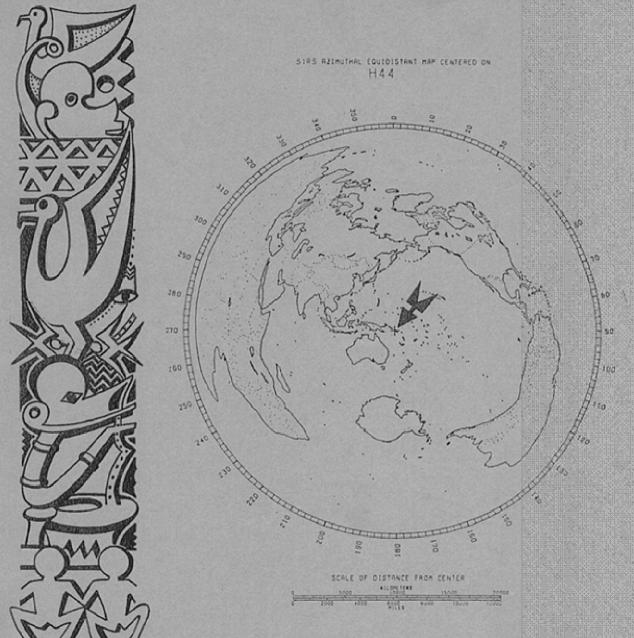
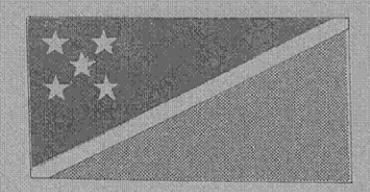
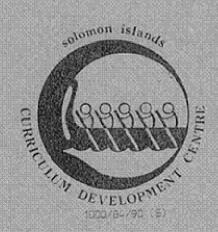
A SOCIAL STUDIES ATLAS OF SOLOMON ISLANDS







An insight into the infra-structure of a developing Nation

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A SOCIAL STUDIES ATLAS OF SOLOMON ISLANDS An insight into the infrastructure of a developing nation

INTRODUCTION

This project, initiated by teachers of Social Studies Panel aims at providing social and economic information suitable for secondary school pupils. It is also our hope that this collection of data, based mostly on the 1986 National Census, will be of use to others here in Solomon Islands and even overseas.

Udo Witulski, a United Nations sponsored Economic Geographer from Germany, did most of the paper work, converting statistics into graphs, providing most of the text, and to him we are most grateful. Advised by the Census co-ordinator, the undersigned contacted Udo. Working with the then Ministry of Economic Planning, Udo offered his drawings, some of which he felt were simply being shelved. We hope that this resurrection of the material will give some new life to his painstaking research. Some updating of his material has been attempted by teachers and appropriate Government departments. Charles Manata, the cartographer at the Curriculum Development Center has spent much time in preparing Udo's maps for printing and drawing some others. Some photos were bought from the Government Information Office. Others were permitted by Solomon Airlines to be used from their excellent in-flight magazine. Still others were provided by Ian McKinney, Sisters Christiana Garo and Claire O'Brien and myself. A special thanks to my Marist Community for meeting the expenses of transport to and from Panatina Campus. We regret the delay in publishing the project, but we have been severely hampered by constraints. We are open to comments and corrections and invite you to correspond with the Principal Curriculum Officer at the C.D.C., Panatina Campus. The atlas is being printed locally by the C.D.C. Press, using machines recently donated by the Australian High Commission. To all concerned our gratitude.

May this atlas contribute to a wider appreciation of these "Happy Isles". May their bountiful beauty and re-sources be sustained and enhanced. May the Creator of All continue to bless Solomon Islands and its people.

John Craddock S.M. Chairman Social Studies Teachers (1988-90) St. Joseph's School, Tenaru



25th September 1990 Social Studies Teachers at June Workshop 1987

GENERAL LAYOUT OF MAPS

Keuopua Reef, Ontong Java. Sikaiana, Outer Easter Islands and Temotu Province as Inserts.

Country, Map No. (NRR), Document Name, Contents and Subsector in upper left corner.

Legend in lower center on top always indicates national and provincial boundaries.

Source and Date of Drawing in lower right corner.

Except for Maps 1, 2, 5, 13, 16 and 19, all maps show Bar Charts for maximum five indicators in water areas within provincial boundaries, for Honiara Town Council as insert in left center.

Figures are always in percentages (except for Maps 11, 15 and 17).

Total Numbers and Corresponding Year in brackets underneath Indicator Title.

MAP 1: SOLOMON ISLANDS BASELINES AND BOUNDARIES

MAIN FEATURES:

Medians: Shows latitude and longitude medians in 1° steps between 4° s.l. and 17° s.l., 155° e.l. and 174° e.l.

<u>Island Outlines</u>: Maps all Solomon Islands' islands and prominent reefs of Solomon Islands. Indicates islands and prominent reefs of neighboring countries closest to Solomon Islands boundaries.

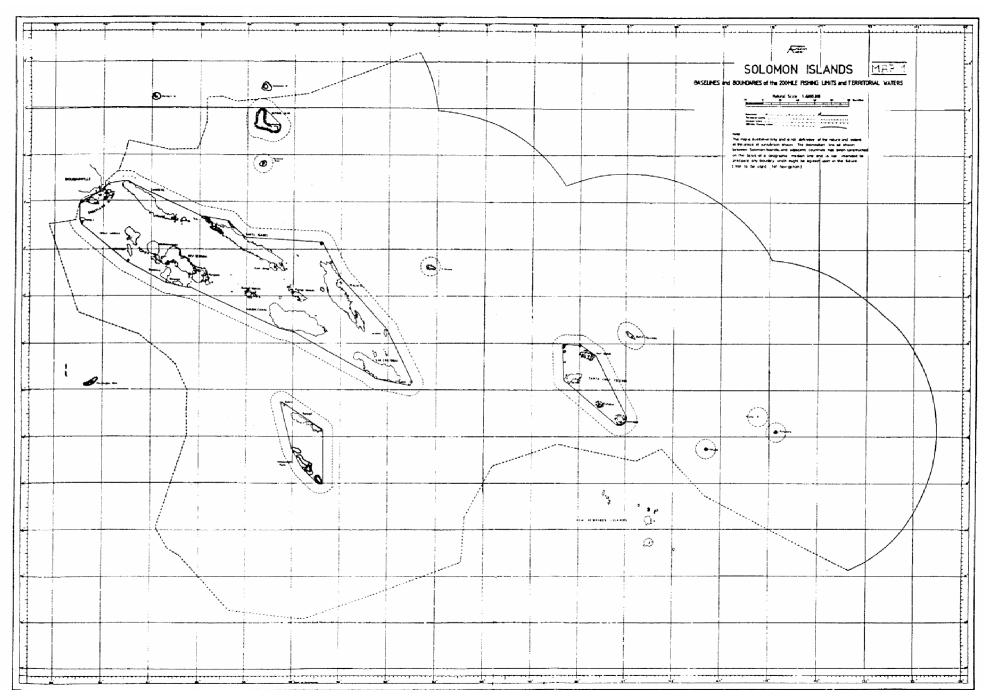
<u>Boundaries</u>: Indicates Solomon Islands archipelagic baselines drawn along prominent landmarks of major island groups. Territorial limits in 12 nautical miles distance to baselines and around lowwater mark of separate islands show Solomon Islands' national waters. Median lines (half way between neighboring islands) and fishing limits (in 188 nautical miles distance from territorial limits) limit the Exclusive Economic Zone for Solomon Islands' fishing and mining rights.

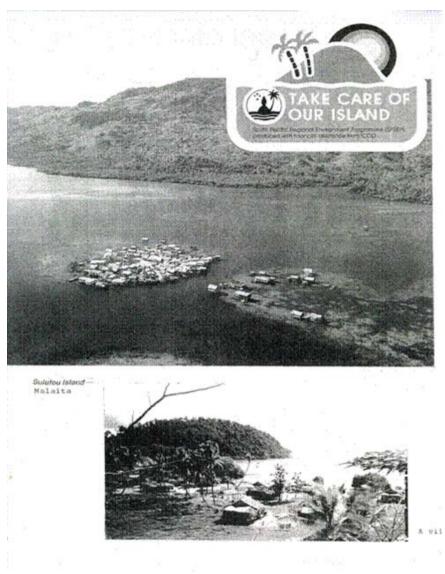
INTERPRETATION:

Solomon Islands' territory is located between 5° s.l. and 13° s.l., 155.5° e.l. and 170.5° e.l. Common borders exist with Papua New Guinea (N, NW, W, SW), Australia (S) and Vanuatu (SE). The Exclusive Economic Zone (EEZ) for fishing and mineral rights covers 632,964 km² or 60 times the amount of Solomon Islands' land area. This large EEZ is due to the outlaying Temotu Islands and to prominent reefs and atolls such as Ontong Java, Sikaiana, Duff Islands and the Indispensable Reefs.

Six major islands, 15 medium and about 400 minor islands total a size of 28,373 km². Longest distances (Outer Islands) between Alu / Shortland Islands and Fatutaka / Temotu amount to 1,670 km, between Ontong Java and Indispensable Reefs 890 km. Longest distances (Core Islands) between Taro Island / Choiseul and Santa Catalina / Makira are 810 km, between Manoaba / North Malaita and Mbabanakira / South Guadalcanal 195 km. Solomon Islands' core island territorial area is compact compared to surrounding scattered islands, but not located centrally within its EEZ.

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MAP 2: CLIMATE AND TOPOGRAPHY

MAIN FEATURES:

<u>Topography</u>: Logging restricted in areas above 400 meters altitude due to erosive potential. Existence of steep-sided ridges increases danger of soil erosion (densely shaded regions in centers of all major islands). Volcanoes indicate points of high altitudes and Solomon Islands'

potential for volcanic eruptions.

<u>Shore Structure</u>: Mangrove areas, reefs and lagoons constitute important biotopes for literal / maritime plant and animal life and should be considered for environmental conservation (Southeast Choiseul, New Georgia, Isabel, Ngela Sule, Reef and Russell islands).

Regional and Annual Rainfall and Wind Pattern: Rainfall isolines in 1,000 mm intervals, lesser amounts have to be extrapolated (to know upward or downward extrapolation between isolines of same amount, see for neighboring isolines). Annual rainfall distribution can be estimated by direction of trade winds, which bring most rain in seaward regions.

Cyclone Routes: Although probably incomplete (1967-87), the paths' annual distribution indicates a concentration during the first half of the year and is highest in January and February, Their direction is generally southwards; since cyclones are generated at the equator, however, they often change to a latitude-parallel direction.

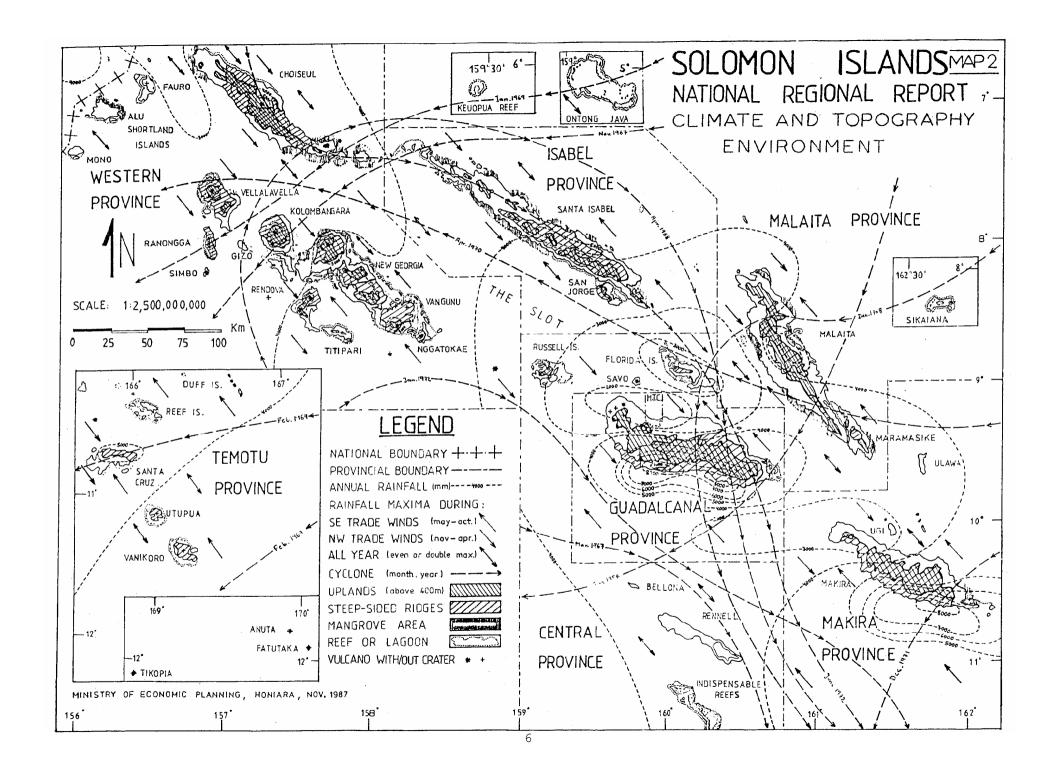
INTERPRETATION:

A general description of Solomon Islands could distinguish between the two lines of inner major and medium volcanic islands paralleling the 'Slot', and the outer medium and minor islands of both volcanic and coral origin.

With regard to position, topography, climate, soil, vegetation and coastal exposure, the twenty-one larger islands show great variations both within and among each other: Topography is generally rough with steep-sided ridges on the larger volcanic islands, thus limiting inland communication and agricultural production. While these islands have good volcanic soils, though with high erosive potential, the smaller islands consist of carbonic or podsolic soils. Indigenous vegetation is a three-layer rainforest with misty forests at altitudes above 800m, and below 800m in regions of high rainfall exposure.

Unsheltered coastal exposure poses a constraint to rural fishing activities mainly at the south coasts of the southern Slot islands (i.e. Guadalcanal and Makira), and at conic volcanic islands such as Savo or Kolombangara. Frequent cyclones flood riverbeds and devastate the surrounding low-lying areas. Lack of adequate anchorages also affects interregional communication, aggravated by the vast distances to the outer islands, i.e. Shortlands, Bellona, Rennell, Temotu Islands, Sikaiana and Ontong Java. Situated on the volcanic rim of the pacific plate, geo-tectonic movements often cause earthquakes and always threaten with volcanic eruptions.

The north coast of Guadalcanal is the only area of low precipitation and a pronounced dry season, since the summerly trade winds rain off mostly over New Georgia, Isabel and Malaita. In contrast, annual rainfall totals of up to 9,000 mm at Guadalcanal's and Makira's weather coasts and above 5,000 mm in the mountainous areas of other major islands increase the erosive potential in those areas, but are well distributed throughout the year and provide for sufficient perennial river flow. However, the islands are too small and cone-shaped to enable the creation of lakes with the exception of Lake TeNggano (brackish water) on Rennell Island and Lee's Lake on Guadalcanal.



tap 2B Climate

SUNSHINE HOURS FOR HENDERSON AIRPORT

Year		Jan	Feb	Mor	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1985	Total Aver.	175.0 5.6	180.6	164.9	211.2	211.5	212.7	192.4 6.2	181.4 5.9	221.3 7.4	219.9	176.5 5.9	133.8
1986	Total Aver.					172.8 5.6:							
1987	Totol Aver					197.7							
1988	Total Aver.	163.0	153.5 5.3	249.1 8.0	195.5 6.5	238.4 7.7	221.6 7.4	187.0	217.5	173.5 5.8	181.7 5.9	221.9	144.3 4.7
1989	Total Aver.	168.3 5.4	109.2	169.9	194.4	213.2	140.8	248.1	246.1 7.9	222.2 7.4	285.9 8.6	239.0 8.0	182.7 5.9

Total 1676.1 1376.9 1772.7 1741.8 1928.3 1901.3 1772.7 2109.7 1899.6 2270.8 1902.4 1684.6 Monthly Aver.

