

### PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: Full-sized Project

THE GEF TRUST FUND

**Submission Date**: 11<sup>th</sup> September 2008 **Re-submission Date**:

Milestones

CEO Endorsement/Approval

Mid-term Review (if planned)

Implementation Completion

Work Program (for FSP)

**GEF Agency Approval** 

Implementation Start

INDICATIVE CALENDAR

**Expected Dates** 

Nov. 2008

Nov. 2009

April 2010

April 2012

Dec 2014

March 2010

### **PART I: PROJECT IDENTIFICATION**

GEFSEC PROJECT ID<sup>1</sup>: 2706

**GEF AGENCY PROJECT ID: 3524 (UNDP)** 

COUNTRY(IES): Cape Verde, Comoros, Maldives, Mauritius, Sao

Tome and Principe, Seychelles

**PROJECT TITLE:** Implementing Integrated Water Resource and Wastewater Management in Atlantic and Indian Ocean SIDS

GEF AGENCY(IES): UNEP, UNDP

**OTHER EXECUTING PARTNER(S):** UNOPs, Joint Secretariat for the Conventions for the Cooperation in the Protection and Development

of The Marine And Coastal Environment of The Western African

 $Region \ (Abidjan \ Convention) \ and \ the \ Eastern \ African \ Region \ (Nairobi \ Convention) \ , \ International \ Knowledge \ Management - IKM/EcoAfrica$ 

**GEF FOCAL AREA (S):** International Waters

GEF-4 STRATEGIC PROGRAM(S): IW SP3: Balancing Overuse and Conflicting Uses of Water Resources in

Transboundary Surface and Groundwater Basins.

NAME OF PARENT PROGRAM/UMBRELLA PROJECT:

#### A. PROJECT FRAMEWORK

**Project Objective**: Participating countries accelerate progress on WSSD targets on IWRM/WUE plans and water supply and sanitation MDGs through adoption and implementation of an integrated approach to water resource management and water use efficiency, including policy, institutional and legislative reforms, demonstration of more effective technologies and methodologies for the protection and utilization of ground and surface waters, and the learning and exchange of best practices.

Project or TA, or Components STA**		Expected Outcomes	Expected Outputs	Indicative GEF Financing*		Indicative Co-financing*		Total (M \$)
				(\$ M)	%	(\$ M)	%	
C1 Development and Implementation of Targeted Demonstrations in IWRM and WUE	TA	i. Barriers removed at each participating SIDS against the adoption and application of more effective technologies and methodologies to promote IWRM and WUE, in particular at selected demonstration sites. ii. Country-specific IWRM demonstrations as selected and adopted during the PPG phase effectively implemented. iii. National and/or local capacities necessary to implement IWRM and WUE practices and meet water and sanitation MDGs strengthened at each participating SIDS iv. Measurable stress reduction achieved at the demonstration sites, including increased availability and/or access to potable water and/or sustainable sanitation services, increased water use efficiency, improved groundwater quality, reduced deforestation and watershed erosion, and reduced coastal pollution and ecosystem degradation. v. Social and economic welfare of selected island communities improved through improved water and wastewater management vi. Best practices captured and lessons learned documented from each demonstration for dissemination at national,	Water Resource Assessment and Protection  i. A (rapid) water and land-related diagnostic analysis for each participating SIDS conducted as part of the IWRM demonstrations ii. Groundwater management and monitoring system (reuse, recharge, protection) developed at demo site #1. Results of demo incorporated into national IWRM planning process.  Watershed Management iii. Improvements in upstream land and water use practices result in 20% or greater reduction in erosion, land degradation and coastal sediment runoff at demo site #2 (incorporating NAPA priorities) iv. Watershed protection and restoration measures demonstrated at demo #2 included in the national land use and IWRM planning  Wastewater Management v. An artificial wetland constructed as a wastewater purification and waste reuse (e.g. nutrients) measure at demo site #3, resulting in 20% or greater reduction in raw sewage, nutrient, and other pollutant discharges into	4,50	36	8,15	64	12,65

Project ID number will be assigned initially by GEFSEC.

	vii. Replication strategies developed from each demonstration project and where	river and adjacent coastal zone. vi. Wastewater management plan developed and demonstrated at a pilot municipality for demo #3.					
		Water Supply, Water Use Efficiency and Sanitation vii. 20% or greater increase in water use efficiency at 1 high water consumption site (demo #4) through demonstration of water conservation and re-use measures; possible public-private partnerships; effective measures incorporated into national IWRM planning process; demo results incorporated into national IWRM planning. viii. 20% or greater increase in freshwater availability through the application of rainwater harvesting at demo site #5 ix. 20% or greater reduction in wastewater discharge through demonstration of ecosan technologies at demo site #6; reuse of 80%					
C2 IWRM and WUE Monitoring, and Indicators framework		or more of ecosan products as fertilizer  i. Development of national IW-related indicators of process, stress reduction, and environmental and socioeconomic status to monitor improvements in the management of water resources and wastewater ii. A set of indicators developed in line with guidance developed by UN-Water and GWP to track the progress of the IWRM implementation and to assess the shorterm and long-term effectiveness of IWRM and WUE strategies in the participating SIDS;  iii. Development and implementation of rational, simplified data analysis approaches to support the policy development and legislative reform processes as well as to provide a measure of success in addressing water quality and water use problems.  iv. GEF tracking tool completed as part of annual project implementation review process	0,50	38	0,80	62	1,30
C3. Policy, legislative and institutional reforms and capacity building for IWRM and WUE	ii. Strengthened policy and legislation for the effective management of water resources and wastewater in Atlantic/Indian Ocean SIDS;  iii. Harmonization of National IWRM/WUE process with relevant national plans and experience from other regional SIDS and IWRM partnerships; with long-term sustainable implementation plan;	i. Establish a National Intersectoral Committee in each country (based on the NICs established during the PPG) to ensure broad multi-sectoral participation in IWRM and Water Use Efficiency planning processes (taking into account institutional and capacity constraints, and the obvious economy of using existing multi-sectoral committees already established under other related national/regional initiatives); National Reviews of water, wastewater, and land use policy, legislation and institutional arrangements followed by recommendations of necessary reforms;  ii. New or revised policies on water supply and sanitation based on the developed IWRM/WUE strategies iii. Development, adoption and initial implementation of national Integrated Water Resource Management and Water Use Efficiency strategies. These strategies would include the identification of long-term sustainability measures for water resource and wastewater use and management, and protection of ecosystem functions and environmental flow (e.g. tariffs, 'beneficiary- pays' and 'polluter-pays' policies, incentives and penalties. They would also address awareness of, and access to, cost-effective and appropriate technologies;	1,65	39	2,60	61	4,25

