



SOPAC



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Second Meeting of the Regional Project Steering Committee
for the SOPAC/UNDP/UNEP/GEF Project:
*“Implementing Sustainable Water Resource and Wastewater
Management in Pacific Island Countries”*

Republic of Palau, 19th – 23rd July 2010

ESTABLISHMENT OF A REGIONAL INDICATOR FRAMEWORK

1. Introduction

The logframe of the UNEP and UNDP Project Documents provides a suite of “*comprehensive baseline and target indicators and sources of verification for both outcome and output levels during project implementation*”. It was anticipated that these would “*form the basis on which the project’s Monitoring and Evaluation (M&E) system [would] be built*”. It was anticipated that the M&E program would be revised and finalised in the first six months of the project.

The deliverable of Component 2 of the UNEP and UNDP Project Document (‘ProDoc’) is the development of an IWRM and WUE Regional Indicator Framework with the objective of “*IWRM and environmental stress indicators developed and monitored through national and regional M&E systems to improve IWRM and WUE planning and programming and provide national and global environmental benefits*”. It is proposed in the ProDoc that the regional project indicator framework might evolve into the ongoing regional participatory M&E framework.

Whilst these two frameworks report on similar and overlapping issues and indicators, the scope of the two frameworks are distinctly different. The project M&E Framework is required to provide an indication of progress against project outputs and outcomes; whereas the Regional Indicator Framework is required to show national and regional changes in IWRM and WUE, and the associated environmental benefits.

This paper seeks to propose a mechanism for finalising these frameworks. It is anticipated that an interim project assessment could be developed by the end of 2010, with full reporting at the 2011 Steering Committee Meeting. Indicative regional reports could be developed by the end of 2010, with the intention of establishing a participatory framework by the end of 2011.

2. Background

The need for a regional participatory M&E framework was highlighted at the September 2009 Project Inception Meeting. Since that time, opportunities have arisen to link this framework with other regional initiatives, including the Asian Development Bank’s Asian Water Development Outlook, the UNEP Pacific Water Vulnerability Assessment and the UNEP/SPREP Pacific Environment and Climate Change Outlook. All three of these initiatives are seeking to establish regional indicators for water management. The overlaps between these projects and programmes and the regional monitoring programme required for the GEF IWRM project provide significant opportunity to bring these programmes together. Accordingly, the PCU has been coordinating with these projects, which are currently nearing completion, to ensure that the GEF IWRM monitoring and evaluation framework aligns with the frameworks adopted for these projects. In this way it is hoped to synergise future monitoring to maximise the value of monitoring data collection.

Work on the project M&E framework has been delayed until the finalisation of the country logframes. The initial Project Document logframe with indicators is presented in Attachment 1. A review of these indicators is discussed in Section 4.

3. Project Indicator Framework

Delays in finalising the demonstration project framework have necessarily led to delays in confirming the Project Indicator Framework (PIF).

Table 1 presents the outputs and outcomes summarised from the revised national demonstration project logframes. The timeframes between the initial project proposals and the commencement of Pacific GEF IWRM project has meant that many activities need revision. Often, supporting work has been undertaken by other agencies [such as work by NZAID and the EU in the Muri Lagoon catchment in Cook Islands], separation of roles with the GEF Pacific Adaptation to Climate Change (PACC) [such as the separation of composting toilets and septic rehabilitation in Tuvalu] or opportunities have arisen for catalytic work [such as the synergies with the groundwater assessment work of HYCOS in Nauru]. Accordingly, the outputs in Table 1 do not directly align with the project indicator targets identified in the Project Documents.

It is proposed that this set of indicators be modified with endorsement by the TAG to be adopted for the purpose of reporting against project progress.

4. Regional Indicator Framework

Ideally, the regional indicator framework will provide key information to Pacific and Global decision makers regarding water resource management in the Pacific. Additionally, it is considered important that this framework link to other regional reporting requirements, including the Millennium Development Goals. By linking these processes, data collection and collation can be streamlined and resources efficiently directed at the most appropriate monitoring and evaluation processes.

The following presents an outline of the indicator framework principles outlined in the ProDoc, and the current regional reporting initiatives that relate directly to water. These are not the only regional reporting initiatives that relate to water, as reporting is required for sectors such as climate change, desertification, energy, biodiversity, waste management and agriculture. However, it is anticipated that through working in partnership with the CROP agencies and other partners, the participatory M&E framework can be developed to meet the regional reporting demands.

Indicator Framework Principles

The Project Documents outline principles for the development of a participatory M&E framework. The core components identified are:

1. *Participation* – stakeholders participate in all aspects of choosing indicators and in collecting and analysing data;
2. *Negotiation* – stakeholders negotiate over what will and will not be monitored and evaluated, how and when data will be collected, and how findings will be presented;
3. *Learning* – participation, negotiation, and collective working leads to learning, ownership and investment in those findings;
4. *Flexibility* – is essential, as the purpose of PM&E is improved learning for improved results, leading to ongoing change and adaptation in approaches;
5. *Stakeholder Involvement* – when multiple stakeholders work together (a key principle of IWRM) to develop indicators, they also clarify expectations and priorities, negotiate common approaches, and build ownership of outcomes.

