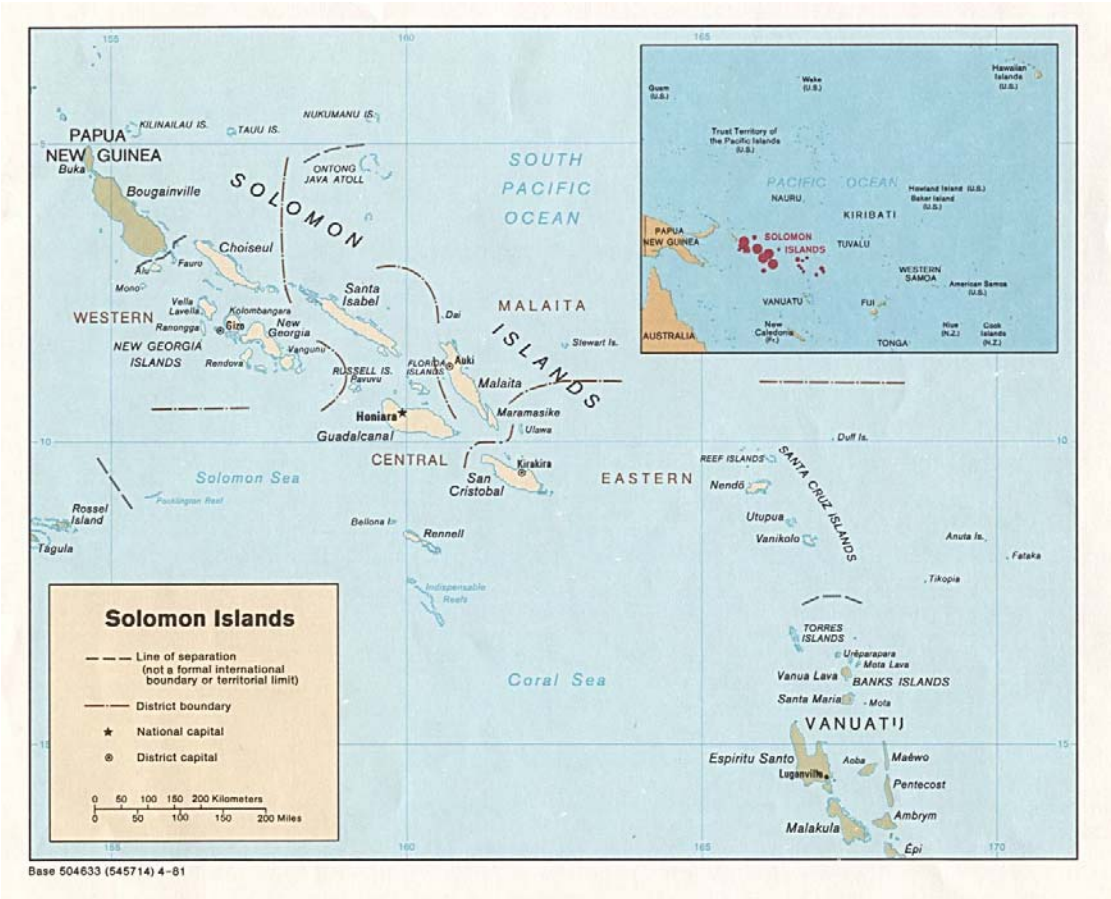


Solomon Islands Water Governance Programme



Assignment in the Solomon Islands 17-24 January 2006

KEW Consult Ltd
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1 Purpose of the visit

The purpose of this assignment was to collect the existing documentation relating to water sector in the Solomon Islands. This includes legislation on water and sectors impacting on it, studies, reports and data.

2 Programme

As the only photocopying machine available in the building was not functioning and no electronic copy of the documents was existing, I had to scan all the documents collected which occupied most of my time in the Solomons.

Tuesday 17	First meeting with Charlie Bepapa. Localization of documents.
Wednesday 18	Documents collection and scanning.
Thursday 19	Documents collection and scanning.
Friday 20	Documents collection and scanning. Meeting with SIWA
Monday 23	Documents collection and scanning. Meeting with Ministry of Health
Tuesday 24	Departure from the Solomon islands.

