

Annex

1. IDENTIFICATION

Title/Number	KIRIBATI - Water and Sanitation in Outer Islands (Phase I) CRIS: KI/FED/022-422	
Total cost	EUR 3 400 000 – Envelope A	
Aid method	Project approach – Joint management	
DAC-code	14030	Sector: Basic drinking water supply and basic Sanitation

2. RATIONALE

2.1. Sector context

Background information: Kiribati became independent of the UK in 1979 and has since maintained a stable democratic government. The country consists of 33 islands scattered across 5 million km² in the Pacific Ocean, with an estimated population of 110,000 living in 20 low-lying coral atolls and islands in the Gilbert, Line and Phoenix groups (2009 statistics). It is estimated that 90% of the population lives in the Gilbert group, on which this project will focus.¹ Kiribati is classified as a least developed ACP State under Annex 6 of the Cotonou Agreement with a Gross Domestic Product (GDP) per capita of US\$1,295. Overseas Development Assistance per capita is estimated at US\$285 and remittances inflows were US\$74 per capita in 2007². There is a wide disparity between the socio-economic conditions in the capital (South Tarawa) and on the outer islands, where subsistence lifestyle still prevails. This causes an important migratory flow from outer islands to South Tarawa, leading to population pressure, competition for limited resources and environmental degradation in the capital. The country appears to be highly vulnerable to the adverse effects of climate change, including climate variability and sea-level rise.

Water and Sanitation: Although groundwater is the most common source of freshwater throughout Kiribati, it is increasingly threatened by saline water intrusion (due to rising sea levels and unsustainable management of water resources), increased pollution and over extraction due to population pressure and economic development. According to the 2006 WHO/UNICEF (JMP) report³ access to improved drinking water sources⁴ was 77% for urban population and only 53% for the rural population. Rainwater collection can be an efficient and sustainable complementary source of safe freshwater for Kiribati (rainfall varies from a mean annual rainfall of 1,230 mm in Onotoa island in the South to 3,107 mm in Butaritari island in the north). However, this requires adequate catchment areas and storage facilities as well as stronger water governance structures and better management of demand. Producing desalinated water is presently not viable due to high electricity and fuel costs to operate desalination plants.

¹ 2005 National Census Kiribati: Analytical Report.

² Human Development Report, 2009, UNDP

³ WHO/UNICEF Joint monitoring Programme on the MDGs. This is the latest available report for Kiribati.

⁴ An improved drinking-water source is defined as one that, by nature of its construction or through active intervention, is protected from outside contamination, in particular from contamination with faecal matter (WHO/UNICEF JMP).

According to the 2006 WHO/UNICEF (JMP) report, access to improved sanitation facilities⁵ was reported as 46% for the urban and 20% for the rural population. Kiribati has a relatively high infant (52 deaths/1,000 live births) and under-five (69 deaths/1,000 live births) mortality rates⁶, with diarrhoeal diseases making a significant contribution. High incidence of diarrhoeal diseases is mainly caused by poor quality groundwater used as a source of drinking water. Schools in the majority of the outer islands rely on unsafe drinking water from open wells, unprotected rain catchments and limited and/or non-existent piped water supplies⁷. In order to address the high incidence of water-borne diseases in Kiribati, there needs to be better access to safe drinking water, adequate and socially acceptable sanitation facilities, combined with an effective education/awareness raising campaign to improve peoples' understanding of water, sanitation and hygiene (WASH) issues and to encourage behavioural changes (for example as regards to the widespread practice of open defecation in bush, beach and sea).

