PACIFIC PROGRAMME FOR WATER GOVERNANCE

Kiribati Case Study

Progress Report
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EU-SOPAC WATER GOVERNANCE PROJECT

Pacific Programme for Water Governance
The European Union has established a Programme for Water Governance (PfWG), for three regions, Africa, the Caribbean and the Pacific. A successful Pacific region submission in 2002 by the South Pacific Applied Geoscience Commission (SOPAC) proposed three pilot studies in Fiji Islands, Kiribati, and the Solomon Islands for water governance at different scales: national, major utility and local village, island or catchment based.

Increasing demographic trends, hydrogeology, climatic variation and change, urbanisation and the impacts of human activities all combine to impose significant risks to water resources in small island nations. The challenges faced in the water and sanitation sector in small island states are amongst the most difficult in the world. They require a strategic, coordinated whole-of-government approach, in partnership with island communities, that incorporates the existing expertise and experience throughout the government and community sectors and which represents the hopes and needs of communities for adequate water and sanitation.

Goal:
The overall goal of the PfWG is:
“to mainstream the principles of good water governance into day to day applications and pilot projects so as to assist in achieving sustainable water resource management and provision of water services”.

Good Water Governance
Water governance is the capability of a social system to mobilise energies, in a coherent way, for the sustainable development, management and use of water resources. Effective governance is open, transparent, participatory, communicative, sustainable, equitable, coherent, incentive-based, efficient, sustainable, integrative and ethical. It includes the ability to design public policies that have as their goal the sustainable development, management and use of water resources. It also involves the building of social acceptance and support for them and the development of strategies to implement them.

The degree of water governance within a society is determined by:
• The degree of consensus about the linkages between society and water;
• Agreement on the bases for public policy that express those linkages;
• The existence of management systems that can effectively implement policies.

Governance implies the capacity to generate and implement appropriate policies based on having established a consensus and coherent management systems and adequate administration. A fundamental factor in governance is the ability to introduce and develop institutions consistent with the capability, limitations and expectations of the prevailing system.1

The major challenge in water governance in the Pacific region is coping with the institutional changes necessary in the transition from subsistence cultures to developing, urban communities.

Water Governance Issues in Kiribati

Geographic constraints
The geographic setting of Kiribati provides significant constraints on the provision of water and sanitation services to its widespread island communities. Kiribati consists of 32 low lying coral islands and 1 raised coral island, Banaba, in 3 main island groups scattered over three million km$^2$ of sea in the Central Pacific, between 4° N and 3° S, and 172° E to 157° W. Twelve of these islands are currently unoccupied. The total land area of the country is only is 810.8 km$^2$. The Gilbert Group, with a land area of 285.7 km$^2$, contains the capital on the southern islands of Tarawa atoll. South Tarawa is highly urbanised and has 43.5% of the nation’s population. Some island population densities there are over 15,000 people/ km$^2$.

The Phoenix Group, located some 1750 km east of Tarawa, has 8 largely uninhabited islands with a total land area of just 28.6 km$^2$. The only inhabited island of the Phoenix group is Kanton (Canton) Island with the land area of 9 km$^2$. The Line Group has 8 islands with a total land area of 496.5 km$^2$, extending over a north-south line 2,100 km long and located at a distance of between 3,280 and 4,210 km east of Tarawa, beginning 800 km south of Hawaii. This Group includes the Kiritimati Island, a designated growth centre, with the largest island area in the Republic of 388.4 km$^2$. Transport and communications between the widespread islands which make up the Republic and transport costs to other countries around the Pacific pose significant problems.

The country’s population of over 92,400 people living in over 14,700 households scattered throughout the islands. These are in 1 urban centre with a population of over 40,000 and 167 villages in the rural outer islands. Village size in rural areas ranges from 17 to 1872 people (2005 census) with a median size of 245 people. There are over 14700 households with an average household size of 6.5 people. The task for a small island developing nation of devising governance strategies that are able to deliver equitably supply and maintain safe water and sanitation services to such small and very widely dispersed communities is both complex and expensive. The tyranny of distance is compounded by the lack of few economies of scale.

