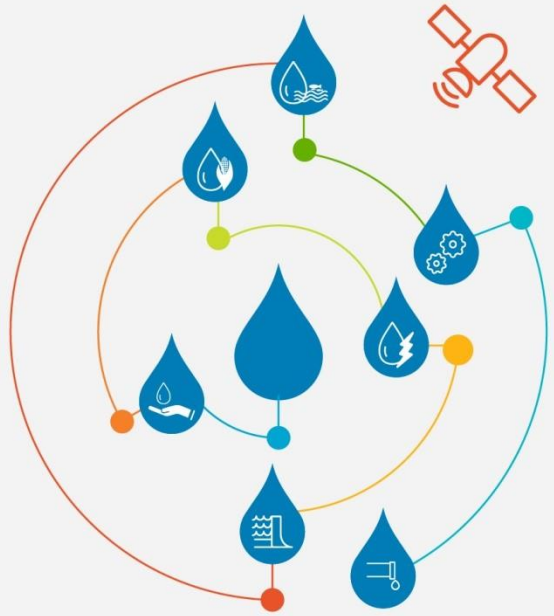
# ENABLING POLICIES FOR FINANCING SOUND WATER CYCLE MANAGEMENT TO ACHIEVE WATER-RELATED SUSTAINABLE DEVELOPMENT GOALS IN ASIA



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Japan Water Forum/
Secretariat of Asia-Pacific Water Forum
4 October, 2018

# OBJECTIVES OF THE PRESENTATION

1. To introduce financing conditions to achieve water-related SDGs
2. To highlight intervention points through three water cycle management loops for achieving water-related SDGs
3. To summarise challenges and opportunities
4. To examine enabling policies and ways for scaling-up

This presentation is based on the discussion paper on “Enabling Policies for Financing Water-Related SDGs” of ESCAP and the Secretariat of the Asia-Pacific Water Forum, August, 2018, sponsored by the 8th World Water Forum Secretariat

# YANGON DECLARATION: PATHWAY FORWARD

## 3rd ASIA-PACIFIC WATER SUMMIT, 11-12 December 2017

**The regional leaders highlighted the necessity to identify priority areas of actions and mobilize resources for water SDGs**


**The Yangon Declaration calls for the regions to address:**

- ✓**Sound Water Cycle Management;**
- ✓**Governance and Inclusive Development;**
- ✓**Financing Implementation of Water-Related SDGs.**

