



PROJECT IDENTIFICATION FORM (PIF) ¹

PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND:SCCF

PART I: PROJECT IDENTIFICATION

Project Title:	Adaptation of Nicaragua's Water Supplies to Climate Change		
Country(ies):	Nicaragua	GEF Project ID: ²	
GEF Agency(ies):	WB (select) (select)	GEF Agency Project ID:	
Other Executing Partner(s):		Submission Date:	2011-03-10
GEF Focal Area (s):	Climate Change	Project Duration (Months)	60 months
Name of parent program (if applicable): ➤ For SFM/REDD+ <input type="checkbox"/>		Agency Fee (\$):	600,000

A. FOCAL AREA STRATEGY FRAMEWORK³:

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-financing (\$)
CCA-1 (select)	Mainstreamed adaptation in the National Water Supply strategy and rural water supply investment programs at country level and in targeted vulnerable areas with high indexes of water supply deficit	Adaptation measures and necessary budget allocations included in sectoral investment plans by the Emergency Social Investment Fund (FISE) and by the targeted vulnerable municipalities (with help of COMPONENT 1)	SCCF	300,000	1,000,000
CCA-1 (select)	Reduced vulnerability to climate change in the provision of drinking water supply	Water sources protected and investment in groundwater wells planned including adaptation measures to strengthen climate resilience, including the investment in additional wells needed to increase the availability of drinking water in drought-impacted areas (with help of COMPONENT 3)	SCCF	1,600,000	12,000,000
CCA-2 (select)	Increased knowledge and understanding of climate variability and change-induced threats at country level and in targeted vulnerable areas	Risk and vulnerability assessments conducted and updated by strengthening the monitoring, the development of indicators, and education on adaptation measures in the water supply sector (with help of COMPONENT 1)	SCCF	400,000	1,500,000
CCA-2 (select)	Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level	Municipal level councils make community level investment decisions taking into account the results of technical assessments and data on water supply vulnerability to climate change and the adaptation options (with help of	SCCF	300,000	1,000,000

¹ It is very important to consult the PIF preparation guidelines when completing this template.

² Project ID number will be assigned by GEFSEC.

³ Refer to the reference attached on the [Focal Area Results Framework](#) when filling up the table in item A.

		COMPONENT 1)			
CCA-3 (select)	Enhanced enabling environment through institutional strengthening at national and municipal levels to support adaptation-related technology transfer and the use of economic instruments for climate change adaptation	Increased capacity at the national and local levels to devise investment plans in water source protection, target demand side water efficiency programs taking into account climate vulnerability of water sources, and devise watershed protection plans to strengthen the resilience of ground- and surface water supply sources to droughts and the additional pollution pressures from climate change (with help of COMPONENTS 2 AND 4)	SCCF	3,000,000	14,000,000
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)	Others		(select)		
Sub-Total				5,600,000	29,500,000
Project Management Cost ⁴			SCCF	400,000	2,000,000
Total Project Cost				6,000,000	31,500,000

B. PROJECT FRAMEWORK

Project Objective:						
Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Cofinancing (\$)
1. Institutional capacity development and strengthening to facilitate integration of climate risks in water resources management.	TA	Strengthening the ability of the national and municipal level government and communities to respond to extreme hydrometeorological events, such as sea level rise, increase in precipitation, floods, droughts, and natural disasters (hurricanes).	<p>1. Implementation of a climate change education and training program for municipal and national level technical staff and decision makers, with the objective of strengthening environmental management at different levels.</p> <p>2. Implementation of a monitoring and information system for extreme weather events and natural disasters, including the early warning system and disaster prevention programs at the national and municipal levels.</p> <p>3. Strengthening MARENA's institutional</p>	SCCF	1,000,000	3,500,000

⁴ GEF will finance management cost that is solely linked to GEF financing of the project.

