comm.), NFD's shareholder, Trimarine, was keen to help Soltai with capital for investment and access to markets in the United States and the European Union, but so far the government had chosen to retain control of Soltai.

Foreign investment in tuna industries was viewed positively in the Tuna Management and Development Plan, as complementary for domestic development through increasing revenue and fisheries development. The policy framework for generating maximum domestic benefits from foreign investment included addressing disincentives for foreign investors, encouraging foreign vessels to base themselves locally and ensuring a 'fair return' to Solomon Islands for fisheries access (p.38). It was recommended that joint ventures with foreign investors be better negotiated, to be more clear and binding and to ensure greater returns to Solomon Islands.

Pole-and-line

Several interviewees included in their aspirations the desire for Soltai to be profitable (Kukui, pers. comm.; Sibisopere, pers. comm.; Wickham, pers. comm.). According to Adrian Wickham, this meant the pole-and-line fleet would have to go, because without a special marketing advantage over purse-seine product on the basis of social and environmental responsibility, he saw no way for Soltai's pole-and-line fleet to be profitable. Other interviewees, however, wanted the pole-and-line fleet to continue, largely because it was seen as being more environmentally sustainable than purse-seining (Kukui, pers. comm.; Mamupio, pers. comm.). Various interviewees hoped that the Solomon Islands government would support the pole-and-line method by monitoring and enforcing policies to make sure The Slot and Main Group Archipelago areas were reserved for small-scale and domestic pole-and-line fleets only (Pina, pers. comm.; Sevillejo, pers. comm.).

Village-level development

One of the most commonly cited aspirations for development from tuna resources was that villagers could somehow benefit from tuna businesses. Interviewees repeatedly pointed out that tuna fisheries gave very few returns at the village level. Rural people had very negative images about tuna fisheries because they saw fishing boats offshore and believed they were taking fish that belonged to them, with no recompense.

Interviewees said they would like to see more involvement by local people in tuna fisheries and more benefits from tuna industries visible at the village level (Atu, pers. comm.; Ramohia, pers. comm.). Most frequently this was envisaged as villagers fishing tuna themselves for local markets, for processing and/or for export markets. The Tuna Management and Development Plan included various schemes for small-scale tuna harvesting, such as the development of a small multipurpose vessel, local ownership of fishing vessels, canoe fisheries, facilitating financing and incentives for business development.

Generating commercial export or processing-oriented small-scale fisheries at the village level, however, has proven to be difficult. It is often logistically difficult and expensive to transport fish from village fishing grounds to markets. Village-based fishers with diverse social and economic obligations rarely commit to full-time fishing, and they have limited experience and training to enable them to run a small business, either in terms of accounting or in handling food to export-destination standards for food safety and hygiene. The Tuna Management and Development Plan aimed to work around the lack of business experience in villages with small-scale processing and fishing business development training.

Considering the difficulties in linking small-scale village-based tuna fisheries to commercial markets, however, even with training, it is unlikely small-scale operators will be able to supply export markets.

There have been discussions about localising bait-fish harvesting over the years, and companies have said they would prefer to buy bait than catch it themselves, but bait-ground owners naturally prefer to be paid royalties (and not have to fish) rather than be paid for fishing. Non-bait-ground owners could possibly start bait-fishing businesses, but since bait-grounds are considered to be held under customary tenure they would likely have difficulties accessing them. If these tenure issues could be overcome, it could be possible for Solomon Islanders to harvest bait fish and freeze it for sale to the increasing numbers of longline vessels operating in Solomon Islands' EEZ.

Game fishing

Potentially, ecotourism with game fishing could be a business for rural communities, with high economic returns for each fish caught. There was a small game-fishing tourism market in Solomon Islands, but it was limited by the general tourism industry constraints: perceived health risks, unreliable and expensive air travel, expensive telecommunications, difficulties in accessing land for tourism businesses, and bad publicity surrounding the Tensions. In 2004, Solomon Islands accounted for less than 1 per cent of the tourists who visited the South Pacific (CBSI 2005).

Addressing the issues that discourage tourists and constrain tourism businesses as well as a large marketing campaign will be necessary to make game-fishing tourism a viable form of development from tuna in Solomon Islands.

Processing

Value-adding processing of tuna was another field in which Solomon Islanders hoped to become more involved. The Tuna Development and Management Plan envisaged small-scale processing (such as tuna jerky and smoking) and large-scale processing (such as canneries and loining facilities). Fisheries access licences were to be tied to sales to local shore-based processors to ensure supply for the processing sector.

In addition to the development potential of processing enterprises themselves, they generate spin-off businesses, such as security, cleaning and food sales. Solomon Islands could develop a salt industry to supply industrial salt for brine-freezing units, and produce

table salt as an ingredient for the cannery. Spices and other ingredients used in canned products could be grown locally.

To make the most of processing in Solomon Islands, the trade and marketing sectors will have to improve. The absence of significant international trade and marketing expertise in Soltai is possibly the most important factor deterring success in recent years (Barclay 2005).

Service and supply industries

Other aspirations for generating more wealth in the domestic economy from tuna industries included expanding service industries for trans-shipping fleets. Such service industries would also benefit domestic fleets. Solomon Islands ports could improve their attractiveness by streamlining the paperwork, ensuring port security and improving air links. In terms of entertainment, Honiara could do with more cinemas, restaurants, shopping areas and karaoke bars. It will likewise be necessary to manage the health and welfare problems of substance abuse and sex work that inevitably emerge around active international ports.

