



## PROJECT IDENTIFICATION FORM

**Project Type:** Full Size Project

**Type of Trust Fund:** LDCF

### PART I: PROJECT IDENTIFICATION

Project Title:	Solomon Islands Water Sector Adaptation Project (SIWSAP)		
County (ies):	Solomon Islands	GEF Project ID:	4725
GEF Agency(ies):	UNDP	GEF Agency Project ID:	4568
Other Executing Partner(s)	Water Resources Department of the Ministry of Mines, Energy and Rural Electrification (WRD-MMERE)	Resubmission Date:	March _,2012
GEF Focal Area(s):	Climate Change	Project Duration (Months)	48
Name of parent programme (if applicable):	N/A	Agency Fee (\$)	685,000

### A. FOCAL AREA STRATEGY FRAMEWORK

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Indicative Grant Amount	Indicative Co-financing
CCA-1: Reduce vulnerability to the adverse impacts of CC, including variability, at local, national, regional and global levels	1.1 Mainstreamed adaptation in broader development frameworks at country level and in targeted vulnerable areas	1.1.1 Adaptation measures and necessary budget allocations included in relevant frameworks	LDCF	400,000	500,000
	1.2 Reduced vulnerability in development sectors	1.2.1 Vulnerable physical, natural and social assets strengthened in response to climate change impacts, including variability	LDCF	4,800,000	34,655,000
CCA-2: Increase adaptive capacity to respond to the impacts of CC, including variability, at local, national, regional and global levels	2.1 Increased knowledge and understanding of climate vulnerability and change – induced risks at country level and in targeted vulnerable areas	2.1.1 Risk and vulnerability assessments conducted and updated	LDCF	200,000	100,000
	2.2 Strengthened adaptive capacity to reduce risks to climate-induced economic losses	2.2.2 Targeted population groups covered by adequate risk reduction measures	LDCF	400,000	600,000
	2.3 Strengthened awareness and ownership adaptation and climate risk reduction processes at local level	2.3.1 Targeted population groups participating in adaptation and risk reduction awareness activities		280,000	400,000
CCA-3: Promote transfer and adoption of adaptation technology	3.1 Successful demonstration, deployment and transfer of relevant adaptation technology in targeted areas	3.1.1 Relevant adaptation technology transferred to targeted groups	LDCF	428,000	1,500,000

		Sub-Total		6,508,000	37,755,000
		Project Management Cost	LDCF	342,000	2,500,000
		Total		6,850,000	40,255,000

## B. PROJECT FRAMEWORK

<b>Project Objective:</b> To improve the resilience of water resources to the impacts of climate change in order to improve health, sanitation and quality of life, and sustain livelihoods in targeted vulnerable areas						
<b>Project Component</b>	<b>Grant Type</b>	<b>Expected Outcomes</b>	<b>Expected Outputs</b>	<b>Trust Fund</b>	<b>Indicative Grant Amount (\$)</b>	<b>Indicative Co-financing (\$)</b>
1. Water Sector Climate Change Adaptation (WS-CCA) Planning in the context of Integrated Water Resources Management (IWRM)	TA	1.1 WS –CCA plans formulated, integrated and mainstreamed in water sector-related and in broader policy and development frameworks	<p>1.1.1 Vulnerability assessments of water supplies (in terms of quantity and quality) to climate change in targeted critical areas refined or formulated</p> <p>1.1.2 WS-CCA plans prepared in the context of IWRM and in line with and integrated into existing local and national policy and development planning processes</p> <p>1.1.3 Government budgets allocated to support implementation of key components of WS-CCA plans</p>	LDCF	<b>850,000</b>	<b>700,000</b>
2. Implementation of WS-CCA Plans	INV	<p>2.1 Increased reliability and improved quality of water supply in targeted areas</p> <p>2.2 Investments in cost-effective and adaptive water and sanitation management and technology transfer</p>	<p>2.1.1 Community-level WS-CCA soft measures implemented to improve sanitation and water supply in times of scarcity, that may include, but not limited to: diversification of water sources; protection and restoration of ecosystems that protect critical water resources; improvements in water-use efficiency and overall demand-side management; use of innovative instruments; building on traditional knowledge (in about 6 sites)</p> <p>2.1.2 Community-based Climate Early Warning and Disaster Preparedness Information System tailored for water resources management developed and implemented in targeted areas (6 sites)</p> <p>2.2.1 Strategic investments in water and sanitation infrastructure in target areas, including but not limited to: enhanced household and communal water storage systems and infrastructure; design and construction of applicable small-scale climate-resilient reservoir in at least 1 site; provision of up to 4 portable water filtration and/or desalination systems for sharing across communities in times</p>	LDCF	<b>4,908,000</b>	<b>36,055,000</b>

			of extreme water scarcity; protection of freshwater lens through better sanitation practices in small islands (e.g., composting toilets).  2.2.2 Compilation of best practices on applicable technologies for dissemination and replication by project partners with support from the project			
3. CCA-orientated Governance in the Water Sector	TA	3.1 Improved governance and knowledge management for CCA in the water sector at the local and national levels	3.1.1 Overarching policy and legislation for the water sector that integrates CCA components in IWRM plans drafted and advocated, including guidelines for climate resilient water supply development in vulnerable areas  3.1.2 Institutional and community capacities strengthened toward water-sector CCA formulation, implementation and monitoring at the national and local levels  3.1.3 Multi-media knowledge products on CC, CCA, IWRM, lessons learned and best practices developed and disseminated extensively to communities, schools and the general population and through ALM	LDCF	750,000	1,000,000
Sub-Total					6,508,000	37,755,000
Project Management Cost				LDCF	342,000	2,500,000
<b>Total Project Cost</b>					<b>6,850,000</b>	<b>40,255,000</b>

### C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE (\$)

Sources of Cofinancing	Name of Cofinancier	Type of Cofinancing	Amount (\$)
National Government	WRD	In-kind	500,000
	RWSS	In-kind	400,000
	Ministry of Rural Development	In-kind	200,000
Local Government	Provincial government(s)	In-kind	200,000
GEF Agency	UNDP	Grant	1,755,000
Other Multilateral Agenc(ies)	European Union/RWSS	Grant	27,000,000
	AusAID/RWSS	Grant	10,000,000
CSO	Solomon Island Red Cross; World Vision; Adventist Development Relief Agency; CARITAS; others	In-kind	100,000
Others	Beneficiaries (communities)	In-kind	100,000
<b>Total Cofinancing</b>			<b>40,255,000</b>

#### D. GEF/LDCF/SCCF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	Grant Amount (a)	Agency Fee (b)	Total c=a+b
UNDP	LDCF	Climate Change	Solomon Islands	\$6,850,000	\$685,000	\$7,535,000

### PART II: PROJECT JUSTIFICATION

#### A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

##### A.1.1 the GEF focal area/LDCF/SCCF strategies:

The project is aligned with LDCF/SCCF focal area objective 1 (GEF/LDCF.SCCF.9/4/Rev.1) – to ‘reduce vulnerability to the adverse impacts of climate change, including variability at local, national regional and global level’, objective 2 – to ‘increase adaptive capacity to respond to the impacts of CC, including variability’, and objective 3 – to ‘promote transfer and adoption of adaptation technology’. The project will start with the assessment of vulnerabilities in the water sector (Output 1.1.1 relevant to CCA-2) which will provide the context for the Water Sector Climate Change Adaptation (CC-A) plans. The WS-CCA plans that will be formulated within the IWRM framework (Output 1.1.2 relevant to CCA-1) will be mainstreamed in broader development frameworks, particularly at the relevant geopolitical unit (district) of the project sites and up-scaled at the national level (Outcome 1.1). The process of mainstreaming (Output 1.1.3 relevant to CCA-1) will target on the allocation of necessary budget to implement the adaptation frameworks/plans although the plans will be implemented with LDCF support. The implementation of the plans will reduce the vulnerability to climate change of the water-dependent development sectors (Outcomes 2.1 and 2.2 and associated Outputs relevant to all CCA objectives), specifically through investments and improved provision and access to clean drinking water and sanitation, better water management practices and institutions of integrated disaster response measures to extreme climate events. New technologies to improve community-level water sector resilience in the context of climate change will be employed and transferred to the beneficiaries and the private sector, as appropriate to facilitate replication. The long-term reduction of vulnerability to the adverse impacts of climate change in the water sector will be addressed through improved governance and replication of lessons learned within the country (Outcome 3.1 and associated Outputs primarily relevant to CCA-2).