The focus on participatory M&E requires strong linkages between stakeholders and the national PMUs, and between the national PMUs and the PCU in order to deliver successful M&E programme. The intent is that the M&E framework operates at four levels: Demonstration project; National; Demonstration sub-group and Regionally. At the regional level, the M&E programme needs to be able to interface with the Regional Action Plan and the Millennium Development Goals.

Project Document Indicators

The indicator types outlined in the ProDoc include:

- Process indicators, which establish regional or national frameworks/conditions for improving environmental/water resources quality or quantity but do not themselves deliver stress reduction or improved environmental/water resources quality or quantity
- Stress reduction indicators, which relate to specific on-the-ground measures implemented by the countries, and which characterize and quantify specific reductions in environmental/water resources stress on water bodies
- Socio-economic indicators which demonstrate improvements in the livelihood base of people involved in or affected by the project
- Water Use Efficiency indicators – will demonstrate improvement in the use of water resources
- Catalytic indicators – represent events and activities which occur which, when combined with others, including the project interventions, have a catalytic effect and can therefore improve the situation with no direct involvement from the project
- Governance indicators – relate to the national IWRM policy planning process

Notably, the ProDoc flagged that, for project reporting, environmental status would be assessed on the basis of environmental stress indicators.

Other Regional Water Resource Management Monitoring and Evaluation Initiatives

Asian Water Development Outlook (AWDO – ADB)

In 2007 the Asian Development Bank (ADB) released the Asian Water Development Outlook, a high-level assessment of the region's water resources, targeting finance and planning ministers, other leaders and the media. AWDO 2007 focussed on the importance of improving water security, its inter-sectoral aspects, and the key role of water governance. AWDO 2010 will focus on how water security is measured and where improvements are needed, linking increase water security to better water governance. SOPAC was invited to provide regional expertise as a resource to support the core authors of AWDO 2010.

AWDO 2010 will have five key components:

- household services – based on the MDGs for improved water supply and sanitation
- productivity – combining agricultural, industrial and ecological flows
- urban development – assessing the water development in urban areas
- ecosystem health – a complex ecosystem model-based assessment
- disaster resilience – combining indicators for both hard capacity (infrastructure) and soft capacity (awareness and process)

These sections will be drawn together through a composite index. The AWDO process is based entirely on collation and interpretation of existing data, in many cases integrated data and indices, rather than raw data. The AWDO team had significant difficulty in identifying data for the Pacific countries. Of the fourteen Pacific island countries, it is likely that there will be sufficient data to report a composite index for only two, Papua New Guinea and Fiji. Additionally, key indicators for agricultural productivity and disaster vulnerability potentially misrepresented the Pacific situation.

The AWDO is due for completion in September 2010. ADB have indicated a desire to produce AWDO 2013. AWDO 2007 can be found at www.adb.org/Documents/Books/AWDO/2007/awdo.pdf.

UNEP Pacific Water Vulnerability to Environmental Change Assessment (PWVECA)

The UNEP Pacific Water Vulnerability to Environmental Change Assessment is being undertaken by SOPAC for UNEP, based on an adoption and adaptation of *Methodology Guidelines – Vulnerability Assessment of Freshwater Resource to Environmental Change*, developed for assessing vulnerability in river basins.

The PWVECA is based on a driver, pressure, state, impact, response (DPSIR) approach. It is a composite index with four main categories (resource stress, development pressure, ecological health and management capacity). Sub-indicators include rainfall variability, total water resources, MDGs for improved water supply and sanitation and a panel assessment of management capacity.

Key adaptation from river basins to the Pacific region are the recognition of the importance and vulnerability of rainfed agriculture in the Pacific region (compared with irrigated agriculture in other areas) and a broadening of the management capacity from conflict management to IWRM capacity.

The key findings of this report are likely to be that atolls and rock islands are under severe water resource stress, and that water resources on larger Pacific islands are less stressed than elsewhere in the Asia-Pacific region. This methodology and outcomes are being presented to the six countries considered in the report (Cook Islands, Fiji, Marshall Islands, Nauru, Samoa and Tuvalu).

UNEP/SPREP Pacific Environment and Climate Change Outlook (PECCO)

UNEP have funded SPREP to develop regional integrated environmental assessment (IEA) capacity and to produce the regional Pacific Environment and Climate Change Outlook (PECCO). It is intended that the outputs from the PECCO will inform regional aspects of the fifth UNEP Global Environment Outlook (GEO5), due in 2012.

The IEA process is a high-level one, based on identifying key issues and trends for decision makers. Similar to the AWDO process, the PECCO process is based on collation and interpretation of existing data, in many cases integrated data and indices, rather than raw data. The work for this project has recently commenced, with a due date for completion December 2010.

Bringing Regional Indicator Frameworks Together

The AWDO, UNEP Pacific Water Vulnerability Assessment and the PECCO are all high-level assessments of water indicators, consistent with the outputs that are likely to be required of the GEF IWRM regional. All three reports are targeted to a key audience of decision-makers, both regionally and globally. All three are constructed of numeric indicators and composite indices. All try to bring together a range of stress, status and response indicators, each subtly differing in the balance.