3 Solomon Islands Water Sector Overview

The provision of water supply services in Honiara covers 69.6% of the population and about 50% of the population have access to piped water nationwide.

3.1 Current water sector structure

Ministry of Natural Resources – Department of Mines and Energy	Responsible for water resources assessment and management.
Ministry of Natural Resources – Department of Forestry, Environment and Conservation	Responsible for environment assessment
SIWA (under department of Mines and Energy)	Established in 1992. responsible for water supply and sanitation in urban areas: Honiara, Auki, Tulagi and Noro.
Ministry of Health	Water supply and sanitation in rural areas. Coordinate and assess demands coming from provincial governments. Compile demands into a document and look for funding.
Provincial governments-Water Units	Water supply in rural areas. Assess villages demand and transmit a request to the Ministry of Health. Design, implement and maintain water schemes.

3.2 Water Function and responsible bodies

Water function	Responsible bodies
Water resources management	Ministry of Natural Resources – Dep. of Mines and Energy
watershed protection	Ministry of Natural Resources – Dep. of Forestry, Environment and Conservation.
Water supply services	Urban areas: SIWA Rural areas: Ministry of Health
Sewerage services	SIWA
Septic tank collection	Operated by Honiara City Council and a private company but shortage of manpower and vehicles so sewage is flooding from tanks into the river.
Storm Water drainage	NA
Hydrology, hydrogeology and water quantity monitoring	MNR, dep. of Mines and Energy.
Water quality monitoring	Ministry of Health SIWA Ministry of Natural Resources
Hydropower generation	Only 2 hydropower plants but are not working at the moment. Most of the power produced by diesel.
Irrigation water (very limited)	Ministry of Agriculture

3.3 Sector outcomes

Field	Comments
National water reform	
National water resource policy	None
National water service policy	None
Effective water sector coordination body	None. There is currently a steering committee in charge with drafting water quality guidelines. Few meetings were held last year, but no output yet.
Effective Water Action Agenda	None
Water resource management	
Existing policy and capacity to collect, coordinate and manage water data among agencies	None. Lack of coordination mechanisms. Each agency is collecting its own data.
River basin management	None
Water quality	Monitored by the Ministry of Natural Resources
Effective water resources and environmental management	The environment Act makes provision for environment impact assessment to be conducted but there is no mean to implement it.
Water service delivery	
Consumption	197 l/c/d for domestic customers in urban areas 334 l/c/d for all customers
UFW	Non revenue water ratio: 42.6%
Access to piped water	Urban: 69.6% Rural: 50%
Access to adequate sanitation	In Honiara, household using septic tank 71% and household with sewer connection: 5%.

	<p>SI Households by type of toilets: Flush toilet: 12.6% Pour toilet: 7.6% Pit toilet : 2.5% Ventilated improved pit : 0.2% Other: 0.1% No modern toilet or type not stated: 77%</p>
Water related disease	Still need to be collected
Non-revenue water collection	42.6% in urban areas water losses from leakage: about 40%
Collection and treatment of urban wastewater	No water treatment facilities except chlorination disinfections facilities Only Central hospital and the private companies Solbrew and Solomon Tobacco have wastewater treatment plants.
Cost recovery for urban water services	In 2004, SIWA total revenue was SI\$ 17.2 million and expenses (including capital costs), SI\$ 12.3 million. Profit: 4.8 million or 28% of total revenue. Commercial water bills: 60% of income Sewerage income: 10% of total revenue.
Private sector participation in urban water services	Septic tank sludge.
Awareness programs in schools and for public	Awareness campaign have been undertaken in areas supplied by SIWA to limit water consumption and inform about billing. It has been said that provincial governments are also conducting awareness session in villages for water conservation and water supply system basic maintenance. More awareness programmes are needed but the lack of funds.

