

# **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.

<b>IWRM Issue 1 - Water Supply Management (34 indicators)</b>			
<b>Indicator Types</b>	<b>Indicators</b>	<b>Progress</b>	<b>Description</b>
<b>Outcome Indicators</b>	1. Percentage of population having access to piped drinking water	94.7%	
	2. Percentage of water delivered to customer meeting WHO guidelines for drinking water quality	%	Not available
	3. Average hour of water supplied/day	24hr/day	
	4. Per capita domestic water consumption	120l/c/day	
	5. Percentage of water supply metered	%	Not available
	6. Percentage of UFW/NRW	15.6%	
	1. Any "Policy" on water supply management	8	Decree No. 117/2007/ND-CP dated July 11, 2007 of the Government on production, supply and consumption of clean water (Decree 117); Decree No. 124/2011/ND-CP dated December 28, 2011 on amending and supplementing a number of articles of Decree 117; Decree No. 98/2019/ND-CP dated December 27, 2019 of the Government amending and supplementing a number of articles of Decrees in the field of technical infrastructure; Circular No. 01/2008/TT-BXD dated January 2, 2008 guiding the implementation of a number of contents of Decree 117 Circular No. 08/2012/TT-BXD dated November 21, 2012 guiding the implementation of ensuring safe water supply issued by the Minister of Construction; Decision No. 2502/QD-TTg dated December 22, 2016 approving the adjustment of the orientation for the development of urban and
	2. Any "Legislation/Regulations" on water supply distribution management	8	
	3. Any "Legislation/Regulations" on water supply quality management	8	

			<p>industrial water supply in Vietnam to 2025, with a vision to 2050,</p> <p>Decision No. 1566/QĐ-TTg dated August 9, 2016 approving the National Program to ensure safe water supply for the period 2016-2025,</p> <p>Decision No. 2147/QĐ-TTg dated November 24, 2010 approving the National Program to prevent water loss and revenue loss until 2025 and</p> <p>Directive No. 34/CT-TTg dated August 28, 2020 on strengthening the management of clean water production and business activities, ensuring safe and continuous water supply issued by the Prime Minister</p>
	4. Any “Legislation/Regulations” on water conservation management	8	Water Resources Law 2023
	5. Any “Financial framework and Financing plans” for development of water supply	8	
	6. Any “Operator business plan” (Annual Budget, Manpower resource plan, etc.)	8	Local water supply units
<b>IS Indicators</b>	1. Any water supply planning and policy department	8	Ministry of Construction, People's Committees of provinces and centrally run cities and water supply units (according to the Law on Urban and Rural Planning 2024; Decree No. 33/2025/ND-CP dated February 25, 2025 of the Government stipulating the functions, tasks, powers and organizational structure of the Ministry of Construction and Decree 117).
	2. Any water supply quality office, water testing lab, water sampling team	8	Ministry of Health, Department of Health and water supply unit
	3. Any water supply operation centre	8	Local water supply units
	4. Any water	8	Local water supply units

	conservation unit		
	5. Any water meter management unit	8	Local water supply units
	6. Any customer account/meter reading/billing unit	8	Local water supply units
	7. Any water meter workshop	8	Local water supply units
	8. Any water leak detection unit	8	Local water supply units
	9. Any 24-hr water supply call centre	8	Local water supply units
	10. Any water supply network maintenance unit	8	Local water supply units
	11. Any water supply meter management unit	8	Local water supply units
	12. Any water supply EMI unit	8	Local water supply units
<b>MT Indicators</b>	1. Any short and long term water demand projection and infrastructure development plan	8	Department of Construction and Local water supply units
	2. Any water safety plan – e.g. water sampling programme, water testing lab, real time monitoring of water quality at water treatment plants and service reservoirs	8	Implement according to the instructions in Circular No. 08/2012/TT-BXD dated November 21, 2012 of the Minister of Construction guiding the implementation of ensuring safe water supply and Decision No. 1566/QD-TTg dated August 9, 2016 of the Prime Minister approving the National Program to ensure safe water supply for the period 2016-2025.
	3. Any water supply pressure monitoring system – e.g. pressure sensor/ monitoring in network, flow and level monitoring at service reservoirs, waterworks outputs	NA	
	4. Any water conservation plan – e.g. water saving measures, public education programme	8	

	5. Any water supply meter installation plan – e.g. all new premises must be metered	8	
	6. Any monitoring of water treatment plant output meters – e.g. all are metered and the meters are checked periodically	8	
	7. Any water meter management system – e.g. comply with ISO/EU standard, error check system, meter replacement programme, meter repair and testing facilities	8	
	8. Any water supply network record /mapping system, network asset management and pipeline replacement/ renewal programme	8	
	9. Any water supply leak detection programme	NA	
	10. Any 24-hour Call Centre and Operation Centre for feedback on leak and deployment of crew for repair	NA	