##### A.1.2 For projects funded from LDCF/SCCF: the LDCF/SCCF eligibility criteria and priorities

The focus of the project on improving the resilience of water resources impacts of climate change is within the priorities of the LDCF programming strategy which recognizes the special challenges in the water sector in the context of climate change. More specifically, it is stated in the strategy that ‘the linked impacts of climate change pose very complex adaptation challenges that are additional to the existing policy and management failures facing ..., water supply, irrigation, ... and water resources management, including commonly ignored areas of groundwater and coast’. Climate-related stresses exacerbate long standing pressures on water resources but would to be jointly addressed if drinking water supplies and food from irrigation are to be sustained. The LDCF programming strategy further indicates that “projections show billions of people will suffer from water and food shortages resulting in deepening poverty, further political instability, and forced migration”. This project will respond to these challenges that are particularly most relevant to a water-stressed country such as the Solomon Islands.

##### A.2. National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e., NAPAs, NAPs, NBSAPs, national communications, TNAs, NIPs, PRSPs, NPFE, etc.:

The proposed project is consistent with national strategies and plans. As part of the commitments to the UNFCCC a National Adaptation Programme of Action (NAPA) was completed in 2009 with the water sector included as one of the priority vulnerability and adaptation issues. Elements of a water supply and sanitation adaptation programme was enunciated in the NAPA. It is included in Priority 1: Managing the Impacts of, and Enhancing Resilience to, Climate Change and Sea-Level Rise, on Agriculture and Food Security, **Water Supply and Sanitation**, Human Settlements, Human Health and Education, Awareness and Information. The details on Water Supply and Sanitation are pasted below.

#### *Component 2: Water Supply and Sanitation*

*The main objective is to increase the resilience of water resources management to impacts of climate change and sea-level rise.*

*Outcome 1: Integrate water conservation and sustainable water resources management in all sectors and communities.*

*The outputs include: construction of village/community water tanks; construction of water reservoirs for institutional and residential areas; upgrading of existing reservoirs, protective structures/access roads; promote/build household rainwater harvesting; construction of strategic storage water reserve tank; engineered or "climate proofed" water reservoirs; develop and implement Water Use efficiency Plan; raise awareness for water conservation.*

*Outcome 2: Incorporate climate change adaptation strategies into the guidelines and criteria for design and construction of appropriate water infrastructure in vulnerable areas.*

*The outputs include: guidelines for development of water supply in rural areas developed; inventory of POPs and adequate storage and leakage prevention conducted; good practice guidance for pesticide storage and use, and application developed and used; drought and its effect on water distribution in rural areas assessed; rainwater harvesting technologies developed and used.*

*Outcome 3: Increased reliability and quality of water supply to all sectors and communities*

*The outputs include: capacity of water supply increased; water reticulation and distribution systems improved and where necessary constructed; arable land improved and rehabilitated; sustainable use of water on commercial agriculture land; build appropriate low-technology irrigation system for farmers; diversification food crops with a focus on high-yielding crop varieties promoted; promote water conservation and water use efficiency; prevent land-based pollution.*

*Outcome 4: Enhanced institutional and legal framework for water resources management*

*The outputs include: individual and institutional capacity for sustainable water management built and/or enhanced; water resources sector policy developed and implemented; water resources sector legislation developed and adopted; water sector plans and programmes developed and implemented.*

A draft Second National Communication (SNC) highlights the vulnerability of water resources and their potential for renewable energy as well as the range of technology needs and technology transfer opportunities for adaptation and mitigation in the water sector. As a commitment to the Hyogo Framework for Action on Disaster Risk Management a National Disaster Risk Management Plan was developed in 2009 setting out the institutional arrangements for disaster risk management (DRM) and disaster risk reduction (DRR) measures. Linked to climate change mitigation, the national Renewable Energy Policy (2008) promotes the management of water resources as a source of renewable energy and the recently developed initiative on Reduction of Emission from Deforestation and Degradation (REDD) supported by the UN will be establishing a governance framework and building capacity to implement REDD. It is envisaged that this can lead to a REDD+ approach where ecosystem services such as water catchments can be valued and protected with appropriate incentives. The National Biodiversity Strategic Action Plan (NBSAP) provides for the establishment of protected areas including around catchments and watersheds and the recently completed UNCCD National Action Programme (NAP) to Combat Land Degradation and Mitigate the Effects of Drought includes actions aimed at strengthening early warning and weather observation systems. A national Waste Management Strategy and Action Plan (2009-2014) has

identified pollution of underground water resources as an issue and includes actions to minimize pollution into water systems.

## **B. PROJECT OVERVIEW**

### **B.1 . Describe the baseline project and problem that it seeks to address**

**Problem.** The Solomon Islands Water, Sanitation and Climate Outlook (Low 2011 – draft) describes the poor state of affairs regarding water resource management in the country. According to the report, water and sanitation are in a state of neglect with significant gaps in governance and institutional arrangements and very limited human and financial capacity. The MDG Progress Report for Solomon Islands (2010) finds that the country is severely off-track to reach its targets for MDG 7.c. With respect to access to improved drinking water sources, the proportion of population having access has remained constant both for urban (at 94%) and rural areas (at 65%) from the 1990 baseline to the assessments in 2004 and 2010. On the other hand, there has been a deteriorating use of sanitation facilities during the same period for both urban areas (from 98% to 77%) and rural communities (from 18% to 7.8%). It is usually the case for small islands that poor sanitation facilities affect groundwater water quality and therefore access to improved drinking water sources.

*Climate Change Dimension of the Problem.* The IPCC Fourth Assessment Report recognizes that the projected impacts of climate change in SIDS cross all sectors and their high vulnerability and low adaptive capacity is inextricably linked to the socio-cultural and economic context of these island states. Water supply is likely to be exacerbated by climate change. Freshwater lenses are predicted to reduce in size due to increased demand and reduced rainfall. The estimate for Kiribati (Tarawa Atoll) is typical for similar islands in the Pacific, including those in Solomon Islands – a 10% reduction in average rainfall by 2050 could produce a 20% reduction in the size of freshwater lens.

In the southwest Pacific (Melanesia region<sup>1</sup>) the rate of change of sea level height as measured by satellites over the 10 years was at 8-10mm/yr, approximately, which is three times the global average. In other recent measurements of sea level in Solomon Islands from 1994 up to June 2008 indicates the net relative sea level trend at 7.6mm/yr which showed significant acceleration compared with previous periods. At the same time, temperature readings are showing general warming while rainfall records show a downward trend. The country is vulnerable to long dry spells associated with the warm phase of the El Nino-Southern Oscillation (ENSO).

The impacts of climate change, particularly sea-level rise (SLR) and pronounced droughts have severe consequences on water and sanitation in the country. The areas which are most vulnerable to SLR are low-lying islands, atolls and flat deltaic regions at the mouth of larger rivers. Intrusion of salt water from rise in sea level has affected groundwater resources, especially freshwater aquifers (lens) in small atolls and low-lying islands that rely on rainfall or groundwater for their freshwater supply. Droughts have severely affected water supplies; during the 1997/1998 droughts that resulted in reduction of freshwater availability in Honiara by around 30-40%. Droughts have also damaged crops and livelihoods. Likewise, climate-related impacts on the quality and quantity of water has a gender dimension; in the context of the ethnic tensions, the safety and security of women and girls are compromised as they need to travel further to collect water, also leading to less time for other activities.