There are strong synergies between the frameworks, with MDGs for improved water supply and sanitation featuring in all frameworks. Similarities between the PWVECA and the AWDO extend to the inclusion of indicators for productivity and ecosystem health/stress. The AWDO approach focuses on available numeric data, so uses proxy indicators for management through distance resilience, whereas the PWVECA uses an expert assessment of the management status, with consensus. The PECCO framework for water assessment is currently under development. All frameworks composite together lower-level indicators (or sub-indicators) to produce high level indices.

The key challenge presented by the AWDO and PWVECA are that they consider high level indicators, most of which are unlikely to provide significant evidence of change over periods of say 10 years, and extremely unlikely to show significant change over 2 to 5 years for most countries. These include indicators such as climatic indicators [e.g. rainfall totals and variation], high-level demographics [population] and broad scale land use [country or island scale vegetation cover]. Other indicators unlikely to change significantly for most countries include:

- Improved drinking water supplies – many Pacific countries currently have drinking water access rates over 85%, so absolute changes will be minimal (PNG is a notable exception)
- Surface water resources and environmental flows – most Pacific nations typically have very high surface water availability (e.g. Papua New Guinea, Fiji and Samoa) or extremely challenged surface water availability (e.g. Tuvalu, Kiribati, Nauru, Niue and Marshall Islands), none of which is likely to significantly change over even long periods of time.
- GDP – total and sectoral GDP are unlikely to change dramatically over this timeframe, particularly with respect to benchmark developed countries

Accordingly, whilst these frameworks provide useful benchmarking across the region, many of the indicators used are not useful indicators of change. This doesn't mean that they don't have a place in an indicators framework – they provide important information about the status of water management and provide important context for indicators that do change. However, a review of both the AWDO and the PWVECA will suggest that, regardless of management over a five to ten year period, the composite index from either of these frameworks is unlikely to change significantly. A similar outcome is expected of the PECCO process. Notably, this is typical of indicators of environmental and socio-economic status.

It is proposed that distilling the above indicators, together with working with the Technical Advisory Group (TAG) and in close collaboration with the ADB team developing AWDO 2013, as well as future PECCO or similar reporting processes, the indicators from AWDO, PECCO and the PWVECA could be adapted and adopted within the regional indicator framework.

The aspects of the indicator framework not well addressed in the above frameworks are process, governance, cross-cutting and stress reduction indicators. Clearly work is required to develop these indicators for the regional indicator framework.

The indicator framework proposed at the inception meeting provided indicators for key process, governance, cross-cutting and stress-reduction indicators, as well as mechanisms for constructing an M&E framework. Whilst the PCU proposes that this model form the basis for initial discussions on the components and structure of the regional participatory M&E framework, it is not intended to revisit this model at this meeting, but rather to provide a mechanism for moving forward and delivering the indicator framework.

Timing

It is proposed that a regional participatory M&E framework be developed in Draft form, with interim data by February 2011. It is proposed that this framework and data be circulated with the intent of finalising the reporting for endorsement at the 2011 Steering Committee Meeting.

Where to from here?

An approach to develop a project regional monitoring and evaluation strategy is required. The key considerations in developing this framework include:

- Reflecting attainment of community values – meaning that the aspects being monitored relate to the values that communities place on the resource(s), rather than peripheral information
- Relating to meaningful changes in the resource condition, stressor(s) or enabling environment – if there is a significant change in the resource condition, stressor or enabling environment it should be reportable, and significant reported changes in indicators should reflect a meaningful change in the value, the pressure on it or the way in which it is being managed. This also means that changes can be detected from background variability
- Indicators should inform decision-making and stakeholders – in addition to the above, they must be available in a timely manner and presentable in an accessible manner to all stakeholders, including the most vulnerable
- The indicators should, where possible align with indicators used for other regional reporting frameworks and provide core information for regional reporting needs (such as MDGs)
- Roles and responsibilities of countries in delivering the indicator framework
- Ongoing administrative and governance arrangements associated with the indicator framework
- Assessment methods – as part of the roles and responsibilities, it is necessary to determine how the framework performance would be assessed. Options include:
 - National reporting
 - Independent audits
 - Regional assessments
 - Exchange assessments
 - a combination of the above.

It is proposed that the TAG be tasked with developing a framework developed out of session, with input from the subcommittee, and presented at the next Steering Committee for endorsement.