The project is aligned with the Kiribati National Water Resources Policy 2008 (NWRP) and the 10-year National Water Resources Implementation Plan (NWRIP). Indeed, it will contribute to the achievement of the 3 main policy goals (Point 7.1 of the NWRP: 1) To Provide safe, socially equitable, financially, technically and environmentally sustainable water supplies; 2) Protect and conserve freshwater resources for public water supplies; and 3) Deliver freshwater efficiently and effectively. The project is also aligned with the Kiribati National Sanitation Policy and 10-year Sanitation Implementation Plan⁸ which explicitly mentions this project under their point 3.3.2 'Related Projects'. The proposed action complements the Kiribati Development Plan (KDP) 2008-11 and the 1977 Public Utilities Ordinance and is relevant to the Government's policies on developing Growth Centres in atolls beyond Tarawa (1994) and on their Adaptation to Climate Change strategies (2005).

2.2. Lessons learnt

A review of past WASH projects⁹, 11 on-going or recently concluded projects¹⁰ and the assessment of groundwater supply systems installed in 73 villages in 13 islands of the Gilbert Group in the 1990s, through the UNDP¹¹/UNCDF¹² Outer Islands Community Water Supply Project (OICWSP), revealed that the main challenges to the sustainability of outer island water and sanitation systems are: lack of proper water resources assessments; weak local community engagement, lack of ownership leading to poor operation and maintenance; limited local capacity; failure to recognise and address connected water and land ownership issues; managing highly dispersed island communities through centralised bureaucracies; sole focus on infrastructure; and non-inclusion of sanitation and hygiene education and awareness. The proposed project will mitigate each one of these factors: it will conduct hydro-geological assessments in the first phase of implementation; will focus on building ownership through

⁵ For MDG monitoring, an improved sanitation facility is defined as one that hygienically separates human excreta from human contact.

⁶ Sources: (1) Census Report 2005, (2) World Health Organization, Country Health Information Profile (CHIP),

⁷ Moglia M; Perez P; and Burn S. Water troubles in a Pacific atoll town. *Water Policy* 10 (2008) 613—637

⁸ The draft sanitation policy document scheduled for Cabinet approval during the Parliamentary sitting period of 12-23 April 2010.

⁹ ADB. Promotion of effective water management policies and practices: sectoral strategy and action program. TA No.6031-REG. TAR: 35494-01. By Sinclair Knight in association with Brisbane City Enterprises. August 2004.

¹⁰ Summary of Background Document: Key issues and recommendations by Ian White, Fenner Schools of Environment and Society, Australian National University, June 2009.

¹¹ United Nations Development Programme

¹² United Nations Capital Development Fund

several rounds of all-inclusive community mobilisation and dialogue sessions leading to the formulation and adoption of community action plans which will include management, operation and maintenance schemes with clear lines of accountability; it will build local capacity by having the team located in the offices of the Ministry of Public Works and Utilities (MPWU) and through a specific training/capacity building component for the Island Development Committees (technical sub-committees of the Island Councils), village committees and community-based water artisans and health promoters. Connection between water and land ownership issues will be addressed with the Ministry of Land and Agricultural Development (MELAD) and the MPWU. This project will only build infrastructure once governance structures are strengthened to ensure proper operation and maintenance of facilities and once the communities are satisfied and socially ready to adopt them.

Assessment of past projects has also shown some encouraging elements. For example, the Kiribati Sustainable Energy Company (KSEC) provides and charges for solar electricity in outer islands (at a rate of AUS\$9.00 per month per household). It therefore appears possible to charge nominal user-fees for essential services, such as water. Furthermore, some Island communities have been able to manage essential services as illustrated by the use of *Kamwengaraoi* island committees to improve health and hygiene under the technical supervision of the Ministry of Health and Medical Services. Finally, the Cabinet 2004 decision to make outer island water supply systems sustainable provides a clear policy direction on outer island water schemes, including setting a cost-recovery of AUS\$2.00 per household per month when connected to a public water supply. It is on these grounds that the project will support and encourage the establishment of a cost-recovery mechanism for communities to finance and manage the operation and maintenance of their water and sanitation facilities (an element which should enhance ownership).

