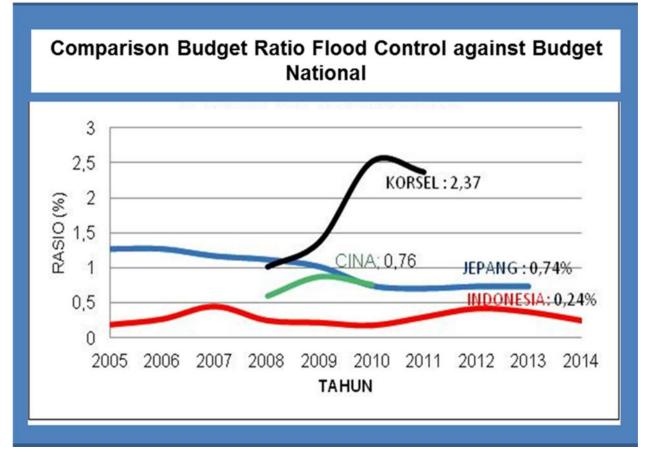
# Indonesia 2013 Report (Flood Management)

	IWRM Issue 4 - Flood Mai	nagement (15 ind	icators)
Indicator Types	Indicators	Progress	Description
Outcome	1. Total area affected by flood	219.298 ha	31.223 ha of farm
Indicators	(target reduction in flooded area)		<ul><li>18.112 ha of fishery</li><li>46.789 ha of settlement</li><li>121.114 ha of paddy field</li><li>1060 ha of irrigation</li></ul>
	<ol> <li>Total number of people affected by flood (target reduction in the number of people/households affected by flood)</li> </ol>	108.259 people	245 died 130 disappeared 107.884 evacuated
	<ol> <li>Annual cost of flood damages</li> </ol>	5.415.554.689. 000 IDR	Includes all activities to prevent and control of all the damage from flooding, volcanic lava, and also coastal protection
	<ol> <li>Percentage of annual national budget allocated to flood management</li> </ol>	0.32 %	from the total of DIPA (list the contents of budgetary) from national budget (1.657,9 Trillion IDR)
	5. Percentage of flood-prone areas in the country covered by early flood warning systems	17,11 %	See Note 1 Including all areas in Java, Celebes, and Maluku Island.
	<ol> <li>Percentage of flood-prone areas in the country covered by real-time flood monitoring system</li> </ol>	29,95 %	only available in Java and Sumatera Island <b>See Note 2</b>

# **Outcome Indicators**



#### Note 1

#### Note 2

In 2013, there is an increasing in number of RBO with early flood warning system from 10 to 15, and the RBO with real-time monitoring system from 9 to 18 (from total 33 RBO in Indonesia).

## **Enabling Environment Indicators**

EE Indicators	<ol> <li>Any "Policy" on flood management and river conservation</li> </ol>	Yes (8)	Effectiveness of Output is monitored and evaluated Peraturan Pemerintah No. 42 Tahun 2008 tentang Pengelolaan Sumber Daya Air (Government Regulation Nr. 42 of 2008 regarding Water Resources Management) <b>See Note 1</b>
	<ol> <li>Any</li> <li>"Legislation/Regulations" on flood</li> </ol>	Yes (8)	Effectiveness of Output is monitored and evaluated

river conservation	Sumber Daya Air (Law of Indonesia Nr. 7 of 2004 regarding Water Resources) See Note 2
management and	UU RI No. 7 Tahun 2004 tentang

### Note 1

On Government Regulation Nr. 42 of 2008 regarding Water Resources Management also stated that in implementing conservation of water resources, the minister or the government in accordance with the authority and responsibility, should pay attention to local knowledge and included the local community on the activities.

#### Note 2

More details about flood management and river conservation explained on Law of Indonesia Nr. 7 of 2004 regarding Water Resources. In this regulation also stated about water resources management plan as an attempt to implement, monitor, and evaluate the implementation of the conservation of water resources, efficient use of water resources, and control of water damage. The pattern of water resource management is a basic framework for planning, implementing, monitoring, and evaluating the conservation of water resources, efficient use of water resources, and control of water damage.