# FINANCING CONDITIONS IN THE REGION

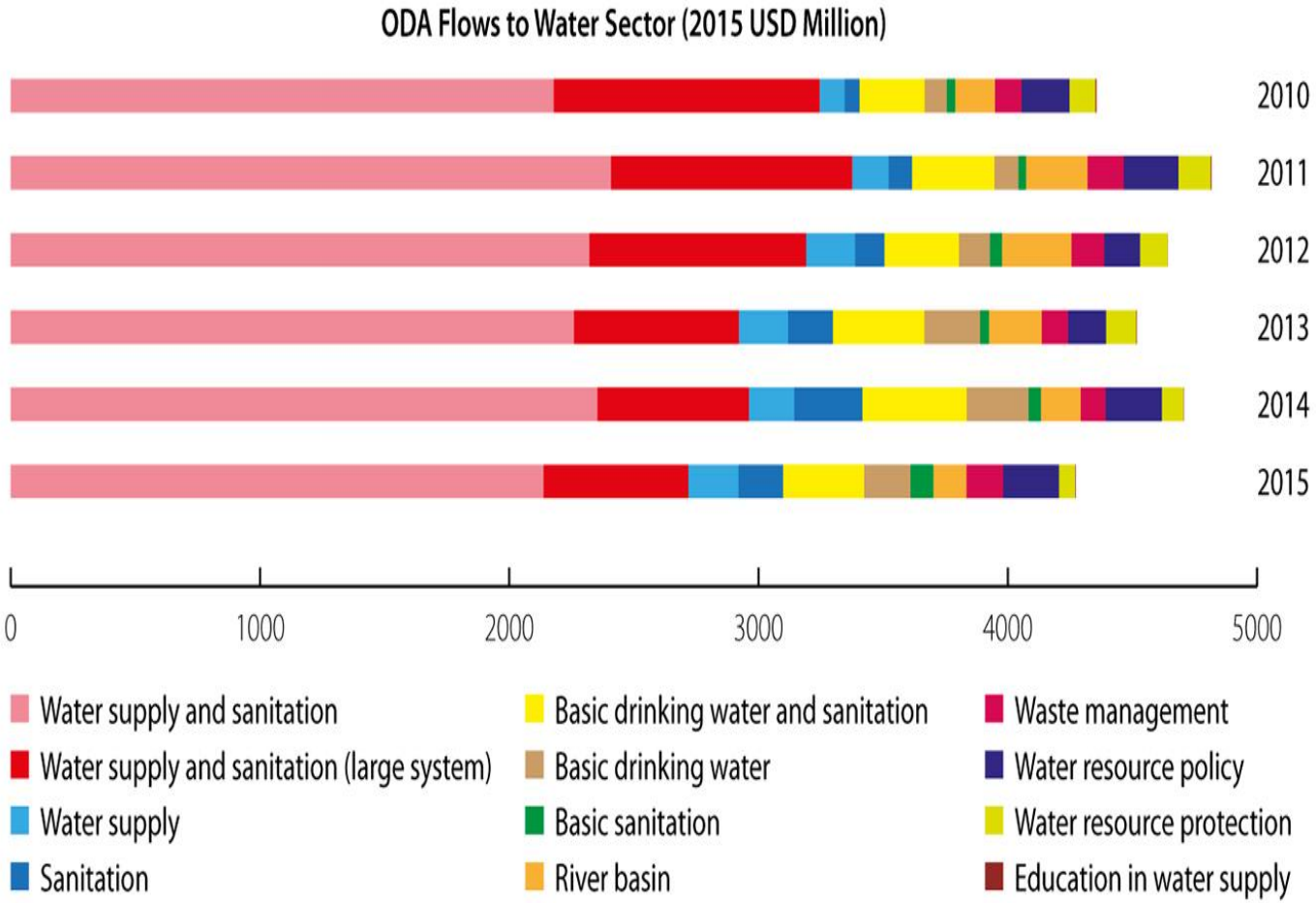


***Figure 1: Asia and Pacific ODA flows to water sectors from 2010 to 2015***

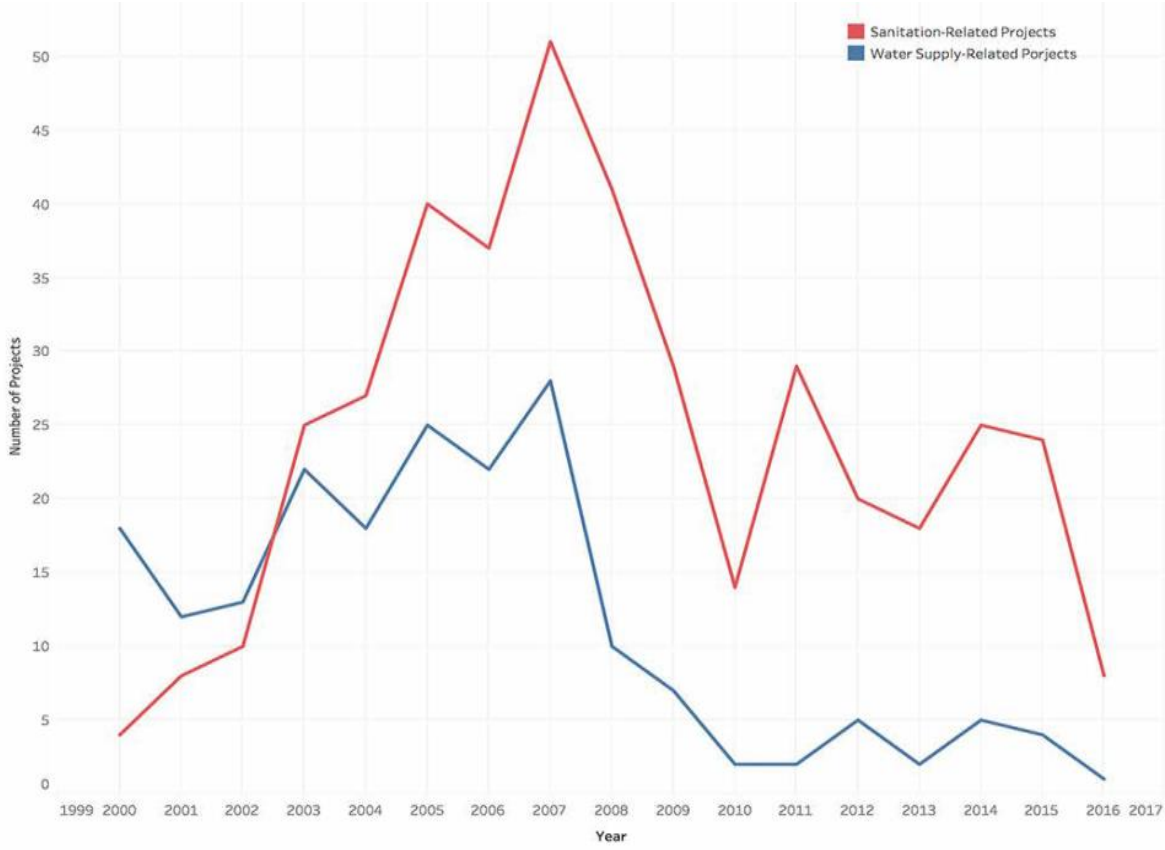


***Figure 2: Trends of sanitation and water supply investments from private sources (2000-16)***

Since 1970, around US$ 1.3 trillion in assets were lost to disasters

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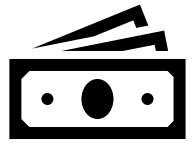
# FINANCING AND ECONOMIC INSTRUMENTS

"*When financial and economic instruments properly designed and implemented, they can make important contribution to the water related SDGs*" (Gomez & Leflaive, 2015)

## Factors preventing impactful investments:

- Inadequate pricing and incentives
- Uncoordinated policy responses to competing sectoral water demands
- Lack of incentives for pro-poor public/private partnership