The climate-induced impacts on the water sector in the Solomon Islands would have economy-wide implications considering the closer (statistical) links between human development and Water and Sanitation (WatSan) than any other variable, including health, education, gender equality and access to modern energy services (Human Development Report 2006). Thus, addressing climate-related vulnerabilities in this sector would have co-benefits in terms of overall quality of life and would contribute to sustainable development and in turn, to improve resilience to climate change.

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<sup>1</sup> Melanesia region includes Papua New Guinea, Solomon Islands, Vanuatu and New Caledonia.

*Governance Context of the Problem.* The generally weak water governance in the Solomon Islands does not enable the country to respond effectively to emerging challenges, including climate change. The Water Outlook report (mentioned earlier) attributed the state of neglect in the water and sanitation sector to the significant gaps in governance and institutional arrangements and very limited human and financial capacity.

The institutions for delivering water and sanitation services reside in various ministries. The Water Resources Department (WRD) in the Ministry of Mines, Energy and Rural Electrification is the government agency mandated to oversee water resources management in the country. The WRD currently has a staff of hydrologists and hydro-geologists involved in a range of initiatives including hydrological monitoring, negotiating with customary land owners for access rights to water catchments supporting urban water supply systems and use of land for water storage.

Rural water supply is overseen by the Ministry of Health and Medical Services (MHMS) Environmental Health Division through the Rural Water Supply and Sanitation (RWSS) programme. The management of urban water supply systems is the responsibility of the Solomon Islands Water Authority (SIWA) and provincial governments with support from the Ministry of Rural Development (MRD) and Ministry of Infrastructure Development (MID). SIWA manages the water supply system in the capital of Honiara and the industrial township of Noro.

In all these government agencies, capacity is already limited to dispense basic functions and even worse, to address emerging issues such as climate change. Both supply and demand side management approaches do not yet integrate climate change impacts and IWRM approaches. Supply is affected by limited storage capacity and by on-going disputes by the traditional landowners that own catchment areas. On the demand side illegal connections and the high number of leakages has resulted in only 40% of the total water supply being recorded as reaching metered outlets. Quality of water is generally poor and sewerage system is mainly through the use of septic tanks. A few places in Honiara are provided with an old sewerage system installed in the 1970s. Water sector governance and policy are further described in the succeeding section.

**The Baseline.** The baseline upon which the project builds is described for each outcome. UNDP is undertaking major climate related projects that also constitute the baseline and these are described in Section II.C.

#### *Component 1: Water Sector Climate Change Adaptation (WS-CCA) Plans in the Context of Integrated Water Resources Management (IWRM)*

The government recognizes the need for a sector-wide approach to water resources management and is committed to embracing the IWRM philosophy and needs assistance with integrating climate change into their policies, strategies and programmes. Planned engineering and quality standards for water supply systems still need to be developed and climate-proofed, and there is a pressing need to establish a RWSS database. Water resources assessments are still not being carried out to guide the planning of water supply systems and these will also need to incorporate climate change considerations. A Rural Water Supply Policy currently under development is also yet to integrate climate change. Donors involved in supporting the national government and NGOs with water related projects in Solomon Islands include EU, AusAID, JICA, GEF, Adaptation Fund, UNDP, NZAID and Government of Taiwan

#### *Component 2: Implementation of WS-CCA plans*

*Rural water supply and sanitation.* The RWSS Programme within the MHMS is receiving financing from the national government and budgetary support from a number of international donors. In an effort to scale up efforts in RWSS and accelerate the attainment of MDG 7.c. in Solomon Islands national government is on the verge of securing support from the European Union MDG Initiative through a project with a total funding of 21.2 million Euros and titled; “Rural Water and Sanitation Improvement Initiative”. This project is expected to increase by 13% the proportion of rural population using improved drinking water and increasing at least by 23% the proportion of rural population using improved sanitation facilities. The detailed design of the project is expected to start in mid 2012 and implementation thereafter from 2013 up to 2015, which are in line with this LDCF proposal.

The project targets include the following:

- a) Increase access of: about 54,000 rural people to improved drinking water sources through 180 water projects; about 96,250 people to improved sanitation facilities;
- b) Improve hygiene awareness and practices and demand for improved sanitation in at least 300 rural communities, 400 schools and 175 clinics;
- c) Facilitate approval of a RWSS Policy and implemented with sufficient funds enabling the strengthening of capacities and organization in the RWSS Unit and sector partners at national and provincial level, and the monitoring and coordination of rural WatSan activities in the country; and
- d) Establish inclusive and sustainable O&M (operation and maintenance) mechanisms at the provincial level in close association with the rural communities.

Australia is financing the ongoing “Solomon Islands Access to Clean Water and Sanitation Initiative”, which will improve the health and quality of life for the rural people. The project is currently being implemented to:

- a) increase water, sanitation and hygiene coverage for 100,000 people in rural areas and in 75 schools;
- b) improve sector coordination, work on the approval of the national water and sanitation policy framework and strengthen the capacity of RWSS through institutional reform;
- c) establish sustainable and inclusive operation and maintenance to ensure 80% of WatSan infrastructure is operation at least 3 years after completion, O&M funds are established and operational; and
- d) improve hygiene awareness and demand for sanitation in 140 communities and incorporation of hygiene awareness in school curricula and health programs.

Total funding for this project is AUD 11 million for the period 2010-2014. The project sites, which are at the level of communities and schools, are distributed across the entire country, covering all nine provinces. Each year, around 40 communities are selected for implementation based on the request from provincial planning units of provincial governments.

RWSS has recognized the importance of the partnership with the private sector and NGOs to increase the annual delivery rate of WatSan infrastructure, maintenance and training. Thus, the projects, in particular the ongoing AusAID-RWSS project, are being implemented in partnership with NGOs such as the World Vision and church organizations including the Adventist Development and Relief Agency (ADRA) and CARITAS operated by the Catholic Church.

The EU-funded intervention will draw on and complement the current RWSS program implemented by RWSS with support from AusAID (as described above) and will aim to be implemented as a single government rural WatSan programme with funds from SIG and development partners. The RWSS programme will cover mobilization of international and local technical assistance for WatSan, policy targets, capacity building and awareness campaigns on hygiene practices.

The two projects focusing on rural WatSan will constitute the baseline for this LDCF proposal. Discussions with the RWSS Programme staff and the Under Secretary of the MHMS reveal that climate considerations are yet to be considered in the planning and implementation of project interventions and they welcome partnership with SIWSAP in this regard. The idea is to complement the EU- and AusAID-funded projects with the inclusion of climate change adaptation measures to make the basic water supply and sanitation projects resilient to the impacts of climate change.

The National Disaster Management Office (NDMO) under the National Disaster Risk Management Plan has been actively involved in promoting the DRR paradigm and running awareness and training programmes throughout the country. Provincial government disaster committees and village Disaster Preparedness Committees have been established. More recently the government has relocated the NDMO into the Ministry of Environment, Climate Change, Disaster Management and Meteorology (MECDM). MECDM also hosts the Climate Change Division (CCD) with a total of four officers. The CCD is coordinating CCA and V&A Assessments and is developing a framework for Nationally Appropriate Mitigation Actions (NAMA) as encouraged by the UNFCCC. Currently the Climate Change Division and the NDMO are planning how to integrate DRR and CCA at the policy and operational levels.



Across all the organizations involved with RWSS the identification of sites, planning and design of water supply and storage systems do not yet take into consideration climate change and government capacity to address the incremental costs of climate change is very limited given that funding support for RWSS has declined over the years with SBD 5 million in 2010 and SBD 2.5 million in 2011. There is yet no long term projections in terms of demand, infrastructure requirements etc that factor in various climate change scenarios.