2.3. Complementary actions

The proposed project will complement the following ongoing initiatives and programmes:

(a) The EUR 8.8 million EDF 9 Improvement of Health Service in the Outer Islands (KIR-EU), which will provide data on the impact of the project as regards to the incidence of water-related diseases in the population.

(b) AusAID-funded AUS\$1.6 million Kiribati Adaptation Project II (KAPII): “Improving the Sustainability and Supply of Freshwater” (2006-2010), which has helped building the capacity of the Water Engineering Unit of the MPWU and set up boreholes for monitoring groundwater in the outer islands which will be used to calibrate instruments for the hydro-geological assessments phase of the project;

the proposed project will also make use of lessons learned from

(c) the UNDP “Strengthening Decentralised Government Programme”, aimed at reducing migration from outer islands to Tarawa and disentangling the overlapping and competing functions of the Church, local councils and traditional decision-making structures in the outer islands;

and will complement the work of

(d) Italian government funded solar water pumping systems for selected schools in outer islands; and

(e) UNICEF’s ongoing water and sanitation activities in schools and surrounding communities in South Tarawa and Abemama outer island.

2.4. Donor coordination

There are two main donor coordination mechanisms in Kiribati: The first (at national level) is through the Development Coordination Committee (DCC) within the Ministry of Finance and Economic Development, a permanent body composed of Permanent Secretaries from all Ministries and chaired by the Secretary of the Cabinet, which provides oversight, linkage and coordination between development programs. The second (at donors' level) is through the Donor Coordination Meetings, which have taken place annually since 2007 but will, from now on, take place only once every two years. These meetings are frequently held at high representational level and cover projects in all sectors. One of the major constraints is that not all donor organisations are present in Kiribati¹³. This project will therefore establish a complementary donor coordination mechanism which will be specific to the sector (covering only projects in water, sanitation and hygiene), which will meet twice a year and work at technical level to ensure coordination between donors' activities, discuss selected technical issues, work towards harmonising donor assistance in the sector, ensure alignment to national policies and strategic plans, undertake sector performance reviews, and draw lessons which will be incorporated into national development strategies. This WASH Donor Coordination Committee will be complementary to the above mentioned mechanisms and will be coordinating its activities with both mechanisms and with the Pacific Regional Infrastructure Facility (PRIF).

3. DESCRIPTION

3.1. Objectives

The **overall objective** of the project is to improve social and economic development and reduce poverty in the Outer Islands of Kiribati. The project will contribute to closing the wide disparity between the socio-economic conditions in the capital, South Tarawa, and outer islands as well as to the achievement of millennium development goals (MDGs).

The **purpose** of the project is to increase access to safe and sustainable water and sanitation and reduce WASH-related diseases in at least 70 out of 139 villages in 16 islands of the Gilbert group, in Kiribati.

3.2. Expected results and main activities

Project description: This project is designed as the first out of two complementary projects and can only be understood when seen in conjunction with its proposed follow-up project.

This project will focus on a) conducting hydro-geological assessments of groundwater resources, b) assessing existing water and sanitation infrastructures, repairing existing structures where appropriate and installing new rainwater harvesting systems with safe storage facilities and c) enhancing capacity at community level to build strong governance structures that will ensure sustainable operation and maintenance of the water infrastructure facilities, and conducting a training/awareness raising campaign on WASH issues. This project will focus heavily on involving communities and all relevant stakeholders in decision-making in order to ensure ownership and prepare the ground for the follow-up project.

¹³ Non-resident development partners are EU, WB, ADB and SPC. Resident development partners are AusAID, NZAID, JICA, WHO, UNICEF, Taiwan Mission and UNDP.

The follow-up project (included here only for information) will a) draw directly on the hydro-geological studies/designs in order to build pumps and access groundwater in a safe and sustainable way, b) draw on the governance structures to ensure that there is a cost-recovery mechanisms allowing communities to manage, operate and repair the new instalments past the life of the project, and c) use the results and recommendations from assessments and from community consultations to build the technologically appropriate/socially acceptable and chosen sanitation facilities. It is expected that the WASH campaign will have initiated the behavioural changes that need to accompany the new sanitation facilities.