Attachment 1 – Project Document Project Indicators

Summary Project Logframe

	Indicator	Baseline	Target	Sources of verification	Risks and Assumptions
<p>Objective: Improved water resources management and water use efficiency in Pacific Island Countries in order to balance overuse and conflicting uses of scarce freshwater resources through policy and legislative reform and implementation of applicable and effective Integrated Water Resources Management (IWRM) and Water Use Efficiency (WUE) plans</p>	<p>1.1 Overarching improvement in water resource management, quality and availability through appropriate national Demonstration Project execution and concurrent reforms in policy, legislation and institutional arrangements leading to global environmental benefits [P]</p> <p>1.2 Actual change in institutional and societal behaviour [P]</p>	<p>1.1 Fragmented institutional responsibilities, weak policies, communication & coordination resulting in fragile or non-existent IWRM approaches in place</p> <p>1.2 Poor and inconsistent data collection for monitoring and inadequate action and investment and change based on monitoring information</p>	<p>1.1 14 National IWRM and Water Use Efficiency Strategies in place, with institutional ownership secured with 20% increase in national budget allocations by month 42 [P]</p> <p>1.2 Best IWRM and WUE approaches mainstreamed into national and regional planning frameworks by end of project facilitated by national IWRM APEX bodies, Project Steering Committee, Pacific Partnership, and PCU by month 60 [P]</p> <p>1.3 Environmental stress reduction in 14 Pacific SIDS: 30% increase in forest area for ~8,000 ha of land, 35% reduction in sewage pollution over eq.~40,000 ha area leading to reduction in eutrophication for 4 coastal receiving waters sites, and 35% reduction in water leakage for systems supplying ~85,000 people by end of project, leading to av. 30% increase in population with access to safe water supply and sanitation for 6 sites (based on targets under Component 1) [SR]</p>	<p>Demonstration Project Annual Reporting</p> <p>National IWRM Plans and Water Use Efficiency Strategies with appropriate budget allocations in place</p> <p>Indicator Framework mechanism</p> <p>National Government feedback on institutional changes</p> <p>Pacific Partnership, RAP, NAPA, NAP, NSDSs, and MDG reporting</p>	<p>Strong and high-level government commitment is sustained and willing to make change – adequate understanding and political will</p> <p>Able to monitor and update baseline information and action taken ion findings and results</p> <p>Inclusive stakeholder involvement in the IWRM consultation process</p>
<p>Component 1: Demonstration, Capture and Transfer of Best Practices in IWRM and WUE</p> <p>Component 1 Outcome: Lessons learned from demonstrations of IWRM and water use efficiency approaches replicated and mainstreamed into existing cross-sectoral local, national and regional approaches to water management</p>	<p>1.1 Step change improvement in baseline situation (based on Diagnostic Analyses) from project start, including adoption of technical and allocative water use efficiency approaches by end of project [SR]</p>	<p>1.1 Fragmented institutional responsibilities, weak policies, communication & coordination resulting in fragile or non-existent IWRM approaches in place</p> <p>1.2 Lessons learned from water management and IWRM type interventions are not shared or acted upon</p> <p>1.3 Water Use Efficiency is poorly understood and often not considered in water management decisions</p> <p>1.4 Pollutants from sanitation systems, industrial and urban</p>	<p>(i) Watershed Management 2 Basin Flood Risk Management Plans resulting in 10% reduction in infrastructure loss due to flooding (on approximately 18,000 ha of land) by end of project [SR]</p> <p>30% increase in forest area at 2 Demonstration Sites covering ~8,000 ha of land [SR]</p> <p>(ii) Wastewater & Sanitation Management 35% reduction in sewage pollution discharge at 8 Demonstration sites (covering eq. 40,000 ha of land) by month 48 [SR]</p> <p>(iii) Water Resources Assessment & Protection 4 SIDS have revised legislation in place to protect surface water quality by end of project [P]</p> <p>(iv) Water Use Efficiency & Water Safety 35% reduction in leakage in 3 national urban water supply</p>	<p>Demonstration Project Annual Reporting</p> <p>National IWRM Plans and Water Use Efficiency Strategies with appropriate budget allocations in place</p> <p>Pacific Partnership and RAP reporting</p>	<p>Available local capacity to manage and implement national Demonstration projects</p> <p>Inclusive stakeholder involvement in the IWRM consultation process</p> <p>Mechanisms and approaches to capture lessons are appropriate and promote action and replication</p>

