

## **ASEAN IWRM PERFORMANCE REPORTS & MONITORING INDICATORS**

### **Vietnam 2013 IWRM Reports (Based on 2009 report framework for the six issues)**

#### **ISSUE 1 - WATER SUPPLY**

<b>Monitoring Indicators</b>	<b>Value</b>
1. Percentage of population having access to piped drinking water	<b>51%</b>
<u>Description</u> In urban area: more than 90% In Rural area: about 30%	
2. Percentage of water deliver (cu.m) to customer meeting WHO guidelines for drinking water quality	<b>65%</b>
<u>Description</u> In urban area: 120 little /person.day In Rural area: 80 little /person.day	
3. Average hour of water supplied per day	<b>18-20</b>
<u>Description</u> In urban area: 20-22 hours/day In Rural area: 16-18 hour /day	
4. Per capita domestic water consumption	
<u>Description</u> In urban area: 120 little /person.day In Rural area: 80 little /person.day	
5. Percentage of water supply metered	<b>75%</b>
<u>Description</u>	
6. Percentage of UFW/NRW	<b>25%</b>
<u>Description</u>	

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### **ISSUE 2 - IRRIGATION**

<b>Monitoring Indicators</b>	<b>Value</b>
1. Percentage of irrigated area versus the total potential irrigable area	<b>85%</b>
<u>Description</u> Some remote areas from rain water	
2. Percentage of irrigated area damaged by flood and drought	<b>35%</b>
<u>Description</u> Area damaged by flood: mostly in mountain area Area damaged by drought: mostly in central provinces	
3. Percentage of irrigated area with water quantity measuring devices	<b>65%</b>
<u>Description</u> Water quantity measuring by pumping system and canal system	

### **ISSUE 3 – STORMWATER MANAGEMENT**

<b>Monitoring Indicators</b>	<b>Value</b>
1. Any policy on managing stormwater (Yes/No)	<b>Yes</b>
<u>Description</u> Policy on managing stormwater for main cities	
2. Any legislation on managing stormwater (Yes/No)	<b>yes</b>
<u>Description</u> Legislation on managing stormwater for main cities	
3. Any regulatory agencies to control stormwater (Yes/No)	<b>yes</b>
<u>Description</u> Regulatory agencies to control stormwater under people committee	
4. Any formal institutional arrangements among related agencies to manage stormwater (Yes/No)	<b>yes</b>

**Source:** ASEAN Working Group for Water Resources Management (AWGWRM) – April 2015  
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<u>Description</u> Under Ministry of Construction	
5. Use of computer modelling tools to model stormwater quality and quantity (Yes/No)	<b>No</b>
<u>Description</u>	
6. Availability of design manual/code of practices for stormwater management (Yes/No)	<b>No</b>
<u>Description</u>	

### **ISSUE 4 – FLOOD MANAGEMENT**

<b>Monitoring Indicators</b>	<b>Value</b>
1. Any steps taken to implement Integrated Flood Management (IFM) approaches in the country (Yes/No)	<b>yes</b>
<u>Description</u> <b>Forecasting and implementing under National board</b>	
2. Percentage of high risk flood-prone areas in the country covered by early flood warning and response systems	<b>65%</b>
<u>Description</u>	
3. Percentage of high risk flood-prone areas in the country covered by a real time flood monitoring information system	<b>35%</b>
<u>Description</u> <u>Mostly for big city</u>	
4. Percentage of annual national budget allocated to flood management	<b>10%</b>
<u>Description</u> Budget allocated for flood management infrastructure and human resources	
5. Any legislation on river conservation (Yes/No)	<b>yes</b>
<u>Description</u> Under Law and decrees system	

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6. Any formal institutional arrangements among related agencies to manage floods (Yes/No)	<b>yes</b>
<u>Description</u> Under National flood control Board	

### **ISSUE 5 – WATER POLLUTION MANAGEMENT**

<b>Monitoring Indicators</b>	<b>Value</b>
1. Any policy on water pollution control (Yes/No)	<b>yes</b>
<u>Description</u> Under Law and decrees system	
2. Any specific legislation for the management of water quality and wastewater (Yes/No)	<b>yes</b>
<u>Description</u> Under Law and decrees system	
3. Any specific financial support programme for controlling water pollutions (Yes/No)	<b>yes</b>
<u>Description</u> From national budget and other Loan or technical assistant	
4. Any formal institutional arrangements among related agencies to manage water pollution (Yes/No)	<b>yes</b>
<u>Description</u> Under Ministry of Natural resources and Environment	
5. Any public/private sector partnership and participation in managing water pollution (Yes/No)	<b>yes</b>
<u>Description</u> Just in early first step	
6. Any river water quality monitoring information system/database (Yes/No)	<b>yes</b>

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<u>Description</u> River water quality monitoring information system for important river	
7. Any river water quality master plan at national and local levels (Yes/No)	<b>yes</b>
<u>Description</u> National programme for river water quality protection	
8. Any river basin master plan for relocating the highly polluting industries in a river basin (Yes/No)	<b>yes</b>
<u>Description</u> Under Prime Minister Decision	

### **ISSUE 6 – SANITATION MANAGEMENT**

<b>Monitoring Indicators</b>	<b>Value</b>
1. Any policy on urban/rural sanitation and sewerage systems (Yes/No)	<b>yes</b>
<u>Description</u> National programme for urban/rural sanitation	
2. Any specific legislation on urban/rural sanitation and sewerage systems (Yes/No)	<b>yes</b>
<u>Description</u> By big cities' decision	
3. Percentage of annual budget for sanitation and sewerage programme/projects	<b>8-10%</b>
<u>Description</u> annual budget for sanitation and sewerage programme used for mainly big cities	
4. Any integrated national and provincial institutions to implement sanitation policies (Yes/No)	<b>no</b>
<u>Description</u>	

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5. Any private sector participation in providing sanitation services for the people (Yes/No)	<b>yes</b>
<u>Description</u> Very first step in some towns	
6. Any national sanitation/sewerage information system/database (Yes/No)	<b>No</b>
<u>Description</u>	
7. Any comprehensive sewerage/sanitation master plan at national, regional and local levels (Yes/No)	<b>No</b>
<u>Description</u>	
8. Any effective regulatory framework to control the quality of wastewater discharges to water courses (Yes/No)	<b>yes</b>
<u>Description</u> Under Law and Decrees system on water licesing	
9. Any landuse masterplan for relocating the highly polluting industries in a river basin (Yes/No)	<b>yes</b>
<u>Description</u> Under Prime Minister Decision	
10. Any awareness/advocacy programme for stakeholders on the importance of proper sanitation and sewerage systems (Yes/No)	<b>yes</b>
<u>Description</u> Some cities and town developing their own program	