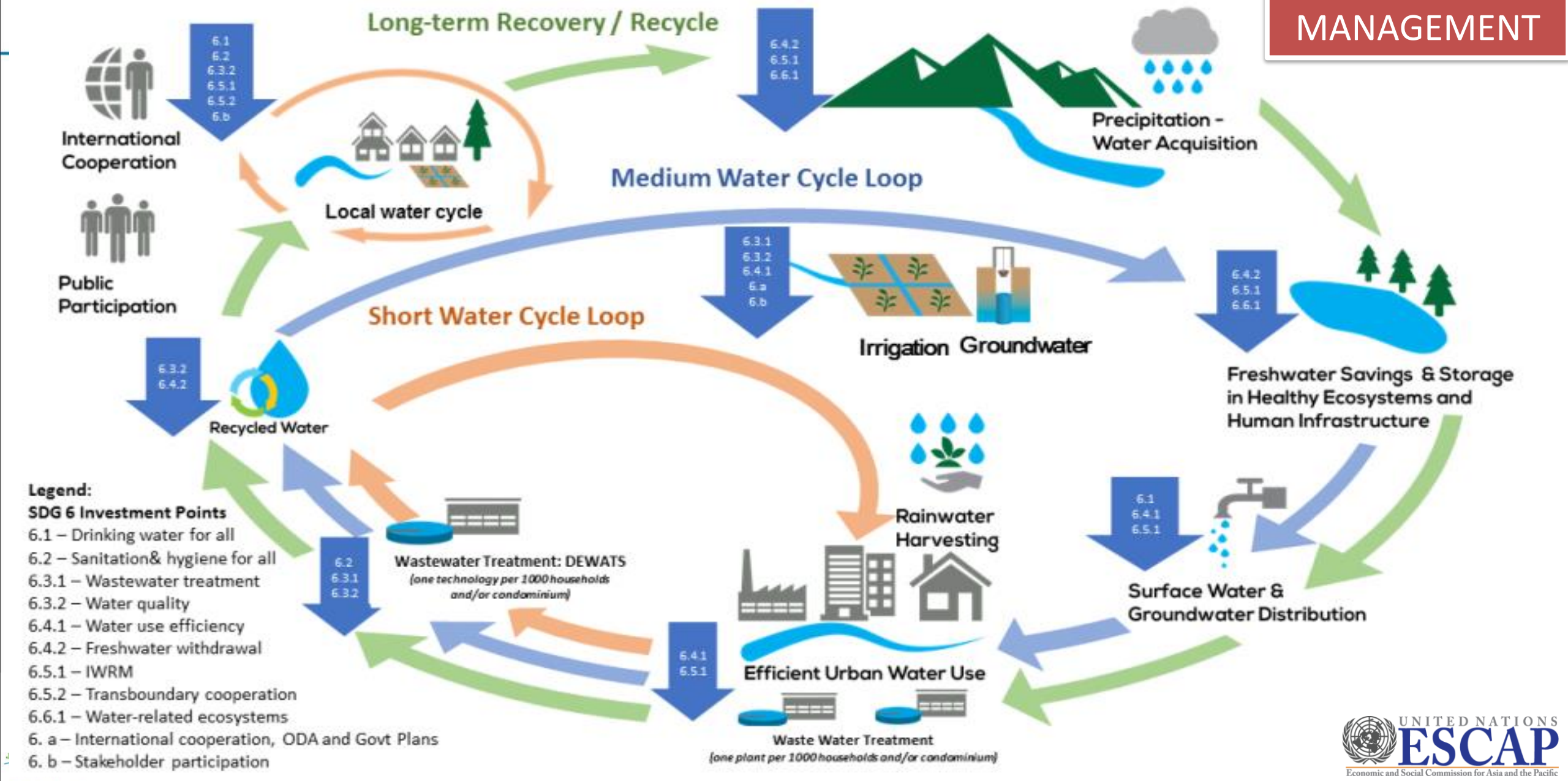


**Examples of Financial & Economic Instruments**

- Equitable Share
- Subsidy
- Taxes
- Water pricing
- Tariffs
- Loans and Bonds
- Transfers (external sources)
- Public-Public Partnership
- Public-Private partnership
- Payment for Ecosystem Service
- Trading (trading of permits for using water or polluting water)
- Negotiated voluntary agreement (cooperation)
- Insurance
- Liability

# INTERVENTION POINTS TO IMPLEMENT SDGs

3-Size LOOPS OF WATER CYCLE MANAGEMENT




**Legend:**
**SDG 6 Investment Points**
6.1 – Drinking water for all
6.2 – Sanitation& hygiene for all
6.3.1 – Wastewater treatment
6.3.2 – Water quality
6.4.1 – Water use efficiency
6.4.2 – Freshwater withdrawal
6.5.1 – IWRM
6.5.2 – Transboundary cooperation
6.6.1 – Water-related ecosystems
6. a – International cooperation, ODA and Govt Plans
6. b – Stakeholder participation

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# WATER CYCLE MANAGEMENT

In most countries, government-owned systems or organizations are responsible for drinking water supply, wastewater treatment and irrigation