			capacity for managing climate change impacts on water supply.			
2. Protection of water sources and the use of economic instruments to strengthen water supplies' resilience to climate change.	Inv	Reduction of climate change vulnerability of water supplies and development of replicable models for the use of economic instruments for the protection of water sources.	<p>1. Implementation of a wetland conservation and restoration program for the adjacent wetlands of Lake Nicaragua.</p> <p>2. Piloting the use of economic instruments and innovative institutional approaches for water resources management and water source protection in micro-watersheds of Lake Nicaragua and River San Juan.</p>	SCCF	2,000,000	10,000,000
3. Demand and supply side measures to protect water sources and improve the efficiency of water use.	Inv	Reduction of human and ecosystems vulnerability to climate change by strengthening the resilience of water sources to droughts.	<p>1. Water harvesting, water storage, rehabilitation and construction of additional wells (or making them deeper, and adding pumping to cope with reduced water availability during droughts) and development of alternative water sources in drought prone areas.</p> <p>2. Innovative approaches to strengthen the efficiency of water use and reduce climate vulnerability (e.g., metering, reuse of wastewater in agriculture or the introduction of water saving technologies).</p>	SCCF	1,600,000	12,000,000
4. Coastal wetland protection and reduction of vulnerability to sea level rise to reduce climate-induced impacts on drinking water supplies in vulnerable areas (Corn Island).	Inv	Reduction of human vulnerability to climate change by building resilience of the source of water supply to sea level rise and stronger pollution management.	<p>1. Implementation of a wetland protection and restoration program to reduce human vulnerability to sea level rise (by strengthening the resilience of the groundwater aquifer).</p> <p>2. Institutional strengthening of water utility and the municipality to address the effects of climate change on water availability.</p> <p>3. Climate (rainfall) monitoring as an input in groundwater aquifer management plan.</p>	SCCF	1,000,000	4,000,000

5. Project management	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
Sub-Total						5,600,000 29,500,000
Project Management Cost ⁵					SCCF	400,000 2,000,000
Total Project Costs						6,000,000 31,500,000

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

Sources of Cofinancing	Name of Cofinancier	Type of Cofinancing	Amount (\$)
Other Multilateral Agency (ies)	World Bank	Soft Loan	20,000,000
Other Multilateral Agency (ies)	Inter-American Development Bank	Soft Loan	8,500,000
Bilateral Aid Agency (ies)	Nordic Development Fund	Grant	3,000,000
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
Total Cofinancing			31,500,000

D. GEF/LDCF/SCCF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY¹

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	Grant Amount (a)	Agency Fee (b) ²	Total c=a+b
WB	SCCF	Climate Change	Nicaragua	6,000,000	600,000	6,600,000
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
Total Grant Resources				6,000,000	600,000	6,600,000

¹ In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table

² Please indicate fees related to this project.

⁵ Same as footnote #3.

PART II: PROJECT JUSTIFICATION

A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

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

The proposed project is consistent with the SCCF's strategy to finance country-driven programs on climate adaptation. Specifically, it will facilitate support the sustainable development and climate adaptation strategies supported by the SCCF; and the strategy to support adaptation measures in areas such as water resources management, land management, and fragile ecosystems, as well as institutional strengthening to reduce vulnerability to droughts and extreme weather events. The proposed project includes a program of investments and institutional strengthening activities that will help integrate climate impacts in water resources management at the national and local levels, protect water sources in areas vulnerable to droughts and floods, and reduce the vulnerability of drinking water supplies by protecting the water regulation and filtration functions of coastal ecosystems (wetlands and mangroves) in areas of high vulnerability to climate change and sea level rise. The geographic coverage of the proposed program of activities is closely aligned with the World Bank's ongoing Rural Water Supply and Sanitation Project in Nicaragua (PRASNICA), the main baseline investment which the SCCF project would complement, and targets areas particularly vulnerable to the impacts of climate change.