	Indicator	Baseline	Target	Sources of verification	Risks and Assumptions
		discharges and poor land management practices enter fresh surface and groundwater and coastal receiving waters	<p>systems (serving ~85,000 people) by month 42 and reduction over freshwater usage for sanitation by end of project [SR]</p> <p>Replication of technical and water use efficiency lessons from project applied in future national and project based activities by end of project [P]</p> <p>Technical, management, participatory and advocacy lessons from projects developed into national lessons learned presentation packages with best practices mainstreamed into national and regional approaches by end of project facilitated by national IWRM APEX bodies, Project Steering Committee, Pacific Partnership, and PCU [P]</p>		
<p>Component 2: IWRM and WUE Regional Indicator Framework</p> <p>Component 2 Outcome: National and Regional adoption of IWRM and WUE indicator framework based on improved data collection and indicator feedback and action for improved national and regional sustainable development using water as the entry point</p>	1.1 Multi-sectoral approaches to national water and environmental management improved and increased through M&E feedback and action, leading to global environmental benefits by end of project [P]	1.1 Poor and inconsistent data collection for monitoring and inadequate action and investment and change based on monitoring information	1.1 Indicator feedback facilitated through IWRM APEX Body provides information for multi-sectoral action and endorsement of national and indicators for IWRM, NAPA, NAP and sustainable development planning (NSDSs and NEAPs) by end of project [P]	<p>Indicator Framework mechanism in place and active</p> <p>Increase national budget for hot-spot areas identified by Indicator Framework</p>	Strong understanding and willingness to use and act upon the data is present
<p>Component 3: Policy, Legislative and Institutional Reform for IWRM and WUE</p> <p>Component 3 Outcome: Institutional change and realignment to enact National IWRM plans and WUE strategies, including appropriate financing mechanisms identified and necessary political and legal commitments made to endorse IWRM policies and plans to accelerate Pacific Regional Action Plan actions</p>	1.1 Nationally endorsed IWRM plans and WUE strategies in place and driving sustainable water governance reform in PICS by end of project [P]	<p>1.1 No nationally endorsed IWRM plans or water use efficiency approaches in place</p> <p>1.2 Fragmented national and regional water sector</p>	1.1 14 draft National IWRM and Water Use Efficiency Strategies in place, with institutional ownership secured through the national APEX body and institutional mandates adjusted/confirmed as IWRM implementing agencies with appropriate budget allocations by month 42 [P]	<p>National IWRM Plans and Water Use Efficiency Strategies with appropriate budget allocations in place</p> <p>National budget plans</p>	Strong and high-level government commitment is sustained and willing to make change – adequate understanding and political will
<p>Component 4: Regional and National Capacity Building and Sustainability Programme for IWRM and WUE, including Knowledge Exchange and Learning and Replication</p> <p>Component 4 Outcome: Improved institutional and community capacity in IWRM at national and regional levels</p>	1.1 Measurable sustained increase in training and awareness campaigns, including appropriate national level financial allocations for capacity development by end of project [P]	1.1 Poor collection and exchange of information within and between countries, often sectorally focused with poor consideration of investment planning required to ensure sustainability and human capacity development needs	<p>1.1 Increase in national staff (both men and women) across institutions with IWRM knowledge and experience by end of project [P]</p> <p>1.2 30% increase in gender balanced community and wider stakeholder engagement in water related issues by month 60, [P]</p> <p>1.3 Improved cross-sectoral communication by end of project [P]</p>	<p>National water management reporting</p> <p>National and regional press</p> <p>National Government feedback on institutional changes</p> <p>Pacific Partnership and RAP reporting</p>	<p>Strong and high-level government commitment is sustained and willing to make change – adequate understanding and political will</p> <p>Stakeholders able to understand, cope and promote IWRM</p>

Component 1: Demonstration, Capture and Transfer of Best Practices in IWRM and WUE