**Case of Japan:**

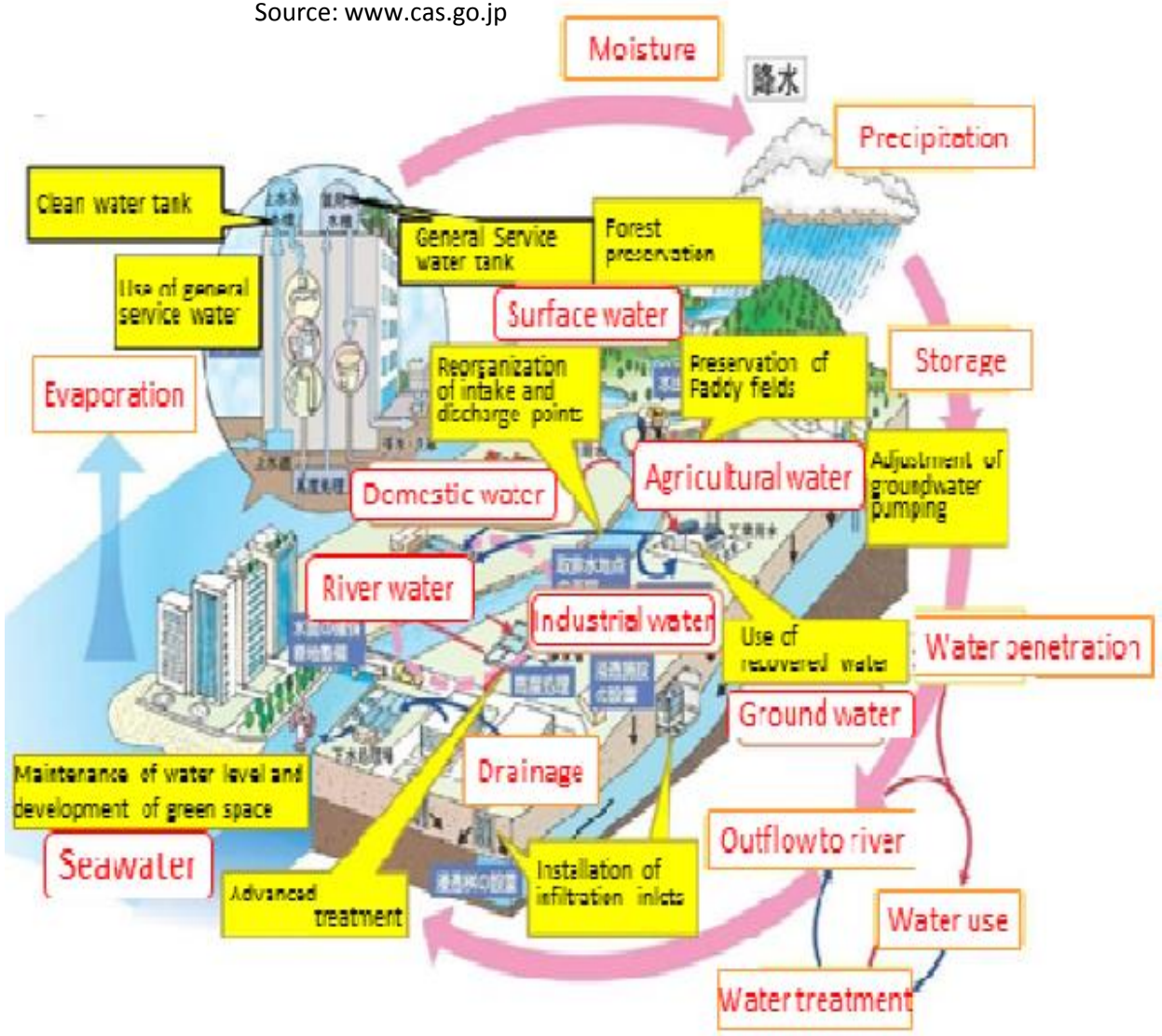
- **Basic Water Cycle Act in Japan (2014)**

**Source of Funding about water cycle measures:**

- Municipal bonds (public enterprise bonds)
- General account of local government,
- special tax for specific purpose,
- public utility accounting,
- donation and investment from private companies.
- Cloud Funding

- Environment, Social, Governance investment

Source: www.cas.go.jp

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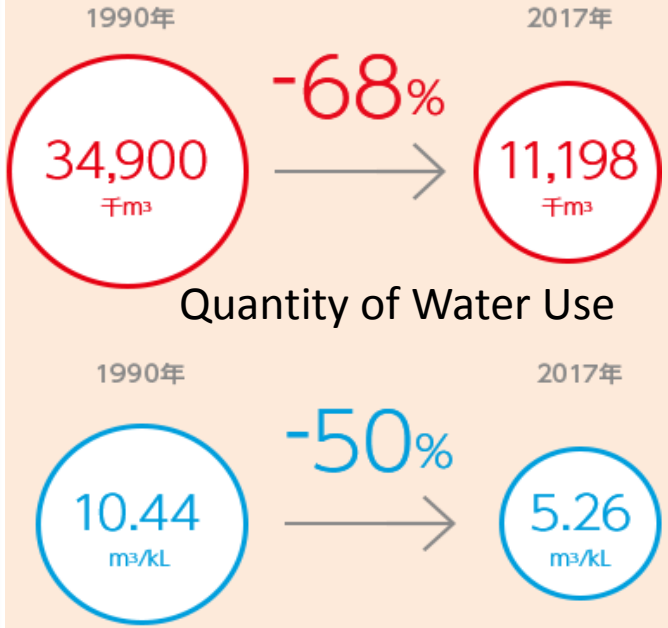
# Intervention Point for Medium Water Cycle Loop