Result 1: Availability and adequacy of ground and rain water ascertained and appropriate water and sanitation systems designed.

Result 2: Increased volume of rainwater harvested, stored and used.

Result 3: Enhanced capacity to install and sustain improved water and sanitation systems.

Main activities:

Linked to result 1:

Availability and adequacy of ground and rain water ascertained and appropriate water and sanitation systems designed

1.1 Establish a project management unit (PMU) embedded in the MPWU.

1.2 Consult relevant Ministries, Island Councils and private land owners on all aspects of the project.

1.3 Conduct Round One community mobilisation and assessment of perceptions and capacity.

1.4 Launch the Outer Islands WASH scheme at national level.

1.5 Conduct hydro-geological assessment and analysis of existing water and sanitation systems.

1.6 Conduct Round Two community mobilisation and participatory designs of water and sanitation systems.

1.7 Conduct participatory monitoring and evaluation of the project.

Linked to result 2:

Increased volume of rainwater harvested, stored and used.

2.1 Assess availability and suitability of existing roofs on individual, communal/public buildings.

2.2 Install rain water storage tanks to identified buildings and repair existing installations.

2.3 Train two water artisans and two village health workers per village.

Linked to result 3:

Enhanced capacity to install and sustain improved water and sanitation systems

3.1 Adapt available WASH guidelines, training and information/education/ communication materials.

3.2 Establish water information system linked to health and cost-recovery scheme.

3.3 Conduct national training of trainers (TOTs) on community-led total sanitation (CLTS) and personal hygiene and sanitation transformation (PHAST).

3.4 Support training of community-based WASH workers and committees.

3.5 Provide initial WASH spare parts and toolkits.

3.6. Train primary school teachers on child-friendly WASH approach.

3.7 Train civil society organisations on sustainable WASH.

3.3. Risks and assumptions

In addition to the risks identified in Section 2.2 with their mitigation strategies, the following three main risks have been identified

Natural hazards and disasters such as cyclones, drought and floods, might affect the achievement of all the results. Specifically, these would affect the delivery of supplies to the remote island communities, might destroy roof catchments or lead to depleted groundwater sources. However, the use of both groundwater and rainwater technological options in conjunction with one another is expected to mitigate the effects of these disasters (in so far as the pumps should allow groundwater extraction when roof catchments are destroyed by a cyclone and rainwater harvest should provide another freshwater source when there is no sufficient water underground due to prolonged periods of drought).

Migration of skilled persons from Outer Islands: There is an important migration flow from outer islands to the urban centres, which is the reason why this project focuses on the development of outer islands. With the provision of skills to the village technicians and establishment of cost recovery mechanisms, village water and sanitation technicians should be encouraged to stay and possibly use their acquired skills to start income generating activities.

Willingness and ability to pay: A critical project assumption is that beneficiaries will be willing and able to share costs of operation and maintenance of the water supply systems. Involvement of communities in decision-making at all stages of the project is expected to increase their sense of ownership and duty to sustain the benefits of the new WASH facilities. It is also expected that the health benefits and daily advantages from having improved drinking water all year around will provide the main incentive for contributing to the cost recovery mechanism.

3.4. Crosscutting Issues

Good governance and human rights: Transparent and accountable management of the project resources will be ensured through establishing and/or strengthening water, sanitation and health committees as well as training Island Councils, Island Development Committee (IDC) and community representatives. Training will cover the six essential elements of good governance¹⁴. Community participation in decision-making will promote democracy and the rule of law.

Gender: Women play a key role in the provision of water to their household and in the training of children as regards to WASH habits. The project will ensure the effective participation of women and girls in every aspect of the project and will support their active representation in village welfare groups dealing with WASH issues.