Project Strategy	Objectively verifiable indicators				
Component 1 Objective:	Practical demonstrations of IWRM and WUE focused on removing barriers to implementation at the community/local level and targeted towards national and regional level learning and application				
	Indicator	Baseline	Target	Sources of verification	Risks and Assumptions
<p>Component 1 Outputs:</p> <p>1.1 Improved access to safe drinking water supplies</p> <p>1.2 Reduction in sewage release into coastal receiving waters</p> <p>1.3 Reduction in catchment deforestation and sustainable forest and land management practices established</p> <p>1.4 Water Safety Plans developed and adopted</p> <p>1.5 Integrated Flood Risk Management approaches designed and developed</p> <p>1.6 Expansion in eco-sanitation use and reduction in freshwater use for sanitation purposes</p> <p>1.7 Improved community level engagement with national institutions responsible for water management</p> <p>1.8 Increase in water storage facilities</p> <p>1.9 Technical and Allocative Water Use Efficiency approaches designed and adopted</p> <p>1.10 Identification and adoption of appropriate financing approaches for sustainable water management</p>	<p>1.1 Capture of Lessons from Demonstration Projects & other Water Initiatives (CTI/PACC/PAS) shared regionally & with global SIDS [P]</p> <p>1.2 Replication of Demonstration Projects within & between PICS (where support and finances available) [SR]</p> <p>1.3 Successful demonstrations of IWRM approaches mainstreamed into existing local, national, & regional approaches [SR]</p> <p>1.4 PIC understanding & adoption of technical, allocative, and equitable water use efficiency measures [P]</p> <p>1.5 Support for social and economic welfare of island communities through improved water management [P]</p> <p>1.6 Environmental quality and productivity sustained [SR]</p> <p>1.7 Improved public-health across SIDS with improved monitoring [SR]</p> <p>1.8 Increase in groundwater monitoring and regular sampling routines established for SIDS (leading to improvements in groundwater quality) [SR]</p> <p>1.9 Functioning water & environment cost recovery schemes adopted using PIC driven mechanisms to sustain environmental productivity balanced with equitable use of water resources [P]</p>	<p>1.1 Limited water resources susceptible to over-exploitation and pollution</p> <p>1.2 Vulnerability to climate variability</p> <p>1.3 Insufficient political and public awareness of the role water plays in economic development, public health and environmental protection</p> <p>1.4 High urban water losses, poor water conservation & inadequate drinking water treatment</p> <p>1.5 Poor wastewater management resulting in increased land based source pollution into the watershed and coastal environment</p> <p>1.6 Fragmented institutional responsibilities, weak policies, communication & coordination</p> <p>1.7 Conflicts between national versus traditional rights</p> <p>1.8 Inadequate financing due to poor cost-recovery and limited 'economies of scale'</p> <p>1.9 Weak stakeholder linkages both within and outside the water sector</p> <p>1.10 Reduction in ecosystem productivity and biodiversity</p> <p>1.11 Reduction in human health and socio-economic condition due to poor and inadequate access to sanitation and safe water supplies</p>	<p>i) Watershed Management</p> <p>(i) 40% increase in population with access to safe drinking water at 1 demo site [SR]</p> <p>(ii) 30% reduction in animal manure and sewage entering marine waters at 1 demo site [SR]</p> <p>(iii) 30% increase in forest area at 2 demo sites [SR]</p> <p>(iv) Water Safety Plans in place and enacted in 3 peri-urban areas [SR]</p> <p>(v) Legislation in place to protect surface water quality in 4 SIDS [P]</p> <p>(vi) 1 basin flood risk management plan in place [P]</p> <p>(vii) Sustainable forest & land mgmt practices established and trialed with landowners in 2 demo sites [SR]</p> <p>(ii) Wastewater & Sanitation Management</p> <p>(i) 40% reduction in GW and marine pollution discharge at 2 demo sites from sewage and manure [SR]</p> <p>(ii) 30% reduction in drinking water resources pollution discharge for 1 SIDS [SR]</p> <p>(iii) 30% reduction in use of freshwater for sanitation purposes due to eco-sanitation expansion in 1 demo site [SR]</p> <p>(iv) 50% increase in community engagement with National Government in 3 SIDS [P]</p> <p>(iii) Water Resources Assessment & Protection</p> <p>(i) National effluent standards reached for wastewater treatment at 3 sites [P]</p> <p>(ii) 20% increase in water storage facilities at 1 demo site [SR]</p> <p>(iii) Water leakage reduced by 40% from existing baseline levels in 1 water supply system [SR]</p> <p>(iv) 10% reduction in damage to infrastructure due to flooding in 1 significant catchment [SR]</p> <p>(v) 1 basin flood risk management plan in place and a Catchment Council established in 2 SIDS [SR]</p> <p>(iv) Water Use Efficiency & Water Safety</p> <p>(i) WUE improved by 30% over baseline in 2 urban water supply systems [SR]</p> <p>(ii) Water Safety Plans in place and enacted in 2 urban areas [P]</p> <p>(iii) 20% reduction in sewage and manure pollution into fresh and marine waters for 2 urban/peri-urban areas [SR]</p> <p>(iv) 30% reduction in groundwater pollution discharge for 2 water supply systems [SR]</p>	<p>Quarterly, bi-annual, and annual National Demonstration Progress Reporting</p> <p>Project Coordination Unit (PCU) Annual Monitoring Reports and missions</p> <p>National and regional statistical reports (SPC MDG and census reporting)</p> <p>Mid-Term Review Reporting and mission</p> <p>PCU general reporting to Project Steering Committee and UNDP/UNEP</p> <p>IWRM Planning and WUE Strategies (available online and via PCU)</p> <p>National IWRM APEX body meeting minutes</p>	<p>Strong and high-level government commitment is not sustained</p> <p>Vulnerability to changing environmental conditions</p> <p>Inclusive stakeholder involvement in the IWRM consultation process</p> <p>Limited influence of national and catchment stakeholders to promote and sustain IWRM</p> <p>Restricted capacity of stakeholders to implement IWRM best practice in countries</p>