Totel 186.2 153.0 197.0 193.5 214.3 211.3 177.3 211.0 190.0 227.1 211.4 187.2

HENDERSON NUMBER TOTAL RAINFALL (MM) FROM 1985 TO 1989

	YEAR	JAN	131	MAR	APR	MAY	JIN	JUL	AUG	SEP	001	NOV	DEC	TOTAL	AVER	
	1985	259.8	185,4	457.2	99.2	99.4	52.4	119.6	124.0	44.2	123.4	332.8	330.0	2227.4	185.6	
	8/0	- 17	13	22	8	16	8	15	15	10	. 9	18	17	168	14	
	1986	205.0	272.8	339.6	199.6	405.0	21.8	73.8	105.2	137.6		224.0	79.2	2070.4	172.5	
	R/O	15	19	12	18	12	11	8	-7	15	5	- 8	12	142	12	
	1987	22.8	293.0	138.6	52.3	92.0	1.0	69.4	22.2	50.2	51.6	138.4	264.4	1195.9	99-7	
	R/D	6	17	16	12	13	1	7	2	7	10	11	16	118	10	
	1988	237.6	357.4	166.0	183.8	26.6	37.2	106.2	137.4	101.2	209.4	- 384.2	-712.5	2639.5	220.0	
	R/D	22	20	12	13	5	12	19	20	17		15				
	1989	556.8	421.6	205.8	317.8		71.8	22.4	24.2	63.2				1642.8	410.7	
	R/D	24	23	18	20	17	9	-10	5	13				139	35	
	TOTAL	4096,4	4452.4	3775.4	2442.2	1947.4	872.8	1509.0	1499.4	1514.8	1350.7	2615.6	3000.5	29092.4	2598.2	
	11/0					186										
,																
	AVER.	273.1	296.8	251.7	162,8	129.8	58.2	100.6	100.0	101.0	88.7	175.5	200.0	1937.1	161,4	
	R/D					12							14		14	
	NG.YR	15	15	15	15	15	15	15	15	15	15	15	15	180	15	
	11/4 11/4	1.7	- 17	.,	.,	.,	- '/	. ,	'/	.,	12		.,		. ,	

KEY: R/b-RAINDAYS



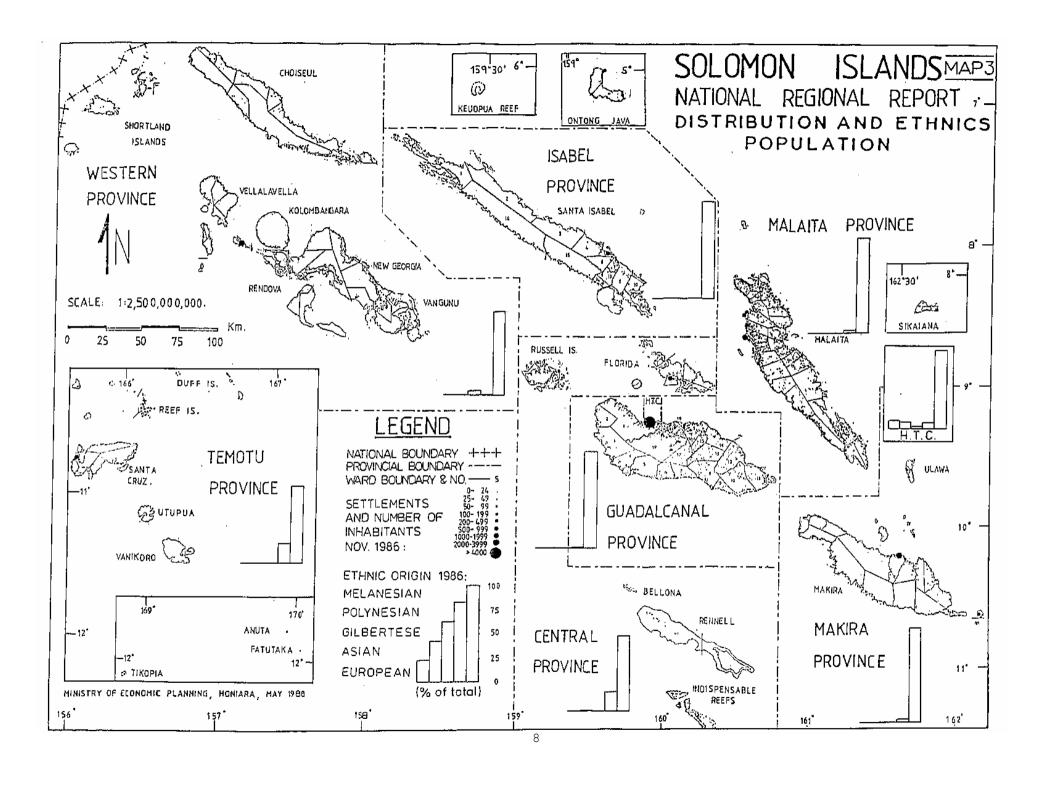
Sun, sea and sand at Siota, Gela.



A village in Langalanga Lagoon



Santa Catalina

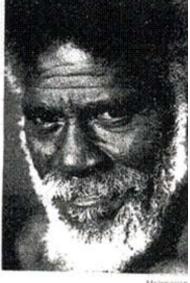


Polynesian woman from Onlong Java, the northernnost Island in the Solomons and just live degrees south of the equator



Kwalo, Malaita, man with human-teeth necidace

Polynesian girl from Tikopia island, one of the three easternmost outliers of the Solomon Islands



man Irom Novin

MAP 3: POPULATION DISTRIBUTION AND ETHNICS

MAIN FEATURES:

<u>Ward Boundaries and Numbers</u>: Correspond with Solomon Islands 1986 Population Census for references (missing numbers are on Map 4). Small ward area is an indicator for high population density (e.g. Malaita, South Isabel, North Guadalcanal).

<u>Population Distribution</u>: Population size is in 9 categories, Due to map reduction, the two smallest sizes are almost undistinguishable (especially in Western Province), although occurring with highest frequency. The three largest categories comprise only Honiara and Provincial Centers.

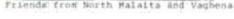
<u>Ethnic Distribution Indicators</u>: Due to small number of non-Melanesian ethnics, their charts might be slightly exaggerated. European bar chart subsumes all Caucasian ethnics, Asians consist mainly of Chinese origins.

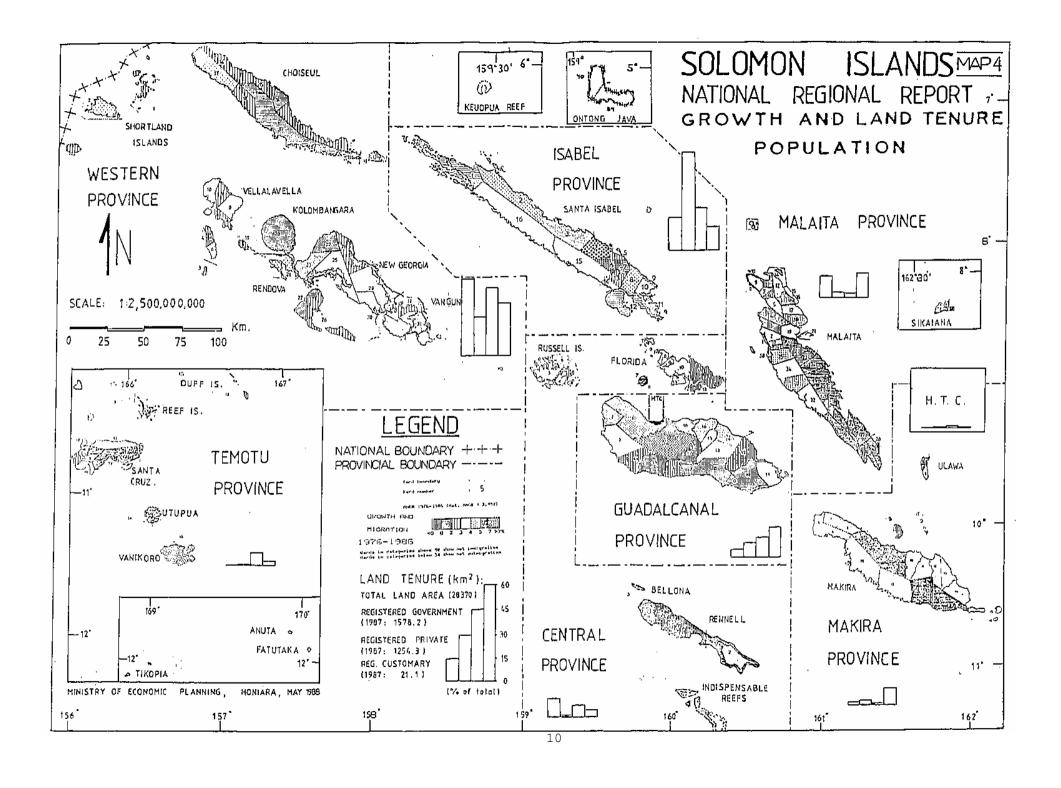
INTERPRETATION:

The capital city Honiara with just over 30,000 inhabitants has the role of a primate city, encompassing more than 10% of the total population. The population difference to Gizo, Solomon Islands' next largest town, is almost 90%. Also some provincial centers, their origin dating back to the beginning of British colonial rule with different settlement backgrounds, suffer from serious limitations: Tulagi and Gizo for instance are both situated on small islands with periodical breakdowns of water supply and limited food production.

While the main ethnic group with about 95% of the total population is Melanesian, a large spectrum of Polynesians, Micronesians, Europeans, Chinese and other Asians concentrate in. the capital Honiara. Polynesians are concentrated on the outer atoll islands such as Bellona, Rennell, Ontong Java, Sikaiana, Reefs, Tikopia and Anuta. Gilbertese settlements exist on Wagina and Gizo islands in Western Province; many Asians live in Gizo and other Western Province centers. The main part of all ethnic minor groups, however, live in the capital Honiara, either for employment reasons like the Europeans and Chinese arriving directly from their home countries, or through internal migration like all other groups.

A large variety of languages (more than 80 without counting local dialects) spoken in Solomon Islands poses problems only in remote areas, which have not yet been penetrated by the lingua franca 'Pijin Inglis'. This holds true mainly for the outer islands and the inner parts of the larger central islands. English as commercial and administrative language spreads more and more from Honiara via the provincial centers also into rural areas.







Children in school

POPULATION PROJECTIONS

The census figures for 1976 and 1986 were used to calculate annual growth rates for each Province/District, then these were applied to obtain the estimated populations in 1994 and 2000.

TEST 1984 11.042 72,151 48.435 53,485 55,250 15,749 13,545 78,915 256342 27,826 18,457 13.048 16,400 17,460 29,555 Central 83,235 71,214 27,795 45,545 45, 833 54,495 Sagan Labourt 31.822 52,141 22,990 26.555 30, 411 BUECAPA. 13, 920 195,353 75.420 80.033 84,658 Bukhte/Sheve 37,290 16,440 33,644 20,015 12,727 13,070 17,475 14.781 15.746 19.036 237,645 245,085 264,045 285,376 307,938 386,325

Solomons set for POPULATION BOOM

At a Talk's fevor's mentions on propositions growth and its persblower in heid at the Mandaton Thread on 22-25 March in delegation were took that the population of the Solomon balends is growing at 3.5 per over a year. This means that some statistics are been to overy 200 people soury year.

The total popularium of the governy at the last commun is Neromine 1984 as 195,195 - nearly half as high again as in 1974. This is away the highest races, or population growth is the world. In 2016 the population is hopected as esset

It is thought that this high join of greath will done have for many years. This is because there is a high properties of young people (neerly half the population is mader if years old) who will soon have children of thate see.

uniform of Chair see. The creams found than of all people aged fine and own walf had no loomal modulation. Ments one in films of those only in the order of those one in the country of th

Tores to five times some premary achieved the form times are now.

Of projets agad 16 years and some, of projets agad 16 years and some, other acres and page 16 years and some, and the others work angugad in village work. The assumption is thus more accratic projets will hear to more for more than the first projets will hear to more for more;

It was poissed out that family plausing

It was pointed not that family plussing campaigns do not above receiving result to a fulling population. However, if fectors like income, education, chosen in the infector and for a second result of occupation, commencion tree and Pleasing of occupation, commencions tree and Pleasing of occupation of the end probability deciries and opposition and the occupation occurs to the occupation of the occupation occupation of the occupation occupati

people to reach rural areas. But he admitted it was difficult areas to maintain healt services tibe education as their primary level, and almost impossible to reason manual manual trains around, manual trains around them.



MAP 4: POPULATION GROWTH AND LAND TENURE

MAIN FEATURES:

Ward Boundaries and Numbers: Correspond with SI 1986 Population Census for reference.

Annual Average Population Growth: Calculated from intercensus period 1976-86 in percent. National Annual Average Growth Rate (AAGR) for this period is 3.9%. Allowing 0.5% either way to calculation and surveying errors, an AAGR above 4% shows a general net (immigration minus outmigration) immigration, below 3% a general net outmigration without indicating the target of migration.

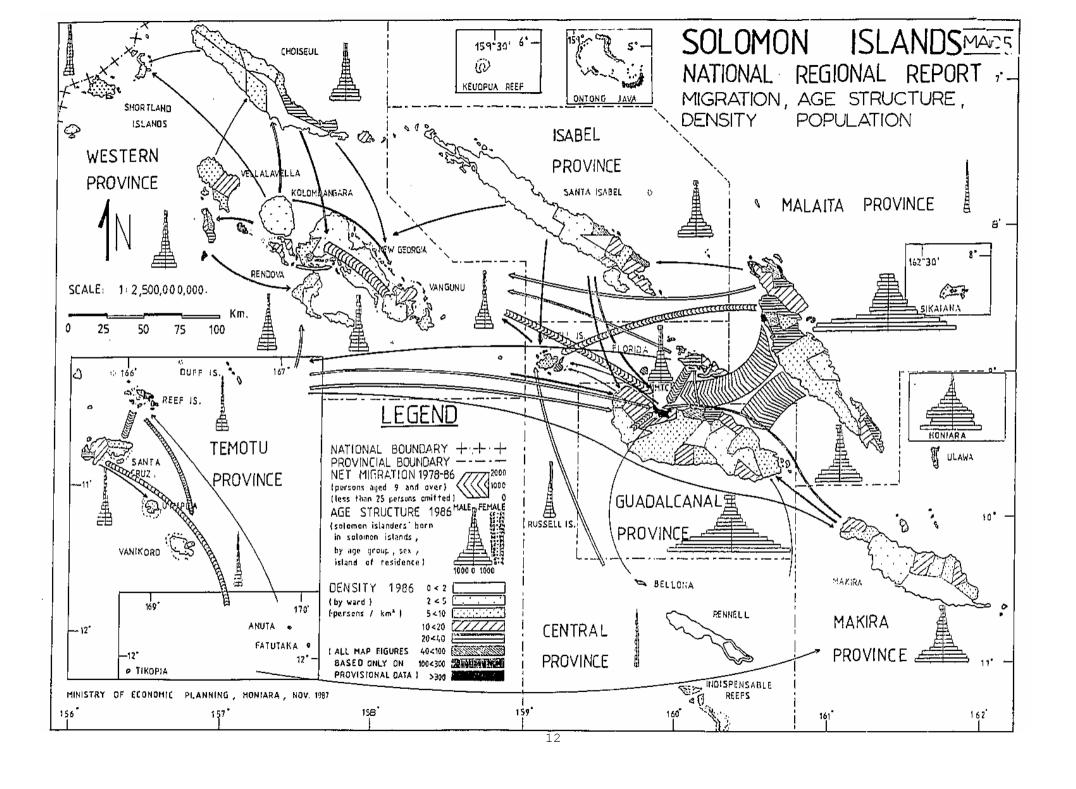
<u>Land Registration Forms:</u> Registered government land does not distinguish between provincial or central-government registered, registered private land does not distinguish between expatriate or mission leasehold and Solomon Islands' citizen freehold land. Difference between registered government, private and customary land, and total land area is unregistered customary land.

INTERPRETATION:

At the present pace Honiara's population is doubling every 10 years. Space for settlement within the Honiara Town Council area will run out within 5 years. The SI Government therefore attempts to decentralize the population growth by developing the new township of Noro Port in Western Province, and by establishing one rural development center in each province under the Rural Services Project.

Although the smaller Central and Temotu provinces show an AAGR below 3%, AGGR in Malaita Province is lowest with 2.7%. Assuming homogeneous fertility and mortality rates, this difference from the national AAGR of 3.5% for a population of 80,000 would mean an annual net outmigration of more than 600 people. With this national AAGR of 3.5% (CBR 47- CDR 12), population density between the previous census of 1976 and the recent 1986 census increased from 6.9 to 10.1 persons per km², meaning a doubling of Solomon Islands population within 18 years to the present number of 286,000. Assuming the same growth rate in the near future, Solomon Islands' population will almost double by the year 2000.