### *Component 3: CCA-orientated governance in the water sector*

A range of national legislation governing and impacting on water resources management include; i) River Waters Act of 1969 which makes provides for watershed control in relation to rivers only and controls the use of river water through permit applications; ii) Environment Act of 1998 providing for environmental protection, preservation and conservation including measures to prevent and control water pollution; iii) Solomon Islands Water Authority Act of 1992 establishing the SIWA to oversee, manage and develop urban water and waste water; iv) Environmental Health Act of 1998 enacted to control and manage water and sanitation services in the rural areas of the country; v) Lands and Titles Act of 1969 enacted for the management and control of registered land; vi) Forestry Act of 1969 providing for development and management of the forestry sector; vii) Mines and Minerals Act of 1996 enacted to manage mineral development. It is generally accepted that many of the legislation are out of date and ineffective and need revising to the current institutional arrangements do not provide an effective enabling environment for integrated water resources management.

A Draft National Climate Change Policy is being developed with coordination from the Climate Change Division of the Ministry of Environment, Climate Change, Disaster Management and Meteorology (MECDM). The policy will be presented to a national stakeholder consultation in March 2012. The policy includes, inter-alia; establishing a national high level coordinating mechanism, mainstreaming of climate change into all levels of government and development sectors and their related legislation, policies and strategies; integration of CCA at the policy and operational levels; promoting and building capacity for valuation of ecosystem services as part of the Reduced Emissions from Deforestation and Degradation (REDD+) mechanism. Vertical linkages between MECDM and Provincial governments are weak as well as the horizontal linkages between the Ministry and other government Ministries, NGOs and institutions.

For sector-specific policies, this proposed project will build on the relevant works of the WatSan projects funded by AusAID and EU. A draft National Water Sector Policy developed since 2007 is yet to be finalized and endorsed and a Draft Water Resources Bill (2006) is currently being subjected to community consultations. There are currently no plans to integrate climate change considerations into the policy and legislation. The Solomon Islands Draft National Development Strategy 2011-2015 highlights water as a basic right and development priority, clearly articulating the desire of government to *..build and upgrade physical infrastructure to ensure that all Solomon Islanders have access to basic amenities, especially clean running water and proper sanitation.*

At the local government level there is growing awareness of climate change and disaster risks, however, climate change considerations have not been integrated into provincial level policies, ordinances, and development plans. All provincial headquarters and townships rely on water resources that are located on customary land and often have to contend with landowners that do not have a proper management system. Community level governance arrangements for water resources management is not well established in areas surrounding the provincial headquarters and urgently need to take into consideration climate change impacts given the urban population growth rate averaging 4% per annum.

- B.2. Incremental / Additional cost reasoning: describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated global environmental benefits (GEF Trust Fund/NPIF) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

The description of the baseline in the preceding section clearly indicates that climate change impacts are yet to be properly considered and integrated into the urban and rural water supply and sanitation systems and in the

legal and policy frameworks. The exception and a big leap is the proposed National Climate Change Policy that could provide the platform for proposed integration of climate change for the water sector. The overall goal of this project is to address these gaps and support ongoing initiatives in order to build resilience in the water sector to improve health and sanitation, protect economic assets and sustain livelihoods in vulnerable areas.

SIWSAP will implement the NAPA priorities in the water sector in a transformational manner. This will be done through the explicit integration of climate change considerations in significant ongoing and planned water sector projects that are primarily developmental in nature adopting the business-as-usual approach with no climate adaptation components currently included. At the center of this LDCF project is the baseline project “Rural Water and Sanitation Improvement Initiative”. The proposed project outcomes are outputs are therefore primarily incremental to the baseline described above.

SIWSAP will adopt an integrated approach in building climate resilience in the water sector through the formulation of CC adaptation plans in the context of IWRM. IPCC<sup>2</sup> in its earlier assessments has already recognized that *integrated water resources management (IWRM) increasingly is regarded as the most effective way to manage water resources in a changing environment with competing demands. IWRM essentially involves three major components: explicit consideration of all potential supply-side and demand-side actions, inclusion of all stakeholders in the decision process, and continual monitoring and review of the water resources situation. ... Adopting integrated water resources management will go a long way toward increasing the ability of water managers to adapt to climate change.* The expanded IWRM approach in SIWWAP will build on the lessons learned from IWRM efforts globally and locally from the ongoing GEF-supported IWRM activities in Honiara and by extending it to include climate change considerations.

The additional activities to the baseline that will be funded are described below. These will build resilience to the impacts of climate change in the water and sanitation sector in the country.

**Components 1 and 2.** Vulnerability assessments and the development of WS-CCA approaches will go beyond ‘business as usual’ measures and require additional resources. It is expected that adjustments in water supply and sanitation infrastructure are needed as these have been designed for different resource availability and water use. Based on findings of V&A following a multi-stakeholder participatory planning phase, a range of community based interventions will be identified in the context of IWRM. The range of IWRM<sup>3</sup> tools and instruments include water allocation; pollution control; monitoring; flood and drought management; information management; basin planning; and stakeholder participation. These functions will be employed to address adaptation with climate variability in the water sector in the project sites. For example, in monitoring water quantity and quality developments, communities will proactively take action towards adaptation. The management of floods and droughts, which is a key function of IWRM, will allow for direct intervention in cases of extreme events. In basin/island planning, risk assessment and adaptation measures will be incorporated. Water will be allocated to the most efficient and effective use to react to climate variability in a flexible manner, but with due consideration to social goals including gender and equity dimensions.

The implementation of WS-CCA plans in the selected project sites will draw from the entire range of IWRM approaches, as applicable and adjusted for the geographic scope and characteristics (atolls, raised volcanic areas, etc) of each site. These will include both soft adaptation measures as well as investments in water and sanitation infrastructure. The menu of ‘soft’ options are identified in the logical framework and these include inter-alia: protection and restoration of ecosystems that protect critical water resources; community-based monitoring of water supply and demand; improvements in water-use efficiency and overall demand management; use of innovative instruments for supply and demand-side management; capacity building on water and sanitation management.

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<sup>2</sup> IPCC (2001): Climate Change 2001: Impacts, Adaptation, and Vulnerability. Cambridge University Press

<sup>3</sup> Cap-Net (2009). IWRM as a Tool for Adaptation to Climate Change.

Investments in water and sanitation will be pursued in all of the 6 project sites. Considerations will be made for each of the project site to implement the following potential investments: enhanced household and communal water storage systems and infrastructure; design and construction of applicable small scale climate-resilient reservoir in at least 1 site; provision of up to 4 portable water filtration and/or desalination systems for sharing across communities in times of extreme water scarcity; protection of freshwater lens through better sanitation practices in small islands (e.g., composting toilets). The list of options will be expanded and validated during project preparation. Proven technologies in each of the CC-A measures will be demonstrated and replicated in communities covered by the project through a sequential implementation, particularly of infrastructure investments. While the project is going on, it will also facilitate the transfer of technologies developed by the project to other stakeholders to facilitate replication.

There is currently only one portable water filtration system that is used by the Solomon Islands Red Cross during disasters. Recently this was used during the devastating floods on Guadalcanal in 2010. Red Cross officers highlighted the growing demand for such services during disasters and that increased number of climate proofed large water storage facilities are needed. As mentioned, this project will consider providing the SIRC and National Disaster Management Office (NDMO) with increased number of portable water filtration systems and will enhance their capacity to respond to disaster situations where clean drinking water is urgently needed. The deployment and transfer of such technologies are in line with the objectives of the LDCF.

This project will be the first in the country to integrate CCA and IWRM and to support the mainstreaming of these approaches at all levels of governance. Training activities and guidelines will be developed to understand, formulate and implement IWRM and to mainstream CCA into the lifecycle of water sector projects and programmes. In collaboration with other donors and water projects, a national water sector conference will be convened early in the project where stakeholders can contribute towards strengthening the enabling environment for water governance and develop a constituency for the project and its approaches. Subsequently, guidelines and mechanisms to mainstream IWRM CCA into the government development planning and budgetary processes will be formulated by building on the implementation of these approaches in the project sites. This will contribute to enhancing adaptive capacity and resilience of water supply programmes. Senior officials of MMERE, Development Planning and Finance ministries will undergo training on IWRM and CCA principles and the use of mainstreaming tools.