Component 2: IWRM and WUE Regional Indicator Framework

Project Strategy	Objectively verifiable indicators				
<i>Component 2 Objective:</i>	IWRM and environmental stress indicators developed and monitored through national and regional M&E systems to improve IWRM and WUE planning and programming and provide national and global environmental benefits				
	Indicator	Baseline	Target	Sources of verification	Risks and Assumptions
<p>Component 2 Outputs:</p> <p>2.1 Process, Stress Reduction, Environmental and Socio-Economic Status, WUE, Catalytic, Governance, Proxy, and X-Cutting Regional Indicator Framework (RIF) established and in use</p> <p>2.2 Participatory M&E adopted within Demonstration Projects [C1] and mainstreamed into national best practice</p> <p>2.3 Improved institutional capacity for monitoring and support for action on findings across the region, including Pacific RAP progress for water investment planning (and International Waters SAP)</p>	<p>1.1 Regional Indicator Framework (RIF) integrated into national sustainable development approaches (NSDSs and NEAPs) and national adaptation programmes for action (NAPAs) and national adaptation plans (NAPs) for disaster risk reduction [P]</p> <p>1.2 Indicator data provides evidence base for action by SIDS National Governments [P]</p> <p>1.3 Communities actively involved in designing, implementing and monitoring water and environment projects [P]</p> <p>1.4 National expert monitoring staff available as a resource to National IWRM APEX bodies and across government using systems thinking approaches [P]</p> <p>1.5 Established national data collection for monitoring and access by all database facilities with appropriate institutional mandates and powers in place for use of and action with the data for national programming, advocacy, learning and accountability [P]</p>	<p>1.1 National approaches do not use appropriate indicators and where they do these are single sectoral in nature</p> <p>1.2 Communities are rarely involved in water and environmental management approaches</p> <p>1.3 Monitoring is not a mainstreamed practice in national institutions responsible for water and environmental management</p> <p>1.4 Inconsistent monitoring data collection and insufficient use of information for intervention improvements and planning</p>	<p>1.1 Aggregation of all final national demonstration project indicators by month 8 of the project [P]</p> <p>1.2 Draft regional Indicator Framework developed for consultation by month 18 of the project [P]</p> <p>1.3 Countries fully utilizing Indicator Framework by month 36 [P]</p> <p>1.4 Stakeholder consultation and approval of project design and PM&E plan for each national demonstration project by month 8 of the project, including separate consultations with women [P]</p> <p>1.5 National promotion and adoption of PM&E approaches by national water APEX body by month 36 of project using Most Significant Change (MSC) and reflection and learning techniques [P]</p> <p>1.6 Relevant national country staff trained in monitoring and PM&E approaches by month 24 of the project based on needs assessment [P]</p> <p>1.7 APEX body leading institutional training in consistent data collection and development of national monitoring rationale by month 36 of project [P]</p> <p>1.8 Regional matrix in place for Pacific RAP monitoring and national investment planning by month 42 of the project [P]</p>	<p>Revised and finally endorsed Demonstration Project Proposals (available month 8)</p> <p>C2 Indicator Framework annual reports</p> <p>Regional Indicator Framework progress reports</p> <p>National Demonstration Project reporting</p> <p>Annual national IWRM reporting by national APEX bodies</p> <p>Training Needs Assessment report and Training of Trainers workshops</p> <p>National Monitoring Plans and relevant data collection records and action recommendations</p> <p>Regional matrix available online and annual investment planning reporting per country</p>	<p>Indicator data is available and/or the means to find/collect the data are available</p> <p>Strong understanding and willingness to use and act upon the data is present</p> <p>Strong willingness to participate by communities involved in Demonstration Projects and wider stakeholders</p> <p>Willingness by national government to learn from and adopt PM&E approaches where applicable</p> <p>Appropriate staff are available to work with project staff and the national IWRM APEX bodies to mainstream monitoring into normal practice</p>

Component 3: Policy, Legislative and Institutional Reform for IWRM and WUE

Project Strategy	Objectively verifiable indicators				
<i>Component 3 Objective:</i>	Supporting countries to develop national IWRM policies and water efficiency strategies, endorsed by both government and civil society stakeholders, and integrated into national sustainable development strategies				
	Indicator	Baseline	Target	Sources of verification	Risks and Assumptions
<p>Component 3 Outputs:</p> <p>3.1 National IWRM plans and WUE strategies developed and endorsed</p> <p>3.2 Implementation of IWRM approaches agreed across national, community and regional organisations</p> <p>3.3 Strengthened and sustainable APEX water bodies to catalyze implementation of national IWRM and WUE plans, including balanced gender membership</p> <p>3.4 Awareness raised across civil society, governments, education systems and the private sector</p> <p>3.5 Sustainability strategies developed focusing on institutional and technical interventions required for Demonstration scaling-up as part of National IWRM Plan development and implementation</p>	<p>1.1 National IWRM Plans in place and adopted by SIDS National Governments with appropriate resources to implement and monitor & strategic links made to NAPAs and NAPs, NSDSs, and coastal resources management plans [P]</p> <p>1.2 National Water Use Efficiencies in place and adopted by SIDS National Governments with appropriate resources to implement and monitor [P]</p> <p>1.3 Regularly meeting capable IWRM APEX bodies responsible for the coordination of national IWRM activities including sharing experience regionally with other SIDS IWRM APEX bodies [P]</p> <p>1.4 IWRM communicated and mainstreamed into national working practices, including national school curricula [P]</p> <p>1.5 National budgeting and financial planning for x-sectoral IWRM approaches included within Treasuries/Financial Ministries [P]</p>	<p>1.1 No nationally endorsed IWRM plans in place</p> <p>1.2 Water use efficiency measures not considered (or only focusing on technical efficiency)</p> <p>1.3 APEX bodies in place but with weak or no mandates/ToR, budget, or authority</p> <p>1.4 Adhoc awareness campaigns for water management, with little engagement with the private sector, civil society or the education sector</p> <p>1.5 Few operation and maintenance plans for infrastructure in place</p> <p>1.6 Few asset management plans or approaches developed</p> <p>1.7 Unwillingness to change institutional situation to improve water governance</p>	<p>1.1 14 draft National IWRM plans produced by month 18 of the project, with final versions published by month 24 [P]</p> <p>1.2 14 draft Water Use Efficiency Strategy documents produced by month 18 of the project, with final versions published by month 24 [P]</p> <p>1.3 National recruitment of support adviser to national APEX bodies by month 6 of the project [P]</p> <p>1.4 Strategic IWRM communication plan framework for individual national development in place by month 12 of the project (based on Regional Communication Strategy in place by month 6), with national development and implementation by month 24 [P]</p> <p>1.5 Multi-sectoral participation in national APEX bodies by month 12 of the project with 33% female membership (including private and education sector membership and national finance and economic planning units) [P]</p> <p>1.6 Replication Framework in place by month 6, Replication Toolkit in place by month 24, National scaling-up and replication strategies in place based on Demonstration project success and failures for each country by month 54 of the project [P]</p>	<p>National IWRM Plans and Water Use Efficiency Strategies</p> <p>National IWRM Roadmaps</p> <p>Other National Plans (Sanitation action Plans, etc)</p> <p>Contract and annual performance reviews of Advisers to national APEX bodies</p> <p>National IWRM communication plans and materials produced (videos, webshots, websites, articles, press releases, speeches, posters, workshop reports, meetings, community theatre productions, radio stories/interviews, work stories, community meeting notes, APEX body Terms of Reference, membership log, minutes, other national APEX body meeting minutes)</p> <p>National Scaling-Up and Replication recommendation reports</p> <p>Regional Indicator Framework progress reports and National Monitoring Plans</p> <p>National Demonstration Project reporting</p> <p>Regional matrix available online and annual investment planning reporting</p>	<p>Appropriately qualified national staff available</p> <p>Stakeholders willing to participate.</p> <p>Country and catchment priority issues exist</p> <p>Early partnerships continue to exist and function. Partnerships have capacity to use support tools or work with external advisors</p> <p>Partnerships maintain capacity and external examples of good practice exist and can be adapted for SIDS</p>