Negotiating partners for land compensation agreements are very difficult to identify, whether for mining, logging or infrastructural construction, since hardly any customary land is registered. In 1986, customary land constituted 86.7% of Solomon Islands' total area, of which a bare 21 km² were registered. The main problem is to record boundaries of clans in order to legalize customary land tenure systems without them, and to give negotiating powers to local chiefs. However, customary land registration, although proposed in the Land Recording Act, is not compulsory, e.g. in AOAs.



MAP 5: MIGRATION, AGE STRUCTURE, DENSITY

MAIN FFATURES:

<u>Total Net Migration 1978-86</u>: Arrows indicate direction and total net (immigration minus outmigration) number of migrants between 1978 and 1986 for persons aged 9 years and older in 1986. Migration arrows for numbers of 25 and fewer net migrants are omitted (net migration means that there might have been 3,000 persons moving from Makira to Guadalcanal and 2,989 from Guadalcanal to Makira without showing on the map).

Age Structure: Total population numbers distinguish between males and females in 5-year steps (topmost step is 70 years and over) for all major islands and medium/minor island groups or lagoons. Pyramids are generally used to indicate labor migration (especially from Malaita to Honiara, Guadalcanal and Russell Islands).

<u>Population Density</u>: 7 categories with logarithmically increasing number of persons per km². Categories shaded where above national average {10 persons per km² in 1986). Population densities were calculated on ward level and consequently do not represent true density distribution, since most people settle along the coastline.

INTERPRETATION:

Overall population densities are very accentuated in some regions with present trends further enforcing this polarization. Migration for the last fifty years existed to a smaller extent as a valve to release landless people who could not find work in the local subsistence sector. The 1986 Solomon Islands Population Census revealed changes in the migration pattern since 1978: Central Province for instance started to lose population through migration to Western and Temotu Province; probably labor remigration from Tulagi and the Russell Islands; Guadalcanal Province began to lose heavily to Honiara; and Western Province ceased to constitute an immigration destination of Malaitan labor.

Due to lack of agricultural opportunities and poor communication, most Solomon Islands inhabitants moved from inland to coast during the last hundred years, which resulted in a virtual discharge of most inner parts of the larger islands. The only exception of the major islands is Malaita, where population pressure and traditional lifestyles furthered inland settlements, and Russell Islands as representative of the medium islands, where plantation agriculture pushed smallholder farming inland and onto the surrounding islands. However, while Russell islanders still find wage employment at the local copra plantations, disputes over distribution and allocation of customary land have been forcing a high proportion of Malaitans into other provinces over the past fifty years. The proportion of population living outside their native provinces increased from 10.5% in 1970 to 17% in 1986.

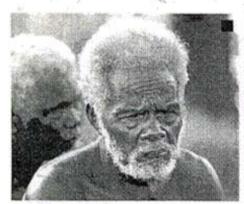
This migration takes place mainly from the denser populated regions of Malaita into Honiara, North Guadalcanal and the Russell Islands. Over the last eight years more than 5,000 people left Malaita mainly for the cash economies of Honiara's commercial sector and North Guadalcanal's palm-oil plantations, or to replace Western laborers on Russell's copra plantations.

All medium and minor islands within the Slot are densely (i.e. above average) populated, similar to the outer islands, where outmigration - in contrast to the former - functions as valve against population pressure on poor lands. Presently, for instance, more Sikaiana people live in Honiara than back on their tiny atoll. A high number of emigrants from Temotu's outer islands and the Reef Islands found wage employment much closer at Lata or settled on Nendo, Utupua and Vanikoro.

Population age structure corresponds with this migration pattern: Passive economic regions such as Malaita, Isabel, Makira, Choiseul and Temotu's outer islands show a deficit of male population aged between 15 and 45 years, while active regions such as Guadalcanal including Honiara, Russells and the Roviana Lagoon have a surplus of male population. In contrast, other outer islands such as Rennell / Bellona, Ontong Java and the Shortlands, and some Western Province islands, have an average age distribution.

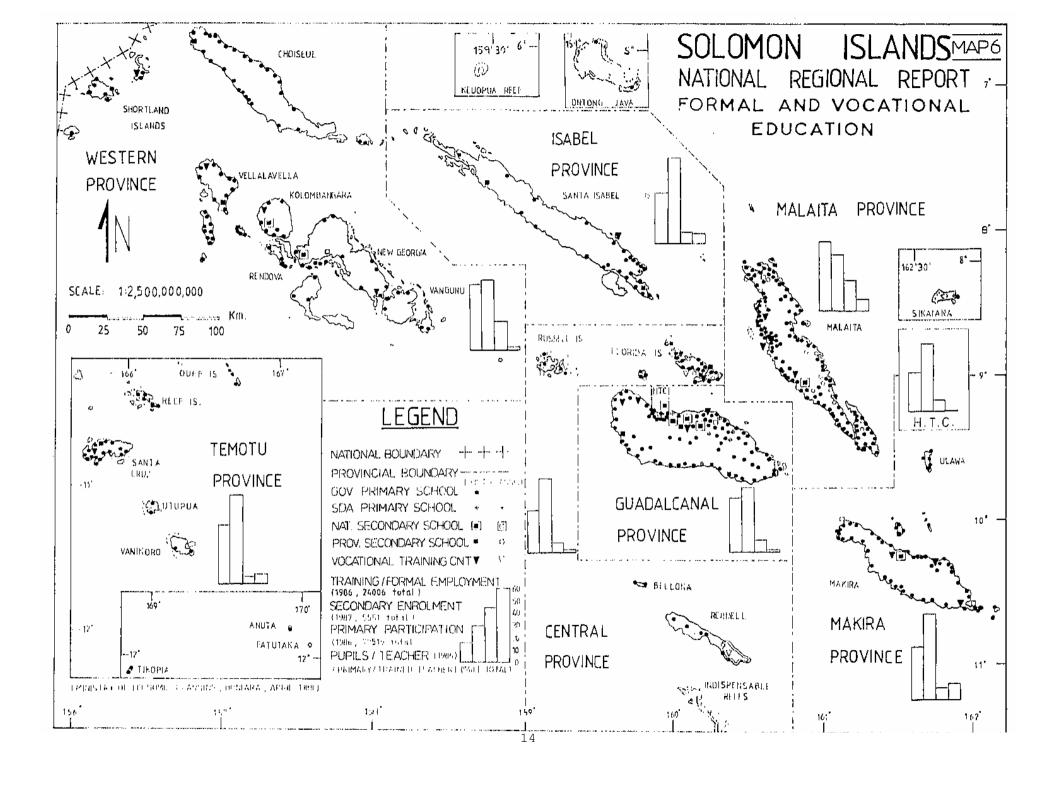






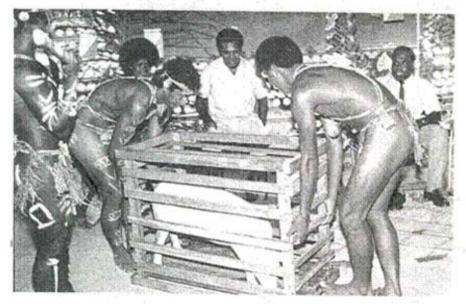


Paces in the Solomons. Where are they from?





Headmaster of Su'u Secondary School, Samson, speaking at the 1989 End-of-year Prize Giving.



St. Martins Rural Training Centra End-of-year Prize Giving

MAP 6: FORMAL AND VOCATIONAL EDUCATION

MAIN FEATURES:

<u>Primary Schools</u>: Distinguish between government and church schools (except Western Province) both existing (1987) and proposed (until 1990), SDA primary schools generally have better financial resources and more trained teachers.

<u>Secondary Schools</u>: Existing in 1987 and proposed for later these distinguish between National (up to Form VI, 300 students and more) and Provincial (up to Form III, less than 300 students) Secondary Schools (both categories in 1987 totaled about 2,800 students each).

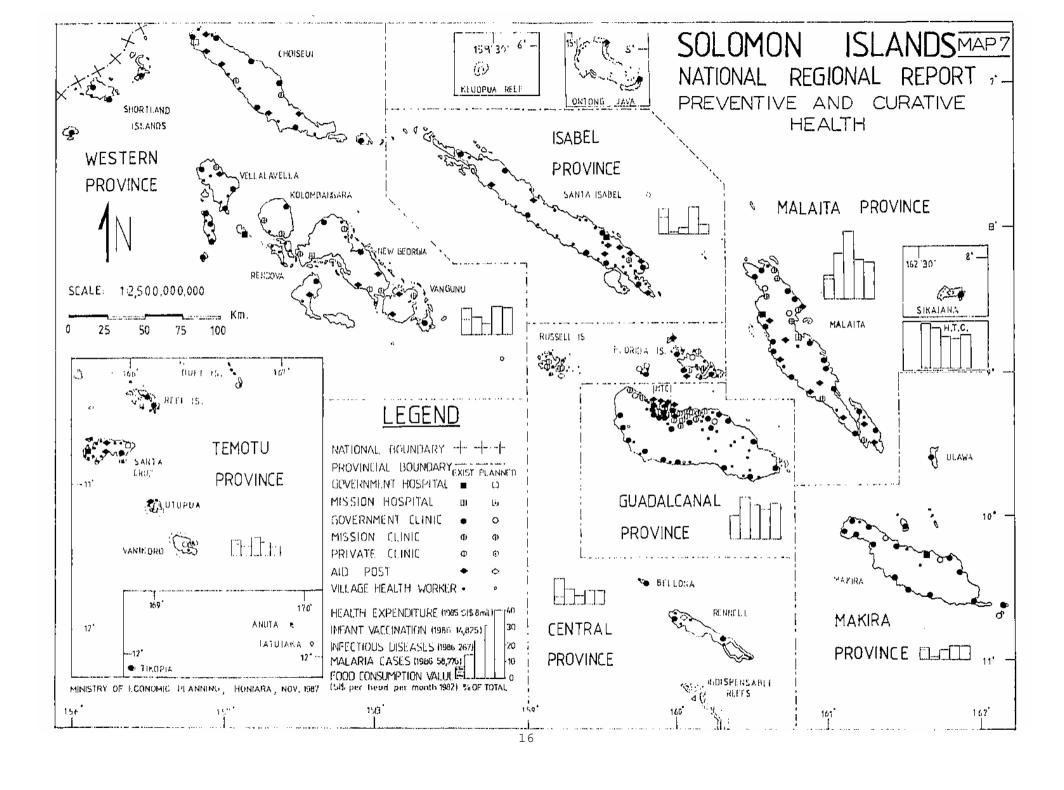
<u>Vocational Training Centers</u>: Mostly run by a church or mission, these training centers cater for either agricultural or other artisanal training. Generally, they offer-between 15 and 50 student places, some are proposed for expansion or new establishment.

Educational and Training Indicators: Training-to-formal-employment ratio indicates the chance of trained persons to find employment in their own province. 1987 secondary enrolment is the enrolment percentage of the individual province as of Solomon Islands' total. Primary participation rate shows the percentage of school attending to school-age population in 1986. The pupil-per-teacher ratio is the number of students per teachers in 1986, i.e. size of classes.

INTERPRETATION:

In 1986, the primary school participation rate of 6-14 year-old children ranged between 45% in Malaita and 70% in Temotu with a national average of 55%. Malaita has the worst pupil to trained teacher ratio (56) compared to Honiara and the national average of 42. Government primary schools (404 in 1986) for third-world standards are quite numerous and well distributed. SDA runs 52 primary schools, which cater almost exclusively for Western, Guadalcanal and Malaita provinces. Excerpt for Temotu, Makira and Central provinces, two provincial secondary schools in each province house more than 200 students each. Their biggest problems are coordinated transport of students to and from their home villages, lack of space to extend their food gardens and general maintenance problems. On contrast, most national secondary schools are or were mission schools and consequently concentrated in Guadalcanal (4), Western (2), Makira (1) and Malaita (1).

Social-service distance indicators are agreed upon in the Ministry of Education: Objective until the year 2000 is a maximum walking time of 60 minutes to any primary school. Tertiary education and vocational training in Solomon Islands are still insufficient: There exist only two tertiary institutions in Solomon Islands, comprising the Solomon Islands College of Higher Education (SICHE) and a USP Extension, both in Honiara. 15 vocational training centers, although well distributed over the seven provinces, offer training opportunities to a total of fewer than 800 people a year.





Opening of the Stansfield Dental Clinic at Central Hospital (No.9), Honiara,



Nurses at Atoifi Adventist Hospital, Malaita,

MAP 7: PREVENTIVE AND CURATIVE HEALTH

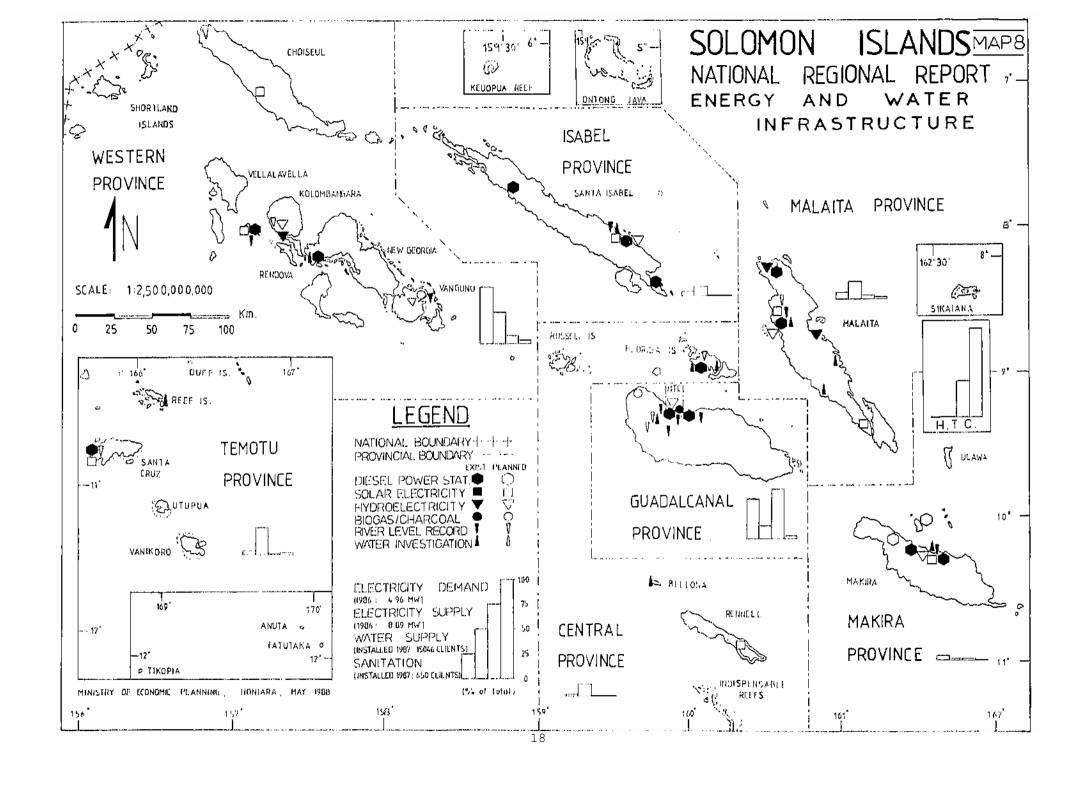
MAIN FFATURES:

<u>Distribution of Health Facilities</u>: Indicates existing (1987) and proposed (until 1990) location of hospitals, clinics, aid posts and village health workers. Private clinics comprise commercial and industrial clinics. Slight incongruencies are possible due to varying definitions of categories within Solomon Islands' referral health system.

<u>Health and Nutrition Indicators</u>: Health expenditure indicates all government, industry and mission expenditure in. 1985 for facilities, environmental health and health education, but excludes Ministry of Health and Medical Services central administration, malaria administration and foreign expenditure. Infant vaccination in 1986 against BCG, DPT and Polio. Infectious diseases in 1986 comprised leprosy and tuberculosis. Malaria cases were positive blood slights only, undetected or not registered cases are not included in 1986. Food consumption value expressed in SB\$ per head and month indicated the sum of cash and non-cash expenditures for food and beverages in 1982.