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

The proposed project is consistent with the SCCF's eligibility criteria and priorities. The project will support the formulation and implementation of the national level framework on adaptation in the water supply sector and financing key adaptation measures in vulnerable areas. This will be achieved through (i) the integration of climate impacts in the process of water resources management at the national and local levels by providing the climate information and monitoring data, (ii) strengthening the response capacity and water management institutions, and (iii) financing the additional costs of investments necessary to climate-proof water supplies in vulnerable areas. The project also seeks to strengthen the planning and investment processes by climate proofing vulnerable coastal zones by improving the resilience of ecosystems critical for ensuring the reliability and adequate quality of drinking water supplies. In addition, the proposed project will serve as a catalyst to leverage additional resources from bilateral and other multilateral sources. The activities funded by the proposed project are country-driven, cost-effective and integrated in national planning policies as expressed in the National Environmental and Climate Change Strategy, and consistent with the 2007 National Water Law and the subsequent related legislation (e.g., the 2010 Special Law for Drinking Water and Sanitation Committees (CAPS) and the regulations to implement the Water Law).

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.:

Recent droughts in the Pacific region of Nicaragua and floods in the Caribbean region have significantly affected the water supply sector and the trend is expected to worsen with climate change. The IPCC Fourth Assessment and regional studies concur that the climate variability and extreme events have high economic costs for Central America and particularly Nicaragua, and that a large share of these costs is a result of having too much or too little water.⁶ During the increasingly frequent dry El Niño years many rural areas are affected by drought and the availability of water for domestic uses falls, particularly for the poorer communities in rural areas and small towns that rely

⁶ DFID and CEPAL (2009). "Economics of Climate Change in Central America. Feasibility Report." Mexico City.

on shallow groundwater wells.⁷ The 2010-2015 National Environment and Climate Change Strategy and climate change action plans for critical watersheds in Nicaragua have identified a set of priority adaptation measures: strengthening environmental and climate change education and information systems at the national and municipal levels; supporting watershed protection actions, such as conservation, protection of forest cover, and water harvesting; protection of critical ecosystems such as forests and mangroves; and sustainable land management in agriculture.

The 2010 National Environmental and Climate Change Strategy of Nicaragua and an Action Plan define the programs and funding sources for key adaptation actions in the water supply sector. The proposed project is fully consistent with the four out of five strategic areas of Nicaragua's 2010 National Environmental and Climate Change Strategy and the 2010-2015 Action Plan: (i) environmental education, (ii) protection of natural resources, (iii) conservation, rehabilitation of watersheds, and water harvesting, (iv) mitigation, adaptation and management of climate-related risks, and (v) sustainable land management. More specifically, the Action Plan has identified wetland and mangrove protection as a priority within the broader area of natural resources protection due to the important role they play as biological filters and for the provision of clean water. Within the area of protection of water sources and water harvesting, watershed protection measures, forest conservation and water harvesting for a range of domestic and agricultural uses have been defined as the priority measures. Finally, within the area of mitigation and adaptation to climate change, protection of the watershed of Lake Nicaragua (Cocibolca) due to its central role as a future source of potable water supply is the top in the list of twelve measures. Through its support of wetland management, protection of water sources and water harvesting in the greater watershed of Lake Nicaragua, and climate education and information systems, the project will directly support the Government of Nicaragua with the attainment of its stated objectives in the Strategy.

B. PROJECT OVERVIEW:

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

Nicaragua's strategic water sources are vulnerable to climate change. The extension of Nicaragua's water supply and sanitation networks and better service quality are a pillar of Nicaragua's National Development Plan and an essential element of the strategy to attain the MDGs on health and environmental sustainability. Yet, as described above, Nicaragua's strategic water resources for current and future water supplies are vulnerable to the effects of climate change due to the high frequency of extreme weather events, floods and hurricanes, in addition to the pressures from pollution from untreated wastewater, agricultural runoff and other sources. At the national level, the 8,000 sq km Lake Nicaragua (Cocibolca) and its tributaries within the greater San Juan River watershed are the strategic source of freshwater in the future. As recognized by the Water Law and the National Development Plan, Lake Nicaragua (Cocibolca)—the second largest in Latin America—is a strategic water resource not only for Nicaragua, and eventually Managua, but also for the Central American region. Deforestation, pasture burning, pollution by agrochemicals and untreated wastewater and unsustainable land use in the watershed have resulted in very high sediment and nutrient runoffs to the lake which, if the current trend continues, would have high economic, environmental and social costs.