Ex Knowledge Exchange, best Exchange		iv. Strengthened regional and national institutions and other regional, national and local stakeholders for protection of ground and surface waters, sanitation and wastewater reduction as part of the implementation of IWRM/WUE plans, (and monitoring plans,).  iv. A Programme of cross-sectoral sensitisation and awareness of IWRM and WUE strategies and requirements (to include high-level policy makers); v. A Programme of tross-sectoral sensitisation and awareness of IWRM and WUE strategies and requirements (to include high-level policy makers); v. A Programme of cross-sectoral sensitisation and awareness of IWRM and WUE strategies and requirements (to include high-level policy makers); v. A Programme of cross-sectoral sensitisation and awareness of IWRM and WUE strategies and requirements (to include high-level policy makers); v. A Programme of cross-sectoral sensitisation and awareness of IWRM and WUE strategies and requirements (to include high-level policy makers); v. A Programme of cross-sectoral sensitisation and awareness of IWRM and WUE strategies and requirements (to include high-level policy makers); v. A Programme of cross-sectoral sensitisation and awareness of IWRM and WUE strategies and requirements (to include high-level policy makers); v. A Programme of cross-sectoral sensitisation and awareness of IWRM and WUE strategies and requirements (to include high-level policy makers); v. A Programme of cross-sectoral sensitisation and awareness of IWRM and WUE plans (and include high-level policy makers); v. A Programme of cross-sectoral sensitisation and awareness of IWRM and WUE plans (and include high-level policy makers); v. A Programme of cross-sectoral sensitisation and awareness of IWRM and WUE plans (and include high-level policy makers); v. A Programme of training and capacity building to support the implementation of IWRM and WUE plans (and include high-level policy makers); v. A Programme of training and capacity building to support the implementation of IWRM and WUE plans (and include high-leve					
involvement, participation, and education initiatives are developed and implemented in the region through the application of DLIST mechanisms and tools  iii. Water governance enhanced through strengthened stakeholder participation by the creation of a Community of Practice (COP) at peach SIDS which promote dialogue between civil society and government of information sharing, enhanced inter- and intra-regional knowledge sharing and learning:  iv. More effective networking for information sharing, enhanced inter- and intra-regional knowledge sharing and learning:  v. Gender mainstreaming achieved in development/ implementation of IWRMWUE Ensuring women's and men's equitable access to and management of safe and adequate water, for domestic supply, sanitation, food security and environmental sustainability  iii. Water governance enhanced through strengthened stakeholder participation by the created and management of safe and adequate water, for domestic supply, sanitation, food security and environmental sustainability  iii. Water governance enhanced through strengthened stakeholder participation between experts, institutions and information between experts, institutions and common maintained:  iii. Water governance enhanced through strengthened stakeholder participation by the communities, as well as a common pool of knowledge is created and maintained:  iv. A Community of Practice (COP) created or maintained schedule sare and adequate as a sell as horizontal (multi-sectoral) information exchanges as well as a common pool of knowledge is created and as well as horizontal (multi-sectoral) information exchanges as well as a common pool of knowledge is created and savel as horizontal (multi-sectoral) information exchanges as well as a common pool of knowledge sharing of properties.  v. Linkage among the COPs created or information dissemination and knowledge sharing  vi. Project participates in IW Learn activities, such as Biennial conferences, and developes a homepage according to IW LEARN guidence etc²  vii. SIDS l	Exchange, best- practices, replication and stakeholder	i. Network of collaboration and exchange for long-term implementation of IWRM/WUE plans and exchange of best practices and lessons learned established between other SIDS projects (Pacific and Caribbean) and other SIDS and IWRM networks and projects resulting in: Improvements in technology and water management methods within the countries due to efficient exchange of technologies, best practice and lessons learned;  i. Identification of best practices and lessons from other SIDS in IWRM and WUE (i.e. Pacific and Caribbean), and other projects, particularly in relation to the selection of more suitable and applicable technologies and water resource management/use methodologies, including the adoption of strategies to deal with extreme and chronic events; drought and the adoption of more appropriate resource valuation and pricing policies; ii. Inter-regional IWRM/WUE dialogue process in partnership with the Alliance of	2,09	42	2,90	58	4,99
iv. More effective networking for information sharing, enhanced inter- and intra-regional knowledge sharing and learning:  Vi. Project participates in IW Learn activities, such as Biennial conferences, and develops a homepage according to IW LEARN guidance etc² vii. SIDS learning exchange at regional global meetings (Global Oceans Forum, GPA, Nitrogen Initiative etc  V. Gender mainstreaming achieved in development/ implementation of IWRM/WUE Ensuring women's and men's equitable access to and management of safe and adequate water, for domestic supply, sanitation, food security and environmental sustainability  4. Project  Vi. Project participates in IW Learn activities, such as Biennial conferences, and develops a homepage according to IW LEARN guidance etc² viii. SIDS learning exchange at regional global meetings (Global Oceans Forum, GPA, Nitrogen Initiative etc viiii. Gender audits and analysis and training adequate water, for domestic supply, sanitation, food security and environmental sustainability  4. Project		involvement, participation, and education initiatives are developed and implemented in the region through the application of DLIST mechanisms and tools  iii. Water governance enhanced through strengthened stakeholder participation by the creation of a Community of Practice (COP) at each SIDS which promote dialogue between civil society and government  iii. Water governance enhanced through strengthened stakeholder participation by the creation of a Community of Practice (COP) at each SIDS which promote dialogue between civil society and government  iii. Water governance enhanced through strengthened stakeholder participation by the creation of a Community of Practice (COP) at each SIDS which promote dialogue between civil society and government  iv. A Community of Practice (COP) created (multi-sectoral) information exchanges as well as debates on the needs and aspirations of people, project deliverables and environmental realities.  v. Linkage among the COPs created for information dissemination and knowledge					
development/ implementation of IWRM/WUE Ensuring women's and men's equitable access to and management of safe and adequate water, for domestic supply, sanitation, food security and environmental sustainability  4. Project  development/ implementation of IWRM/WUE viii. Gender audits and analysis and training viii. Gender audits and analysis an		iv. More effective networking for information sharing, enhanced inter- and intra-regional knowledge sharing and learning;  vi. Project participates in IW Learn activities, such as Biennial conferences, and develops a homepage according to IW LEARN guidance etc² vii. SIDS learning exchange at regional global meetings (Global Oceans Forum, GPA, Nitrogen Initiative etc					
	4 Drainet	development/ implementation of IWRM/WUE Ensuring women's and men's equitable access to and management of safe and adequate water, for domestic supply, sanitation, food security and environmental		27	1/5	(2)	2/1
			0,96	3/	1,65	03	Z,0 I