INTERPRETATION:

The country's health facilities consist of a hierarchical, i.e. referral system from village health workers (6 weeks training), aid posts (6 months training), clinics (3 years trained nurse), area health centers (with additional facilities) in the provincial centers up to hospitals (doctor and operation room) in Honiara, Gizo, Munda (both Western Province), Kirakira (Makira), Lata (Temotu), Auki and Atoifi (both Malaita Province). The National Health Plan 1986-89 (MHMS, Honiara, March 1986) recommends a minimum of 1,500 clients in the corresponding catchment area to be most cost effective for clinics. Regional planning furthermore has to take account of missionary and private clinics (many of which cluster around Honiara) to avoid duplications and give priority to non-served areas, even though private clinics charge for services and equipment. Social service indicators plan a maximum walking distance of 120 minutes to a clinic. Indicators, such as the number of malaria cases (in 1986 almost 50% of total in Guadalcanal including Honiara, 10% each in Malaita, Western and Central Province) or of tuberculosis cases (40% of total in Malaita, 30% in Guadalcanal including Honiara) seem to be not very accurate because of the referral system and of climatic / biological preconditions. From a survey on primary health care and disease prevention, diet patterns and values of total food consumption (SB\$/person/month) seemed to be more relevant, although slightly outdated (1982): Honiara (low income group) 20. Western 15.5. Central 15. Guadalcanal 13. Malaita 13. Temotu 8.5 and, Makira 7 SB\$.



Boys ready for Wogasia Makira Province

MAP 8: ENERGY AND WATER

MAIN FEATURES:

<u>Energy Generation</u>: Existing (1988) and planned (until 1990) diesel, solar, hydro, biogas / charcoal power stations (in 1986, energy almost entirely generated by diesel power stations).

<u>Ground- and Surface-Water Investigation</u>: River level recording stations (mainly around Honiara and provincial centers) for registration of river flow. Water investigations are permanent rainfall recording sites and onetime groundwater tests.

Energy and Water Supply and Sanitation Indicators: 1986 electricity demand and supply is annual total and does not consider peak demand periods. Water supply and sanitation systems installed during 1987 (targeted 30,000 water supply and 6,000 sanitation) comprised hand-pumped wells (-), gravity fed pipelines (68), rain catchment tanks (37) and mechanically pumped wells (-).

INTERPRETATION:

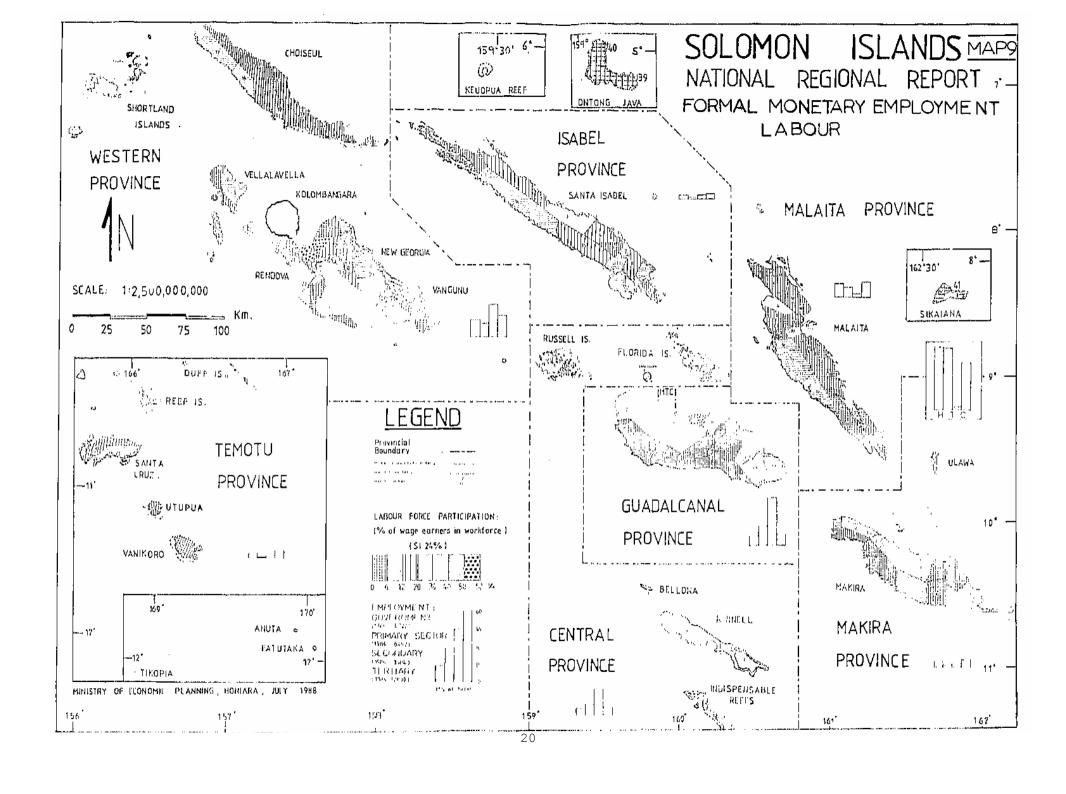
Planning and implementation of rural water supply and sanitation is devolved to the provinces, while the central government assumes responsibility for the water supply of urban areas such as Honiara, Munda and Gizo. The central government also renders services and advice to the other provincial centers. Of the more than 23,000 people connected to safe drinking water during 1986 (mostly through gravity-fed pipelines or rainwater-catchment tanks), 7,500 alone lived on Guadalcanal.

Location and type of water supply also depend on the climatic environment: Catchment tanks for instance are the only water source on small islands without perennial rivers. To be most cost effective, gravity-fed systems need a minimum of 100-200 users, while a 2,000 gallon water tank suffices for 80-100 people. However, villages can be charged a minimum price for water systems to be used for maintenance and to assure assistance from the villagers.

The Environmental Health Division intends to provide potable water and adequate sanitation within 5 minutes (100 meters) walking distance to every village in Solomon Islands by the end of the UN Water and Sanitation Decade in 1990.

Measurement of energy provision is very difficult in the Solomon Islands: Energy in the form of electricity is provided in all main centers, however, statistics are incomplete and other energy sources such as fuel wood are not included.

The Rural Electrification Scheme plans to establish 500 solar-powered mini-stations. Feasibility of charcoal, biogas, wind, tidal and thermal energy generation is also being investigated.



Pole and-line fishing in Solomons waters



A busy intersection in central Honiara

MAP 9: FORMAL MONTETARY EMPLOYMENT

MAIN FFATURES:

<u>Ward Boundaries and Numbers</u>: Correspond with Solomon Islands 1986 Population Census boundaries for reference.

<u>Labor-Force Participation</u>: Expresses the percentage of wage earners in Solomon Islands' potential workforce during the week before the census. Solomon Islands total percentage is 24%. The middle 20-30% category is left blank to allow for deviation and calculation errors. Shaded categories indicate labor force participation below national average, dotted categories above.

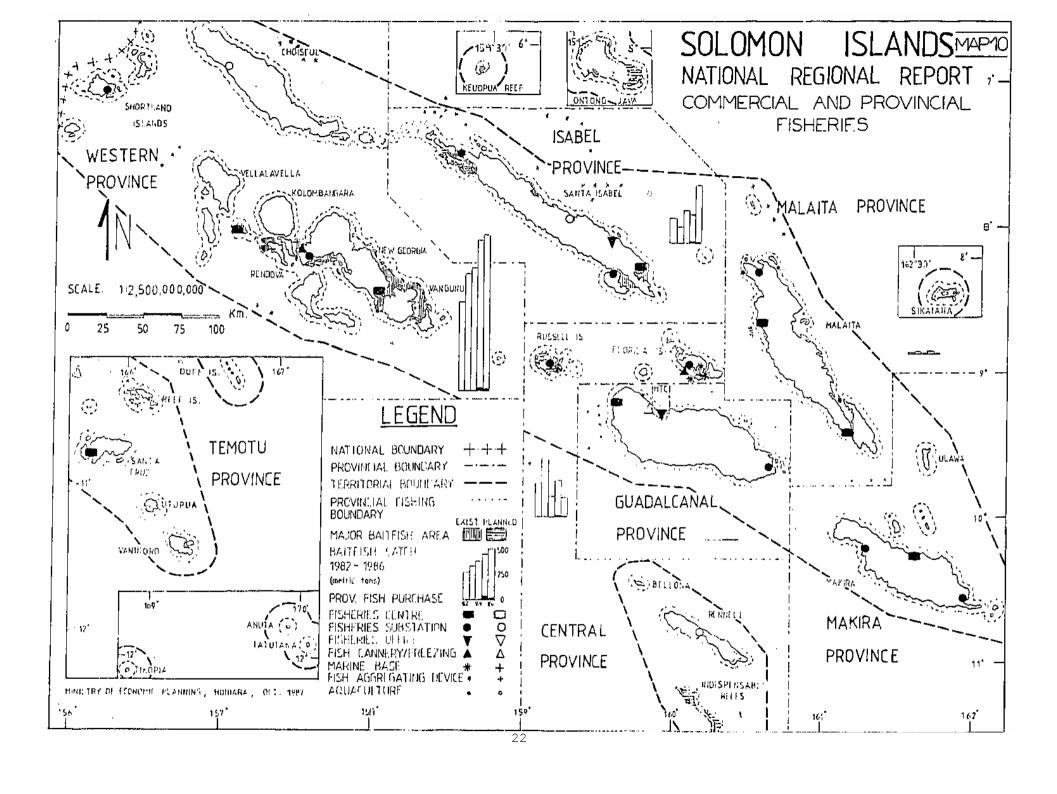
Employment Indicators: Are expressed in percentage of Solomon Islands 1988 total (in brackets underneath indicator title) and distinguish between (both central and provincial) government employment, and employment in the primary (agriculture, mining, logging, fishing), secondary (commerce, industry and construction) and tertiary (transport, trade, energy and water, etc.) sectors.

INTERPRETATION:

The main reason for outmigration is the low level of formal employment relative to population size. In 1986, on average only 10% of Solomon Islands population was formally employed (provincial averages are: Western 14.7%, Isabel 10.7%, Central 23.0%, Guadalcanal 20.0%, Honiara 47.9%, Malaita 6.8%, Makira 8.0%, Temotu 17.1%). The total of all income-generating activities (including employers and self-employed) is generally 3-5% higher than pure wage employment. 70% of all formal employees in Guadalcanal and Central Province and more than 50% in Western Province work in the primary sector.

However, the formal employment rate of Malaita Province was as low as 2%, in contrast to Honiara's 30% and Guadalcanal Province's 10%. Central Province's high percentage (15%) is mainly due to private-business employment (i.e. on Levers Pacific copra plantations), while a formal private sector hardly exists in Malaita, Isabel, Makira or Temotu province. Often one wage earner in Honiara or in the provincial centers has to support ten heads and more by lodging and feeding them. Especially Honiara plays the important role of a cash supplier to rural communities.

Fluctuation of semi- and unskilled labor is high, since many employees go back to their village after reaching their target amount of savings, after simply getting bored and wanting to work their gardens or to hand their job over to one of their wantoks. Adverse effects on labor productivity are the natural consequence.



A good catch of Bonito being unloaded at Tulagi.



Adult clams in tank west of Honiara

MAP 10: COMMERCIAL AND PROVINCIAL FISHERIES

MAIN FEATURES:

<u>Fishing Boundaries</u>: The territorial sea boundary is drawn in 12 nautical miles distance from either archipelagic baselines connecting prominent landmarks of island groups or from the centers of small detached islands. Provincial fishing boundary is established at 3 nautical miles distance from the low-water mark of the island, or of adjacent lagoon islands or reefs if situated closer than 3 nautical miles.

<u>Major Baitfish Areas</u>: Existing official (1987) and potential (not regarding economical constraints) major baitfish areas. Other potential minor baitfish areas are not shown.

<u>Fisheries Infrastructure</u>: Comprising both existing (1987) and proposed (until 1990) production (aquaculture, fish aggregating devices, distribution (fisheries centers and substations) and administration (fisheries offices) of fish resources.

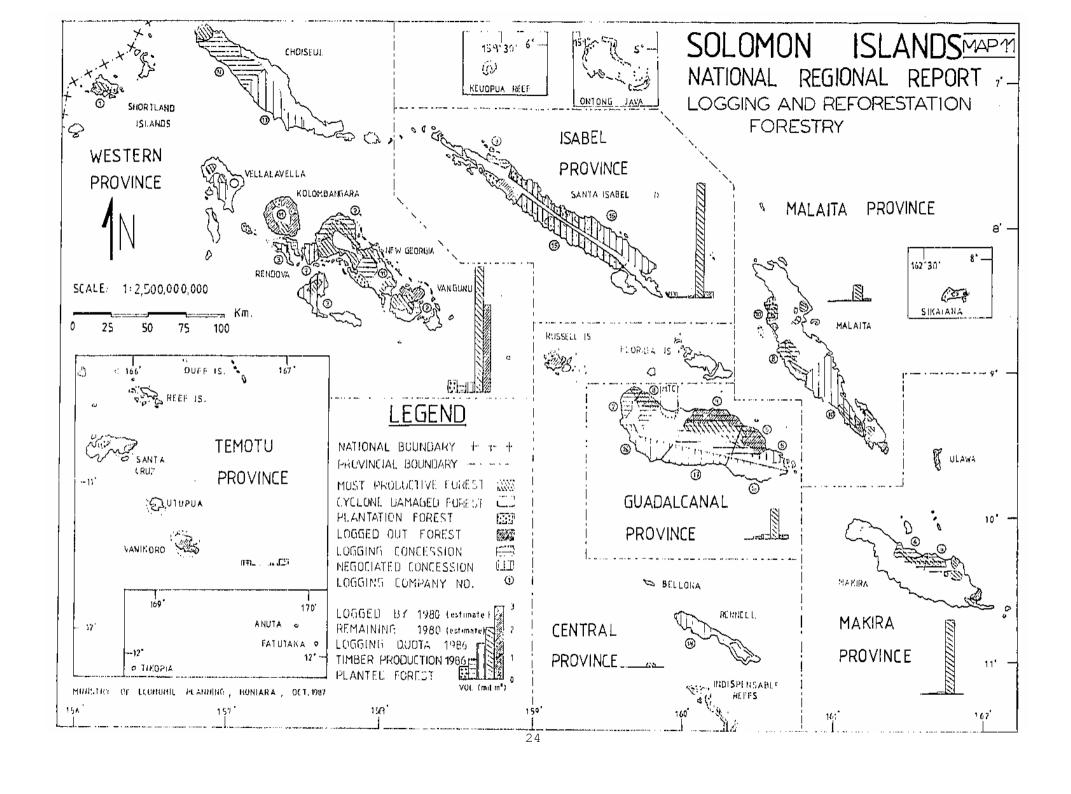
<u>Fishing Indicators</u>: Show baitfish catches between 1982 and 1986 in metric tons, fish purchases by provincial fisheries centers and substations in 1985 and 1986 in metric tons.

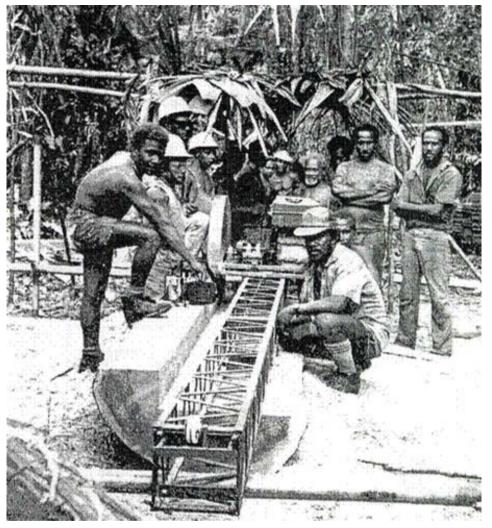
INTERPRETATION:

Western Province constitutes a large proportion of Solomon Islands provincial waters. These boundaries were included into the Provincial Government Act 1981 in order to enable local communities to protect their fishing grounds or to earn royalties from commercial fishing operations.