Increased adaptation capacity and resilience require financial resources and the cooperation of stakeholders. Multi-stakeholder investment dialogues at the national and local levels coordinated by the Ministry of Planning with technical guidance from RWSS, WRD and Climate Change Division will contribute to strengthening social capital needed to manage and protect water resources in the country. This project will, for the first time in the country, create an environment for investment dialogue between stakeholders to guide mobilization of financial resources targeted at vulnerable communities and ecosystems. Big ticket items may be required to fully implement IWRM that could be financed through private sector investments. Increased collaboration, coordination and cooperation will contribute strongly to increased adaptive capacity of the water sector.

**Component 3.** This project will support the development and completion of the overarching policy and legislation for the sector using IWRM principles by supporting local and national consultations that will also factor in climate change considerations. In this way climate change will be mainstreamed into local and national instruments and guide the government and stakeholders increasing the resilience of the water sector. Expertise will be secured to guide the mainstreaming approach and training will be undertaken at the national, provincial and community levels. This intervention will enable longer term planning for the water sector and goes beyond the business as usual approach where only population projections and cost considerations are used. This activity will be closely coordinated with the ongoing UNDP/AF project in the country.

The Ministry of Health and Medical Services National Health Strategic Plan 2011-2015 recognizes that increasing funding alone will not necessarily improve rural water supply and sanitation in Solomon Islands but institutional capacity building and partnerships are equally important. The same situation is confirmed by the WRD. To enhance adaptive capacity in the water sector, this project will work with and support other

government and donor projects and resources to assess capacity for IWRM and integration of CCA in Solomon Islands. Following this review, resources will be targeted at strengthening institutional capacity in government and non-government organizations. These would include increasing number of technical experts, providing training to local officers and field staff and where applicable, cost-sharing in the provision of equipment for hydrological and land use surveys, equipment and software for database management etc. Technical support will be extended to the WRD to achieve its 2011 Corporate Plan objectives of establishing hydrological sites in Makira, Choiseul, Guadalcanal and maintenance of hydrological sites in Malaita and Isabel.

Development of training courses for village level water technicians, including women will be considered through the Solomon Islands College of Higher School of Industrial Development. The project will also support a mechanism that links in volunteer-sending organizations to place experts in the provinces while Solomon Islanders undergo specialized training in IWRM. These expert volunteers and TAs will provide on-the-job training for local counterparts. With the national development tenor advocating decentralization and increasing involvement of Provincial Governments it is essential that capacity building is also targeted at strengthening technical and managerial capacity at the Provincial Government level.

Guidelines are currently non-existent including technical standards for climate proofing of water infrastructure. To improve adaptive capacity and resilience of water supply systems and infrastructure in urban and rural areas this project will develop technical guidelines that can also be used by communities. Government, NGO and community personnel will be trained in the use of these guidelines and these will be demonstrated in a practical way at the project sites.

Replication strategies are seldom if not never used in project work in Solomon Islands. This project will design a replication strategy in collaboration with other water sector projects in the country. This will involve identifying lessons and best practices during the monitoring of project activities and holding forums to identify and document experiences. CCA practices and lessons in the water sector will help guide similar work in other sectors and contribute more broadly to wider adaptation actions in Solomon Islands.

The project will produce print, audio and video products on CC, IWRM and CCA using local case studies and through engaging private sector audio-visual production organizations to programme and produce awareness raising products. These will be in English as well as Pijin-english language and will be made available to schools, NGOs, churches and training institutions for use throughout the country. Approaches and best practices used in other Pacific and developing countries will be sought and adapted to suit the Solomon Islands context. Information from project sites and tools developed will become part of training materials used in the Solomon Islands College of Higher Education. Information products produced will also be disseminated regionally and internationally through the Adaptation Learning Mechanism (ALM), the Asia-Pacific Adaptation Learning Network and through the Pacific Regional cooperation mechanisms through Pacific Regional Inter-governmental organizations.

SIWSAP will be implemented in close coordination with other organizations and initiatives as described in section B.6.

**Potential Project Sites.** Consultations were conducted in drafting this PIF, including a project design workshop with key stakeholders in government, NGOs and church-based organizations to identify potential project sites. Four provincial townships and 6 regions comprising rural communities have been identified potential project sites. These represent low lying, raised coral and highly mountainous islands that are water stressed. From past assessments, the WRD has identified a number of provincial townships that urgently require climate-proofed IWRM projects to improve and sustain supply capacity as well as managing demand to support the rapidly growing populations.

Provincial townships		Rural areas	
Sites	Province	Sites	Province
Taro Island; Choiseul Bay	Choiseul	Rennell villages; Bellona villages	Rennell and Bellona

Gizo	Western	Choiseul Bay villages	Choiseul
Tinggoa	Rennel and Bellona	Reef Island villages	Temotu
Lata	Temotu	Santa Catalina villages; Taarutona village; Manaaoba villages	Makira

Based on the LDCF resources requested and the scope of the climate change adaptation measures, the project will cover at most two townships and four rural areas. The townships are not currently served by SIWA as it only covers the towns of Honiara, Auki, Tulagi and Noro. Thus, during project preparation, further consultations and assessments will be conducted to narrow down the project sites. Further and an important consideration are the project sites for the ongoing AusAID-funded project, the MDG Initiative to be funded by the EU and the UNDP project UNDP project Human Security Initiative for Tensions ‘Reduction’, Reconciliation and Rehabilitation in the Solomon Islands described in section , which will provide the baseline for the climate change adaptation measures in rural sites.

- B.3. Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environmental benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF). As a background information, read Mainstreaming Gender at the GEF:

There are a number of important national benefits that this project will contribute to. As described earlier in the country overview more than 70% of the national population i.e. more than 360,000 people benefit from communal water systems and natural water sources and do not rely on government managed water supply systems. Many of these supply systems are dependent on water catchments and underground aquifers that are very sensitive to the hydrological cycle and its disturbances, most of which are related to climate change. A breakdown in governance or a change in land-use and management practices can quickly negatively affect the ecosystem services provided even by areas that are protected and well managed. For Honiara area alone the cost of replacing hypochlorite dosing equipment at all sites is provisionally estimated at SBD 650,000 and the operating cost is around SBD 200,000 per annum (SBD 7.8 per USD). This indicates that the government can have significant cost savings if it supports rural populations to care for their water sources and prepare them to be more resilient in light of climate impacts. With the very low levels of income in rural areas it would be impossible to sustain expensive water supply systems.

As is seen throughout the developing world, there is a clear correlation between limited access to clean water and incidences of diseases such as dysentery. Human Development is more closely linked to Water and Sanitation (WatSan) than any other variable, including health, education, gender equality and access to modern energy services (UNDP HDR 2006). Statistics on access to sanitation services in Solomon Islands shows that 57% of all households have no proper toilet facilities, 21% using pit latrines and the 22% using toilet systems that require water (Solomon Islands Census 2009). It comes as little surprise that between 2002 and 2008 the incidence of diarrheal diseases has been on a steady increase according to the 2008 Annual Health Report (MHMS 2009).

Improvements to water supply will also result in more people having access to proper sanitation facilities, potentially reduce prevalence of disease and reduced costs to the people and to government’s social services. In a country with marked gender inequalities and where women do most of the work in water harvesting, cooking and sanitation improvements in access to water and sanitation services will greatly reduce the burden on women. All these benefits from SIWSAP will improve the quality of life of the beneficiaries.