Especially high vulnerability of water supplies in Corn Islands. Another area where the water supplies may be more vulnerable to the pressures from climate change than anywhere else in Nicaragua is Corn Islands off the Caribbean coast. The Great and Little Corn Islands are small but with the total population of 8,000 and a high rate of population growth, they are the most densely populated area in the Caribbean with around 700 people per sq km, and have the highest recognized tourism potential in the country. The local population and the government are alarmed about

⁷ MARENA (2008). "Assessment of Current Climate Change Vulnerability of Water Resources and Agriculture in Basin No. 64." Synthesis Report. Managua.

saltwater intrusion and pollution of the islands' groundwater aquifers and coastal erosion; and the apparent shrinking of the island which the Nicaraguan Institute of Land Studies and Meteorology (INETER) and the locals attribute in part to climate change and the rising sea levels.

The Government's investment program in the water supply sector and the baseline project. The GoN has set ambitious targets to extend water supply and sanitation networks in rural areas (Table 1). The World Bank has been asked by the GoN to take a leading role in coordinating the donor support in the sector, and the Bank is providing financial and technical assistance through the Nicaragua Greater Water and Sanitation (PRASMA, \$40mln, effective in May, 2009) and Rural Water Supply (PRASNICA, \$20mln, effective in March, 2009) Projects. Those projects support (i) increasing rural water supply coverage, (ii) institutional strengthening of rural water supply management institutions, and (iii) pilot projects to strengthen municipal level water supply and sewerage systems and the protection of water sources. The pilot projects include some areas in the watershed of Lake Nicaragua, and Corn Islands.

Table 1. National Development Plan's Targets for Access to Potable Water and Sanitation

Strategic Objective	Rural/Urban	Baseline 2007	Target				Institution responsible
			2008	2009	2010	2011	
Potable water coverage	Urban	72.0	77.0	80.0	82.0	86.0	ENACAL
	Rural	56.3	57.9	59.4	62.1	64.1	FISE
Sanitation coverage (sewerage systems)	Urban	36.5	37.0	38.0	43.0	48.0	ENACAL
	Rural	73.2	74.8	76.3	79.0	81.0	FISE

Notes: ENACAL is the Nicaraguan Water and Sanitation Company responsible for the urban areas and the implementing agency for the PRASMA project, and FISE is the Emergency Social Investment Fund, the leading agency responsible for water supply in rural areas. FISE is the implementing agency for the PRASNICA project.

Source: Government of Nicaragua (2009). National Development Plan Update, 2009-2012.

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

The baseline investments and institutional strengthening measures supported by PRASNICA and PRASMA do not explicitly incorporate the significant vulnerabilities resulting from climate change. These vulnerabilities result from the intensification of drought conditions in the Pacific region and more frequent floods in the Caribbean region of Nicaragua. As stated in the 2010 National Drought Response Strategy, the falling groundwater levels in Nicaragua's drought-prone Pacific region require better monitoring of groundwater aquifers, improved pollution management, and construction of several hundred additional drinking water wells. In Nicaragua's flood-prone Caribbean region other measures, such as the improved management of coastal wetlands and upper watersheds and modifications of the engineering designs of water supply and sewerage systems are required to adapt to the effects of climate change. These measures need to be explicitly incorporated in the design of the PRASNICA and PRASMA projects in order to strengthen the climate resilience of these investments and the broader national investment program in the sector.