Provincial fisheries centers and subcenters are being equipped with ice-making machinery, which enables them to trade fish and to provide local fishermen with freezer boxes and ice. However, usually 50% and more of the ice-making facilities lay idle due to lack of spare parts or customers, and have to be constantly repaired or relocated. Most baitfish areas for pole-and-line tuna fishing are situated at Roviana and Marovo Lagoon, a fish freezing plant exists at Tulagi on Ngela Island, and others are planned for Marmara (Guadalcanal) and Noro Port (Western Province).

Other baitfish areas at present exist only at South Ngela (Floridas) and Isabel, the former having the advantage of ship repair facilities and a tuna cannery. However, baitfishing at South Ngela over the past decade started to deplete this feed source for provincial / rural reef fish. Fish Aggregating Devices (bamboo platforms anchored at 1,000-1,800 meters depth) were started to be established in 1980. These FADs constitute a major tuna-fishing ground for purseseiners, most of them anchored within the territorial waters and. legally accessible only to Solomon Islands-operated purse-seiners. In Malaita, FADs are additionally anchored in provincial waters to supply tuna to the rural population.





Members of a self-help housing association in West Are'Are demonstrate their portable "Walkabout Sawmill". The group fells and mills timber from its own land to build low-cost, high-quality houses for the community {Photo: Link Magazine. Honiara)

MAP 11: LOGGING AND REFORESTATION

MAIN FEATURES:

Main Forest Areas: Distinguishes between productive (for logging), cyclone-damaged (until back to 1912), logged (also partially) and plantation (old, completed and current) forests.

<u>Logging Concession Areas</u>: Existing (1986) Logging concession areas and areas under negotiation (1986). Logging company number refers to Annual Forestry Report 1986.

<u>Forestry Indicators</u>: Most forestry statistics are derived from information supplied by logging companies and therefore can be taken as being minimum only. Another problem is the interpretation of statistical data derived from reports showing contrary information. Logged total 4.2 million m³ and remaining total 14.3 million m³ forest 1980 estimates are updated from a 1960 inventory report by major islands. 1986 logging quota total 678,000 m³ and actual timber production (431,560 m³) are given in the Annual Forestry Report 1986. Planting efforts are estimates derived from planted and forests (total 21,872 ha until end 1986).

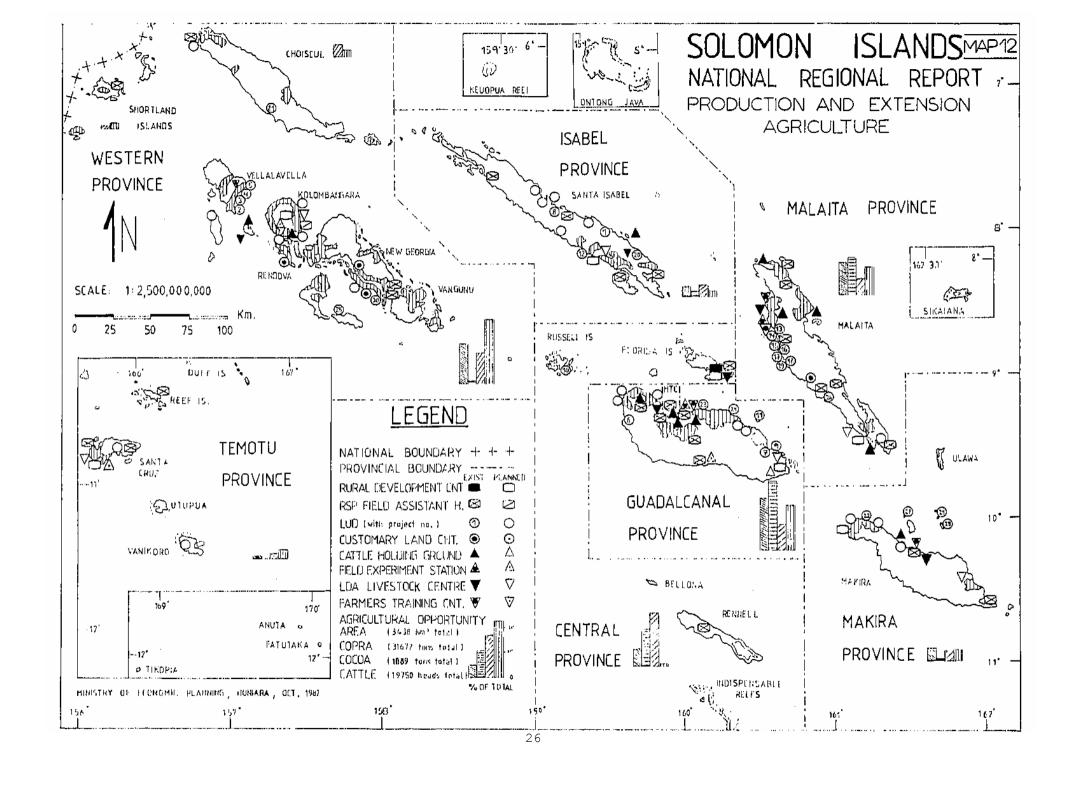
INTERPRETATION:

The natural rainforest over the years has suffered qualitative diminution from natural disasters such as cyclones, floods and forest fires, and quantitative diminution from household gardening (slash-and-burn shifting cultivation) and commercial logging. All these impacts diminished growing timber volume below its reproduction rate to such an extent that estimates anticipated eradication of SI's accessible rainforests within ten years at the logging rate of end 1986 (about 10,000 ha per annum).

Western, Isabel and Makira province are estimated to have the highest potential, but logging in Western Province has progressed very far already. Recent cyclone damage, such as in West Makira in 1981, on Isabel in 1972 or even on Rennell back in 1912 additionally reduced certain tree species and left an ecologically delicate environment. Overlogging and extinction of certain species before the year 2000 could be predicted for Western, Temotu (Kauri forests), Malaita and Guadalcanal province, at the logging rate of 1986. Reforestation efforts (about 3,000 ha per annum) never reached a level to ensure ecological survival. Recent major reforestation projects exist in Western Province, such as on the Shortlands, Gizo, Kolombangara, New Georgia and in Temotu Province mostly on government lands. Recently the first customary-owned land reforestation project was launched in Malaita Province as a pilot project. However, the total logging areas exceed reforestation areas by as much as 7,000 to 8,000 hectares every year, which creates great concerns in the long-term perspective.



Left: Felled logs waiting to be shipped. Guadalcanal, Solomon Islands (Photo; Glenvys Romanes)



Guadalcarus Ptains oil-paim plantation from the air



28 Production



MAP 12: AGRICULTURAL PRODUCTION AND EXTENSION

MAIN FFATURES:

Agricultural Infrastructure: Indicates existing (1987) and proposed (until 1990) Rural Services Project infrastructure (RDC, RSP field assistant houses), Land Use Development projects (project number refers to MAL statistics), livestock activities (Livestock Development Agency centers, cattle holding grounds) and agricultural training and related activities (customary land centers, field experiment stations, farmers training centers).

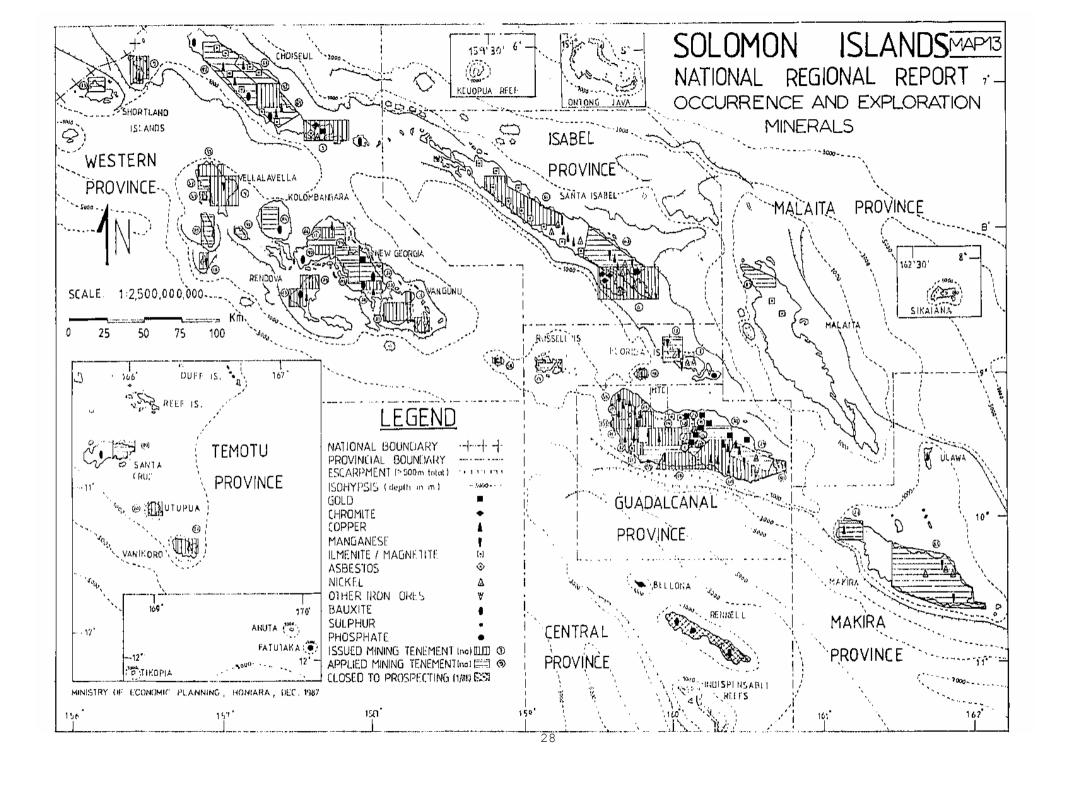
Agricultural Indicators: Agricultural Opportunity Areas constitute large blocks (above 2.5 km² with exception of Isabel) of little used land with above average agricultural potential based on good soils and convenient topography. Copra and cocoa production is expressed in tons as 1986, cattle production in number of heads as 1986 Solomon Islands totals are given in brackets underneath indicator title. All bar charts are expressed in percentage of total.

INTERPRETATION:

Rural Services Project, Land Use Division and Livestock Development Agency attempt to reach also remote AOAs. RSP intends to establish at least one Rural Development Center in each province to provide services such as agricultural training and extension, provincial farms, portable sawmills, oil processing, livestock multiplication, appropriate-technology training, engine maintenance, market, points, wharves and roads, monitoring and evaluation.

LUD helps farmer communities to organize farming on former plantations, which were handed back as registered customary land. Although most agricultural projects so far concentrated on AOAs, extension services are also planned for other areas. In Western Province, they concentrate on Kolombangara, where the former logging station Ringi Cove was taken over by the Solomon Islands Government to put into use the fertile farming land.

Guadalcanal caters for more than 70% of total agricultural export values, although Western Province holds almost 50% of total Agricultural Opportunity Areas. However, their distance both to processing facilities and to major export harbors results in a lower total production of copra compared to Russell's specialized copra plantations (with only 1.5% of total AOA) or of cattle and cocoa compared to Guadalcanal. By 1986, Central and Western province produced already 70% of the national copra crop. While Levers runs large plantations on Russell Islands, copra production in the other provinces is mainly done on smallholdings. Since less than 8% of Western Province's 1984 crop came from the plantation sector, smallholder production levels therefore tend to be much higher. Coconut plantings are very dense in North Malaita, East Isabel and West Choiseul relative to the other island areas, and generally follow the pattern of high population distribution. About 50% of Solomon Islands' total cocoa production comes from Guadalcanal, the other 50% are equally shared by Central and Malaita province.









MAP 13: MINERAL OCCURRENCE AND EXPLORATION

MAIN FEATURES:

<u>Marine Topography</u>: Location of underwater escarpments (totaling more than 500 meters and declining to the open side of the line) and isohypsis (in 1,000 meter steps) was derived from a 1986/87 survey on marine topography.

<u>Mineral Occurrences</u>: Occurrences are speculative or hypothetical reserves (reserves with a low degree of certainty of existence in both quality and quantity terms). Solomon Islands do not have identified reserves, and only Gold Ridge reserves might be recoverable.

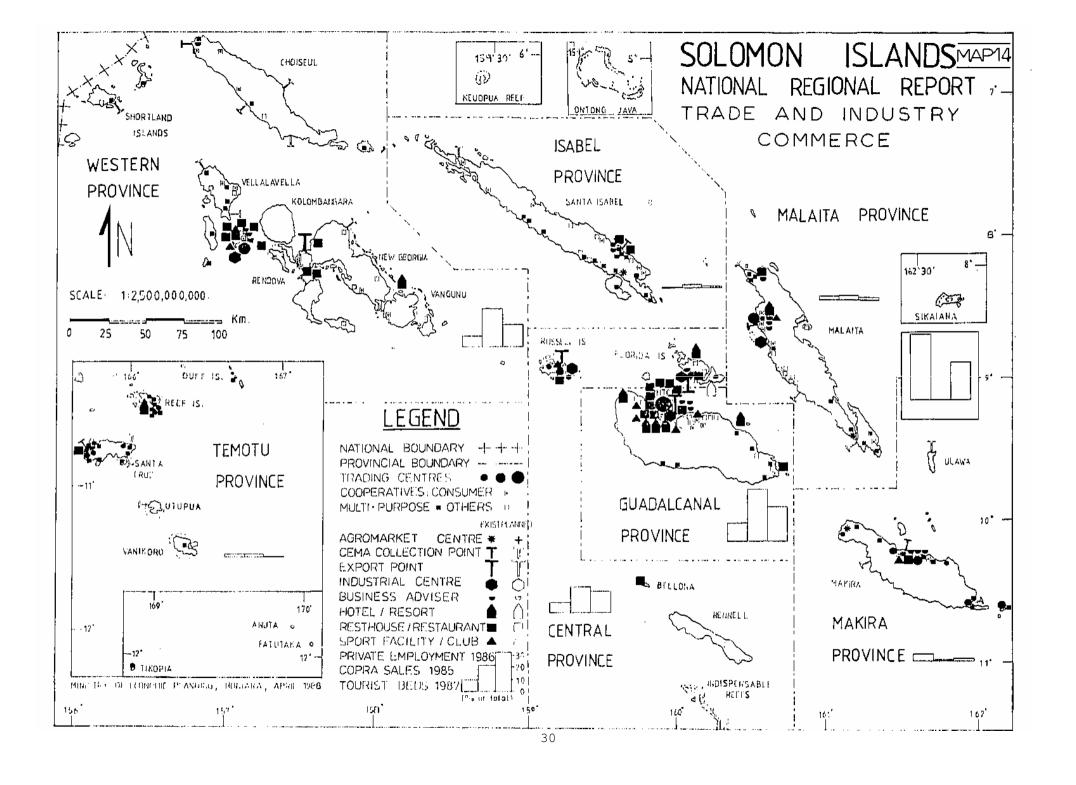
Mining Tenements: Comprise tenements issued as at December 1987 and tenements applied for at that date (both categories with tenement number referring to company list at Geology Division / Ministry of Natural Resources). Although West Rennell's bauxite reserves constitute a conditional reserve, the whole Rennell Island is closed to prospecting due to the destructive potential of open-mine exploitation.

INTERPRETATION:

Mineral mining is slowly developing: Petrol exploration in 1979 was handed over from private companies to CCOP / SOPAK, which constitutes an intergovernmental organization since 1984. Although much of Solomon Islands territory is issued as mining tenements and much more is applied for prospecting, most, of the customary land on Malaita remains unprospected, while large bauxite reserves on Rennell are closed to prospecting. World market prizes for bauxite presently do not warrant any destructive mining methods on Rennell, and Malaita is generally poor in mineral occurrences due to its geotectonic origin from the sub-seabed.

On contrast, Choiseul, Isabel and Guadalcanal are islands situated along a plate-overlap zone, where rich mineral occurrences had been explored, i.e. magnetite, copper, nickel, manganese, bauxite and gold. However, conditional reserves (subeconomic deposits with high degree of certainty) only comprise West Rennell and Wagina bauxite, Bellona phosphate, Kolaula copper and Guadalcanal gold.

Presently only one tenement is leased, i.e. downstream Gold Ridge on Guadalcanal, to two foreign mining companies, which export some alluvial gold and in return had to establish local compensation agreements with all local landowners.