Governance issues
A review has been conducted on previous studies, policy statements and ministerial directives, draft water plans, and development plans in the Republic of Kiribati. These have revealed opportunities for improvements in the governance of the water sector.

Numerous community consultations in Kiribati and studies have demonstrated a well-developed understanding at all levels of the intimate linkages between society and water. Current water and sanitation policy however is ad hoc and fragmented and is not embedded within a framework of sustainable development. There is an urgent need for a National Water Policy to enunciate a national vision for water and sanitation and to provide a clear direction for government authorities and the community. The draft National Water Policy developed here under the EU Pacific Water Governance Project uses previous policy statements and community consultations to develop policy goals and objectives which have as an objective the sustainable development, management and use of water resources and which are based on community endorsed priorities.

In order to implement policy, it is necessary to have in place appropriate management systems. Currently, three government departments have explicitly stated responsibilities in water and at least four others (see Fig 1.) have administrative responsibilities that impinge on the water sector.
Fig. 1 Kiribati Water Sector Organisational & Responsibility Diagram
Fig. 2. Proposed Structure for the National Water and Sanitation Coordination Committee

NATIONAL WATER AND SANITATION COMMITTEE

OB

CABINET

MLPID  MFEP  MHMS  MPWU  MELAD  MCTTD(MO)  MISA

NCC  KANGO

CC  AMAK
In order to implement policy, it is necessary to have in place appropriate management systems. Currently, three government departments have explicitly stated responsibilities in water and at least four others (see Fig 1.) have administrative responsibilities that impinge on the water sector, but that may be without legislative basis. Previous projects and reviews have recommended improved coordination between government ministries and clearer definitions of roles in the water sector. In order to implement policy, it is also necessary to form partnerships with the community and industry. The proposed National Water and Sanitation Coordination Committee (see Fig. 2), whose terms of reference have been developed under the EU Pacific Water Governance Project is one mechanism for ensuring that coordination in the government sector occurs, that partnerships with community and industry are formed and that government policy is implemented.

Another mechanism necessary for the implementation of policy is the enactment of supporting water legislation. While regulations exist specifically for the operation of the PUB, there is no equivalent set of regulation for Outer Islands. Draft National Water Legislation was drawn up in 1992 and has been with the Office of the Attorney General since that time. It has yet to be enacted. In addition water supply services operated in the designated growth centre of Kiritimati appear to be without legislative basis.

A Draft 10 Year National Water Master Plan was prepared under a UNDCTD project in 1992 and subsequently revised up to 2000 by the Water Engineering Unit and the Public Utility Board of the then ministry of Works and Engineering. This plan has been extensively rewritten and revised under the EU Pacific Water Governance Project using elements from the more recent Kiribati Water Sector Road developed under the ADB 2004 Sectoral Strategy and Action Program Promotion of Effective Water Management Policies and Practices. The revised plan provides an analysis of the sectoral responsibilities and the current situation in terms of water and sanitation services as well as strategic framework and plan for moving forward. The proposed National Water Policy provides both the justification and the guiding principles for the Plan. The proposed National Water and Sanitation Coordination Committee provides the mechanism for overseeing the implementation of policy and the Plan, for reviewing and reporting progress and policy effectiveness and for engaging the community at the National level.

**The Kiribati Case Study**

Kiribati and Colombia were the first countries in the world to be selected under the Global Environmental Facility (GEF) Strategic Priority on Adaptation. The World Bank implemented project *Kirabati Adaptation Program – Pilot Implementation Phase (KAPII)*, supported by AusAID and NZAID has recently been signed. The Development of National Water Policy is a keystone Technical Assistance Activity in the Water Component of KAPII. Planning for this activity assumes that a Water Resources Steering Committee will be in place to oversee and review the development of National Water Policy and other water activities in KAPII.