Component 4: Regional and National Capacity Building and Sustainability Programme for IWRM and WUE, including Knowledge Exchange and Learning and Replication

Project Strategy	Objectively verifiable indicators				
Component 4 Objective:	Sustainable IWRM and WUE capacity development, and global SIDS learning and knowledge exchange approaches in place				
	Indicator	Baseline	Target	Sources of verification	Risks and Assumptions
<p>Component 4 Outputs:</p> <p>4.1 National and regional skills upgraded in project management and monitoring including water champions and APEX bodies for both men and women</p> <p>4.2 Active twinning programmes in place between countries facing similar water and environmental degradation problems</p> <p>4.3 Effective knowledge management networking and information sharing inter and intra-regional</p>	<p>1.1 Water champions identified and active in awareness raising by month 9 of the project [P]</p> <p>1.2 Twinning exchange programmes in place between countries and regions (Caribbean and African SIDS) [P]</p> <p>1.3 Dynamic regional CPD* training workshops and networking through existing CROP agencies and IW:LEARN approaches including strategic links to other GEF initiatives throughout project, reviewed and appraised annually [P]</p> <p>1.4 Comprehensive IWRM and WUE data warehouse facility using appropriate media for PICs (linked to Indicator Framework, Pacific RAP and Caribbean and African SIDS approaches) [P]</p>	<p>1.1 Few twinning opportunities and little information exchange and lesson learning between countries and regions</p> <p>1.2 Training workshops in place but often sectoral and technical in focus</p> <p>1.3 Few opportunities for training on IWRM, sustainability issues, investment planning, and monitoring, within the context of IWRM</p> <p>1.4 No comprehensive IWRM and WUE data store of information available to PICs or other global SIDS</p>	<p>1.1 IWRM awareness programs integrated into normal institutional practices with appropriate budget approved by month 48 of project [P]</p> <p>1.2 Five twinning exchange programs in place between countries by month 42 of the project and at least 1 program with the Caribbean on IWRM planning underway for a similar program with African SIDS [P]</p> <p>1.3 Cross-sectoral regional learning mechanisms (communities of practice) in place including x-project workshop attendance for the GEF funded projects: PACC, SLM, and the ADB CTI project reviewed annually [P]</p> <p>1.4 GEF IW experience with IWRM upgraded for SIDS and highlighted at GEF IWC6, WWF5 Istanbul 2009, and WWF6 TBD 2012, including SIDS experience to support GEF in future IW Focal Area Strategy development and Strategic Programming [P]</p> <p>1.5 Women form at least 2 of the 5 twinning exchange programme members by month 42 of the project [P]</p>	<p>Recruitment feedback via National APEX bodies and IWRM Focal Points through meeting reports and minutes, including Awareness Program Scoping and Implementation Reports</p> <p>Twinning and secondment reports</p> <p>Workshop reports and publications, IW:LEARN outputs</p> <p>Database in place and linked to other resources – available via WWW and other media</p> <p>Pacific Partnership meeting outputs and reports, including Partnership Newsletter</p>	<p>Water champions are present in-countries and willing to take on the role</p> <p>National participation in the twinning approach and lessons learned and feedback</p> <p>Public concerned about water and catchment management issues</p> <p>Countries willing to share information with each other, regionally and inter-regionally</p>

Attachment 2 – Assessment of Project Document Targets

Attachment 3 – GEF Reporting Framework