<sup>\*</sup> List the \$ by project components. The percentage is the share of GEF and Co-financing respectively to the total amount for the component.

\*\* TA = Technical Assistance; STA = Scientific & technical analysis.

### B. INDICATIVE FINANCING PLAN SUMMARY FOR THE PROJECT (\$)

	Project Preparation*	Project	Agency Fee	Total
GEF	350,000	9,650,000	1,000,000	11,000,000
Co-financing	350,000	16,100,000		16,450,000
Total	700,000	25,750,000	1,000,000	27,450,000

 $<sup>^2</sup>$  1% of the total GEF budget will be allocated to this in line with agreements with GEF  $_{\rm Page~3~of~14}$ 

*	Please include the previously approved PDFs and planned request for new PPG, if any. footnote here and if the GEF funding is from GEF-3.	Indicate the amount already approved as

## **C. INDICATIVE <u>CO-FINANCING</u> FOR THE PROJECT** (including project preparation amount) **BY SOURCE and BY NAME** (in parenthesis) if available, (\$)

Sources of Co-financing	Type of Co-financing	Amount
Project Government Contribution	In-kind	9.450.000
GEF Agency(ies)	In-kind	800.000
Bilateral Aid Agency(ies)	Unknown at this stage	2.000.000
Multilateral Agency(ies)	Unknown at this stage	1.700.000
Private Sector	Unknown at this stage	1.000.000
NGO	Unknown at this stage	1.000.000
Others	Unknown at this stage	500.000
Total co-financing		16.450.000

### D. GEF RESOURCES REQUESTED BY FOCAL AREA(S), AGENCY (IES) SHARE AND COUNTRY(IES)\*

GEF		Country Name/	(in \$)					
Agency	Focal Area	Global	Project Preparation	9		Total		
UNEP	International Waters	Regional	350,000	5,150,000	550,000	6,050,000		
UNDP	International Waters	Regional	0	4,500,000	450,000	4,950,000		
Total GEF Resources			350,000	9,650,000	1,000,000	11,000,000		

<sup>\*</sup> No need to provide information for this table if it is a single focal area, single country and single GEF Agency project.

#### PART II: PROJECT JUSTIFICATION

## A. STATE THE ISSUE, HOW THE PROJECT SEEKS TO ADDRESS IT, AND THE EXPECTED GLOBAL ENVIRONMENTAL BENEFITS TO BE DELIVERED:

Small Island Developing States (SIDS) have particular needs and specific issues in relation to sustainable development and environment that are not appropriate, or of such a high priority, to larger countries on the continental landmasses. Water resource and wastewater management and water quality are now critical issues to nearly all SIDS throughout the world. This has been recognized through various formal statements and commitments at a number of globally significant conferences and high-level international meetings including the United Nations Conference on Environment and Development (Rio de Janeiro – 1992) and a Conference of SIDS in Barbados in 1994 which adopted the Barbados Programme of Action (BPoA), the Mauritius SIDS Strategy in 2005. In 2002, at the World Summit on Sustainable Development (WSSD), in Johannesburg South Africa, a number of statements related to SIDS that identified priorities, and requested that global resources be targeted to address these priorities were issued. The requirements adopted by WSSD which are most pertinent to this Concept proposal include (i) the need to accelerate the implementation of the Barbados Programme of Action (ii) provide support for development and implementation of freshwater programmes and work on marine and coastal biodiversity (iii) implementation of the GPA (Global Programme of Action for the Protection of the Marine Environment from Land-based Activities) in SIDS to control and prevent waste and pollution, (iv) provide support to develop capacity to reduce and manage waste and pollution and for maintaining and managing systems to deliver water and sanitation services, and (v) IWRM WSSD targets. In particular, WSSD identified GEF resources as being a primary source of funding to the above initiatives.

Although the participating islands within this proposal differ in size and level of economic development, they share common environmental features that can have a profound influence on their development. In particular, these SIDS share problems related to high levels of pollution (both land-based and potentially marine), resultant contamination of already scarce water supplies, over-exploitation and poor management of water supplies and recharge sources, especially groundwater, increasing pressure on limited agricultural production, and rapidly disappearing unique biodiversity (particularly endemic species). Also identified was the inadequate availability of clean drinking water and health problems related to unsanitary drinking water, lack of access to sustainable sanitation services, and poor waste treatment. All of these concerns, and many other closely related issues, threaten the participating SIDS on either side of the African continent and out into the Indian Ocean. Some of the African SIDS, are in the part of the world where poverty is expected to rise in the 21st Century. Such poverty is directly and inevitably linked to water resources and

the environment, both through cause and effect. GEF is already providing assistance on relevant issues to a large number of SIDS within the Caribbean and the South Pacific. The inclusion of these six participating countries from the Atlantic coast of Africa and from the Indian Ocean region into the GEF work programme will effectively ensure that all GEF-eligible insular global SIDS are receiving a substantial level of assistance to address their more pressing issues related to sustainable development within the context of the GEF-4 Focal Area Strategies.