Coopers Choiseul - Getting supplies ashore at Choiseul Meeting your business needs such organisation

MAP 14: TRADE AND INDUSTRY

MAIN FEATURES:

<u>Cooperatives</u>: Distinguishes between consumer (26), multipurpose and other cooperatives. Multipurpose cooperatives usually operate a retail shop and a market for members' produce.

<u>Trading Infrastructure</u>: Comprises existing (1988) and planned (until 1990) agromarket centers, CEMA cocoa and copra collection points, and export ports. Business advisors are stationed in the provincial centers and tour the rural areas on an almost regular schedule.

Industrial Centers: Manufacturing industry in Solomon Islands is largely focused on the 3.5 ha Ranadi Industrial Estate. Small estates of less than 1 ha exist in Auki and Oizo, with additions planned. 7.5 ha at Ranadi area are additionally zoned for development, 4 ha of new industrial development is planned at Noro / New Georgia, A new industrial estate is being designed at Henderson within the jurisdiction of Guadalcanal Province.

<u>Tourist Infrastructure</u>: Consists of 3 categories subsuming hotels and beach resorts, resthouses and restaurants (often identical in the provinces), sport facilities and clubs (all clubs offer sports facilities).

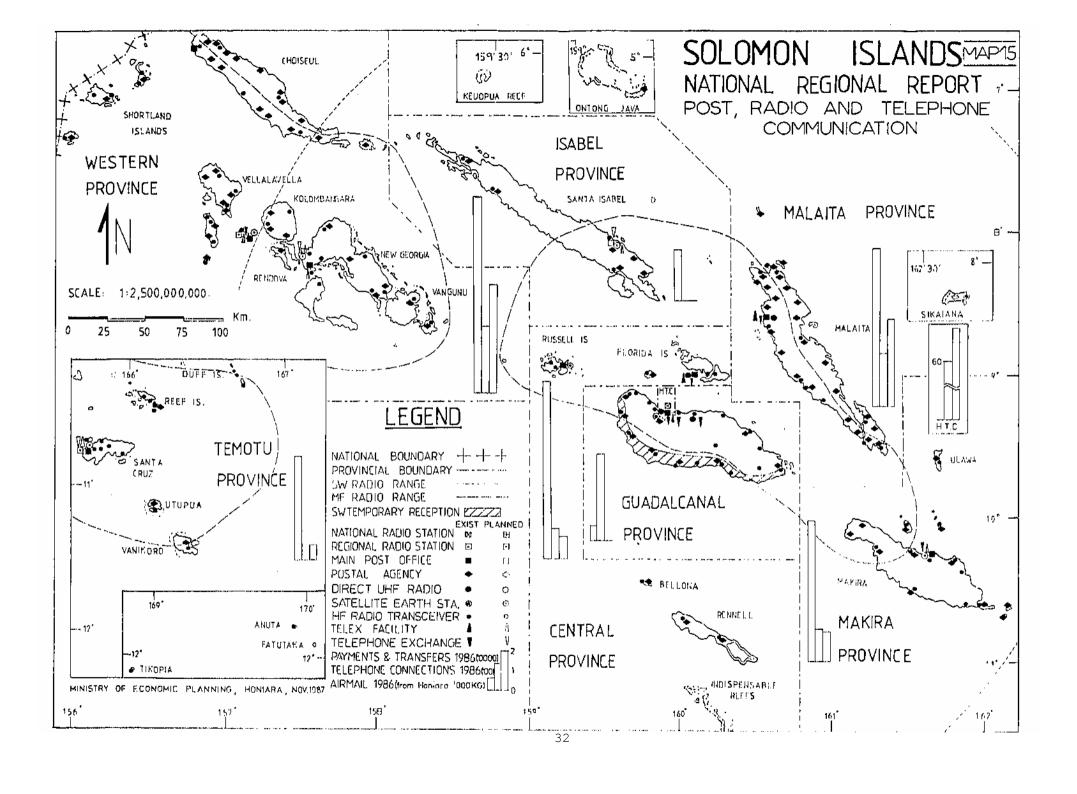
<u>Commercial Indicators</u>: Private employment indicates the size of the commercial sector, copra sales are the only available indicator for inter-provincial (provinces to Honiara) trade, and the number of tourist beds shows the lacking potential in the provinces to absorb larger quantities of travelers. All bar charts are in percentage of Solomon Islands total.

INTERPRETATION:

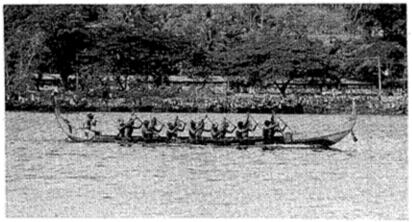
Other cooperatives in 1987 comprised 28 land purchase, 2 land development, 2 sawmilling cooperatives and 2 secondary cooperatives associations, furthermore one mining, one housing, one fishing, one producer and marketing, and one cocoa processing / marketing cooperative.

Industrial activity centers in Honiara: mainly food processing and consumer goods factories are located at Ranadi Industrial Estate. At Gizo and Auki, boat building presently constitutes the major industrial activity. Ship repair and tuna processing presently centers in and around Tulagi, with Solomon Taiyo anticipated to move its cannery to Noro Port at the end of 1989. Private employment is consequently comparatively high in Guadalcanal, Western and Central province, zero in Temotu and Malaita province. In 1986, the commercial sector concentrated 40% of its capital expenditure in Honiara, another 30% on Guadalcanal (Guadalcanal Plains and Gold Ridge), almost. 15% in Central Province (Tulagi and LPPL on Russells) and 10% in Western Province (mainly in Gizo and Noro Port). All other provinces shared in the remaining 5% of total investment.

Distribution of commerce is also heavily biased towards Honiara, where the Trade Testing Center sets standards for weighing and scaling at wholesale and retail trade stores. To facilitate the flow of commodities between Honiara and the provinces, a number of trading centers and copra / cocoa collection points are planned to be built in the provinces. Tourism also centers in Honiara, the only port for cruise ships, and in hotels or resorts in Gizo, Munda, Auki, Uipi, Anuha., Vulelua, Pidgeon Island and Tambea.



MESTIC SATELLITE DROJECT Top: Honiara earth station. Left: Sign showing how satellites link the



A Malaita Canoe at the 1988 10th Anniversary Celebrations -

MAP 15: POST, RADIO AND TELEPHONE COMMUNICATION

MAIN FEATURES:

Radio Transmission Ranges: SW radio broadcast from Honiara on 5,020 KH and 9,545 KH frequency covers most of the inner islands, while MF radio stations (1,035 KH frequency) located in Honiara, Gizo and Lata provide for uncovered areas. Guadalcanal Weathercoast receives SW transmission only temporarily.

Communication Infrastructure: Shows existing (1987) and proposed (until 1990) radio stations, postal agencies and VHP telephone stations linking Honiara with Tenakaro (North Guadalcanal), Tulagi (Florida Islands) and Auki (Malaita). All other radio connections run via HF radio transceivers, but satellite earth stations are planned for the remaining provincial centers. Telephone exchange circuits exist in all centers except Lata and Buala (planned), telex facilities are available in Honiara.

<u>Communication Indicators</u>: Payments and transfers (in SB\$ 10,000) indicate volume of postal transactions, telephone connections (in 100) are calculated between Honiara and the provinces, airmail (in 1,000 kg) is delivered from Honiara (total not indicated) to all provincial postal agencies.

INTERPRETATION:

The most integrating link between the different islands is the radio, which serves to disseminate news and to exchange service messages. During sixteen hours per working day a short frequency transmitter in Honiara serves the whole of Solomon Islands (except Ontong Java and temporarily the Guadalcanal Weathercoast) via relay stations in Gizo and Lata. Additionally, medium frequency transmissions from these three stations offer the same program as emitted from Honiara to all areas except the Guadalcanal Weathercoast, North Choiseul, North Isabel, East Malaita. East Makira and the outer islands.

Another important way of communication, besides mailing, is by direct telephone UHF radio links from Honiara to Auki, Tulagi and Gizo and, at certain hours, via HF radio transceiver extension to Kirakira, Buala and Lata. This communication extension is complemented by a rather tight network of private, mission, police and government services HF transceivers.

Solomon Airtines ToyoTA

On land and in the air, we care



Would you like to travel like this?



Cabin crew during training at Henderson Airfield

MAP 16: AIRCRAFT, SHIPPING, VEHICLE TRANSPORTATION

MAIN FFATURES:

<u>Sea Transport</u>: Shipping capacity flows (mid-1987) indicate number of passengers transported on monthly average (thickness of arrows) and service frequency (mid-1987) on monthly average (density of shading). Generally one small boat commuting daily provides better qualify of services than one large ship monthly, although both transport the same total number of passengers per month. Sea-transport flow arrows are curved and connect sea ports.

<u>Air Transport</u>: Aircraft capacity flows (mid-1987) indicate number of passengers transported on monthly average (thickness of arrows), and service frequency (mid-1987) on monthly average (density of shading). Air transport flow arrows are straight, and connect airfields. Map does not list charter flights.

Land Transport: Number of vehicles stationed 1986 per province indicate density of road traffic.

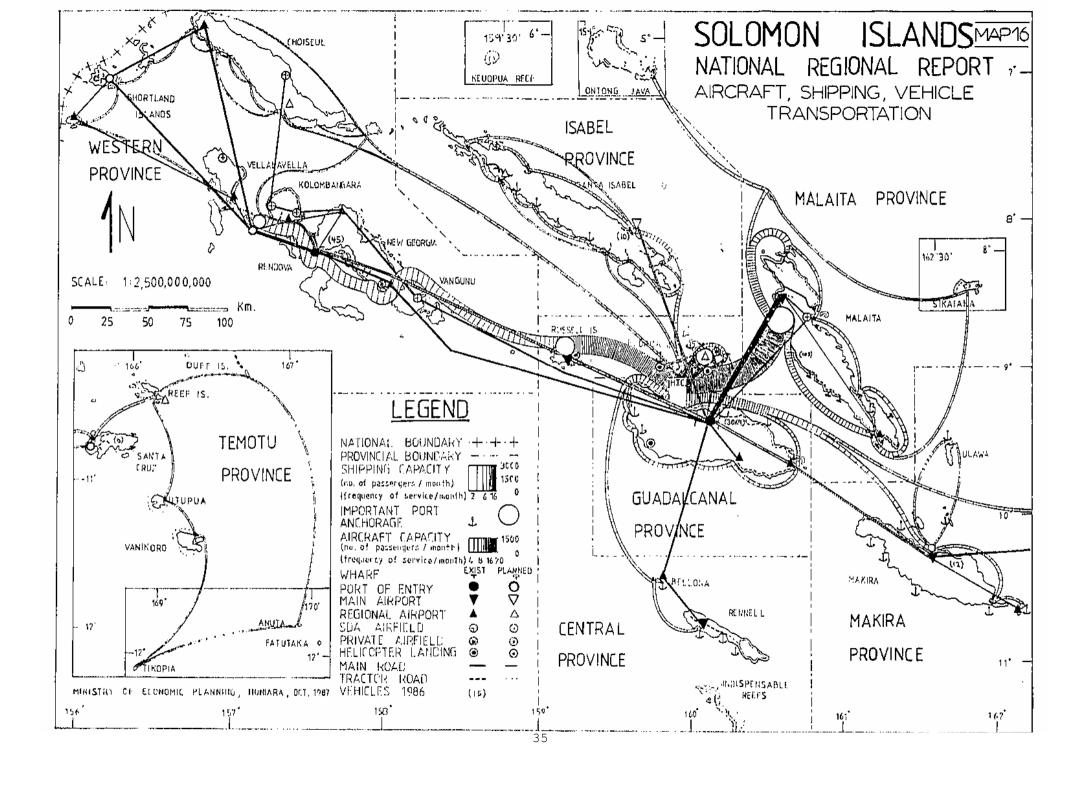
<u>Transport Infrastructure</u>: Existing (1987) and proposed (until 1990) infrastructure consists of shipping (important ports, anchorages, wharfs, ports-of-entry), airplane (main, regional, SDA and private airfields, helicopter landing places) and vehicle (main and tractor roads) transport facilities.

INTERPRETATION:

Cargo shipments from the provinces almost entirely centers on Honiara. Internal provincial transport is negligible except for the numerous islands of Western Province. In mid-1986 all B-class ships (230 GRT) formerly devolved to the provincial governments were recentralized to facilitate shipping maintenance and scheduling (with the exception of Makira), however, each province retained one W-class boat (40 GRT) for internal connections.

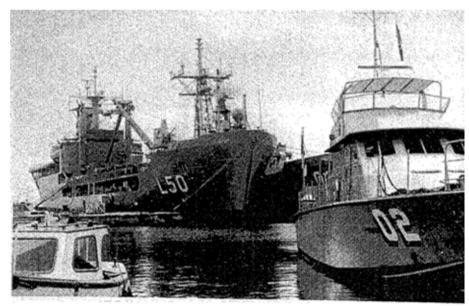
The only important shipping connections Honiara-Auki and Honiara-Gizo are both entirely served by private carriers. On the other hand, unattractive shipping routes to the outer islands are subsidized to the private shipping companies in order to use the small government fleet most effectively and to avoid overlapping with the commercial sector. The only exception of this policy is Ontong Java, where copra freight prices are deregulated, which makes this transport link also attractive for government shipping. On all other islands, copra-buying centers offer standardized purchasing prices, thereby substituting for the old system of pricing zones according to distance to copra shipping port. Construction of another 22 collection points are planned under the CEMA Smallholder Project.

The main shipping axis is further complemented by the integrating link of air transport: almost 80% of all Solomon Islands' internal passengers travel between Auki, Honiara and Gizo. A hierarchy of airports ensures that at least all major and most medium islands can be reached by plane. Additionally, flight connections to Western and Malaita Province by two small SDA aircrafts (Western Pacific) serve the important role of a private sector competitor to the government-owned Solomon Island Airlines. The private enterprise Pacific-Helicopters opens

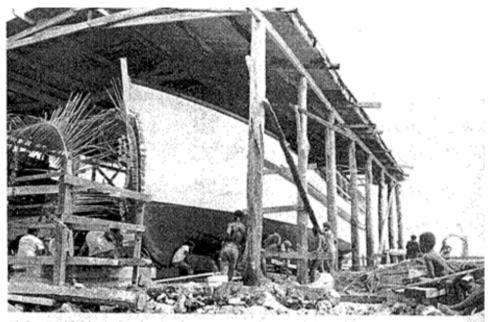


expensive flight access to Tulagi, Mbabanakira / Guadalcanal Weathercoast and Savo. Passenger occupancy rates of the national carrier during the first third of 1987 averaged 45%. High occupancy rates above 60% were achieved on Honiara routes to AvaAvu, Buala, Rennell and on the leg Honiara-Yandina-Seghe-Munda-Ringi Cove-Gizo-Ballalae-Mono. In contrast, low occupancy rates (below 30%) prevailed on the direct route Honiara-Gizo, and on the leg Honiara-Marau-Kirakira-St.Anna.

In contrast to sea and air transportation, land transport plays a bare complementary role: Road connections are required in denser populated areas to open up economic activity for potential areas, or where exposed and rough coasts without wharves or anchorage points do not allow canoes to operate. Except for the recently constructed major road link between Munda and Noro Port, Solomon Islands' roads were built for specific purposes other than these: Virtually all roads on Guadalcanal and some on New Georgia were built during WWII, logging roads end abruptly somewhere in the interior of Isabel, Kolombangara or St. Cruz, a single mining road runs through the inner regions of Rennell. Australia is to fund the East Rennell extension to Lake TeNgano, while RSP will connect the West Makira road with the Kirakira road. A connection between Aola and Marau Sound will depend on long-term economic development and potential in East Guadalcanal. These extension plans pose questions of maintenance (normal maintenance plus high bridging costs of WWII roads, which are either too close to the coast or on steep coasts) and of cost effectiveness (low number of cars in relation to road length in Malaita and Makira).



