



WATER FOR DEVELOPMENT AND ECOSYSTEMS

1. Rationale/Background

Healthy aquatic ecosystems provide tangible economic and social benefits. Protecting zones at the land-water interface such as mangroves, paddy fields, wetlands, forests not only increase ecosystem health, but may also provide extra protection against some disasters and saline intrusion, aide groundwater recharge and improve overall quality of life. Understanding the drivers and status of ecosystem degradation and the need for watershed restoration in order to improve water productivity across the Asia-Pacific region is an important component of this theme. Another key element to this theme is the concept of environmental flows which refer to water provided within a river, wetland or coastal zone to main ecosystems and their benefits where there are competing water uses. In most river basins the natural flows have been modified to some extent, to meet the needs of human settlement, irrigation, and flood control or energy generation.

Over the last decade, with intensifying water competition among different users and uses in this region, more and more emphasis has been placed on sustainable water development and utilization. IWRM at the river basin level has been identified as a guiding principle. Various measures have been practiced and adopted by different players, including advocacy and dissemination of environment flow concepts; protection of aquatic ecosystems through wetland protection, paddy field conservation, watershed restoration and reforestation, etc. In economic areas, efforts have been focused on improvement of water use efficiency and productivity; water pollution mitigation and prevention; and establishment of a water-efficient society. As the largest water user, the agricultural sector has been preparing to go through a sector innovation to replace traditional irrigation concepts and technologies with irrigation modernization.

There is still much to be done in river basins across the Asia-Pacific Region as water stress continues to spread; and land and water degradation is emerging in many developing areas. Among other reasons, experts believe that there is a lack of integration of action from relevant stakeholders; a lack of practical methods and tools to put the new concepts and approaches into real practice. There is a need to review current adoption and implementation of the key concepts and approaches on water for development and ecosystem; analyze the challenges and opportunities on incorporating them into IWRM at the river basin scale; develop technical methods and tools; and identify policy and institutional options to better realize and improve IWRM.

The work under Priority Theme C of APWF will review relevant status and success stories, prepare a synthesis of key messages along with policy recommendations,



seek commitments among government leaders and partner organizations to move forward a water agenda for the Asia-Pacific region.

2. Objectives

To bring together all relevant players, including governments, national, sub-regional and regional organizations, alliances and networks; to establish a cooperation platform and a hub of excellence on water for development and ecosystem at the regional level; to facilitate information sharing, technical development and dissemination, policy study, strategy formulation and capacity building; and to promote sustainable and high productive water use.

3. Topics to be covered under the theme

- Food security and strategic water supply/allocation at river basin level
- Quantification and recognition of multiple roles of irrigation systems
- Irrigation modernization and its implications on IWRM
- Environmental flow approaches and its implication on IWRM
- Watershed degradation and river restoration
- Integrating development and ecosystem issues into IWRM

4. Concrete Targets

- A regional task force on water for development and ecosystem established
- A synthesis of status review and needs assessment on the key issues on water for development and ecosystems, including the adoption of the E-flows approach, river basin/watershed degradation and restoration and irrigation modernization, formulated
- Policy and technical recommendations on better integrating development and ecosystem issues into IWRM prepared

5. Proposed Activities to achieve the targets

- Identify relevant government departments, national, sub-regional and regional organizations, alliances and networks to develop partnerships and establish a task force on water for development and ecosystem
- Carryout a review of key issues related to water for development and ecosystems including the drivers and status of degradation and main issues related to restoration.
- Carryout a review on adoption of irrigation modernization in the Asia-Pacific



Asia-Pacific Water Forum

regional and its implication on IWRM

- Carryout a review of the status and use of the e-flows approach in the Asia-Pacific Region
- The above includes needs assessment of ongoing processes and tools
- Host an email conference to obtain feedback on issues paper
- Provide a preliminary synthesis document
- Host a small write workshop to garner feedback and improve the document
- Generate key messages and policy recommendations to feed into the first APWF Summit

6. Pilot Project Proposal

N/A for first year

7. Input to the 1st Asia-Pacific Water Summit

- Review document of the status of the main issues around the drivers of degradation of rivers and watershed restoration
- Review document of the use of E-flows as a tool for water-related decision-making
- Review document on adoption of irrigation modernization and its implication on IWRM
- Synthesis document of key messages
- Policy recommendations

8. List of Partner/Implementing Institutions

WWF, Basin organizations, UNESCAP, Field-based NGOs in the Asia-Pacific Region, the World Bank, Asian Development Bank, IWMI, sub-regional coordinators, etc.

9. Budget Plan

IUCN and FAO will contribute staff-time and other expenses to this project. The budget outlined below is needed to effectively carryout this work.

Regional Consultant	\$10,000	Carryout the reviews
Travel	\$2,000	
Internet platform	\$5,000	For e-conferences (design and



Asia-Pacific Water Forum

		mgmt)
Write-workshop	\$30,000	25 experts from region
Printing/design of final report	\$6,000	
Miscellaneous	\$7,000	
Overhead FAO/IUCN	\$10,000	\$5,000/org
TOTAL:	\$70,000	