Environmental sustainability: Water and sanitation systems will be designed in an environmentally sustainable way. The need for an Environmental Impact Assessment will be assessed for each supply system, as required by the Ministry of Environment, Land and Agricultural Development (MELAD) and as a prerequisite towards obtaining the necessary Environmental licences.

¹⁴ EC Project Cycle Management Manual, pp 5

3.5. Stakeholders

The project will be implemented in 16 Islands and Atolls¹⁵ of the Gilbert group of islands, with a population of approximately 43,000 people¹⁶ living in 139 villages. Government officers, Non-governmental Organisations (NGOs)¹⁷, the private sector¹⁸ and communities were consulted extensively during KAP I (2003-2005) and water and sanitation was the highest perceived priority in outer island. The key primary stakeholders are Communities and Island Councils, who will have overall responsibility for operating and maintaining the installed systems. The key secondary stakeholders are the Ministries¹⁹. Other stakeholders are regional and donor agencies (such as the World Health Organisation (WHO), the SPC Applied Geoscience and Technology Division (SOPAC), the Secretariat of the Pacific Community (SPC), UNDP, Australia Aid agency, New Zealand Aid, Japan and its International Cooperation Agency, Taiwan, World Bank).

4. IMPLEMENTATION ISSUES

4.1. Method of implementation

A Financing Agreement will be signed between the European Commission and the National Authorising Officer of the Republic of Kiribati. The project will be implemented through **Joint Management** through a Contribution Agreement to be signed between the Commission and UNICEF.

UNICEF was chosen as implementing partner because of their permanent presence in Kiribati, their long and reputable experience in the implementation of projects in the field of water, sanitation and hygiene, and their specific expertise in working on training/capacity development/awareness rising at community level.

4.2. Procurement and grant award procedures

All contracts implementing the action are awarded and implemented in accordance with the procedures and standard documents laid down and published by the International Organisation concerned.

¹⁵ 1. Makin, 2. Butaritari, 3. Marakei, 4. Abaiang, 5. North Tarawa, 6. Maiana, 7. Abemama, 8. Kuria, 9. Aranuka, 10. Nonouti, 11. Tabiteua, 12. Beru, 13. Nikunau, 14. Onotoa, 15. Tamana and 16. Arorae

¹⁶ 2005 National Census.

¹⁷ Non-governmental organisations are largely faith-based, women and youth groups.

¹⁸ Private sector provide shipping services to outer islands according to demand. Services are not scheduled.

¹⁹ Ministry of Internal and Social Affairs (MISA), Public Works and Utilities (MPWU), Ministry of Health and Medical Services (MHMS), and Ministry of Environment Land and Agricultural Development (MELAD).

4.3. Budget and calendar

The operational duration of this proposed action is 36 months. Total budget under the Financing Agreement is **3 400 000**. The budget breakdown is as follows:

<u>Item</u>	<u>Cost (in EUR)</u>
Contribution Agreement with UNICEF	3 220 700
Audit and Evaluation	60 000
Contingency	119 300
Total	3 400 000

4.4. Performance monitoring

Major indicators measuring progress of the programme will include:

Indicator	Baseline	Target	
		With Action	Without Action
1. % of households with access to improved water sources	53% in 2006	75% by 2013	53%
2. # of cases of diarrhea per annum per 1000 population	102 in 2000 ²⁰	51	102
3. # of outer islands covered by hydro-geological assessment	1 (2010)	16 by June 2012	3
4. # of additional rainwater tanks installed and used	N/A	350	0
5. # of villages with a set of water and sanitation committees, community-based water artisans and health promoters	Nil	70	0

4.5. Evaluation and audit

A mid-term review and final evaluation of the project may be carried out by independent consultants recruited by the EU. Audits may be undertaken in accordance with the provisions of the Financial and Administrative Framework Agreement (FAFA) between the European Commission and UN.

4.6. Communication and visibility

Undertaken in accordance with the provisions of the FAFA and associated Joint Visibility Guidelines for European Commission - UN actions in the field.

²⁰ Latest available data.