Because of the climatic fluctuations in the surface fishery around Solomon Islands, it could be worthwhile checking out the possibility for collaborative investment in mobile service industries to follow fleets as they base themselves in different parts of the Pacific from year to year.

Unrealistic aspirations

One final point to make about aspirations for development from tuna resources is that sometimes people's expectations have been unrealistic. Representative for NGO Solomon Islands Development Trust, John Roughan, noted that tuna industries, as with many other things in Solomon Islands, had not lived up to expectations. Partly this was because the original expectations were overblown, based on a lack of knowledge about capitalism in general. He believed that the naivety of many Solomon Islanders' aspirations of development directly contributed to the dissatisfactions at the root of the Tensions, and he saw it as a failure of Solomon Islands leadership to have allowed these unrealistic aspirations to continue (Roughan, pers. comm.).

Recommendations

The main recommendations for Solomon Islands to be able to capture more wealth from its tuna resources are to continue with reforms to improve the stability of government and the economy as a whole, and to deal with governance issues. In particular

- the macroeconomic environment must be improved to build confidence, encourage reinvestment in fisheries and maximise prospects for economic viability
- government must convince investors it will not make capricious decisions relating to fisheries development initiatives and licensing applications
- the foundations for good public policy must be laid, and realistic objectives and strategies agreed on and enforced through legislation to guide development and discourage *ad hoc* arrangements.

Continuing reforms in the Fisheries Department in terms of governance is also important. When that is under control, it will be necessary to

- further develop the capacity of the department and work on improving fisheries management and development policies and administration
- ensure that adequate levels of staffing, resources and skills are available to deliver fisheries management and development objectives—this will inevitably need to include external assistance in the medium term.

Soltai remaining 100 per cent government controlled is unlikely to deliver an economically viable operation in the long term. Consequently, it is recommended that a private-sector partner be sought, possibly using a long-term licensing (access) arrangement as an incentive.

It will be important to consolidate tuna industries at Tulagi and Noro rather than develop new centres, so as to make it feasible to develop infrastructure, government services and human resources to a level where tuna industries can be competitive in Solomon Islands. To avoid exacerbating social problems with this policy, it will be necessary to deal with the problems created by internal migration and land tenure dysfunctions in relation to commercial activity. Further research could be necessary to identify policies that will enable labour migration to occur without causing significant social problems.

Notes

- ¹ The conflict has often been called ‘ethnic tensions’, but in line with the UN Development Program’s Peace and Conflict Development Analysis, we believe the label ‘ethnic’ is inappropriate because although the conflict was ‘ethnicised’ it was more about land ownership, land use and distribution of benefits generated by land, control of political power, poverty and access to natural resources (UNDP 2004a).
- ² For further information on Solomon Taiyo, see Barclay 2001 and Hughes and Thaanum 1995.
- ³ For further information on Solomon Islands’ bait fishery, see Barclay 2001.
- ⁴ NFD was not affected greatly by the Tensions, but it was economically unsound to continue operating at such low prices (Wickham, pers. comm.).
- ⁵ For further information on the transition from Solomon Taiyo to Soltai and a comparison of the two, see Barclay 2005.
- ⁶ Managers from Soltai and the other large domestic skipjack fishing company, NFD, said that their catches had been low from 2003 to 2005. Interestingly, no such drop in productivity for the skipjack fishery was noted by national or regional fisheries reports (Diake 2005; Molony 2005). According to one industry interviewee, skipjack were not available for surface fisheries when the water temperature was 29.5° Celsius or higher on the surface and the water had been this warm for many months to mid 2005. In July 2005, as the surface temperature was starting to drop, catches were recovering accordingly (Wickham, pers. comm.).
- ⁷ Apparently, Soltai bought fish from NFD at the Bangkok price (instead of Bangkok minus the cost of transporting it there). In 2004, NFD sold 5,282mt from its total catch of about 20,000mt to Soltai for processing. The rest of its catch was sold wherever gave the best price for frozen purse-seine product, usually Thailand (Wickham, pers. comm.).
- ⁸ Japan had a fleet of larger ocean-going pole-and-line vessels supplying the Japanese fresh skipjack market, and other companies based in Pacific island countries had one or two pole-and-line vessels but not a fleet.
- ⁹ For further information on Solomon Taiyo’s productivity, see Hughes and Thaanum 1995; SPPF 1999.
- ¹⁰ Some Western Province leaders apparently invited vigilante groups of militants from Bougainville to come to Noro to protect Western Province from Malaitans, and these groups decided it was their mandate to protect Solomon Taiyo from looting (Kukui, pers. comm.).
- ¹¹ For further information on the nature of OFCF and its activities, see Tarte 1998.
- ¹² Vessels and other equipment procured in Japan under the Japanese aid program are often much more expensive than comparable items available elsewhere, and some observers felt that the purchase of these vessels from a Shizuoka shipyard was as much about assisting the constituency of the shipyard as it was about assisting Solomon Islands (Hughes, pers. comm.).
- ¹³ ‘Ethnicisation’ refers to the process by which ethnic divisions are politicised by political or conflict entrepreneurs. In these cases, it is not ethnic groups per se that are the problem but the way ethnic relations are manipulated so that, for example, competition for employment or land comes to be framed as an ‘ethnic’ dispute (UNDP 2004a).