The EU Pacific Water Governance pilot programme for Kiribati is focussing on development of initiatives at the national level but with major implications at the island and village levels and is aimed to blend seamlessly into the water component of KAPII. The programme is being run over a 10-12 month period based on brief inputs from the Australian National University to assist country facilitation of the process and development of a strategy. A key element in this process is the re-establishment of National Water and Sanitation Coordination Committee.
Activities under this pilot programme will include:

- Discussions with stakeholders over past recommendations on water governance, particularly policies and institutional frameworks, and their application in Kiribati, together with past experiences in whole-of-government and community participation approaches;
- Initiation of processes that will lead to the re-establishment of a National Water and Sanitation Committee that includes community and NGO representatives;
- Initiation of broadly-based consultations and discussions on the basic elements of a Draft National Water and Sanitation Policy and
- Revision and restructuring of a Draft 10 year National Water and Sanitation Plan.

Progress to Date

Phase I

In Phase I of this case study, consultations with government agencies, NGO’s and donor agencies have helped identify previous impediments to the establishment of a whole-of-government approach to the water and sanitation sector that includes community and NGO participation. As a result, a background paper on past experiences and suggestions on a whole-of-government approach to water and sanitation has been circulated to stakeholders together with a discussion document that sets out the case for the re-establishment of a National Water and Sanitation Coordination Committee that includes community and NGO representation. Comments on these discussion papers have lead to the development of a Draft Terms of Reference for the Proposed National Water and Sanitation Coordination Committee (Fig. 2) which is now under consideration by government agencies and NGOs. A key strategy here, to avoid the institutional rivalry over leadership of the Committee has been to have the Committee convened and coordinated by the National Strategic Policy and Risk Assessment Unit of the Office of the President. This suggestion received complete support by all organisations.

The suggested overall goal of the committee is to:

coordinate, facilitate and enhance Government and community activities in the water and sanitation sector to ensure that communities have access to water of suitable quality and appropriate quantities and to appropriate sanitation to meet all reasonable health, environmental, and development needs

The suggested aims of the Committee are to:

1. Promote the sustainable management, conservation and use of water and related land resources by implementing Government policy and by coordinating and enhancing Government and community activities and involvement.
2. Facilitate and enhance initiatives to raise the quality of life by improving the quality and availability of safe water and decreasing illness and infant mortality rates due to water-borne diseases.
3. Coordinate and facilitate information gathering and assessment, policy and instrument development and review, and identification of other needs for the water and sanitation sector throughout Kiribati.
4. Provide broadly-based strategic advice to the Government of Kiribati, the community, non-government and donor organisations on the nation’s water resources and sanitation service and their management and use.
While the proposed terms of reference for the Committee are to:

1. Coordinate and enhance the strategic activities of Government Ministries in the water and sanitation sector to ensure sustainable management.
2. Facilitate and coordinate the review and assessment of water and sanitation-related policies, regulations, plans, instruments and standards and make recommendations to Government on policy development, program implementation and potential improvements.
3. Provide the Government with broadly-based, coordinated, strategic advice on priorities for water and sanitation and on water-related development opportunities.
4. Provide a national forum for the discussion of water and sanitation-related issues.
5. Coordinate and facilitate an annual, national, island-based assessment report on the quality and quantity of water resources, water consumption, rainwater harvesting and demand for water and encourage strategic systematic monitoring.
6. Coordinate and facilitate assessments of risks in the water and sanitation sector and possible adaptation strategies in relation to global change and extreme events.
7. Enhance and coordinate strategies to improve community understanding of and participation in water and sanitation use and planning and in furthering water conservation and protection.
8. Coordinate the review and assessment of, and prioritise and make recommendations on proposals for water and sanitation-related projects.

A draft National Water Resources Policy, NWRP, *Water for Healthy Communities, Environments and Sustainable Development* was prepared following the Phsa I country visit. The policy is consistent with regional initiatives and with previous policy statements and Ministerial directives. The draft NWRP is intended to provide the framework for the conservation, sustainable use and management of Kiribati’s water resources and for the provision of safe and adequate water to island communities. It represents the vision of the people of Kiribati for the water sector.