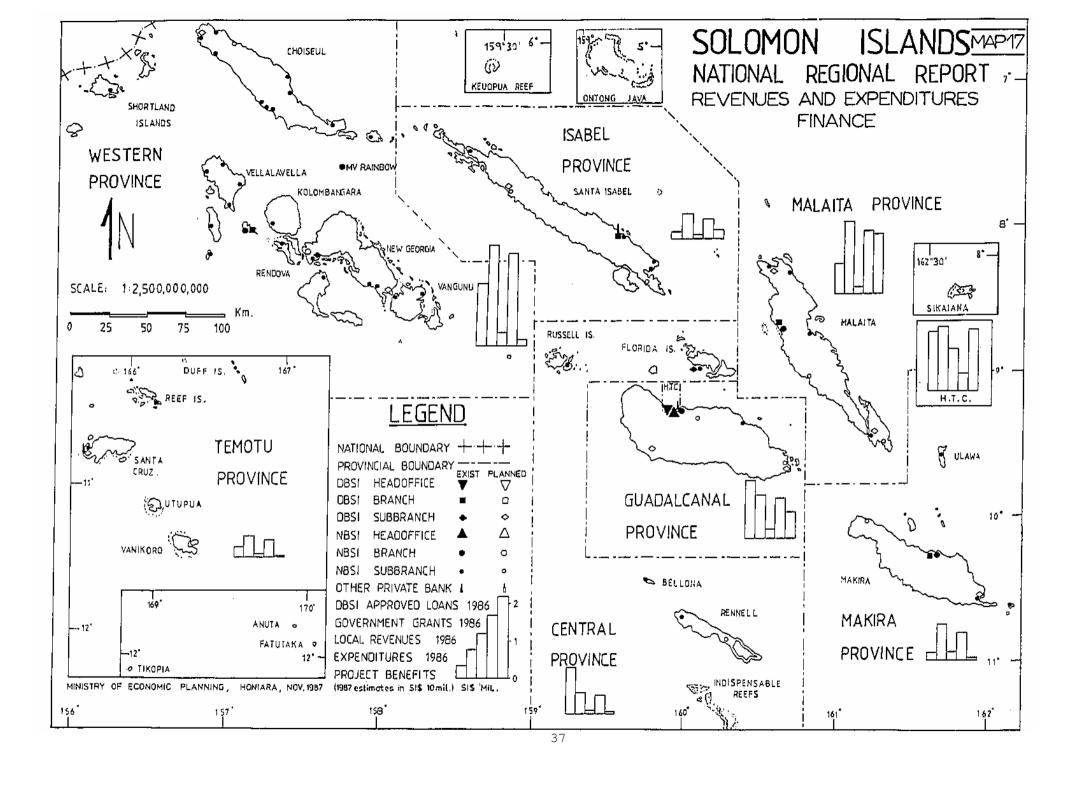
These three ships have different tasks.



Ship Building in LangaLanga Lagoon, a major industry in Malait



A local trading ship at Lata Wharf, Graciosa Bay, Santa Cruz.



On Malaita, making money is an art

A Malaitan girl wearing a shell money headband (decorated with dolphin teeth) and a tafuliae



MAP 17: REVENUES AND EXPENDITURES

MAIN FEATURES:

<u>Banks</u>: Distinguishes between Development Bank of Solomon Islands, National Bank of Solomon Islands and other bank (private overseas controlled) offices and branches. Does not include bank facilities of postal agencies.

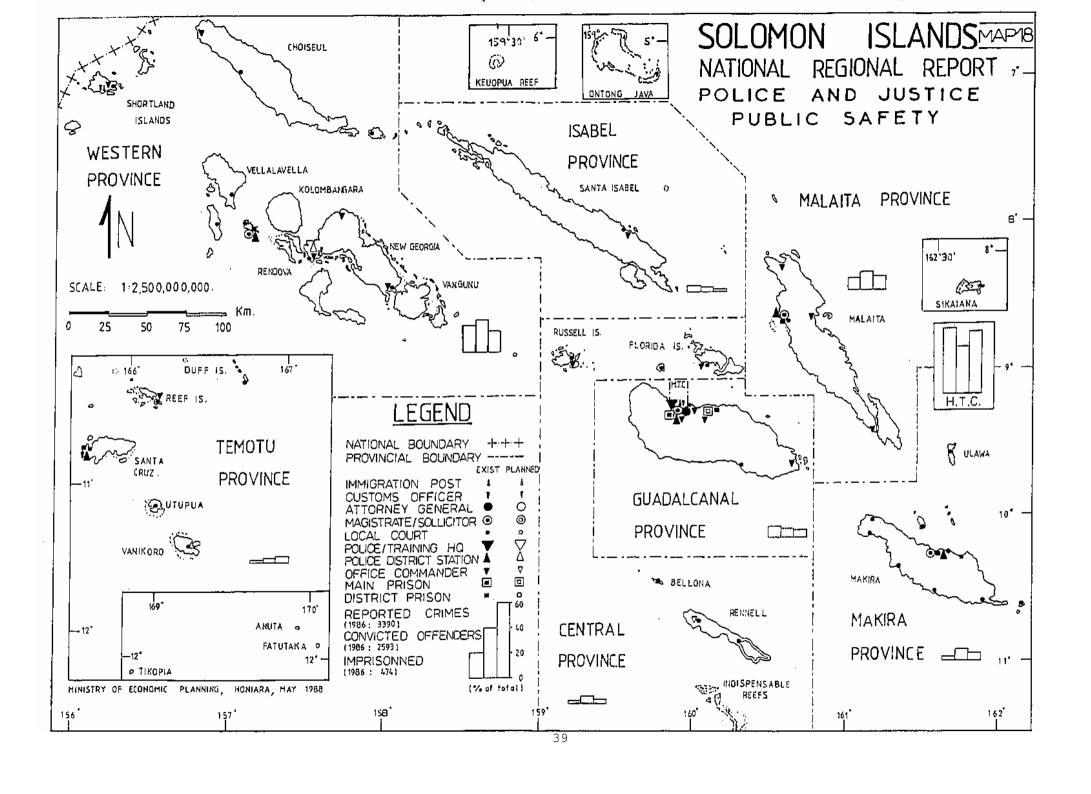
<u>Financial Indicators</u>: Show DB Solomon Islands-approved loans for all sectors in SB\$ million. Central Government grants to provinces in SB\$ million, revenues generated locally by the provincial authorities in SB\$ million, total financial expenditures by the provinces in SB\$ million, and cash and non-cash estimates of the 1987 Development Budget project benefits distributed onto the provinces in 10 SB\$ million.

INTERPRETATION:

1987 DB Solomon Islands head office is staffed with 28, branches with 6-8, sub-branches with 1 officer. NB Solomon Islands in Western Province runs the ship MV Rainbow as mobile bank. Financing of private capital and recurrent expenditure (4.6 SB\$ million in 1986) is done by the government-owned DB Solomon Islands. While in 1986 55% of DB Solomon Islands loans went to Guadalcanal including Honiara and 35% to Malaita, the remaining 10% were shared by Western, Isabel, Makira and Central province in decreasing order.

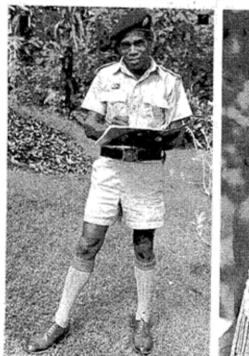
77.3% of total provincial government recurrent expenses and 93.3% of all capital expenses were met by central government in 1986. Western Province (2.46 million SB\$) and Malaita (1.73 SB\$ million) got the biggest shares in the 1986 total grants of 8.05 SB\$ million (7% of 1986 primary commodity export value). Most of these grants are to compensate for services rendered by the provinces and for resources harvested in the provinces. Most of all provincial revenues including internally generated ones from rates, licenses, fees, etc. are required to pay for salaries and wages of provincial and seconded staff, while area councils are left with the income from basic head taxes, and village communities share revenues from fishing and logging royalties paid by private enterprises.

Internal generation of revenues is very restricted within the provinces, 75% of recurrent revenues coming from the central government in form of grants. Capital grants are distributed among the provinces for minor projects to be executed by the provincial authorities, such as staff housing and offices, totaling less than 1.4 SB\$ million in 1987, The central government allocates the vast majority of grants and all loans, together almost 77 SB\$ million in 1987, on an ad-hoc basis as development projects. Of the 51.7 SB\$ million budgeted for 'National Projects', Honiara, Western, Malaita, Guadalcanal and Central province shared 90% of their estimated benefits.





Bis Excellency, the Governor General, Sir George Lepping, inspecting the Police Guard.





Michael Kwaioloa in special Constable Uniform

MAP 18: POLICE AND JUSTICE

MAIN FFATURES:

<u>Immigration, Police, Legal and Prison Infrastructure</u>: Existing (1987) and proposed (until 1990) immigration posts and customs officers; public attorney generals, magistrates / solicitors and local courts; police headquarter, district stations, office commanders; main and district prisons.

<u>Criminal Indicators</u>: Number of reported crimes, convicted offenders and imprisoned offenders. All bar charts in percentages, total figures for 1986 in brackets underneath indicator titles.

INTERPRETATION:

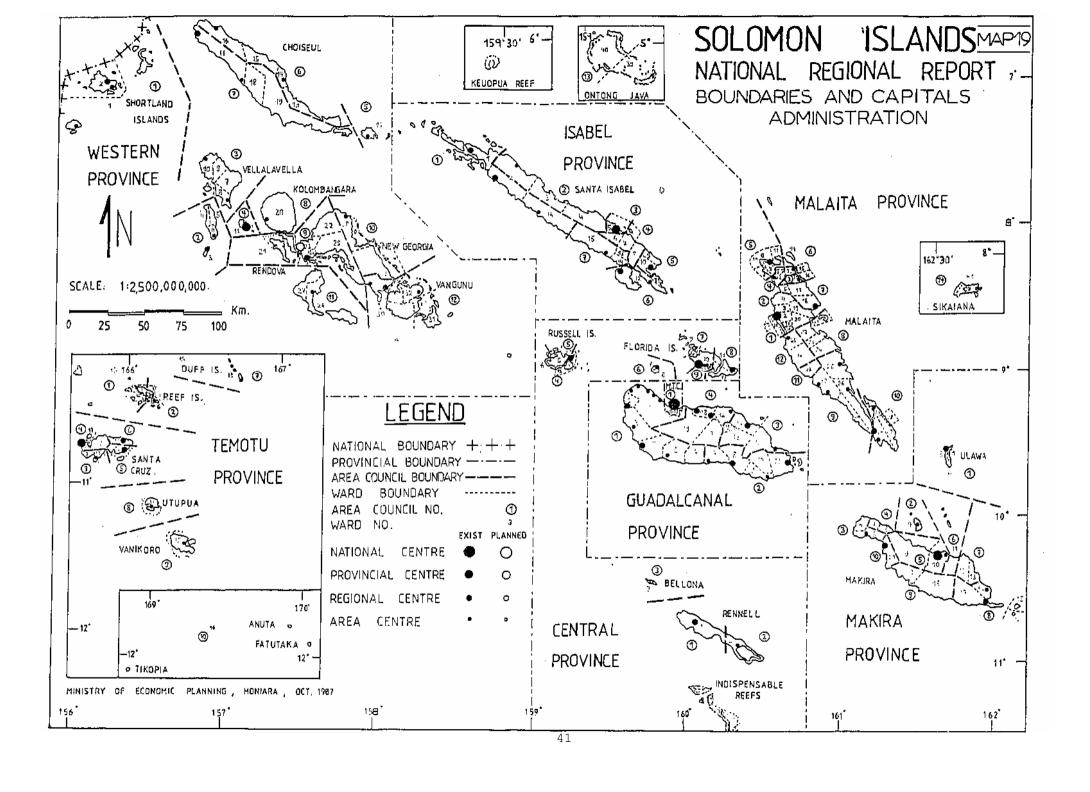
Each provincial center (with the exception of Buala and Tulagi) holds a police district commander station with its own magistrate and prison. Office commander stations exist in most regional centers of Malaita, Western and Guadalcanal province (number of officers 1987: Temotu 14, Makira 22, Malaita 74, Western 76, Isabel 12, Central 22, Honiara 161, Guadalcanal 20). Additionally, some area centers cater for the same services.

Local courts to deal with minor legal questions and land disputes are located one each on all major (with the exception of Makira) and medium islands, where each area council area holds one local court. The number of local court members in 1987 varied strongly by provinces: Temotu, 36, Makira 77, Isabel 14, Central 43, Honiara 18, Western 109, Guadalcanal 69 and Malaita 117.

Most crimes (50% of total) were reported to Honiara police stations, followed in number by Western (20%) and Malaita (10%) provinces, but Malaita and Western provinces' shares in convicted offenders are much higher compared to the number of crimes. This might indicate a better success rate in the investigation of crimes, or a higher number of offenders per crime. Most offenders from Guadalcanal are brought into Honiara for court trial and imprisonment, while hardly any criminal activities are reported in the smaller provinces.

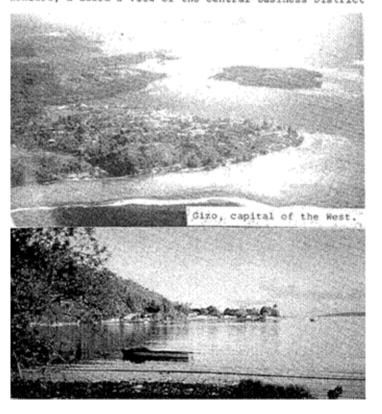


Some of the young men gathered for "The Rist," November 1989.





Honiara, a daula's view of the Central Business District



MAP 19: ADMINISTRATIVE BOUNDARIES AND CAPITALS

MAIN FEATURES:

Administrative Boundaries: Information on Area Council boundaries and numbers from MHA&PG, ward boundaries and numbers correspond with 1986 Solomon Islands Population Census.

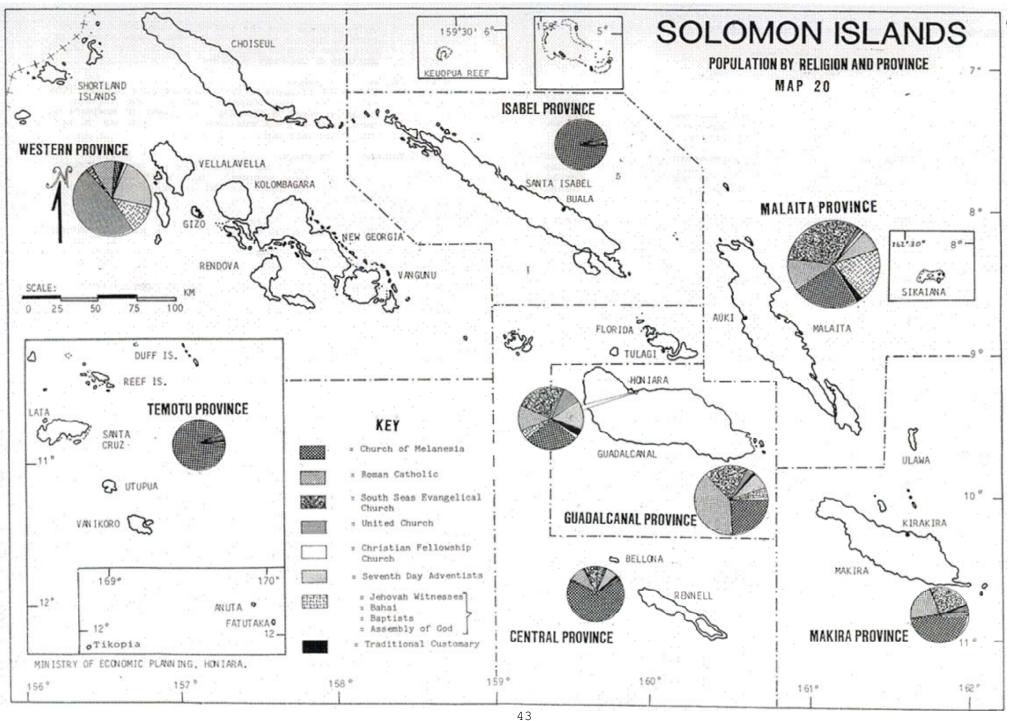
Hierarchy of central places of administration distinguishes between national capital (Honiara), provincial centers, regional centers (on island level) and area centers (on Area Council level).