This PIF proposes the development of a Full GEF Project in partnership between UNEP and UNDP to address these constraints and barriers through development, adoption and demonstration of Integrated Water Resource Management (IWRM) mechanisms and Water Use Efficiency strategies, a process of policy and legislative reforms, institutional and human resource capacity building; the adoption of an integrated and participatory management approach; the development of more effective, appropriate technologies and methodologies; the adoption of strategies to deal with extreme and chronic events; and the adoption of more appropriate resource valuation and pricing policies. Particular emphasize will be given towards the protection and rational use of water supplies, both surface and ground waters (e.g. rainwater harvesting, pricing structures, improving efficient use, watershed management, flood control, climate change adaptation, etc) and improved wastewater management (e.g. EcoSan, constructed wetlands, etc.). Full analysis of the baseline situation priority actions and will be undertaken during the PPG phase of the project.

The IWRM approach improves cross-sectoral efficiency and cooperation at all levels on sustainable water resources development and management, including specific sector interventions, supports the integration of water supply and use with the management of waste, sewage and groundwater protection, while recognizing that the protection and quality improvements of water are preconditions for sustaining both human livelihoods and natural ecosystems. Further, it assists realizing better allocation of water to different water user groups and in so doing stresses the importance of involving all stakeholders in the decision-making process. It also calls for gender mainstreaming in land and water management decision making. This approach is also recognized as a framework for the adaptation of water management to climate change and the management of floods and droughts. The importance of improved water management has been further highlighted by the recent reports of the Intergovernmental Panel on Climate Change (IPCC) and others that have warned that climate change will have extensive impacts on water resources, particularly in SIDS.

As part of the achievement of the Objectives and Outcomes of the project, Component 1. Development of Targeted Demonstrations in IWRM and WUE will implement a series of IWRM/WUE demonstrations within each of the SIDS that will provide real, on-the-ground solutions to common problems. Expected outputs listed in the Project Framework will individually and collectively address both surface and groundwater resource protection, watershed management, wastewater management and water supply, water use efficiency and sanitation. The effective demonstration results can be transferred and replicated throughout the 6 SIDS, and ideally throughout other SIDS on a global basis, as appropriate. The project will develop the six national demonstrations around the following six different entry points to demonstrate IWRM/WUE strategies and practices:

- 1. Constructed wetlands
- 2. Groundwater reuse/recharge/efficiency/protection/storage
- 3. Integrated watershed management (incl. land use and coastal area protection benefits)
- 4. Ecosan (e.g. zero/low water toilets, reuse of composted materials as fertilizer for agriculture, etc.)
- 5. Rainwater harvesting and storage
- 6. Water use efficiency improvements in possible partnership with private sector (e.g. hotel industry) utilizing both technological & economic instruments

Further details for the IWRM/WUE demonstrations will be designed based on the country specific conditions and needs and through consultative processes among stakeholders in each SIDS during the PPG phase. Emphasis will be put upon the protection and sustainable utilization of groundwater resources and protection against groundwater pollution and sea water intrusion. Also, priorities identified in NAPA will be given particular consideration with the aim to strengthen the adaptation capacity of the SIDS through the better management of the water resources. In particular, for demo types 2, 3, 5 and 6 above, climate change considerations will be incorporated based on available climate change scenarios for the concerned SIDS. During the PPG, maximum synergies will be sought by coordinating activities at the demonstration level with other WatSan initiatives supporting SIDS. Table 1 and 2 in the Annex provide the major concerns and issues arising from various national reports produced by the participating SIDS and the status of participating ISDS in relation to IWRM and WUE policy and reform, respectively.

Component 2. IWRM and WUE Monitoring, and Indicators framework will develop regional/national IW related indicators (process, stress and environmental/socioeconomic status), many of which will be identified and agreed during the PPG phase of the project, as part of the monitoring and evaluation plan, not just for the project but for the long term mechanism to assess the effectiveness of IWRM and WUE in the participating SIDS. These will be developed in close cooperation with the other partner SIDS projects (Pacific and Caribbean) and will be in line with internationally recommended indicators for IWRM and related initiatives (e.g. GWP, UN-Water) and will provide the mechanism to track project impact on MDG's and WSSD targets. The monitoring mechanism developed will include climate considerations and gender mainstreaming in participating SIDS. Feedback will be incorporated from other regional and nationally related projects developing indicators and monitoring and evaluation plans and regional agreements (i.e. TDA and SAP process in GCLME, ASCLME among others) and will in work closely with all national stakeholders to ensure that the monitoring and data analysis approach developed feeds in from existing research and databases, to support national priorities, plans and strategies, and where capacity gaps are identified, that appropriate capacity is built upon for the long term monitoring of IWRM/WUE. As such this component also works closely with the demonstration projects developed and implemented under Component 1, the policy, legislation and institutional reforms and capacity building activities under Component 3, and the knowledge, exchange, best practices and stakeholder involvement of Component 4.

Component 3. Policy, legislative and institutional reforms and capacity building for IWRM and WUE addresses the policy, legislation, institutions and capacity needs to enable Atlantic and Indian Ocean SIDS to develop and implement IWRM and WUE plans for the long term achievement of the Millennium Development Goals and WSSD IWRM target. Policy, legislation and institutional reforms will be developed and adopted that address the lack of financing and policy identified in many of the participating countries. Particular focus will be (in parallel to the demonstration projects) on policy tools and guidelines for the protection of surface and ground-waters (also from extreme events, drought and projected climate change), and for sustainable sanitation, by exploring best practices and lessons learned generated under Component 4. Tools and guidelines will be adopted for the future sustainable use of water resources, waste-water collection and treatment solutions, protection from drought, whilst ensuring efficient use of water for the economic requirements of each participating countries (i.e. household, urban, industry and agriculture), and alternative solutions for more effective uses of water and promoting sustainable development and reduced poverty. This will require coordination amongst the relevant national sectors and the establishment of National Intersectoral Committee in the countries, the harmonization with national plans, and the implementation of programmes of cross-sectoral sensitization and awareness raining along with training and capacity building in the identified national institutions and private sector (closely linked to the Stakeholder Involvement Plan under Component 4).