The overall policy goal is:

*To ensure that communities have affordable access to sustainable water supply systems providing water of suitable quality and appropriate quantities and to appropriate sanitation to meet all reasonable health, environmental, and development needs*

The intended policy outcomes are:

1. Improved public health due to a decrease in water-born diseases;
2. Equitable access to safe freshwater;
3. Sustainable water supply systems;
4. Protection of freshwater resources from adverse impacts of human activities;
5. Better knowledge of the quantity and quality of fresh water resources;
6. Efficient allocation of water to various users;
7. Improved risk assessment and management for the water sector;
8. Greater public awareness of water resources issues;
9. Enhanced water and sanitation educational programs;
10. Increased stakeholder involvement in water protection of freshwater sources;
11. Increased community participation in the conservation and management of water and water sources
12. More effective governance, monitoring and assessment of water resources;
13. Increased ability to respond quickly to water crises;
14. Strengthened institutional capacity and training in the water sector;
15. Clear identification of roles and responsibilities;
16. Improved levels of cost recovery;
17. Improved access to donor and loan schemes.

In order to achieve these outcomes 13 short to medium term and 10 long term strategies have been proposed.

**Phase II**

During the Phase II visit progress towards re-establishing the NWSCC was discussed. It has emerged that the Ministry of Health and Medical Services has taken the lead and has written to the Permanent Secretary of the Office of the President requesting the Cabinet to reconvene the Committee. Also during the visit the draft policy was refined and discussed. Copies of the draft policy have been circulated to all relevant agencies and organisations and are currently under review.

A start was made at reviewing and a complete rewriting of the National Water Plan. A draft Plan, *National Plan and Strategies for Sustainable Water Management and Use* was subsequently developed and has been sent to selected key agencies for review. This National Plan aims to respond to the identified priorities and government policy agenda in Kiribati’s water and sanitation sector and to provide a framework for the sustainable supply of appropriate quantities water of adequate quality and sanitation services to meet community, health, environmental and development needs and to benefit all I-Kiribati. This Plan cannot be seen in isolation and builds on a number of earlier assessments, studies, and documents.

This “National Plan and Strategies for Sustainable Water Management and Use” framework elaborates specific strategies in order to guide the medium-term (10 year) development of the sector, and to provide a way of identifying how best the resources of the Government, NGOs, private sector, community organisations, donor and loan agencies may be best invested in technology appropriate to our local circumstances. It is intended that implementation of the Plan will be monitored and assessed through a set of indicators and milestones.

The objectives of this plan are to:

- Implement Government policy in the water and sanitation sector
- Establish a basic framework for the orderly planning, development conservation and use of water resources and the provision of adequate sanitation services;
- Ensure the good quality and sufficient quantity of drinking water through the protection of water resources and safe disposal of human waste
- Establish sustainable water supply systems
- Increase community understanding of and participation in water and sanitation planning and management
- Establish a system for monitoring outcomes and the regular review and updating of the plan.

The contents of the Plan are:

1: INTRODUCTION .................................................................................................
  1.1 International Goals for Water and Sanitation.............................................
  1.2 Regional Imperatives ..............................................................................
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Project Title: Provision of Safe Freshwater Supplies for Outer Islands. Phase I. Error! Bookmark not defined.
During the course of the Phase II visit it became obvious that the National Strategic Policy and Risk Assessment Unit of the Office of the President, OB, does not have sufficient resources to coordinate the NWSCC. A proposal was therefore developed for external support for a resource officer for OB to coordinate the whole-of-government-community NWSCC. It was proposed that this could be part of a funding package under EU EDF10.

**EU EDF10 Proposal**

During the course of the Kiribati case study under the EU Pacific Water Governance Project, a number of strategic priority issues were identified in which donor investment has the potential to have longer term benefits. These projects, which were identified by I-Kiribati agency staff are briefly described here. All are directed at the UN’s Millennium Declaration Goal “to halve by the year 2015 the proportion of the world’s population who are unable to reach or afford safe drinking water” and “to stop the unsustainable exploitation of water resources”. Infant mortality rates in Kiribati, due to water-borne diseases are amongst the highest in the Pacific.