The Objective and Components of the SCCF project. The objective of the proposed SCCF project

is to enhance the current and future resilience to climate change of investments in the water supply and rural sector is undertaken by GoN and other development partners, including the World Bank. The proposed SCCF grant will finance four components: (i) institutional strengthening for integration of climate impacts in water resources management, (ii) protection of micro-watersheds and water supply sources from climate-induced vulnerabilities (droughts and floods), (iii) investment in supply- and demand-side measures to increase drinking water availability in vulnerable areas through supply-augmenting and efficiency measures, and (iv) coastal wetland protection and reduction of vulnerability to sea level rise in order to reduce climate-induced impacts on drinking water supplies in vulnerable areas (Corn Island). All of the activities proposed for SCCF financing will be additional to the ongoing and planned investments by the GoN and by the World Bank (\$60 mln from PRASNICA and PRASMA projects) and will finance actions that will contribute to the strengthening of the resilience of Nicaragua's critical water supplies to climate change. They will support the following specific activities:

- **Component 1. Institutional strengthening for integration of climate impacts in water resources management (\$4.5 million, of which \$1 million from SCCF).** This component will support the institutional strengthening to facilitate the mainstreaming of climate change in Nicaragua's water supply sector. Given the uncertainty and evolving nature of climate impacts there is a need to promote flexible and adaptive management and planning regimes. For this to occur, the project will support (i) implementation of a climate change education and training program for municipal and national level technical experts and decision makers, (ii) systems to strengthen and regularize the monitoring of climatic changes, of water quality, disaster and early warning systems and other critical parameters, and (iii) the strengthening of the MARENA's institutional capacity for managing climate change impacts on water resources.
- **Component 2. Protection of water sources and the use of economic instruments to strengthen water supplies' resilience to climate change (\$12 million, of which \$2 million from SCCF).** This component will help strengthen the implementation of watershed and water source protection measures through enhancing the resilience of water sources to climate change. This will include (i) implementation of pilot programs to protect micro-watersheds using a combination of institutional and economic incentives to convert to sustainable land uses, and (ii) investment in protection and restoration of wetlands which have been shown to be critical to assuring the integrity, robustness and climate resilience of the hydrological and other ecosystem services provided by Lake Nicaragua and for the health of the groundwater aquifers in Corn Islands.
- **Component 3. Demand and supply side measures to protect water sources and improve the efficiency of water use (\$13.6 million, of which \$1.6 million from SCCF).** This component will support (i) water harvesting, water storage, rehabilitation and construction of additional wells and development of alternative water sources in drought prone areas, and (ii) innovative approaches to strengthen the efficiency of water use and reduce climate vulnerability of drinking water supplies (e.g., introduction of water saving technologies and metering).
- **Component 4. Coastal wetland protection and reduction of vulnerability to sea level rise to reduce climate-induced impacts on drinking water supplies (Corn Islands) (\$5 million, of which \$1 million from SCCF).** This component will support (i) implementation of a wetland protection and restoration program to reduce the water supplies' and human vulnerability to sea level rise (by strengthening the resilience of the groundwater aquifer), (ii) institutional strengthening of water utility and the municipality to address the effects of climate change on water availability, (iii) climate (rainfall)

monitoring as an input in groundwater aquifer management plan.

Project management cost (\$2.4 million, of which \$0.4 million from SCCF). This component will support the measures to strengthen the PRASNICA implementing agency so as to cover the additional supervision and financial management costs associated with the implementation of the SCCF project (i.e., the purchase of equipment, additional consultancies, and technical training on climate adaptation in the water resources sector for the project implementing agency staff).

All of these actions would be additional to the current World Bank and the government's own investment program and will strengthen the resilience of the current and future water supplies to climate change. The Ministry of Environment and Natural Resources (MARENA), in coordination with the Emergency Social Investment Fund (FISE) and other government agencies, will be responsible for the technical coordination of the proposed activities.