Component 4. Knowledge Exchange, best-practices, replication and stakeholder involvement will aim to support, from a global to a local level for countries to have the capacity, tools and knowledge to meet WSSD and MDG targets on IWRM, water supply and sanitation. The project will utilize existing networks of IWRM and SIDS, to identify and share best practices and lessons from other SIDS in IWRM and WUE, particularly in relation to the selection of more suitable and applicable technologies and water resource management/use methodologies. Interregional dialogue will be established with other global initiatives (i.e. in partnership with AOSIS), and learning exchange study visits and/or twinning activities between SIDS or groups of participating SIDS and other regions will be established (in particular the Caribbean and Pacific SIDS projects). At the national level, consultative dialogue as the mechanism for engaging and capacitating NICs in IWRM & WUE will be established. A stakeholder identification and analysis process will be specified in the PPG phase of the project as well as in planning and preparation for consultative dialogues to ensure that engagement of relevant policy, sectoral, local community and expertise (scientific, technical, etc.) is representative and inclusive. This will include the implementation of the DLIST approach to increase stakeholder involvement with an emphasis on the community level, which will ensure input from local communities and associated structures (for instance fishers associations, NGOs, CBOs and local government), provide an information sharing platform where such input can be augmented, discussed and debated, and 'top down, bottom up' information sharing can be promoted and developed3. Most importantly, through

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<sup>&</sup>lt;sup>3</sup> DLIST applications include developing and offering target audience-adapted distance learning course(s), making relevant information accessible for consumption by intended beneficiaries as well as government officials, providing access to a helpline through its 911 function (see <a href="www.dlist-benguela.org">www.dlist-benguela.org</a> as an example), rolling out pre-packaged and easily portable film festivals (in this case focusing on IWRM) that can be rolled out by any party interested in doping so. The expanded DLIST toolkit, which includes

engagement of DLIST a multi-sectoral Community of Practice (CoP) will be established along the vertical axis of society that includes all stakeholders, including different levels of government, in discussing issues, solutions and generally sharing information and insight, emulating the DLIST-Benguela example, where DLIST is increasingly being shown to be a mechanism that can promote good governance of coastal resources through dialogue between civil society and government. The project will participate and contribute to GEF IW:LEARN (portfolio learning), and will also contribute to regional global meetings such as the Global Oceans Forum, GPA, Nitrogen Initiative amongst others. Finally gender mainstreaming will be achieved in the development/ implementation of IWRM/WUE across all Components (indicators identified in Component 2) to include gender audits, analysis and training<sup>4</sup>.to ensure women's and men's equitable access to and management of safe and adequate water, for domestic supply, sanitation, food security and environmental sustainability.

#### B. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH NATIONAL PRIORITIES/PLANS:

The Concept is consistent with country priorities as articulated in: National Assessments of the Barbados Programme of Action + 10, the Mauritius SIDS Strategy, the UNEP Global International Waters Assessment causal chain process as applied to these participating SIDS, national status reports to the WSSD, National Development Plans and National Biodiversity Strategic Action Plans, and the Programme of Interventions as defined through the Environment Action Plan of NEPAD. At least half of the participating countries are implementing National Environmental Action Plans, and all of the countries are members of regional Commissions or Conventions that have formally recognized and prioritized the need for integrated water resource management. Participating governments have also endorsed the relevant conventions in support of the maintenance of essential ecological processes and ensuring sustainable utilisation of natural resources. Other national initiatives in support of International Waters issues and concerns that demonstrate country ownership include the GIWA Report on the Indian Ocean Islands (GIWA Regional Assessment 45b. 2004) and the Report on the Atlantic and Indian Oceans Environment Outlook, 2005. Lastly, the concept will directly assist all participating SIDS to meet the IWRM target that they are committed at the WSSD in 2002 and also contribute to the achievement of their Millennium Development Goals (especially water supply and sanitation), both of which should be considered as the national priorities in all participating SIDS.

#### C. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH GEF STRATEGIES AND STRATEGIC PROGRAMS:

The project addresses both of the IW Strategic Objectives: 1) to foster international, multi-state cooperation on priority transboundary water concerns through more comprehensive, ecosystem-based approaches to management, and 2) to play a catalytic role in addressing transboundary water concerns by assisting countries to utilize the full range of technical assistance, economic, financial, regulatory and institutional reforms that are needed. The IWRM principle promoted by the project is a more comprehensive and ecosystem-based approach to precious water resources available in the participating SIDS. The project will provide technical assistance necessary for the development of Integrated Water Resource Management (IWRM) mechanisms and Water Use Efficiency Strategies and play a catalytic role for the participating SIDS to bring about necessary financial or governance reforms to provide enabling environment for the implementation of the IWRM and WUE strategies and accelerate progress on water and sanitation MDGs.

The project directly addresses IW Strategic Program 3 "Balancing overuse and conflicting uses of water resources in surface and groundwater basins that are transboundary in nature", including the need to undertake "innovative demonstrations...to test promising approaches, financing, and technologies for introducing IWRM as well as to protect/enhance groundwater supplies, especially in SIDS where multiple benefits can be gained in protecting drinking water supplies. Targeted demonstrations on Integrated Water Resources Management (IWRM) and Water Use Efficiency strategies (WUE) will support the development of national reforms and national capacity to implement those reforms. The demonstration projects will invest in innovative technologies for water-related priorities in SIDS, including protection of surface and groundwater supplies and balancing competing uses of water. The project is consistent with the GEF strategy that calls for 90% of all SIDS to take on-the-ground action as a contribution to the Program of Action adopted by Governments at the Mauritius SIDS meeting in January 2005.

ICT solutions other than the web-based platform such as community radio, local television, etc. will be engaged in targeted awareness raising.