3.4 Challenges and Issues

Theme	Existing tools	Shortcomings	Existing projects
Planning and management of water resources	Legislations: - River water's ordinance 1969 - SIWA Act 1992 - Environment Act 1998 - Public health ordinance 1970 - Forest Act 1998 - Draft Water Resources act.	Lack of: <ul style="list-style-type: none"> ▪ comprehensive water assessment (no reliable hydrological data, no representative national hydrological network, little understanding of hydrology and water resources). ▪ appropriate water resources governance ▪ legislative framework ▪ coordinative approach by agencies involved in water management ▪ River Water's ordinance inadequate as only few rivers are protected under this act. 	Funds from GEF UNESCO for hydrological equipments Hydrological assistant on SOPAC-NIWA hydrology training programme.
Water resources and development	Water catchments declaration.	Logging (especially uncontrolled) and traditional slash-and-burn agriculture have negative impact on surface water resources quality and quantity. Land issues and resources ownership: Major Problem for implementation when water source catchments are on customary land.	
Water quality	Public health Ordinance National Drinking guidelines committee (to review existing quality monitoring practices and establish a national guideline but not completed yet)	Lack of capacity to ensure water analysis in-country Water quality threatened by logging and mining. Environment Act makes provision for PEAR and EIA for any development but there it is not applied due to lack of qualified personnel.	Project funded by JICA for the improvement of water supply and waste water service in Honiara and 4 other centres. Establishment of a national water quality guideline committee.
Island vulnerability	Dialogue on climatic vulnerability and change related to water between govt and NGO attempted	Flooding and droughts No hydrological stations with capability for flood warning.	Awareness programme on hydrology on radio conducted by the National Disaster Management Office
Awareness		Low level of literacy Lack of basic water related data to back up awareness programme Women are not included in decision making process for water.	Awareness programme on hydrology on radio SIWA conducted public awareness programme through radio and schools Awareness workshops for government undertaken by ADB, Ausaid and USP but general election in March 2006.

Theme	Existing tools	Shortcomings	Existing projects
Technology			
Institutional arrangements		<p>No national water resources policy No comprehensive water resources legislation. Need for effective coordination of various agencies and stakeholders (NGO, private sector, communities) for water management. Training staff is a problem.</p>	
Finance		<p>Lack of financial resources. Only urban areas supplied by SIWA are commercially viable. Provincial governments lack of qualified staff and funds to properly maintain rural water supply systems.</p>	<p>WB and JICA, financial restructuring of SIWA to improve revenue and sustainability of service in urban area. Billing system for urban areas has just been upgraded with data capture devices for meter reading (before done manually).</p>

4 Documents collected

4.1 Legislation

- SIWA Act, 1992
- River waters acts, 1969
- Environment Act, 1998
- Lands and titles act
- Forestry Act
- Mines and Minerals Act
- Public health Ordinance, 1970
- Water supply act
- Tentative water resources act, draft, 1992

4.2 Strategic papers

- National Economic Recovery, Reform and development plan 2003-2006, Government of Solomon Islands
- Department of Mines and Energy Corporate plan, 2004 (latest report available)
- Ministry of Health Activities report, 2004 (written in October 2005). *To be emailed by Charlie Bepapa.*

4.3 Reports and studies

- Solomon Islands water management and institutional issues, UNDP mission report, 1989
- Study for rehabilitation and improvement of SIWA's water supply and sewerage, JICA, 2005.
- Solomon Islands Population and housing census, 1998

All these documents are saved in the shared files (KEW Project> SIWG)

5 Constraints and issues for the Water Governance project

5.1 Government's involvement

Water is not a priority of the government. It appears that several workshops and training have been undertaken regarding water governance and water resources management targeting government and governmental agencies. Nevertheless, it seems that the IWRM approach is not very well known.

The government agencies representatives, involved in water resources management, met all stressed the need for a comprehensive legislation.

5.2 Lack of resources

Where legislation is existing and provide effective tools, there is a lack of resources to enforce the law. For example, the Environment Act is making provision for EIA and PEAR to be conducted for any development but this is not apply due to the lack of resources (both human and financial). The drafting of a new comprehensive water resources act will not solve water issues, if the law is not applied. Therefore this should be considered as a part of a global water resources strategy supported by adequate funding and capacity building for implementation.

5.3 Fragmented management of water resources

It has been felt that this project is solely seen as a way to complete the long time awaited water resources act, but is not really considered in its entirety which is a set of pilot projects to move towards good water governance. Moreover, it is driven by the department of Mines and Energy under the Ministry of Natural Resources and there is no involvement of other agencies which reflects the fragmented management of water sector. A stakeholders general meeting to explain the goals of this project and possible areas of change should enable better understanding of what can be achieved and ensure this opportunity is fully exploited.