UNDP estimates that water supply investment has an economic return of \$4.4 to \$1 while investment in sanitation has a return of \$9.1 to \$1. Some of the multiplier effects of investing in water and sanitation include; healthy workers, savings on medicines, bottled water not required, boost to agriculture and healthy tourists. With logging about to end in the country and with it the bulk of government revenue, tourism has been identified as a potential new income source for the country. A very low investment in WatSan will place high risks to tourists

resulting in low visitor numbers and low income for the country as a whole. Effective management and governance in the water sector will also provide better opportunities for the country to harness its water resources as a renewable energy. Currently more than 90% of the country's source of energy is from imported fossil fuels.

Another potential benefit from this project is the strengthening of social capital that is so essential for increasing resilience and adaptive capacity against climate change impacts. In addition, the participatory community based approaches in the IWRM and CCA approaches can contribute to stronger community level governance an area that is weak and fast declining in Solomon Islands (Lane 2008). More than 80% of land on which there are catchment areas and underground aquifers are customary-owned by clans and tribes. Strengthening community-based governance and management of customary land and important resources such as water catchments and similar capacity building in government institutions to enforce regulations is critical for Solomon Islands to become more resilient to climate change.

Increasing preparedness and enhancing resilience of the water sector to extreme events can potentially reduce the cost to government for disaster relief. Over the past few years flooding, king tides, excessive rainfall and storm surges have rendered rural locations and communities as disaster areas with the frequency of calls for disaster relief assistance from the national government reaching levels never before experienced in the country since it attained political independence in 1978. A typical example is the flooding incident that occurred on west Guadalcanal early in 2008 that devastated several villages and killing 9 people. The rainfall recorded for Honiara weather station within 12 hours during the night of the flooding was the highest daily rainfall ever recorded for Honiara in its 30 years record (standing at 251.8mm).

- B.4. Indicate risks, including climate change risks that might prevent the project objectives from being achieved, and if possible, propose measures that address these risks to be further developed during the project design:

Risk	Rating	Mitigation Measure	Responsibility
Limited capacity in government agencies to implement the project and sustain project outcomes	M	Strengthening water governance is one of the project components. This would cover capacity building of government partners and communities in all aspects of the project and post-project activities. Ownership of the project by the partners will be ensured by letting them take the lead with assistance from the project team.	All concerned government agencies; community leaders; project management
Large tracts of land under customary ownership could be an impediment to spatial approaches in CC-A IWRM if landowners do not cooperate	M	The IWRM process in formulating CCA plans will undertake consultative and transparent processes, including with landowners. The co-benefits from IWRM through partnerships will be emphasized with landowners.	WRD, RWSS, NGOs, Communities; project management
Weak coordination amongst project partners may impede project progress	M	The project will support the initiative of the MECDM to sustain (convened in October 2011): Climate Change Working Group (CCWG); Sub-Group of Development Partners within the CCWG; Sub-Group of Government and NGO Partners within the CCWG; Annual Environment Donors Roundtable; and Environment Summit. This initiative aims to strengthen partnership among partners, leadership by government and coordination among stakeholders. The Initiative is currently being discussed and project will support the coordination mechanisms that will be promulgated	MECDM, Ministry of Planning and Aid Coordination (MPAC), WRD, RWSS, Ministry of Mines, Energy and Mineral Resources, Ministry of Agriculture and Livestock Development, Ministry of Fisheries and Marine Resources, , development partners (EU, UNDP, AusAID, WB, ADB, JICA), project management

		through this Initiative.	
Participation by communities may not come at a level necessary to ensure project success	L	As the project outputs and outcomes will benefit communities directly, it is expected that cooperation will be at the highest level. Participatory approaches through IWRM, capacity building and communications will build strong ownership by communities. The project will also explore in-kind inputs from communities, where feasible.	Communities leaders, WRD, RWSS, NGOs; project management
Extreme natural events	L	Project will explicitly consider this as it is about adaptation to CC impacts	WRD, RWSS

B.5. Identify key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable:

This project will mobilize and create partnerships across a wide range of stakeholders in the country. The Table below presents the key stakeholders and their respective roles in the project.

Stakeholder	Expected Roles
Water Resources Division of the Ministry of Mines, Energy and Rural Electrification	Main SIWSAP Executing Agency for the entire project Coordinate policy and legislation development Hydrological monitoring Water quality monitoring Coordinate access and partnership arrangements with customary landowners Take lead in seeking public-private partnerships
Rural Water Supply and Sanitation Programme of the Ministry of Health and Medical Services	Secondary SIWSAP Executing Agency focusing on Component 2 Coordinate and implement rural water supply projects Coordinate development of RWSS policy Development of standards and guidelines for RWSS projects.
Climate Change Division –Ministry of Environment, Climate Change, Disaster Management and Meteorology	Assist with mainstreaming of climate change activities Development of climate change policy Provide guidelines and training in V&A assessments Secretariat of the National Climate Change Country Team Assist governments at all levels establish climate change coordination mechanisms, particularly with other CC projects
National Disaster Management Office	Assist with mainstreaming of DRR and provide training Assist provincial governments with disaster preparedness and coordination of village disaster committees
Ministry of Lands and Housing	Provide guidance on land owner identification, consultations and partnership building, community consultations
Ministry of Forests and Research	Support with catchment management
Attorney General’s Office	Drafting of water sector laws and regulations
Ministry of Infrastructure Development	Design and construction of water supply infrastructure
Environment Division – Ministry of Environment, Climate Change, Disaster Management and Meteorology	Enforcement of Environment Act Guide the implementation of Environment Impact Assessment for water projects Enforce the Protected Area legislation
Provincial governments	Mainstreaming of climate change adaptation Identification of project sites Monitoring of project activities Management and implementation of provincial urban water supply system in partnership with Solomon Islands Water Authority
Solomon Islands Water Authority	Management of Honiara and Noro water supply systems Provide guidance on supply and demand management approaches
School of Industrial Development of the Solomon Islands College of Higher	Development of training materials and provide training for community based water technicians

Education	
Community organizations	Implement WS-CCA projects as major partner in the project Establish governance arrangements for IWRM Contribute labor for project activities
Solomon Islands Meteorological Services	Develop and assist communities and provincial governments with early warning systems and information for community based disaster preparedness
Ministry of Finance and Treasury	Mainstreaming of Climate Change into national and provincial budgets
Ministry of Development Planning and Aid Coordination	Coordinate donor support towards the water sector Mainstream climate change into development budgets Coordinate national-level resource mobilization strategies for the water sector
Ministry of Rural Development	Mainstreaming of IWRM and CCA into water supply projects funded under the Constituency Development Fund
Solomon Islands Red Cross; World Vision; Adventist Development and Relief Agency; Caritas; other NGOs and church-based organizations working on water and sanitation	Plan and implement community based water supply and sanitation projects using IWRM and CCA approaches
Private Sector Companies	Design and provision of water supply materials and equipment; public-private partnerships in provision of services and infrastructure

**B.6. Outline the coordination with other related initiatives:**

Coordination of this project with other related initiatives will be through the recently organized Climate Change Working Group (CCWG) which includes two subgroups: Development Partners CCWG and Government and NGO Partners CCWG and the holding of Annual Environment Donors Roundtable and Environment Summit. The CCWG calls for a strong partnership between stakeholders on matters relating to environment and conservation, climate change, disaster risk and management and meteorology. The CCWG is composed of the Solomon Islands Government (SIG), development partners, regional organizations, representatives from NGOs and civil society and others (potentially private sector), with the secretariat based at MECDM. The CCWG is expected to meet quarterly to: provide framework for policy dialogues and consultations; promote networking amongst members and share lessons learned; provide a platform to the Ministry to update its partners on policy priorities and the implementation of policies, NAPA and ongoing activities in the sector; and play an oversight role with views of further improving coordination, planning, implementation, monitoring and evaluation of programs in the environment, climate changes and disaster risk reduction sector. The CCWG was first convened in October 2011 and UNDP is providing assistance to strengthen it through the SEMRICC project.