<sup>&</sup>lt;sup>4</sup> In possible partnership with the Gender and Water Alliance – to be agreed during PPG phase

#### D. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:

The PPG process will identify the linkages and concrete mechanisms with other national and regional initiatives (both GEF and non-GEF), to be further detailed during the PPG phase. A network of IWRM and SIDS programmes and initiatives will be established to specifically exchange knowledge and lessons learned on monitoring and indicators, best-practices and most effective technologies and methodologies. Global initiatives will include: UN Programme for Implementation of the Mauritius SIDS Strategy; LDC and SIDS Targeted Portfolio Approach for Capacity Development and Mainstreaming of Sustainable Land Management' (UNDP-GEF). Regional Initiatives include: Addressing Land-based Activities in the Western Indian Ocean - WIO-LaB (UNEP-GEF); Toward an Ecosystem Approach for Sustaining the Agulhas and Somali Current Large Marine Ecosystems (UNDP-GEF); Protection of the Canary Current Large Marine Ecosystem (FAO/UNEP-GEF); Preparation of a Transboundary Diagnostic Analysis and Preliminary Framework Strategic Action Programme for the Bay of Bengal Large Marine Ecosystem (WB/FAO-GEF); Combating Living Resource Depletion and Coastal Area Degradation in the Guinea Current LME through Ecosystem-based Regional Actions (UNEP/UNDP-GEF); Implementation of the Benguela Current LME Strategic Action Programme for Restoring Depleted Fisheries and Reducing Coastal Resources Degradation (UNDP-GEF): Reduction of Environmental Impact from Coastal Tourism through Introduction of Policy Changes and Strengthening Public-Private Partnerships (UNEP-GEF). National initiatives will include Island Biodiversity and Participatory Conservation in the Federal Islamic Republic of Comoros; Comoros Marine Biodiversity Conservation; Maldives Atoll Ecosystem-based Conservation of Globally Significant Biological Diversity in the Maldives' Baa Atoll; Mauritius Marine Protected Areas; Capacity Building for Sustainable Land Management in Mauritius (including Rodrigues); Integrated Ecosystem Management in Seychelles; Seychelles Marine Ecosystem Management Project; Cape Verde Integrated Participatory Ecosystem Management In and Around Protected Areas. On the global level UNEP and UNDP will ensure linkages such as with SIDS Programme of Action and the Global Water Partnership among many others. Finally, it is important to note that the PPG process and the Full Project implementation will aim to build close linkages and strong ties to other GEF SIDS initiatives already developed or under development. In particular, the project would coordinate closely with the approved Caribbean SIDS IWCAM (Integrated Watershed and Coastal Area Management) project as well as the project recently submitted for Sustainable Integrated Water Resource Management in the Pacific Island Countries, also to be implemented jointly by UNDP and UNEP. Also under submission are a number of GEF nutrient related projects for partnerships with agri-business to reduce nutrient over-enrichment in the coastal and marine environment, along with ecosystem-based mechanisms for the effective global reduction of nutrient enrichment and oxygen depletion from land-based pollution of coastal waters in LMEs. Through GPA and the Nitrogen Initiative, the sharing of best practices will be critical for the identification of tools for the reduction of nutrients to surface and ground waters in participating SIDS.

# E. DISCUSS THE VALUE-ADDED OF GEF INVOLVEMENT IN THE PROJECT DEMONSTRATED THROUGH <u>INCREMENTAL</u> REASONING:

Currently only Cape Verde is party to any of the Regional Water Partnerships (in this case the West African Water Partnership) that are networked through the Global Water Partnership. None of the other participating SIDS are party to a regional Water Partnership, or are receiving donor support directly related to IWRM planning or water use efficiency issues. Most of the countries have attempted to recognize their national problems vis-à-vis water resource management within the watershed landscape, and to begin to define potential solutions. Nearly all of the islands have developed fairly detailed action plans and strategies in relation to sustainable development issues and/or biodiversity management and conservation issues. Some have gone further and produced specific plans and strategies to address water use management, wastewater and sewage management, drainage management etc. and may also have identified or adopted authorities or other dedicated bodies to take responsibility for these issues. However, there are a number of constraints that are preventing the effective implementation of such strategies and the functioning of the responsible agencies, which include financial constraints (where policy and finances are prioritised towards development to resolve serious issues of poverty and international debt); absence of legislation, limited capacity, awareness, access to more realistic, cost-effective and practicable technologies and methodologies for mitigating the priority issues and no long-term strategy to address the repercussions of extreme events (droughts and flooding) and to act on chronic impacts such as saltwater intrusion. The business-as usual scenario is not a good one for any of the SIDS, but particularly for the poorer countries. Without any incremental intervention and assistance, the baseline can be expected to remain ineffective and the situation with respect to natural resources management and efficient, sustainable water use and wastewater management will predictably deteriorate. In the long term this will potentially result in some or all of the following: i) Deterioration in the availability and quality of freshwater resources, ii) Loss of water resources through loss of surface and ground storage and recharge areas iii) A general failure in coastal and

watershed ecosystem functions along with the loss of associated natural habitats and biodiversity, iv) Increased LBS pollution into the watershed and coastal environment and v) General deterioration of human condition (increased poverty, reduced health and well-being, failed economies, political instability).

The proposed alternative scenario aims to address the thematic areas of critical concern through reforms in policy, legislation and institutions; improvements to institutional and human resources capacity; development of more effective and coordinated intersectoral management approaches; identification and demonstration of more appropriate (to small island) technologies and strategies; adoption of 'extreme-event' strategies; adoption of cost-effective and sustainable service pricing and tariffs; and better information collection and handling to inform policy makers and guide legislative development. GEF assistance would be focused on the production and implementation of an IWRM plan consistent with the WSSD targets in order to establish a regional framework for the needed reforms and investments. A substantial proportion of the proposed GEF funding for this Concept would also be aimed at the development and implementation of on-the-ground demonstrations to remove barriers and alleviate problems preventing effective integrated water resources and wastewater management and efficient water use within the individual participating SIDS, and to the transfer and replication of lessons and practices resulting from those demonstrations. The intended overall outcomes of a proposed Full Project will be improved and sustainable integrated water resources management, water supply protection and water use efficiency in all the participating SIDS. Expected benefits are described under A.