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 environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF). As a background information, read [Mainstreaming Gender at the GEF.](#):

The proposed project is expected to have high socioeconomic benefits at the national and local level: health benefits from the improved quality and greater reliability of drinking water supplies, improved management of watersheds with the resulting benefits to water supplies and agricultural productivity, and stronger water management institutions at the national and community levels. The benefits to women are expected to be even greater than on average because of the time costs for water collection that they bear disproportionately as water collection in rural areas is typically women's responsibility, and the project would help increase access to clean drinking water in rural areas. The project is cost-effective for several reasons. First, it is closely integrated with the existing implementation arrangements of the PRASNICA project and will not create large additional burdens on the limited implementation capacity. Second, the project will generate the climate information specific to the water supply sector which can be considered a global public good and will help improve the targeting of infrastructure investments in the sector. Lastly, rather than investing in costly engineering solutions, protection of water sources will be achieved more cost effectively by restoring and strengthening the natural resilience of micro-watersheds to climate perturbations, supporting the natural water filtration functions of coastal wetlands to support climate resilience of groundwater supplies, and by strengthening institutions and the national and local levels by improving their capacity to monitor climate impacts on water resources and devise adequate adaptation strategies. The project will help achieve the adaptation benefits by strengthening climate information, education, capacity strengthening and by supporting targeted investments in areas particularly vulnerable to climate change.

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:

Two main risks to the attainment of the SCCF's objective "to enhance the current and future resilience to climate change of investments in the water supply and rural sector is undertaken by GoN and other development partners, including the World Bank" are the limited technical and financial capacity of the Nicaraguan institutions to climate-proof its water supply sector, and the sustainability of the measures supported by this project beyond the project's timeframe. In order to mitigate the risks stemming from the limited capacity, the proposed project will be designed so as to minimize the additional capacity requirements for the project's implementation. The project will be implemented jointly by FISE and MARENA. The project will use the existing implementation arrangements (procurement and financial management) of the FISE—the agency charged with the

implementation of the rural water supply investment programs of Nicaragua, including the World Bank's PRASNICA project which the SCCF will complement. Such a design will help address the main risk to the SCCF project's successful implementation stemming from the capacity limitations. Sustainability of the project's outcomes is the second main risk to the SCCF project's success: the sectoral strategies and investment plans for climate-resilient water supply systems may not translate into actual investments. In order to mitigate this risk, the project will be designed with close involvement of the national level implementing agencies, as well as the municipalities and community-level water management organizations (*Comisiones de Agua Potable y Saneamiento*, CAPS). Furthermore, the proposed policy and investment measures are closely aligned with the priorities and investment needs at the local level. Such an alignment of priorities will help ensure that the project achieve sustainable outcomes.

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:

The project's key stakeholders are the national level agencies in charge of planning and investment programs in rural water supply, climate change, and meteorological and hydrological monitoring—FISE, MARENA, and the Nicaraguan Institute of Territorial Studies (INETER). At the local level, the project's main stakeholders are the municipal governments, delegations of FISE and MARENA at the local level, and CAPS. An additional group of stakeholders includes the research institutes and civil society (the Nicaraguan Center for Water Resources Research (CIRA), the National Engineering University (CIEMA) and the NGO community). Lastly, the project will work directly with the communities and community groups, including the *mesquitos* and other indigenous groups and the *mestizo* communities in Corn Islands and the other pilot sites supported by SCCF-financed investments. Some consultations have already been carried out in the course of the preparation of the World Bank-supported "Country Environmental Analysis for Nicaragua," in which water resources management and the vulnerability of Corn Island's ecosystems and groundwater resources to climate change were included as the priority environmental issues. An additional series of in-depth consultations with these important groups of stakeholders will be carried out in the process of the design of the SCCF project, and their roles in the project implementation will be more clearly defined at that stage.