The relevant initiatives are described below and the areas for synergy and collaboration are identified initially and will be finalized at CEO endorsement. Most of the major relevant projects are implemented by UNDP hence ‘internal’ coordination will be facilitated.

- i) *Enhancing the Resilience of Communities in Solomon Islands to the Adverse Effects of CC in Agriculture and Food Security Project* – This 4-year project funded by the Adaptation Fund Board is implemented by UNDP as MIE. The project will be providing training in vulnerability and adaptation as well as disaster risk reduction training and will be assisting rural communities enhance the resilience of farming systems and food production systems including support for improving water catchment and storage. Close coordination with this project will be done to achieve complementation particularly in the site-based with respect to potential geographic overlaps and the application of IWRM. Governance-related activities present another potential area for collaboration.
- ii) *Pacific Adaptation to Climate Change Project* – This UNDP-GEF (SCCF)-funded regional project is also working in Solomon Islands supporting communities in remote outer islands to enhance resilience of food security systems including support for water catchment and storage. This project is funding the development of the national climate change project and mainstreaming of climate change into sector policies. Synergies in governance-related activities will be worked out with this project. There potential synergies will be identified during the design phase.

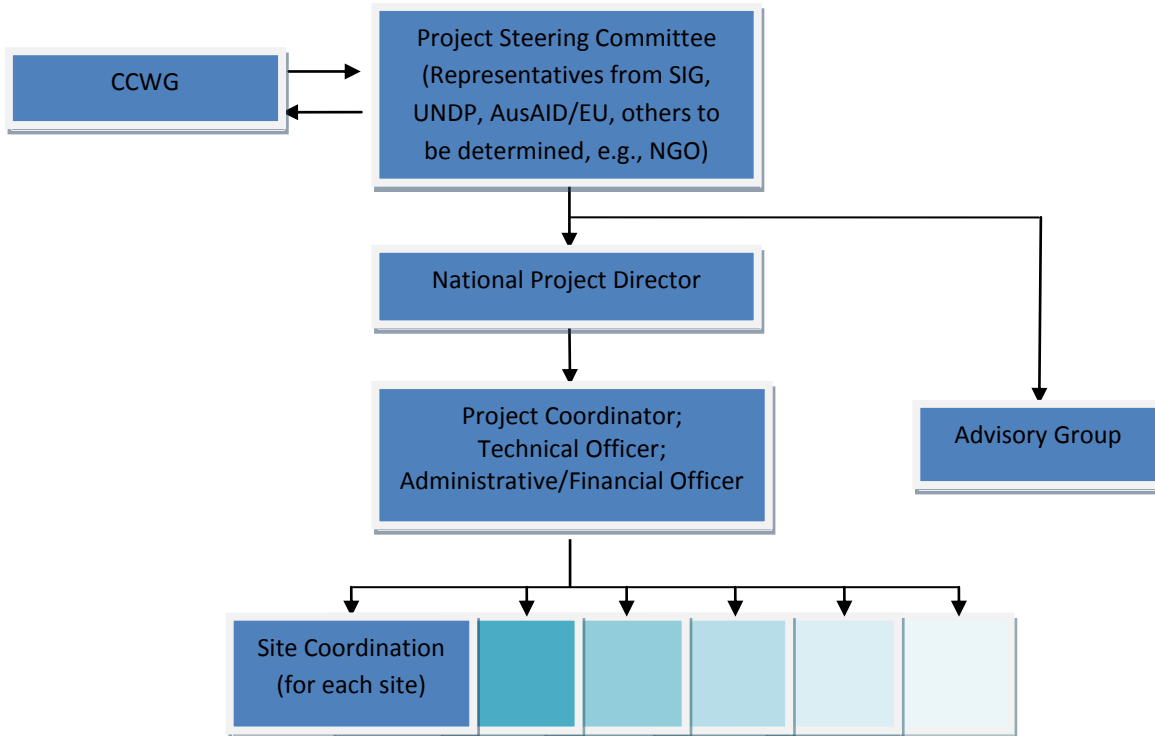


- iii) *Pacific Integrated Water Resources Management Project* – Another UNDP-GEF regional project targets water supply and demand in the capital city of Honiara using the IWRM approach. The demonstration site for this project is implemented by WRD, the same agency that will implement SIWSAP. Lessons emerging from the application of IWRM in this project are useful to guide the SIWSAP project. The focus of SIWSAP will be rural areas so it will not duplicate any activity of the Pacific IWRM project in Honiara.
- iv) *Community Resilience to Climate and Disaster Risk in Solomon Islands Project (CRISP)*. This is a project currently being developed by the WB that will seek funding from LDCF. The proposed development objective is to increase the resilience of selected communities to the impacts of climate change and natural hazards by strengthening government capacity in disaster and climate risk management, and in implementing disaster risk reduction and climate change adaptation investments in selected communities in Guadalcanal and Temotu provinces. Potential areas of collaboration, particularly where geographic overlaps exist, will be identified during project preparation.
- v) *Provincial Governance Strengthening Project (PGSP)* – This project implemented by UNDP and funded by UNDP together with other donors (UNCDF, EU and AusAID) is strengthening the capacity of Provincial Governments to plan and implement development programmes as well as in administration of provincial affairs. It covers 9 provinces in the Solomon Islands. One of the objectives of PGSP that is relevant to this proposal is the development of a Monitoring and Evaluation system which could be utilized by SIWSAP. The SIWSAP will need to work closely with provincial governments for the planning and implementation of provincial based projects. Provincial governments also fund water supply projects and there is the opportunity for SIWSAP to assist Provincial governments mainstream IWRM and CCA, which represents a concrete area for collaboration. Synergy will be sought to avoid any duplication of activities.
- vi) *Constituency Development Funds*- Constituency Development Funds channeled through this Ministry also support water supply projects and provides another opportunity to scale up IWRM and CCA.
- vii) *Solomon Islands Red Cross Participatory Health and Sanitation Project and Climate Change Program* – In 2007, SIRC formulated its Preparedness for Climate Change Programme and several activities have been implemented. Part of the disaster management component of the program is Vulnerability Capacity Assessment (VCA) which works with communities in disaster prone areas using VCA tools to facilitate and gather information and help them decide on suitable coping strategies. The VCAs have brought communities to work together in risk reduction activities. A related WatSan activity of SIRC is the Tugeda Uime Waka for Helti Komuniti, which provides communities with knowledge and skills to help them improve health and hygiene practices, as well as supply equipment and the technical support to help them change their environment. SIRC help communities prepare for and respond to disasters (taking CC into account) and with the support of the Australian Red Cross, they train staff for long-term support for disaster management. SIRC is already using CCA (and DRR) approach but is still to mainstream IWRM. Lessons learnt from CCA approach can help guide interventions under this project. SIRC's activities are very limited but their experience in their sites will be useful for SIWSAP.
- viii) *World Vision Water, Sanitation and Hygiene (WASH) Project and Adventist Development and Relief Agency (ADRA)*. World Vision and ADRA assist rural communities and schools with water supply and sanitation projects including improving children's practices in healthy water, sanitation and hygiene behavior. World Vision and ADRA are the partners in the identified baseline project funded by AusAID.
- ix) *The Asian Development Bank* is currently developing a regional LDCF adaptation program for some Pacific SIDS. The program entitled 'Climate Proofing Development in the Pacific' intends to climate-proof a small-scale hydro-power in the Solomon Islands. The climate-proofing of infrastructure is a potential area for collaboration between the ADB program and SIWSAP.

Project management and coordination arrangements will be put in place at the national and site levels to ensure that the project is not implemented in isolation but in close collaboration with all relevant partners. At the core will be a Project Steering Committee (PSC) to be composed of key government, non-government partners, private sector (as applicable) and UNDP. The key government partners include WRD and RWSS and the CCWG, all of which will be represented in the PSC. The PSC will provide overall guidance and direction for the project. The number of PSC members will be limited to about 7 although this will be determined during project preparation, including the composition. The creation of an Advisory Group (AG) with broader membership than

the PSC will also be assessed during project preparation. The AG could serve as the coordination forum for drawing in the participation of all groups and individuals working in the water sector and would provide information and recommendations to the PSC.