## F. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS, THAT MIGHT PREVENT THE PROJECT OBJECTIVE(S) FROM BEING ACHIEVED, AND IF POSSIBLE INCLUDING RISK MEASURES THAT WILL BE TAKEN:

Risk	Risk Type	Rating	Risk management strategy
1. Strong and high-level government commitment is not sustained	Political	Medium	■ Political ownership of the project established ■ Clear integration of project outcomes and mainstreaming of IWRM and WUE into national frameworks and project aim are promoted through analysis showing economic incentives for addressing hotspot issues ■ Utilizing ongoing and planned GEF support programs ■ Monitoring of economic, social and political conditions to rapidly determine possible project implementation risks (due to political upheaval/changes/financial crises etc)
2. Vulnerability to changing environmental conditions	Environment	Low	<ul> <li>Develop and select priority country driven action programs for climate change adaptation and IWRM</li> <li>Adopt 'no-regrets' approaches in all IWRM Demonstration projects and instigate a culture of risk reduction and risk analysis</li> </ul>
3. Non-inclusive stakeholder involvement in the IWRM consultation process	Operational	Low	<ul> <li>Cross-sectoral approach and involvement of private and non-governmental sectors and existing and long-term relations, activities and networks of the IAs and EAs within the project countries. Assistance and experiences from SIDS projects in other regions will also to help to ensure effective project implementation and follow-up.</li> <li>Clear guidelines where stakeholders are engaged</li> <li>Participatory monitoring of stakeholder involvement</li> </ul>
5. Restricted capacity of stakeholders to implement IWRM best practice	Strategic	Low	<ul> <li>Capacity gaps identified and implement appropriate support and training to ensure, a solid network within each country for the implementation of IWRM tools and approaches.</li> <li>Linking to other on-going or proposed IWRM projects</li> <li>Regional support to secure national project coordinators.</li> <li>ICA platform (based on DLIST) to provide access to training and to increase the flow of information between experts, institutions and networks and coastal players including communities, as well as a common pool of knowledge to be created and maintained</li> </ul>

#### G. DESCRIBE, IF POSSIBLE, THE EXPECTED COST-EFFECTIVENESS OF THE PROJECT:

The regional approach taken in the project was selected in order to be cost-effective and generate the greatest impact in the short and long term for the benefit of the participating countries. Specifically it allows for lessens learned and exchange of best practices with other IWRM SIDS projects and related IWRM projects in the region and beyond, in terms of training, policy, institutional and legislative reforms, as well as the development and implementation of monitoring and evaluation methodologies and indicators. Demonstration projects will greatly benefit from previous

SIDS and other IWRM demonstrations in design and implementation. Mechanisms for exchange and transfer in the design and implementation of all activities and demonstrations within the region will be undertaken, including parallel activities and joint demonstrations. The proposed Full Project will demonstrate of pertinent, applicable and cost-effective methodologies, technologies and reforms (within the SIDS context) coupled with a process of capture of best practices and most effective strategies, so as to promote transfer and replication of lessons learned throughout the participatory SIDS and beyond. Demonstrations will begin replication during the project and results will provided solid foundation for activities under Component 2, 3 and 4. Policy, legal and institutional reform practices that prove to be effective will be shared through a networking process and directly through GEF activities in-country, as well as through regional workshops. Partnerships for transfer and replication (embracing in particular the potential within the private sector and the NGO community) will be also be evolved. A full scale replication strategy for the demonstration projects will be developed in cooperation with the other regional SIDS IWRM projects (Caribbean, Pacific).

The IWRM process itself is the most cost effective mechanism to ensure the effective management of watershed management, involving all relevant sectors, and stakeholders, from governments and national institutions to research institutes, NGO's and local communities, thus ensuring achievement of project objectives and the long-term sustainability of project activities and demonstrations. The process will establish new systems for interagency and interministerial collaboration promoting inter-sectoral partnership through the integrated management of freshwater resource, watershed and coastal zone environmental problems. For example, the Project would strive to ensure linkages between the water sector and related issues such as energy and economic stability. A number of the islands have a geothermal potential that may be unexploited and UNEP/ADB are exploring possibilities for developing wind power through a separate GEF project. The very high cost of electricity in SIDS is often what drives them to unsustainable practices in areas such as agriculture and tourism, and that eventually and inevitably impact water resources and the overall environment. Consideration will be given this close linkage of issues during the development of the demonstration projects with the possibility of mini-hydro and geothermal schemes being developed within the IWRM framework.

Specific emphasis is put on private-public partnership to develop more cost-effective and pragmatic approaches to water and wastewater management related issues within the small-island context. This will require the evolution of customized technologies and specific sales and services that can be developed and fine-tuned by the private sector as investment and business opportunities. In this regard, the project aims to develop a high level of involvement and collaboration with the private sector at the earliest stages of project development and implementation. For example, the targeted demonstrations should provide some excellent opportunities for engaging the private sector into project aims and objectives, bearing in mind that this sector could be directly involved in such activities as provision of water supply and sanitation services, water saving devices, wastewater treatment and other commercial enterprises directly related to Integrated Water Resource Management and Water Use Efficiency.

In terms of implementation the project will capitalize on UNEP's commitment to 'to accelerate implementation of the 2005 IWRM target ensuring environmental aspects are adequately incorporated into IWRM strategies and roadmaps'. Both UNEP and UNDP are implementing projects in several SIDS in the Pacific and Caribbean, as well as IWRM regional and national projects in and beyond the region, thus allowing for the appropriate and best exchange of knowledge and lessons learned. In addition, the Joint Secretariat of the Abidjan and Nairobi Conventions is currently executing a number of IWRM related activities, with future activities proposed in their 2008-2012 workplan in all countries (except Maldives) and will ensure that full advantage in the design and implementation of existing regional and national initiatives and the full participation of all stakeholders in project activities.

#### H. JUSTIFY THE COMPARATIVE ADVANTAGE OF GEF AGENCY:

The Project will be developed and implemented jointly by UNEP and UNDP (with UNEP acting as the Lead Implementing Agency) and each agency will act according to their comparative advantages. Through the implementation of existing processes and projects, the Implementing Agencies are uniquely well-positioned for providing direct support to the SIDS in the project region.

