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COUNTRY STATEMENT - SOLOMON ISLANDS

by

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Introduction

The Solomon Islands consisting of six large, high elevated islands with many small islands is located in the Southwest Pacific between 5 and 13 degrees south; and 155 and 158 degrees east, extending over 1,400 kilometers of ocean. The total land mass area is 28,530 square kilometers (SPC-1982) and supporting a total population of 285,796 (Nov.1986 census), majority of whom are coastal dwellers. The total coastline is 4,023km long (Moiseev 1969) but unlike the continents, the islands have little or no continental shelf area which would support a large scale trawl fishery for demersal fish species. The bottom contour near the coast is usually highly irregular and drops off steeply to deep water with several kilometers beyond the outer reef. The shelf area to 200m was estimated to be about 100,000km² (Moiseev 1969). The Solomon Islands fishery zone after the enactment of the 200 mile conservation and management zone encompasses approximately 1.3 million km² (Sevele and Bollard 1979). Due to the island nature of the country with limited arable farm land, fish and other marine products have traditionally provided the major source of protein, especially to the rural population.

Two distinctive types of fishery are practiced in the Solomon Islands, the commercial and the rural fishery. The rural fishery covers what is known as the subsistence artisanal and the semi-artisanal fisheries. Here, artisanal fishery will be regarded as that with light capital investment, low level of organization, little specialised skill involvement and their fishing activities are confined exclusively to the coastal areas, estuaries, rivers and lakes. Additionally, their productivity and earnings are usually low and the catches are commonly sold fresh, dried or baked for local consumption.

Subsistence fishing has been the main type of activity in Solomon Islands for some time and this has been the common practice for centuries past. Recently there has been considerable growth of a cash economy in the urban centres, making inshore fisheries resources a source of much needed food and income.

There has been quite a substantial growth in the commercial tuna fishery since 1971 and is now the major source of foreign exchange earnings and private-sector employment. Marine products export in 1987 totalled over 28635353 tonnes which constituted some 43.9 % of that years foreign exchange earnings. From the total marine products export of 1987 2.96% was from the rural artisanal fisheries sector. The total marine exports for 1987 is given in appendix A.

Solomon Islands Commercial Fisheries are based on tuna resources which are abundant in Solomon Islands waters. The estimated population size of skipjack (Katsuwonus pelamis) alone has been estimated at between 49,000t (1977 SSAP estimate) and 89,000t (1980 SSAP estimate) with an annual throughput of between 135,000t and 160,000t (Argue and Kearney,1982). In addition, larger tuna species which are taken by longlining are also abundant in Solomon Islands water.

It was therefore considered appropriate that an allowable catch of 75,000t per annum for the pole and line and 8,500t per annum for longline fisheries be allowed for the development of these fisheries at the present time (Gibson,1985)

The total tuna catch in 1987 was 33,470.92t of which 23,925.114t was taken by domestic pole-and-line vessels, 79.8t taken by foreign pole-and-liners, 982.7t taken by foreign longliners and 8,483.31t taken by the domestic group purse seine fleet.

There is great potential to increase the national catches and the Fisheries Department of the Ministry of Natural Resources has been trying to achieve this with care to prevent over intensified fishing effort in any one area by diverting effort into areas where little or no fishing is currently done.

Fisheries Department Administration

In 1987, the Fisheries Department consisted of three distinct functional divisions; namely the Fisheries Resources, Research and Management Division, the Licensing and Project Evaluation Division and the Provincial Fisheries Development Division.

Functionally, the Fisheries Resources, Research and Management Division is charged with pursuing research into fish resources, particularly tunas, baitfishes and bottom fish and is responsible for maintaining computerised fisheries databases. The Licensing and Project Evaluation Division is responsible for stimulating commercial fisheries developments, the vetting of fisheries development proposals, formulation and enforcement of fisheries legislation and the activities of local and foreign vessels which operate in the Solomon Islands 200mile Exclusive Economic Zone (EEZ). The Provincial Fisheries Development Division, in consultation with provincial authorities is responsible for fisheries developments in the rural areas of the Provinces.

Fisheries Department Research

Due to financial and manpower constraints, researches undertaken by the Department are exclusively those that are economically beneficial to the country. Researches by the Department include the continued monitoring of tuna and baitfish catches from the commercial companies, a bottomfish survey with OFCF of Japan to assess the bottom fish resources and species composition in Solomon Islands waters, the setting up of a giant clam research centre with ICLARM and a Baitfish Research Programme with ACIAR of Australia. It is also anticipated that a tuna tagging programme with SPC on a local scale will commence this fishing season to look at fisheries interactions, especially with the pole and line and purse seine operations. A private prawn farm culturing freshwater prawns (Macrobrachium rosenbergii) and marine prawns (Penaeus mondon) has also been established. A seaweed project to culture Euchemia sp. will be set-up very shortly in the Solomon Islands.