INTERPRETATION:

The Provincial Government Act 1981 defined the areas of the seven provinces by outlining the provincial boundaries. If one follows the recommendation to establish a settlement hierarchy to optimally serve the catchment population, settlements are ordered into provincial, regional, area and local centers. In the provincial centers, the Provincial Assembly members (with one elective from each ward) come together twice a year to direct or amend policies by simple majority vote. Most of the central-government grants go to the administrative headquarters of the seven provinces, where most of the funds are spent on staffing of devolved government functions. Area Council members are elected out of each subward and meet irregularly to make decisions for the provincially designated area-council areas. They are responsible for coordination of village activities, i.e. village health workers, primary schools, etc. Several area council areas send one representative to the National Parliament. There exist no direct political links between the Area Council and the Provincial Assembly: Area Councils politically have a mere advising function to the Assembly, while administratively the provinces hand down any technical matters to their Area Councils via an Area Administrative Officer (AAO).

Presently, administrative staff is accommodated only in provincial and regional centers, officers in planning capacity only in the provincial centers.

Finally, permanent housing is provided for government workers by the Solomon Islands Government in the administrative centers and substations (regional centers), construction teams are stationed there to assemble these houses, which are prefabricated in a Ranadi factory. Also, RDC assistant houses are permanent and teachers' houses are semi-permanent, while most private households find enough local material to build traditional leaf houses.



MAP 20: RELIGION

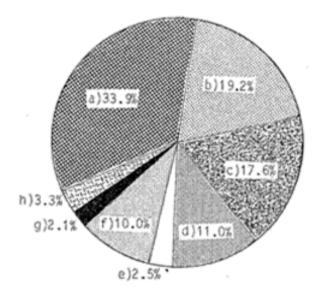
The Church of Melanesia had the most adherents in Solomon Islands in 1986 and is most widely spread (Table F). It was very predominant in Isabel, Central and Temotu provinces. It also took first or second place in all other provinces except Western province. The Roman Catholics, nationally second in numbers, were also widely dispersed, with concentrations in Guadalcanal and Malaita, but also small numbers in Isabel and Temotu. The South Seas Evangelical Church was similar to the Roman Catholic Church in numbers and distribution. The churches which are dominant in Western Province, i.e. the United Church, the Christian Fellowship Church and, to a lesser extent, the Seventh Day Adventists play a minor role in the other provinces. People who maintain their traditional beliefs are still concentrated in Guadalcanal and especially Malaita province.

POPULATION BY RELIGION 1976 AND 1986

Table E

Religion	19	76	1986		
keligion	Person	*	Person	%	
CM RC SSEC UC CFC SDA JW B CUST & ALL THE OTHER OBJECT, NO RELIGION, NS	67370 36870 33306 22209 4822 19113 3530 873 7130 1600	34.2 18.7 16.9 11.3 2.4 9.7 1.8 0.4 3.6 0.6	96592 54618 50344 31441 7031 28514 5100 1178 8997 1361	33.9 19.2 17.6 11.2 2.5 10.0 1.8 0.4 3.2	
TOTAL	196823	100	285178	100	

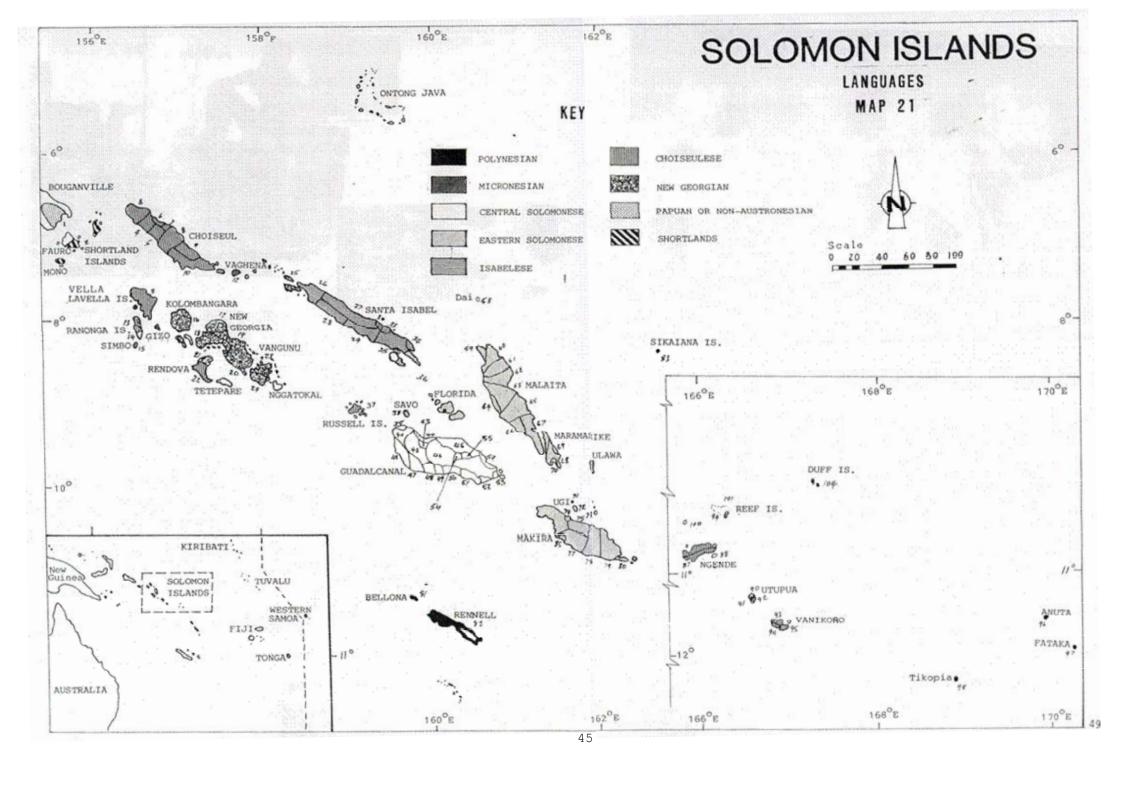
When comparing the distribution of the population by religion (Table E) only minor differences are found between 1976 and 1986. Most churches grew in number of adherents with about the same rate as the total population. However, the people who declared to adhere to traditional beliefs decreased from 7,394 in 1970 to 7,130 in 1978 and to 6,096 in 1986.



-) Church of Melanesia
- b) Roman Catholic
- c) South Seas Evangelical Church
- d) United Church
- e) Christian Fellowship Church
- f) Seventh Day Adventists .
- g) Custom
- h) All Other

	Vestere	Isabel :	Control	Sundalcanal	Tentara !				
						Malaita:	Makiro/Eleve	Temoto	Total
CM :	1493	14135	12870	12151	9330	21534	10798	14281	96592
10	5841	47	1643	19769	3863	18772	4638	45	54618
1166	1098	134	1930	9537	7742	24081	5757	75	50344
	26489 :	78 3	278	1586	2551	368	70	23	31441
crc :	6572	1 1	6	73	357	14	6	0	7031
	13144 :	162	1435	4413	4651	4172	442	95	2.8514
IV :	101	0 :	46	576	673	3496	16	190	5100
	95	4 1	24	64	177	814		0	1178
IAPT :	10 1	2 1	108	112	62	563	3	1 1	861
15	80 1	0 1	1 1	102	254	532	5	1 1	975
(851	47 :	0 :	17	991	70	4958	10	3 1	6098
ALL STREE	149	34	73	159	265	330	50	25	1065
OBJECT, NOME, MS	141	17	26	298	418	410	19	42	1361
TOTAL	55250	14616	18457	49831	30413	80032	21796	14781	285176

. Seventh Day Adventists



MAP 21: SOLOMON ISLANDS LANGUAGES (P. C. Lincoln, April 1979)

I. The Inventory

More than 90 languages are native to the Solomon Islands. Each of the bigger islands (or island clusters) and even some of the smallest islands have several closely related languages. Not much is known about the relationships between language groups on different islands. We use two very broad categories to classify the languages: Austronesian and Papuan (or non-Austronesian). The Austronesian language family includes about 1,000 languages spoken mostly in the area from Malaysia through Polynesia (the family has been known by the more descriptive name of Malayo-Polynesian). Most of the Solomon languages belong to the Austronesian family.

The four non-Austronesian languages of the Solomon Islands are Mbilua (of Vella Lavella), Mbaniata (of Rendova), Lavukaleve (of Russell) and Savosavo (of Savo). A number of points of similarity have been found among these four languages. There are even some similarities between these four and some languages in the neighboring areas: the four non-Austronesian languages of the Solomon Islands have been included in the tentative East Papuan Phylum including also Yele (of Rossel Island in southeast Papua New Guinea), eight languages of the mountains of Bougainville Island, and a few of the languages of New Britain and New Ireland (Wurm 1975).

The other 90 or so languages native to the Solomon Islands are Austronesian (the languages of Reef-Santa Cruz may have been influenced by East Papuan languages (see Wurm 1979), but this issue is not yet resolved (see Lincoln 1979)). These 90 languages belong to about 10 different groups, nine of which are geographically quite cohesive. From northwest to southeast they are:

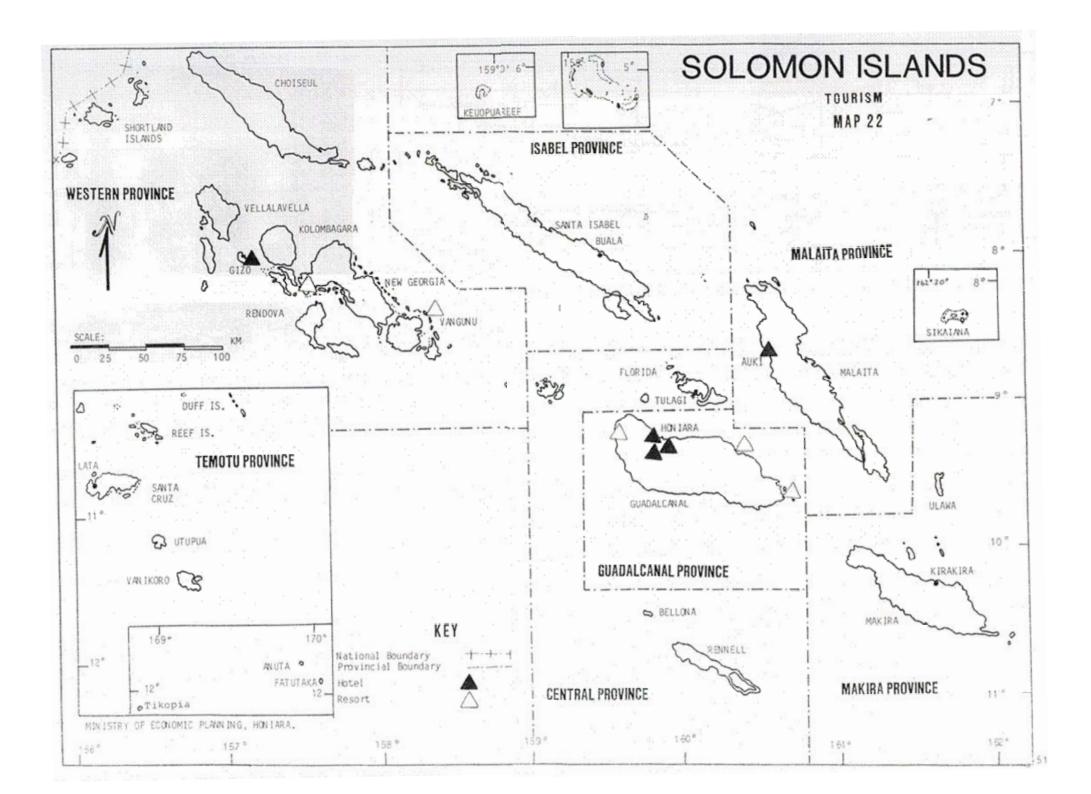
- 1) Shortlands or East Bougainville Group: 3 languages. Mono-Alu of Shortlands Torau of Rorovana area on Bougainville Uruava of Arawa area on Bougainville, nearly extinct.
- 2) Choiseul Group: 8 languages. Most are quite like the best known Mbambatana.
- 3) New Georgia Group: 11 languages. Most are quite like the best known Roviana.
- 4) Santa Isabel: 11 languages. Mbughotu is the best known, but perhaps not typical in that it resembles the languages of the next group.
- 5) Florida and Guadalcanal Group: 20 languages. Nggela is the best known. The linguistically most diverse island, Guadalcanal, remains one of the least studied.
- 6) Malaita and San Cristobal: 21 languages. There are a number of published accounts of these languages, and more reports are in progress.
- 7) Santa Cruz and Reefs: 3 languages. There are several dialects spoken on Santa Cruz; probably only the speech of Nanggu village is different enough to be called a separate language from the rest including Graciosa Bay. Santa Cruz languages are strikingly different from the rest of the Solomons. They require 10 distinct vowel symbols, about twice as many as most other Solomon Islands' languages. Only the Aiwo (or Gnivo) language of the Reefs is similar.

- 8) Utupua. 3 languages: The three languages of the island are quite different from each other. Most Utupians can speak the language of Asuinbua, which is probably the hardest for outsiders to learn because of the voiceless nasals (try to say /h/ and /m/ at the same time).
- 9) Vanikoro: 3 languages. Since the 1930s, most Vanikoro people use the language of Puma (Teanu language). But the languages of Vano (or Vana) and Tetau (or Tarima) are remembered by a few.
- 10) Polynesian: 7 or 8 languages. The islands on the outer edges of the Solomon Islands Ontong Java, Sikaiana, Reefs, Duff, Anuta, Tikopia, Rennell, and Belona are home to several closely related languages that are quite similar to other outlying Polynesians (Nukumanu, Takuu, and Nukuria in Papua New Guinea; Kapingamarangi and Nukuoro in Micronesia; Emae, Fila-Meie, and Futuna-Aniwa in Vanuatu, and West Uvea near New Caledonia). All of these outlying Polynesian languages resemble the languages of Tuvalu and Samoa and to a lesser extent Tonga.

Key to the Linguistic Map of the Solomon Islands

Key	Key to the Linguistic Map of the Solomon Islands								
1.	Rugara	27.	Kokota.	53.	Marau	79.	Kahua		
2.	Alu	28.	Korighole	54.	Gb.ua	80.	Tawarafa		
3.	Tavula	29.	Jajao	55.	Paripao	81.	BeUonese		
4.	Varese	30.	Blablanga	56.	Mbirao	82.	Rennellese		
5.	Mbambatana	31.	Luvukaleve	57.	Longgn	83.	Sikaina		
6.	Ririo	32.	Luangiua	58.	Dai	84.	Lau		
7.	Katazi	33.	Maringe	59.	To'Ambaita	85.	Faghani		
8.	Sengga	34.	Gao	60.	Mbaelelea	86.	To Motu		
9.	Kirunggela	35.	Hograno	61.	Mbaengguu	87.	Nanggu (SW)		
10.	Avaso	36.	Mbughotu	62.	Fataleka	88.	Nanggu (SE)		
11.	Mbilua	37.	Nggela	63.	Kwara'ae	89.	Nanggu (N)		
12.	Micronesian	38.	Savosavo	64.	Langalanga	90.	Nembao		
13.	Ghanongga	39.	Nggae	65.	Koio (Kwaio)	91.	Asumbua		
14.	Lungga	40.	Ndi	66.	Dorio	92.	Tanimbili		
15.	Simbo	41.	Vaturanga	67.	Are'Are	93.	Vano		
16.	Ndughore	42.	Nggeri	68.	Sa'a	94.	Tanima		
17.	Kusaghe	43.	Nginia	69.	Lau	95.	Puma		
18.	Roviana	44	Tandani	70.	Oroha	96.	Anuta		
19.	Hoava	45.	Lengo	71.	Uki	97.	Fatutaka		
20.	Marovo	46.	Malango	72.	Ni	98.	Tikopia		
21.	Ughele	47.	Ghari	73.	Masi	99.	Nupani		
22.	Mbaniata	48.	Poleo	74.	Faghani	100.	Matema		
23.	Mbareke	49.	Koo	75.	Bauro	101.	Nukapu		
24.	Vangunu	50.	Malagheti	76.	Arosi	102.	Pi-eni		
25.	Kia	51.	Toto	77.	Haununu	103.	Gnivo		
26.	Zabana	52.	Moli	78.	Mamaregho Ravo	104.	Taumako		

Adapted from Languages of the Solomon Islands, drawn and printed by the Lands Division of the Ministry of Agriculture and Lands, Honiara, 1975





St. Joseph's panpipers from Malaita play at a social function



Isabellan Women dance for tourists



Relics of W.W.II: live mortars, grenades and shells, mainly American, gathered at Hell's Point, Tenaru, 45 years after