UNEP's comparative advantage includes the platform for regional coordination provided by the UNEP Regional Seas Programme (Nairobi and Abidjan Conventions). In this context, the proximity of UNEP Headquarters in Nairobi, the presence of UNDP country offices and sub-regional offices in Pretoria, Nairobi and Dakar and Bangkok, and the advantage of the Joint Secretariat for the Abidjan and Nairobi Conventions will all be captured and built into the

management process to ensure the effective implementation of the project and the integration of the project into a long-term sustainable process.

The proposed project is fully in concert with UNEP's broad strategy for SIDS. The role of UNEP, as the UN agency responsible for the environment, is described in the SIDS Programme of Action (SIDS/POA) thus: "UNEP, taking into account development perspectives, should continue to provide policy guidance and coordination in the field of environment, including in the implementation of the SIDS/POA". UNEP has perspectives that can efficiently address the sustainable development needs of SIDS. Its Regional Seas Programme has direct links with all SIDS. UNEP can build an effective and productive work programme for SIDS. UNEP has and is working on a number of activities and initiatives in the region that support the objectives of the current PIF and which will be elaborated further through the PPG and as part of the Full Project Document.

For UNDP, its comparative advantage includes extensive experience and networks of UNDP promoting improved water governance, including both IWRM (CapNet), and MDG GoAL-WASH (Governance, Advocacy and Leadership for Water, Sanitation and Hygiene), UNDP's new water supply and sanitation governance reform program. At the national level within the participating countries, UNDP is targeting capacity reinforcement and legislative reforms necessary to achieve MDGs, including MDG 1 and MDG7, including its water and sanitation targets, and to promote inter-sectoral management of natural resources. On a global level, UNDP Water Governance Programme is active in UN-Water and currently chairs the IWRM Task Force. UNDP also supports the Global Water Partnership, the leading NGO promoting IWRM, which responds to the need for participatory institutional mechanisms that are related to water management, and the need for a new global coordination mechanism for IWRM.

# 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 country endorsement letter(s) or regional endorsement letter(s) with this template).

Mr. Claude Morel, GEF National Focal Point, Ministry	August 22 <sup>nd</sup> , 2005
of Foreign Affairs, Seychelles	
Mr. P. Ujoodha, Ag. Director General and GEF Ag.	January 27 <sup>th</sup> , 2006
Operational Focal Point, Ministry of Finance and	
Economic Development, Mauritius	
Ms. Fatouma Ali Abdallah, GEF Operational Focal	May 30 <sup>th</sup> , 2005
Point, Département Environnement, Ministère du	
développement rural, de la pêche, de l'artisanat et de	
l'environnement, Union de Comores	
Mr. Lourenco Monteiro De Jesus, GEF Focal Point,	June 13 <sup>th</sup> , 2005
INDES, Sao Tome	and July 8 <sup>th,</sup> 2005
Ms. Maria Ivone Andrade Lopes, GEF National Focal	October 26 <sup>th</sup> , 2007
Point, Ministério do Ambiente e Agricultura, Direcção	
Geral do Ambiente, Cap Verde	
·	·
Maldives	Date: (Month, day, year)

## **B. GEF AGENCY(IES) CERTIFICATION**

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for project identification and preparation.						
Maryam Niamir- Fuller	Virginie Hart					
Director, UNEP Division of GEF Coordinaton	Project Contact Person					
U. Wiam Duller						
Date: September 11, 2008	Tel. and Email: :+30 2107273122,					
virginie.hart@unep.org						
Akiko Yamamoto						
	Project Contact Person					
J. Horgh						
John Hough						
UNDP-GEF Deputy Executive Coordinator						
Date: 10 September 2008	Tel. and Email: +27 123548125,					
	akiko.yamamoto@undp.org					

### ANNEX TABLE 1: SUMMARY OF PRIORITY COASTAL AND WATERSHED CONCERNS

(X = National Environmental and Sustainable Development Priorities)

COUNTRIES	Cape Verde	Comoros	Mauritius	Sao Tome & Principe	Seychelles	Maldives
Human Development Index	0.717	0.53	0.785	0.645	0.853	0.752
•			Tourism &	Cocoa, Coffee	Tourism,	
Principal Economic Activities	Aid	Agriculture	Sugar	tourism	fisheries	Tourism
ISSUES						
Climate change and sea-level	X	X			X	X
Cyclones		X	X			X
Drought			X			
Reduced rainfall	X	X		X		
Increasing demand for drinking water	X	X	X	X	X	X
Poor access to potable water	X	X		X		X
Inadequate water distribution infrastructure	X	X	X	X		X
Pollution of surface and groundwater	X	X	X	X	X	X
Unsanitary water supply	X	X				X
Over-abstraction	X					X
Saltwater intrusion	X	X				X
Lack of water recycling	X				X	
Inadequate capture and storage of surface water	X	X			X	X
Inadequate supplies of groundwater	X	X			X	X
Lack of watershed management plans	X	X				
Inadequate irrigation for crops	X					
Increased agricultural demand		X				
Overgrazing	X		X			
Deforestation		X	X	X		
Forest fires					X	
Fall in agricultural production		X				
Crop disease		X				
Excessive use of Agro-chemicals		X	X			
Loss of soil fertility	X	X				
Soil erosion and siltation	X	X	X	X	X	
Use of agricultural land for development	X			X		
Absence of wastewater & sewage handling						
facilities	X	X	X	X	X	X
Poor or absent wastewater treatment	X	X	X		X	X
Uncontrolled or poorly managed waste disposal	X		X		X	X
Health problems (unsanitary drinking water and	v	37				V
inadequate waste treatment)	X	X	V	V	V	X
Development in sensitive environment areas	V		X	X	X	
Sand extraction on coast	X X		V	X	X	
Coastal & watershed habitat destruction	X		X	X	X	
Construction in flood-plains			V		v	
Flooding and landslides Transboundary marine pollution	X	X	X X		X	
Inefficient management of water resources & waste		Λ	Λ			
handling			X			X
Lack of Information on ecosystem		X	X	X		X
Lack of information on ecosystem  Lack of information on hydrogeology & recharge		X	Α	A		X
Inadequate human and institutional capacities		X	X	X	X	A
Inadequate public awareness		X	X	X	X	
madequate public awareness		11	11	71	11	