The Department has performed a number stock assessment and trial fishing surveys over the past years and these included a deepwater reef fishing from 1977-79, North and South Malaita deepwater surveys in 1980, a deepwater survey in 1981 and Ysabel Island fishing survey. Earlier surveys included gillnet and tanglenet fishing trial on Guadalcanal and a South Pacific Commission outer reef artisanal fishing project in Western Province, Solomon Islands.

Research on other reef resources has been patchy. In the past decades, a number of small projects have been undertaken on a range of species including pearl shell, crayfish, mangrove oyster, gem coral, beche-de-mer, trochus, green snail, turtle and crocodiles.

Despite all researches, inshore fisheries resources remain poorly known. Many of the basic biological data on stocks have yet to be gathered and their commercial potential estimated.

Fisheries Resources

The inshore resources are typical of reef and lagoon environments with great diversity. Some of the prominent pelagic fish species within reef and lagoon areas include trevally (Caranx spp.), scad (Megalaspis cordyla) and jacks (Caranx ignobilis, Caranx melampygus). Pelagics in open-sea nearshore areas are: spanish mackerel (Scomberomorus sp.), rainbow runner (Elegatis bipinnulatus), dolphinfish (Coryphaena hippurus), island bonito (Euthynnus affinis), wahoo (Acanthocybium solandri) and skipjack.

Numerous demersal fish species are also found in the waters of solomon islands. Those that are commonly found on the outer slope of the reef would include emperor (Lethrinus sp.), snappers (Lutjanus sp.) red sea bass (Lutjanus boha), rosy jobfish (Pristipomoides filamentosus), amberjack (Seriola rivoliana) and black trevally (Caranx lugubris). While demersal species found on deeper grounds would include snappers (Etelis carbunculus, Etelis coruscans, Paracaesio stonei, Paracaesio kusakarii), rosy jobfish (Pristipomoides filamentosus), opakapaka (Pristipomoides flavipinnus), small-tooth jobfish (Aphareus rutilans and black trevally (Caranx lugubris). Fish purchase/sales from Provincial Fisheries Centres/ Markets/ sub-bases for 1986 is given in Appendix B, C and D. Figures for 1987 are still being compiled.

Marine resources other than fish which have high value on international markets include giant clam, trochus, green snail, oysters (i.e black lip, brown lip, green lip and gold lip), other shells, beche-de-mer, turtle and crocodile.

Fisheries Legislation

The current fisheries legislation and supporting regulations cover a wide scope in fisheries and these include fisheries administration, licensing of local fishing vessels, prohibiting fishing methods, size limits on certain marine resources, fish processing establishments, powers of authorised officers, offences and legal proceedings; and concludes with a general category which includes acquisition of land, fishing for scientific purposes and Ministerial power to make regulations.

Apart from the regulations on licensing foreign and local fishing vessels which were reviewed and subsequently amended in 1983, the legislation relating to fisheries is in some ways considered inappropriate for present day purposes of protecting, managing and developing fisheries resources in Solomon Islands. With the assistance of the Legal Department of FAO, a total review of the Act was initiated in 1985 and completed in 1986. Acceptance of these new regulations is pending the outcome of reviews into the provincial government system and the national constitution.

Conclusion

Fisheries are important to the country not only as a source of foreign revenue earning and employment to the local people but for the provision of protein in the diet of local people. There is a strong conviction within the Fisheries Department that the current applied fisheries research efforts into socially and economically important marine resources be expanded, if necessary with outside assistance through collaborative projects, to facilitate monitoring of nations fisheries resources in order to enable the Department to be in a position to give the best advice possible for decision making with regards to protection, development and management of fisheries.

MARINE EXPORTS 1987

Fisheries Dept. Ministry of Natural Resources.