Bring treated wastewater back into the loop, linking with freshwater storage and infrastructure
Ensure more efficient water management, to expand services and enhance ecosystem service potential both upstream and downstream.

Financing & investment from Private Sectors as its beneficially charge Corporation Social Value, CSR

## Example 1: KIRIN Corporation




Quantity of Water Use



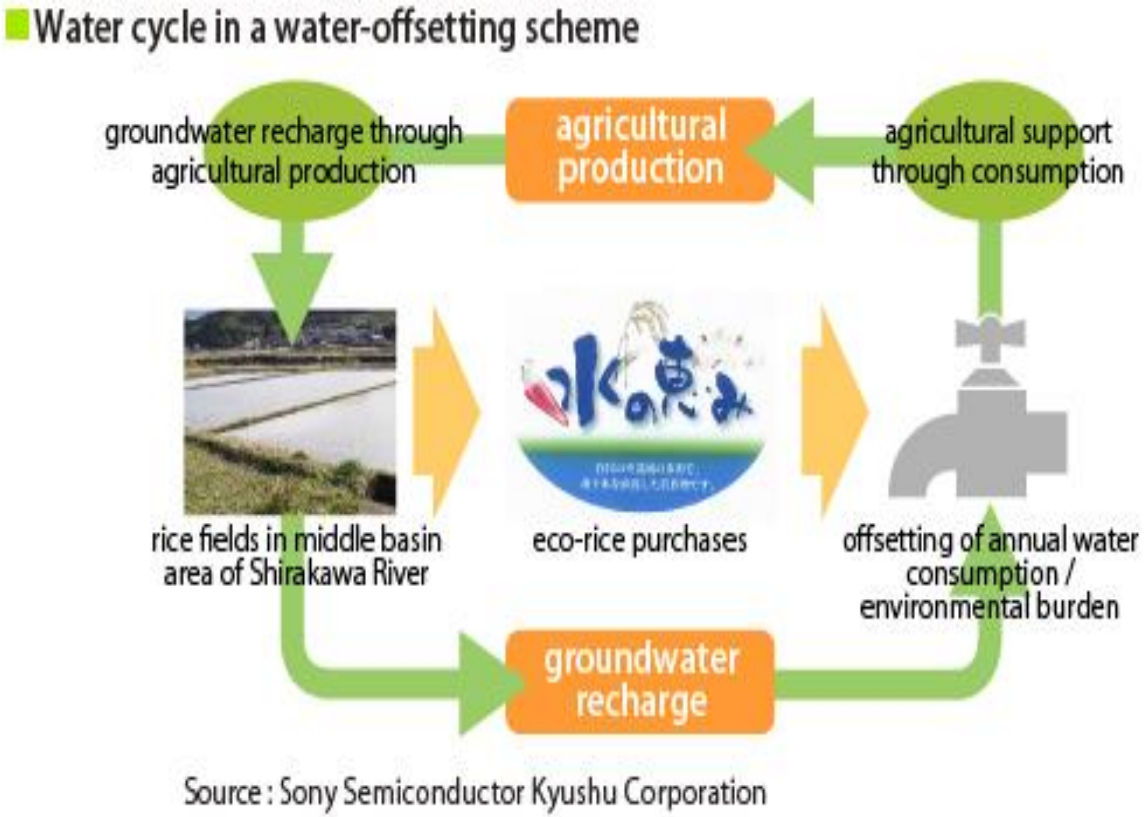

Water Consumption per unit

Wastewater purification by setting the high-voluntary standard

ESG Investment

CDP A LIST 2017 WATER