IS Indicators	<ol> <li>Any flood management regulatory agencies</li> </ol>	Yes (8)	Effectiveness of Output is monitored and evaluated the agencies who manage the flood regulatory are BNPB (Indonesian National Board for Disaster Management) and Dirjen SDA Kementrian PU-PR (Directorate General of Water Resources, The Ministry of Public Works and Housing). See Note 1
	2. Any institutional arrangements among related agencies to manage flood	Yes (8)	Effectiveness of Output is monitored and evaluated the arrangements are being held by BNPB See Note 1

# Institutional Set-up Indicators

### Note 1

**Source:** ASEAN Working Group for Water Resources Management (AWGWRM) – April 2015 [weblink - <u>aseaniwrm.water.gov.my</u>]

Directorate General of Water Resources, from the Ministry of Public Works and Housing charge of policy formulation in the field of water resources in accordance with the laws and regulations that include conservation, utilization, and control the destructive force on rivers, lakes, reservoirs, dams, irrigation, soil water, raw water, swamps, ponds and beaches. This agency also conducts an emergency relief and rehabilitation on damaged infrastructure caused by water related natural disasters.

### Note 2

In February 2013, there is institutional arrangement among BNPB and Directorate General of Water Resources, from the Ministry of Public Works and Housing, related disaster management operations, comprising of three (3) stages:

- (a) Pre disaster activities, include: prevention, mitigation and preparedness
- (b) Actual Emergency Response activities include: Quick Assess Fulfillment of basic needs and recovery of Vital Facilities and Infrastructure.
- (c) Post disaster activities, include: Rehabilitation and reconstruction

MT Indicators	<ol> <li>Any implementation of Integrated Flood Management (IFM) approaches involving the use of structural and non-structural flood mitigation measures</li> </ol>	Yes (8)	Effectiveness of Output is monitored and evaluated Dirjen SDA Kementrian PU-PR (Directorate General of Water Resources, The Ministry of Public Works and Housing) and Japan International Cooperation Agency (JICA) cooperate to run a program named Flood Control System Improvement in Selected Cities (UFCSI).
	2. Any program to develop flood hazard and flood risk maps	Yes (8)	Effectiveness of Output is monitored and evaluated the program has been run since 2006 by: 1. BNPB (Indonesian National Board for Disaster Management) 2. Dirjen SDA Kementrian PU-PR (Directorate General of Water Resources, The Ministry of Public Works and Housing) 3. BMKG (Indonesian Agency for Meteorological, Climatological and Geophysics)

## **Management Tools Indicators**

		<ul> <li>4. BIG (Indonesian National Coordinator for Survey and Mapping)</li> <li>And since then until 2013 there are 104 maps had been created.</li> </ul>
3. Any river basin flood zoning and land use planning	Yes (8)	Effectiveness of Output is monitored and evaluated the flood zoning was made by BNPB and the land use planning was made by Dirjen Tata Ruang Kementrian PU-PR (Directorate General of Regional and City Planning, The Ministry of Public Works and Housing)
<ol> <li>Any program to control the loss of existing low-lying flood detention areas to development</li> </ol>	Yes (8)	Effectiveness of Output is monitored and evaluated the program was arranged by BNPB See Note 1
5. Any climate adaptation program to mitigate the potential impacts of extreme floods due to climate change	Yes (8)	Effectiveness of Output is monitored and evaluated National Action Plan for Climate Change Adaptation (RAN-API) See Note 2

### Note 1

Flood Control System Improvement in Selected Cities (UFCSI) is a strategic program to accelerate the development and improvement of flood mitigation infrastructure and enhance the community's role in disaster mitigation and balancing structural and nonstructural approaches.

### Note 2

National Action Plan for Climate Change Adaptation (RAN-API) is being held by National Development Planning Agency (Bappenas), Ministry of Environment (KLH), National Council on Climate Change (DNPI), and Meteorological, Climatological, and Geophysical Agency (BMKG). The RAN-API is a national action plan document on adaptation to the impacts of climate change, which involves integrated coordination among all the stakeholders, from the government, civil society organizations, international cooperation agencies and other stakeholders. Briefly, RAN- API contains the action plan for adaptation of priority sectors and cross-sectors in the short- term (2013-2014).