6 Possible target areas for pilot projects

- Policies – setting goals for water sector, water use, protection and conservation.
- Legislative framework – rules to follow to achieve policies and goals (water laws cover ownership of water, permits to use it, transferability of those permits, customary entitlements, regulatory norms for conservation, protection, priorities, and conflict management.)
- Creating an organizational framework – forms and functions (clear demarcation of responsibilities, co-ordinating mechanisms, jurisdictional gaps or overlaps, match responsibilities with authority and capacities for action).
- Awareness - developing awareness for decision makers, water managers and professionals, for regulatory bodies and empowerment of civil society.

ANNEX1: Minutes of the meeting with SIWA

Friday 21st January

Freda UNUSI, Senior Sales and Customers Service Officer (funusi@siwa.com.sb)

John WAKI, General Manager, (jwaki@swa.com.sb)

SIWA started operations in 1994 and is responsible for water supply and sanitation in urban areas, namely Honiara, Tulagi, Auki and Noro.

Land issues

The major problem faced by SIWA is land issues. Resources owners' claims are very high as logging and mining companies are paying high compensations. Legislation makes provision of compulsory acquisition but it's very hard to apply.

John said there is a need for standard procedures for compensation and said the creation of "trustees" like in Fiji could be a good solution to address issues with customary land owner and invest money from compensation fees in funds.

The other problem is land registration and legal ownership. There are many land disputes and it is sometimes hard to identify the owner. In some cases, many tribes and sub-tribes are living along a pipeline leading to having one lease and many sub-lease.

Urban Water supply

SIWA has 8000 customers , all metered but about 1900 meters are not functioning. The undergoing project funded by JICA should address the problem. Average consumption is estimated at 196 litre/capita/day. This good performance is attributed to the water conservation programme which combines awareness and aggressive tariff policy.

Tariff structure:

Domestic rate	1\$ per KL if consumption < 30KL per day 2.42\$ per KL if consumption > 30KL per day
Commercial rate	5.60\$ per KL

UFW represents about 50% of non-revenue water. The JICA project also aims at addressing this issue.

Water Quality

Water quality is regularly checked by the environmental department within SIWA. Water is chlorinated. Water from boreholes is not treated as quality is good. There is a need for a national laboratory under the Ministry of health which should be part of recommendations made by the Committee currently in charge with drafting a Water Quality Guidelines.

Financial

Revenue collection is 100% but this is not including arrears. The revenue is barely enough to cover O&M and capital works. Electricity bills are very high and reducing costs is a priority as well as high leakage.

Human resources

The main problem is staff training but not lack of personnel.

ANNEX 2: Minutes of the meeting with the Ministry of Health

Monday 23rd January 2006

Robinson Stanley Fugui, Director of Environmental Health Department

Ministry of health is responsible for coordinating rural water supply and sanitation at the national level. Water Units of the Provincial governments are operating at the local level.

Provision of water

The village lodge a request to the provincial government that will make a first assessment and transmit water supply requests to the Ministry of Health. The Ministry of Health prioritises demands and document them in one project submitted to donors (EU, JICA, AusAid, NZAid, Canada Aid). Once funds secured, the Water Unit of the provincial government is responsible to implement the scheme and maintain it.

Protection of Rivers is a priority

Communities in rural areas depend on rivers for water supply and the quality of water is affected by logging and mining. It is important to review the existing River waters act as it is only applying to protected rivers.

There is no provision in legislation to fine or prosecute polluters.

Management of rural water supply schemes

Once implemented, most of the rural schemes collapse rapidly due to lack of basic maintenance. Provincial governments are in charge with maintaining the schemes but due to lack of staff and funds for capital works, it is not properly done. Some provincial governments charge the village for the water supply which provides funds for maintenance. In these villages, the water supply scheme is better maintained as people are more committed to make it work.

Water consumption

Water consumption is high in rural areas but as there is an adequate supply of water, it is not a major problem.

The meeting was cut short as Mr Fugui had an important meeting with the Canadian donor agency.