## Example 2: Promotion of Groundwater recharge through the payment for Ecosystem-Service in Kumamoto, Japan




Source : Sony Semiconductor Kyushu Corporation

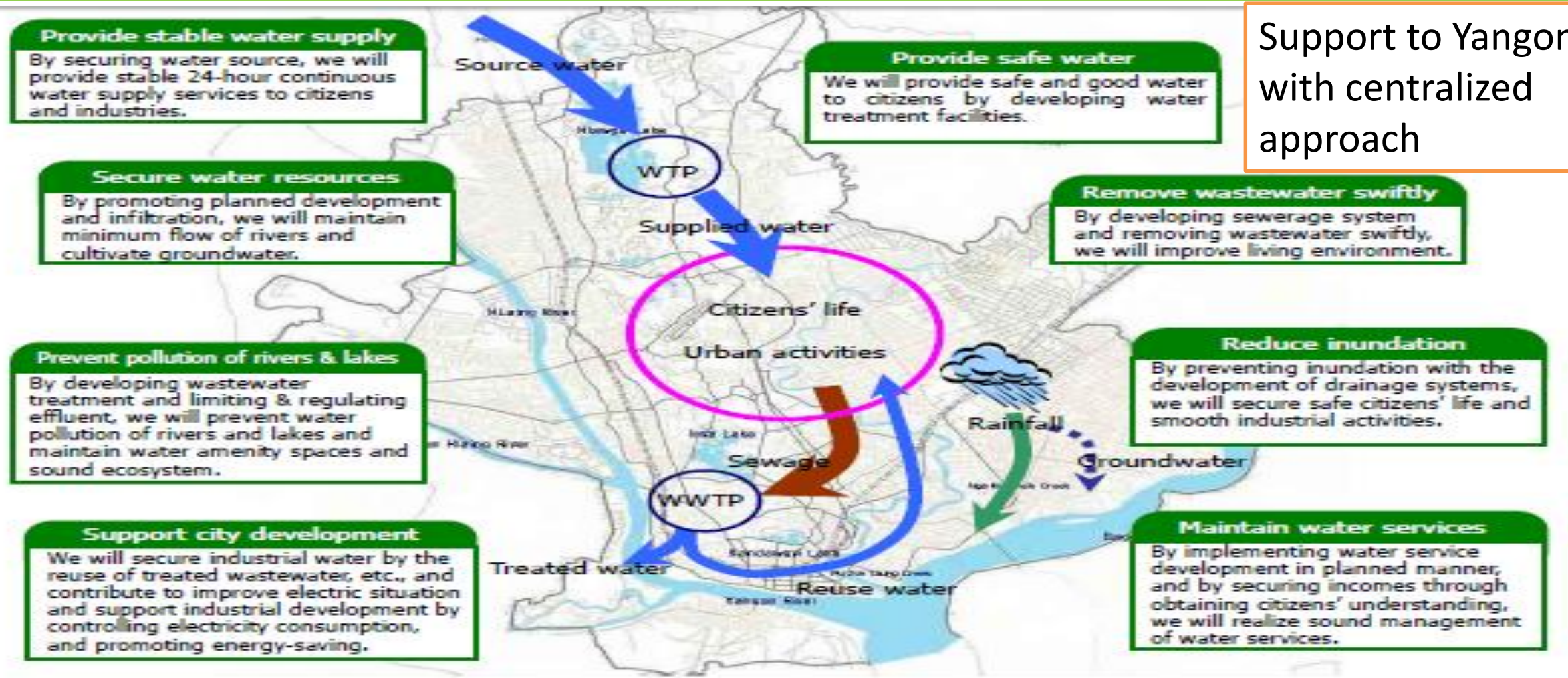
http://www.biodic.go.jp/biodiversity/shiraberu/policy/pes/en/water/water03.html

# INTERVENTION POINTS FOR SHORT & MEDIUM WATER CYCLE

**Medium water cycle management loop: intervention points to bring treated wastewater back into the loop, ensure more efficient water management, and ecosystem service potential**

**Shorter water cycle management loop: intervention points in regenerating and recycling water resources at the local and community scale**