The first project seeks to improve governance by resourcing the National Water and Sanitation Coordination Committee through the provision of a resource officer to support the National Water and Sanitation Coordination Committee. This Committee will provide an integrated, whole-of-government and government-community partnership approach to management and planning of the water and sanitation sector in Kiribati. It is shown that the issues faced in Kiribati in this sector are amongst the most critical in the world. Previous projects have identified the lack of a coordinated approach involving all relevant government agencies and community organisations in developing long term strategies is hampering progress in the water and sanitation sector. The appointment for 10 years of a resource officer within the Strategic National Policy and Risk Assessment Unit in the Office of the President to assist the National Committee will provide the required strategic approach. It is also suggested that a mentoring team be appointed to provide encouragement and support for the resource officer. The estimated cost of this project is 360K€ over 10 years.

The second project is the first 5-year phase of a four phase, 20 year Outer Island Water Supply Project. This is intended to increase access to safe water in rural areas and enhance the amenity and attractiveness of Outer Islands in order to lower the inward migration rate to urban South Tarawa. Priorities for Outer Island water supply systems have already been determined under an ADB project with the highest priority islands, Nonouti, Abemama, Banaba, Abaiang, Tabuaeran (Fanning) and Kuria. This project will build on assessments undertaken under the KAPII project. Solar powered groundwater pumping, storage and distribution systems will be repaired or installed.
in selected islands and rainwater collection and storage systems will also be constructed. In addition, a scheme will be encouraged to facilitate the purchase of private household rain tanks. In the Island of Banaba the dilapidated but sophisticated rainwater collection systems built in the 1960’s will be refurbished as a high priority. This project will include the enhancement of community participation in the management and protection of the freshwater sources at the village level and will incorporate a scheme for ensuring the financial sustainability of maintenance and operation. The two major outcomes planned are the reduction of the infant mortality rate due to water-borne diseases and the increase in amenity of Outer Islands. The cost of the first 5 year phase of this project is estimated to be 5M€.

The third project addresses the urgent needs of urban South Tarawa where demand for safe reticulated water is probably already equal to the sustainable extraction rate from current groundwater sources. The rate of exponential increase in population there has been about 4% since 1963 due to both natural growth and inward migration. The incidence of diarrhoea and dysentery there is disproportionately high particularly in densely populated areas. Refurbishment of the South Tarawa reticulated treated freshwater system under the ADB SAPHE project was completed in December 2005. The SAPHE project concentrated mainly on improving the bulk water supply component of the water supply system. It did not address the nearly 50% leakages that occur in the urban distribution systems to households and it provided improved connections to only 41% of households. This project aims to increase the number of households with improved connections to 80%, to decrease leakage to 25% and to install water meters to initiate charging for consumed water. This project is estimated to cost 1.3M€ over 3 years.

**PLANNED Phase III WORK**

In Phase III of this work it is planned to present the draft National Water Resources Policy, NWRP, *Water for Healthy Communities, Environments and Sustainable Development* to the SOPAC STAR Water Committee meeting in Honiara at the end of September for comment and suggestions from colleagues from around the Pacific. The revised Draft Policy will also be presented to the NWSCC for discussion in Tarawa. This phase will provide a feedback loop to revise and enhance the policy.

Also during Phase III, the “*National Plan and Strategies for Sustainable Water Management and Use*” will be discussed at the STAR Water Committee meeting in Honiara for suggestions and comments. The refined version of the Plan will then be presented for discussion by the NWSCC in Tarawa. The aim of the Phase III work will be to have the NWSCC transmit its version of the Policy and Plan to Cabinet.

**GAPS IN THIS APPROACH**

This project has concentrated on addressing the governance problems at the national level where major opportunities for improvement were identified. Previous work and the analyses conducted as part of this work have revealed that the reason that previous, expensive water and sanitation projects in Kiribati have had limited success has been the failure to engage the community in the projects and the failure to achieve community ownership of the project. Given the highly dispersed, rural, small villages throughout the Republic’s islands, it is extremely doubtful if any centralised Ministry can deliver efficient and safe water surfaces at the village level without the involvement of villages and community ownership of the project. The task of forming village level water and sanitation committees and groundwater source protection committees is beyond the scope of this project but needs urgently addressing.