Commodity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Frozen Fish (Kg)	845475	821458	1200460	3009421	2864564	4018033	5612440	1984775	2666030	1502104	1813079	142000	26479839
(SI\$)	1088235	1156059	1741469	4050555	4133869	5713354	6619470	3236259	4928381	3263499	4690252	351312	42972734
Smoked Fish (Kg)						71490		89535	55290		97185		313500
(SI\$)						513065		687374	430287		862296		2493022
Canned Fish (Kg)	166750	69060	27620	110200		165300	165300	110200	96425	137750	151525		1200130
(SI\$)	928126	389785	158684	636289		934785	980588	747938	538835	854349	944985		7114364
Beche-der-mer (Kg)	16694	11768	9852	13901	2018	11855	14956	14714	10312	12317	16989	11600	146376
(SI\$)	96214	65432	68542	95321	14674	69905	193730	73647	41379	65939	88547	66203	939533
Trochus Shell (Kg)	37400	28850	56424	18150	40970	31720	28928	49150	22150	62084	38490	20100	434416
(SI\$)	57221	42916	91351	65183	229378	176156	162818	286753	131969	353200	241557	206666	2045188
Green Snail (Kg)	300	400	300	100		750		150	2394	82			4476
(SI\$)	1154	1540	1155	650		10043		1992	21199	795			38528
Black Lip (Kg)	1610	1190	1680	800	2320	2405	2790	4585	5800	3521	1600		28301
(SI\$)	2705	1999	2822	2720	17516	17712	22570	33271	40022	30777	14358		186472
Brown Lip (Kg)		2650			1180			397		660			4887
(SI\$)		4452			4456			1345		2789			13042
Green Lip (Kg)													0
(SI\$)													0
Gold Lip (Kg)			274		1250		600			500	3350		5874
(SI\$)			553		9485		6243			5382	33051		54714
Other Shell (Kg)	864		2049	1456	1129	885	850	522	655	719	520	917	10566
(SI\$)	9025		26516	19665	17689	13802	13385	3329	8580	10927	2678	16833	142429
Turtle Shell (Kg)	467	29	188	313		194	144	220	151	131	595		2432
(SI\$)	11203	696	4506	26163		18978	14299	15686	19366	7045	50162		168104
Crocodile Skin(Ins)	911	863		574	1456			753	789			1099	6445
(SI\$)	2277	2157		1435	10031			1882	7383			6928	32093
Clam Shell (Kg)													0
(SI\$)													0
Sharkfin (Kg)	311	398	513	300	377	201	458	339	390	377	758	40	4456
(SI\$)	3,734	4,784	6,088	5,780	9,728	7,946	17,828	13,412	15,067	16,909	32,231	1,435	134842
Total: (Kg)	1069871	935803	1299360	3154041	2913808	4302833	5826466	2254581	2859597	1720245	2124091	174657	28635353
(SI\$)	2199894	1669820	2101706	4903761	4446826	7475646	10030931	5102888	6182468	4611611	6960117	649377	56335045

Fish purchases by Provincial Fisheries Centres/Sub-bases, 1986 (in kg)

Province/Centre	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Guadalcanal/Marau	1,185.2	2,152.8	1,559.6	31.2	102.3				1,383.9	370.0		418.0	7,202.9
Malaita/Auki											80.3	126.7	207.0
Tenotu/Lata			653.9	543.6	223.9	469.4	171.0	44.0	334.5	508.0	734.0	294.0	3,976.4
Western/Gizo	306.0	55.0	157.0	1,894.1	2,844.8	1,737.5	566.9	1,856.0	3,670.8	1,617.1	1,870.7	1,072.3	17,648.2
Ysabel/Kaolo					171.0	325.0	494.0	221.5	672.0	483.5			2,367.0
Ysabel/Kia	764.0	2,703.0	2,475.0	458.5	803.0	2,091.0	27.0	1,288.0			1,233.0	389.5	12,232.0
Ysabel/Tatamba	1,535.5	3,092.0	260.5	1,218.0	1,803.5	1,904.0	292.0	838.1	1,386.0	2,180.0	1,017.9	1,330.5	16,858.0
Totals	3,790.7	8,002.8	5,106.0	4,145.4	5,948.5	6,526.9	1,550.9	4,247.6	7,447.2	5,158.6	4,935.9	3,631.0	60,491.4

Local fish sales through Provincial Fisheries Centres/Sub-base, 1986 (in kg)

Province/Centre	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Totals
Guadalcanal/Marau	362.0	550.0	444.7						271.6	37.8			1,666.1
Tenotu/Lata			807.7	542.9	229.8	379.6	296.0	38.0	307.0	316.0	823.5	530.0	4,270.5
Western/Gizo	735.9	65.1	191.7	1,504.9	1,907.6	1,584.5	1,010.4	1,989.1	3,461.3	1,627.6	1,507.1	955.5	16,540.7
Ysabel/Kaolo					7.0	298.0	273.0	209.3	661.0	432.5			1,880.8
Ysabel/Tatanba	102.0	1,800.0	657.5	1,043.0	1,625.5	1,076.0	971.0	765.5	1,585.5	1,760.0	942.5	1,289.0	13,617.5
Totals	1,199.9	2,415.1	2,101.6	3,090.8	3,769.9	3,338.1	2,550.4	3,001.9	6,286.4	4,173.9	3,273.1	2,774.5	37,975.6

Miscellaneous marine products purchased by Provincial Fisheries centres/sub-bases, 1986 (in kg)

Province/centre	items	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Tenotu/Lata	crayfish			44.5	1.0	-	3.1	24.0				42.0	
	clan			311.1	56.4	392.5	9.2						
	other												
Western/Gizo	crayfish	9.0		17.0		33.0	3.0	38.5					
	clan					4.5		6.0	21.6				
	other					1.5			74.3				
Ysabel/Kaolo	crayfish						1.5			3.5			
	clan												
	other												
Ysabel/kia	crayfish	8.5	19.0	18.5		1.5	1.5		0.5		4.5		0.
	clan												
	other												
Ysabel/Tataba	crayfish	1.0	1.7				6.9						3.
	clan												
	other												
Totals	crayfish	18.5	20.7	80.0	1.0	34.5	16.0	62.5	0.5	3.5	4.5	42.0	3.
	clan			311.1	56.4	397.0	9.2	6.0	21.6				
	other					1.5			74.3				