An indicative and simplified project execution arrangement is shown in the figure below. It is emphasized that this will be finalized during project preparation. The national project director will be seconded staff from the government main executing partner while project coordinator will be responsible for the day-to-day operations of the project. Coordination and implementation at the site will be determined jointly with the communities and local governments.



The implementation of adaptation activities to address the impacts of CC in the water sector constitutes the biggest component of the project. As mentioned, this proposed project will work with the EU- and AusAID-funded projects, identifying suitable sites for the development and implementation of CC-A activities in priority rural communities. At the local level, project community committees (PCC) will be formed consisting of representatives from the communities, local governments, groups working in the community, project management office, among others. It will be the forum for coordinating site-based project activities with all partners. A Project Management Office (PMO) reporting to the PSC will be established to run the day-to-day project activities. The composition and responsibilities of the proposed PSC, PMO, AG and PCC will be determined during the preparation phase. It is emphasized that the PSC, AG and PCC, where feasible will all be integrated within the existing institutional mechanisms and arrangements at the national and local levels.

This project will be implemented as a NIM/DIM modality whereby the MMERE which houses WRD will be the lead executing entity while UNDP and RWSS-MHMS will be implementing partners. This project will adopt a National Implementation (NIM) modality but will be executed as a Direct Implementation (DIM) project due to challenges in manpower and capacity within the government ministry. Under the direct implementation modality UNDP takes on the role of the principal contractor – subcontracting project components and activities, recruitment, and procuring materials directly.

**C. DESCRIBE THE GEF AGENCY’S COMPARATIVE ADVANTAGE TO IMPLEMENT THIS PROJECT:**

C.1. Indicate the co-financing amount the GEF agency is bringing to the project:

The UNDP project Human Security Initiative for Tensions ‘Reduction’, Reconciliation and Rehabilitation in the Solomon Islands will cofinance the LDCF proposal. The project seeks to enhance human security for selected communities and ex-combatants by reducing tensions and promoting peaceful and sustainable measures for their survival and dignity. Specific activities include objective 2-2 in component 2 that will enhance by up to 80% of the functional capacity of target communities to deal with conflict-affected water and sanitation management problems. The target coverage is 10 communities and for each community, the project will: a) establish and self-manage fully functioning water and sanitation committees; b) train local water and sanitation technicians in basic skills for installation of WatSan facilities; c) install water supply facilities; d) develop guidelines and manuals on operation and maintenance of community water supply; and e) install local monitoring mechanism. The total cost of this component is \$555,000 over a 2-year period until late 2013 to early 2014. Total project cost is \$2.71 million. The target beneficiaries are former combatants and communities affected by the civil unrest in 1998-2003, which are concentrated in the capital city of Honiara and the provinces of Guadalcanal and Malaita. The proposed LDCF project will cover some of the communities included in this baseline project to build climate resilience for the baseline activities.

UNDP has just initiated the project “Strengthening Environmental Management and Reducing the Impact of Climate Change in Solomon Islands” (SEMRICC). Of the total resource requirement of US\$2,923,000, UNDP has allocated US\$2,131,000 of its internal (TRAC) funds with the remainder to be raised from potential partners. Of this total, \$1,200,000 is counted as co-financing based on project components that are relevant to SIWSAP. The objective of SEMRICC is to assist the Government of Solomon Islands in developing capacity for environmental management. It will focus on strengthening the executing capacity of national government agencies, provincial government and community institutions to address climate change and other environmental issues and challenges, and to mainstream natural resource conservation and environmental management. The project concentrates on the following areas: 1) strengthening capacity to develop and implement national environment policy and plan; 2) establishing information management and scientific/technical knowledge base, 3) promoting community-based environment management and disaster risk reduction, 4) institutionalizing human resource capacities development and awareness raising; and 5) gender mainstreaming across all environment activities.

SEMRICC is considered as a baseline project with respect to the policy and capacity building components of the proposed LDCF project. The assistance provided to the government by SEMRICC is in the general areas of environmental and climate change policy and capacity building with limited consideration for sectoral policies (in the water and sanitation sector). These are important baselines upon which this project intends to build on by focusing on the water/sanitation policies and capacity building to build resilience in the context of climate change.

Total UNDP cofinancing from the two baseline initiatives is estimated at \$1,755,000. In addition to the above baseline project, UNDP in the Solomons will program internal (TRAC) funds to support additional baseline activities; details including amount and the expected outcomes/outputs will be provided during project preparation. In-kind support from UNDP will be assessed during project preparation and will be incorporated at CEO endorsement.

C.2. How does the project fit into the GEF agency’s programme (reflected in documents such as UNDAF, CAS, etc.) and staff capacity in the country to follow up project implementation:

The proposed project is very much aligned with UNDP’s Pacific Regional UNDAF and the Country Programme Action Plan (CPAP) for the Solomon Islands. The CPAP for 2008-2012 identified environmental and sustainable management as one of the four strategic outcome areas. The outputs associated with this outcome are also consistent with those in the proposed project. Specifically, the CPAP explicitly indicates future support for climate change adaptation that has now been made real through the SEMRICC project. The implementation of the CPAP called for a partnership strategy that includes all of the proposed local executing partners for this project. UNDP has internally allocated US\$4,375,000 of its TRAC funds for the implementation of the entire CPAP, which will be complemented by additional resources from partners.

The CPAP for Solomon Islands specifically recognized UNDP's lead role in the preparation of the NAPA, SNC and other country papers to lay the groundwork for its support to the country by building capacity to better integrate environmental concerns into national and provincial planning process, sectoral plans and strategies. This project, which implements part of the NAPA, is in recognition of the CPAP priorities.

The UN Joint Presence office (UNDP, UNFPA and UNICEF) in the country has recently initiated the preparation of a country-specific UNDAF that will cover the subsequent period 2013-2017. The completion of the NAPA, the creation of the Climate Change Division under MECDM) is an indication that CC adaptation will be a significant outcome area.

As indicated in section B.6, UNDP has a significant portfolio in the water sector some of which are related to climate change and directly relevant to SIWSAP. The UNDP-GEF Pacific IWRM demonstration site activity in Honiara implements the IWRM approach that will be the basis for preparing the CC-A plans. The UNDP-GEF PACC and the UNDP-AF agriculture/food security projects both have major water sector elements. In addition to these projects, the UNDP-funded project SEMRICC mentioned above is emphasized.

The implementation of this project will be supported by UNDP's water and climate adaptation teams with presence at the headquarters in New York, the Asia Pacific Regional Center in Bangkok and in the UN Joint Presence office in Honiara. UNDP has a dedicated regional technical advisor that will have technical oversight of the project and a full-time climate change advisor in-country that will provide operational and technical support. Within the Environment Team of the UNDP Office in Solomon Islands are four committed programme officers who can support the successful implementation of this project. This includes a climate change specialist, two programme analysts and a programme assistant.


**PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT AND GEF AGENCIES**

**A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT ON BEHALF OF THE GOVERNMENT: (Please attaché the Operational Focal Point endorsement letter with this template.)**

NAME	POSITION	MINISTRY	Date MM/dd/yyyy)
Mr. Rence SORE	Permanent Secretary	Ministry of Environment, Climate Change, Disaster Management and Meteorology	3 November 2011

**B. GEF AGENCY CERTIFICATION**

Agency Coordinator, Agency Name	Signature	Date MM/dd/yyyy)	Project Contact Person	Telephone	E-mail Address

Yannick Glemarec Executive Coordinator, UNDP/GEF		November 25, 2011	Jose Erez Padilla (Gr- LECRDS)	66 (0) 2304 9100 Ext.2644	jose.padilla@undp.org
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