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

The proposed SCCF project will be designed and implemented in close coordination with the World Bank's investments in Nicaragua's water supply sector: PRASNICA and PRASMA, as subsequently described. Close coordination will also be ensured with two additional programs on climate adaptation: the recently approved "Environmental Program for Disaster and Climate Change Risk Management" supported by the IADB (US\$ 10 million), the Nordic Development Fund (US\$3 million) and the GoN (US\$ 0.5 million). The program supports (i) strengthening natural resources management for climate adaptation, (ii) infrastructure investments to reduce losses during extreme weather events, and (iii) planning and capacity strengthening for risk management. This program's geographic focus is distinct from the proposed coverage by the SCCF with the exception of the national-level investments to strengthen climate monitoring, planning capacity and education, which would be supported by both programs. Another related project "Reduction of Risks and Vulnerability to Floods and Droughts in the Watershed of Estero Real River" is pending review by the Adaptation Fund, with US\$ 5.5 mln requested by the GoN. This project's main goal is to strengthen climate adaptation in the agricultural sector but it includes some proposed measures that are similar to the SCCF proposal: protection of water sources, rainwater harvesting and water storage, and agroforestry, although in the case of the Adaptation Fund proposal, these measures would help improve the resilience of agricultural production systems and water availability for agriculture. The coordination with these activities will be ensured through the leading role of the Ministry of Natural Resources and Environment (MARENA) in all of those projects, and through continuous dialogue with the IADB and the NDF in the area of climate adaptation.

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:

From its extensive lending in Latin America and other regions, the World Bank has wide experience in increasing the poor's access to water and sanitation services and in improving sustainability of service provision in rural areas. In Nicaragua, the World Bank had been asked to take a leading role in supporting the GoN to finance its ambitious investment program in the water supply and sanitation sector and coordinate the donor support in the sector. Two projects are now under implementation: the Nicaragua Urban Water and Sanitation Project (PRASMA, US\$45 million) and the Nicaragua Water and Sanitation Project, mainly targeting the rural areas (PRASNICA, US\$23.1 million total, of which US\$20 million is provided by the World Bank). The proposed SCCF project will be directly linked with the PRASNICA project and will use its procurement and financial management arrangements and project oversight. By design, the project will directly support the climate proofing of the investments by PRASNICA and it will less directly affect the investment by the PRASMA project and the investments in the water supply and sanitation sector by the GoN and by other multilateral and bilateral donors (notably by the IADB through a recently approved US\$10 million project with US\$4 million by the Nordic Development Fund (NDF) to strengthen climate adaptation in water resources management). Thus, the World Bank's investment of US\$20 million in support of the PRASNICA project is total amount of co-financing provided by the World Bank.

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


The World Bank support in the water supply sector is a priority area in the latest CPS for Nicaragua, which, as described above, included two large projects in the sector totaling an investment of US\$65 million over five years by the World Bank. Furthermore, a Country Environmental Analysis (CEA) for Nicaragua was carried out by the World Bank, within which water resources management and climate adaptation were priority areas. In the course of the discussions of the progress with the CPS implementation and the dissemination of the CEA, the GoN requested World Bank assistance in the area of climate adaptation. Given the World Bank's significant engagement in the water supply sector and the request for climate adaptation assistance, this is expected to become a priority area of World Bank assistance in the next CPS period. The SCCF project will thus form part of a broader program of assistance by the World Bank to the GoN. The World Bank country office in Managua is expected to play a major role in the day-to-day management of the SCCF project.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the [Operational Focal Point endorsement letter\(s\)](#) with this template. For SGP, use this [OFP endorsement letter](#)).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Roberto Araquistain Cisneros	Vice Ministro	MINISTERIO DEL AMBIENTE Y LOS RECURSOS NATURALES	03/10/2011

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF policies and procedures and meets the GEF/LDCF/SCCF criteria for project identification and preparation.					
Agency Coordinator, Agency name	Signature	DATE (MM/dd/yyyy)	Project Contact Person	Telephone	Email Address
Karin Shepardson		03/17/2014	Jocelyn Albert	202-473-3458	