ASEAN IWRM Country Strategy Guidelines

- IWRM Monitoring Status Guidelines for ASEAN Countries

1. Background

The ASEAN Working Group on Water Resources Management (AWGWRM) has developed an ASEAN Strategic Plan of Action on Water Resources Management with the support from the Australian Government in 2005. To support the implementation of the Plan, ten project concept proposals were formulated and included in the Appendix of the Strategic Plan Report. One of the ten project concepts: Project Concept 2 is on the development of an "ASEAN IWRM Country Strategy Guidelines". DID Malaysia was requested by the AWGWRM to organize and conduct a workshop to develop the details of the "ASEAN IWRM Country Strategy Guidelines".

The workshop participants agreed that the generic ASEAN/IWRM framework will be structured on the following 6 major water management issues in ASEAN:

- Water Supply
- Irrigation
- Stormwater Management
- Floods Management
- Water Pollution Management
- Sanitation Management

Arising from the workshop the following outputs have been prepared for use by ASEAN countries to assist them in preparing and reporting on their respective countries' IWRM action plans and strategies to address the above 6 thematic issues.

- (a) A set of specific IWRM goals for the above 6 key water-related issues in the region.
- (b) For each set of thematic goals a set of IWRM objectives to achieve the goals have also been identified, categorized under the 3 categories of GWP IWRM tools, i.e. Enabling environment, Institutional environment and Management tools.
- (c) Also indicators for measuring the progress in achieving the objectives associated with each of the thematic goals have been developed. They can be used for measuring regional performance and progress towards meeting the IWRM goals for the 6 key water related issues in the region.

2. The ASEAN IWRM Monitoring Status Guidelines

The Workshop participants in Malaysia have agreed to develop monitoring guidelines for six key water management issues that are considered important in ASEAN countries. They are as follows:

- (a) Water Supply Management
- (b) Irrigation Management
- (c) Stormwater Management
- (d) Flood Management
- (e) Water Pollution Management
- (f) Sanitation Management

The following are the monitoring guidelines for the above 6 key water management issues.

IWRM Issue 4 – Flood Management (15 indicators)				
Indicator	Indicators	Progress	Description	
Types	1 Total area offeeted by fleed (target	24.0 ha		
Outcome Indicators	 Total area affected by flood (target reduction in flooded area) 	24.0 na		
indicators	Total number of people affected by	_		
	flood (target reduction in number of			
	people/ households affected by flood)			
	Annual cost of flood damages	-		
	Percentage of annual national budget	S\$539.48	For FY2024,	
	allocated to flood management	million	PUB is	
			allocated an	
			operating	
			grant of	
			\$539.48	
			million mainly	
			for the	
			operations	
			and maintenance	
			of drainage	
			systems, the	
			Active,	
			Beautiful,	
			Clean (ABC)	
			Waters	
			Programme,	
			coastal	
			protection,	
			and water	
			infrastructure	
			projects.	
	5. Percentage of flood-prone areas in the	100%		
	country covered by early flood warning			
	systems	4000/		
	6. Percentage of flood-prone areas in the	100%		
	country covered by real-time flood monitoring system			
EE	Any "Policy" on flood management	8		
Indicators	Any "Legislation/Regulations" on flood	8		
	management and river conservation			
IS	Any flood management regulatory	8		
Indicators	agencies			
	Any institutional arrangement among	8		
	related agencies to manage flood			
MT	Any implementation of Integrated Flood	8		
Indicators	Management (IFM) approaches			

	involving the use of structural and non-		
	structural flood mitigation measures		
2.	Any problem to develop flood hazard	8	
	and flood risk maps		
3.	Any river basin flood zoning and land	NA	NA in
	use planning		Singapore
4.	Any program to control loss of existing	8	
	low-lying flood detention areas to		
	development		
5.	Any climate adaptation program to	8	
	mitigate the potential impact of extreme		
	floods due to climate change		