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 Types	Indicators	Progress	Description		
Outcome Indicators	1. Total area affected by flood (target reduction in flooded area)	ha			
	2. Total number of people affected by flood (target reduction in number of people/ households affected by flood)		In 2024, natural disasters killed or left missing 519 people, of which 94 died or went missing due to floods.		
	3. Annual cost of flood damages				
	4. Percentage of annual national budget allocated to flood management	%	NA		
	5. Percentage of flood- prone areas in the country covered by early flood warning systems	NA	Floods in the Northern and Central mountainous areas: Often occur due to localized heavy rains, causing flash floods and serious landslides, affecting infrastructure, traffic, and people's lives Floods and inundation in the Red River Delta and the Mekong Delta: Mainly due to heavy rains, high tides combined with rising sea levels.		
	6. Percentage of flood- prone areas in the country covered by real- time flood monitoring system	%	NA		
EE Indicators	1. Any "Policy" on flood management	8	 Decree No. 66/2021/ND-CP dated July 6, 2021 of the Government detailing the implementation of a number of articles of the Law on Natural Disaster Prevention and Control and the Law on Amendments and Supplements to a number of articles of the Law on Natural Disaster Prevention and Control and the Law on Dykes; Decree No. 113/2007/ND-CP dated June 28, 2007 of the Government stipulating administrative sanctions for 		

			violations in the field of natural disaster prevention and control; exploitation and protection of irrigation works and dykes. - Decree No. 9/2025/ND-CP dated January 10, 2025 on mechanisms and policies to support agricultural production to restore production in areas damaged by natural disasters and plant pests (replacing Decree No. 02/2017/ND-CP dated January
			9, 2017 of the Government); - Decree No. 63/2025/ND-CP dated March 5, 2025 of the
			Government on amending and supplementing a number of articles of Decree No. 78/2021/ND-CP
			dated August 1, 2021 of the Government on the establishment and management of the Natural Disaster Prevention and Control Fund; - Decree No. 20/2021/ND-
			CP dated March 15, 2021 of the Government regulating social
			assistance policies for social protection beneficiaries.
	2. Any	8	- Law on Water Resources - Law
	"Legislation/Regulations " on flood management and river conservation		on Dykes No. 79/2006/QH11 dated November 29, 2006; - Law on Natural Disaster Prevention and Control No. 33/2013/QH13 dated June 19, 2013; - Law amending and supplementing a number of articles of the Law on Natural Disaster Prevention and Control and the Law on Dykes No. 60/QH14 dated June 17, 2020
IS Indicators	 Any flood management regulatory agencies 	8	According to the Law on Natural Disaster Prevention and Control No. 33/2013/QH13 (amended and supplemented in 2020). Previously, the "Flood Management Agency" was the National Steering Committee for Natural Disaster Prevention and Control (the standing agency was the Ministry of Agriculture and Rural Development, now the Ministry of Agriculture and Environment). However, the Law on Civil Defense No. 18/2023/QH15 took effect from July 1, 2024,

	2. Any institutional arrangement among related agencies to manage flood	8	accordingly,the"FloodManagement Agency" is now theNational Steering Committee forCivil Defense National Civil Defense SteeringCommittee Civil DefenseCommandCommittee,ofMinistries, central branches, andministerial-level agencies LocalCivilDefenseCommandCommandCommandCommandCommittee.
MT Indicators	 Any implementation of Integrated Flood Management (IFM) approaches involving the use of structural and non- structural flood mitigation measures 	NA	
	2. Any problem to develop flood hazard and flood risk maps	NA	
	3. Any river basin flood zoning and land use planning	8	 Decision No. 847/QD-TTg dated July 14, 2023 of the Prime Minister approving the Planning for natural disaster prevention and control and irrigation for the period 2021-2030, with a vision to 2050; Decision No. 257/QD-TTg dated February 18, 2016 of the Prime Minister approving the Planning for flood prevention and control and the planning for dikes of the Red River and Thai Binh River systems. Provincial Planning.
	 Any program to control loss of existing low-lying flood detention areas to development 	NA	
	 Any climate adaptation program to mitigate the potential impact of extreme floods due to climate change 	NA	