

PROJECT SUMMARY

Project Code:		Project Title: Acquire technologies and appropriate tools to manage water resources	
Executing Agency: Ministry of Environment, Energy and Water		Implementing Agency:	
Geographic Coverage: National	Start Date: Immediate	Target Groups:	
Goal: 1. Enhance institutional and technological capacity to manage climate change-related risks to water			
Objectives		Activities	
<p><i>1: Gain knowledge on the dynamics of groundwater aquifers and natural water catchment areas to better understand climate change-related risks to aquifers.</i></p>		<ol style="list-style-type: none"> 1. Identify the islands most vulnerable to climate change as starting point for conducting risk analysis. 2. Assess groundwater aquifers to understand the hydrology, hydrogeology and recharge characteristics and identify the risks to the aquifer systems due to climate change-related hazards. 3. Assess the hydrology and hydrogeology of natural water catchment areas and their potential as a reservoir and as stormwater flood control. 4. Study options to protect and manage groundwater aquifers at local level. 	
<p><i>2: Strengthen the policy and regulatory framework for groundwater protection and preservation to build adaptive capacity of aquifers.</i></p>		<ol style="list-style-type: none"> 1. Review existing regulations on water resources management and landuse planning to incorporate climate change-related risk management. 2. Develop policies, standards and guidelines for management of groundwater aquifers in inhabited islands. 3. Provide technical assistance for the development and implementation of management plans for water catchment areas by communities. 4. Sensitize water users to prevent salinisation caused by over-extraction and saltwater intrusion. 	
<p><i>3: Acquire and demonstrate sound water technologies suitable to small coral island environment.</i></p>		<ol style="list-style-type: none"> 1. Demonstrate infiltration gallery technology in selected islands. 2. Undertake an in-depth assessment of solar desalination technology and pilot test the technology in a selected location. 3. Demonstrate aquifer recharging technologies in selected vulnerable islands. 4. Identify and test other appropriate technologies to prevent groundwater salinisation. 5. Identify and document the lessons from demonstration sites and develop replicable Aquifer System Management Guidelines. 	
<p><i>4: Enable household and community level rainwater harvesting to prevent potable water shortages.</i></p>		<ol style="list-style-type: none"> 1. Assess the number of rainwater storage tanks in the islands and their capacities to estimate rainwater harvesting capacity needs. 2. Provide rainwater tanks free of charge to needy households and assist in roof retrofitting where necessary. 3. Disseminate guidelines and standards for rainwater collection and storage to every household. 4. Raise public awareness and seek community commitment on rainwater harvesting. 5. Make it mandatory to harvest rainwater from all public buildings. 6. Develop protocols for use and management of community rainwater tanks. 	
<p><i>5: Improve methods and practices used in rainwater harvesting and storage to ensure the rainwater is safe and of high quality.</i></p>		<ol style="list-style-type: none"> 1. Undertake an audit of the quality of rainwater harvested in the islands and identify the causes of water contamination and poor water quality. 2. Enable water quality testing at community level. 3. Develop and publicize protocols and procedures for regular water testing and quality assurance. 	
Financial Resources: US\$ 900,000			