Support to Yangon with centralized approach



# Comprehensive Support from SHORT to MEDIUM WATER CYCLE Management

**Support to Yangon with decentralized approaches**
**ex: Kubota Corporation's contribution to Myanmar**

**Johkasou**
**(Decentralized wastewater management)**

CDP A LIST 2017 WATER

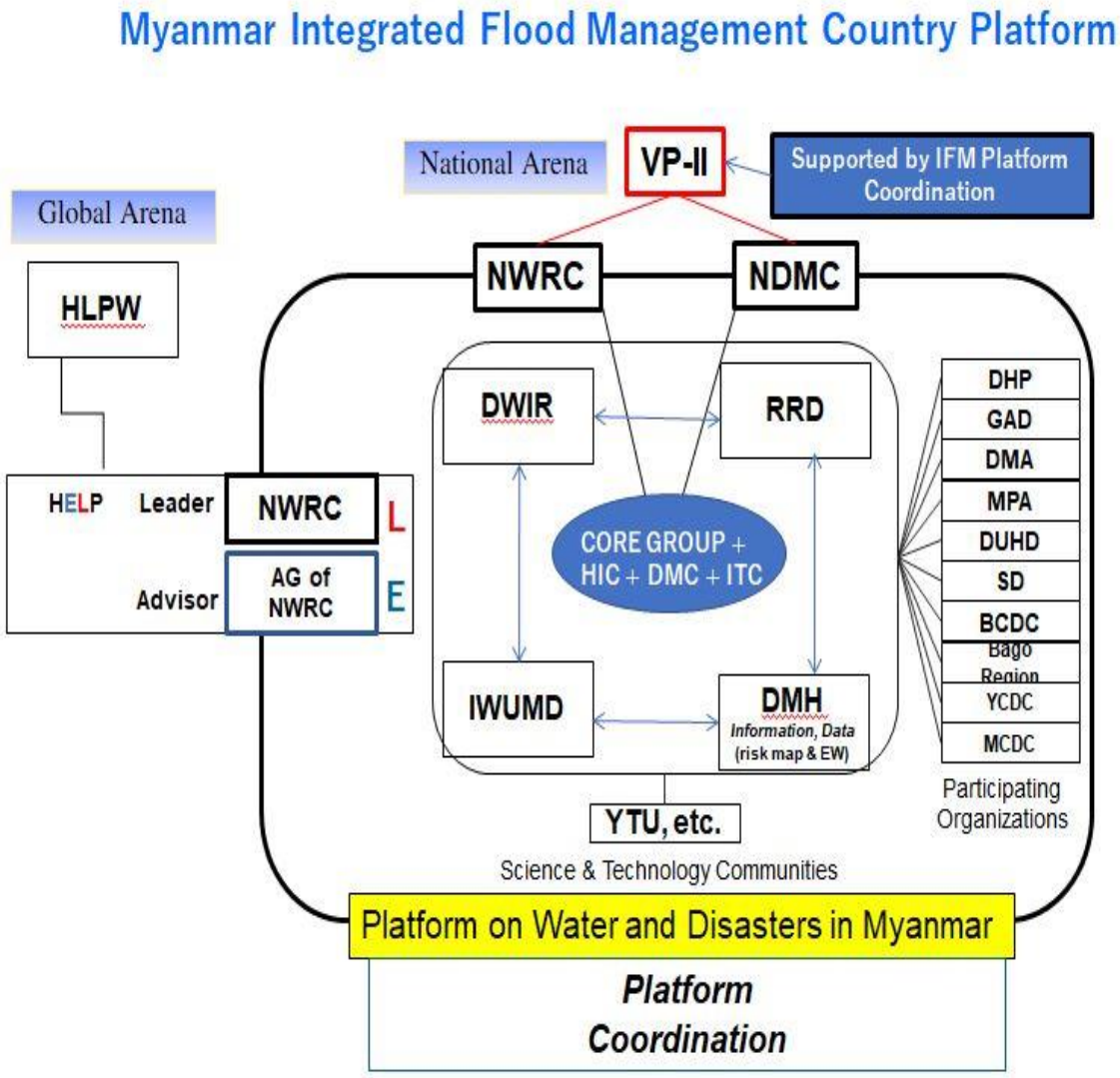
**Kubota is one of A list companies in Asia-Pacific about ESG investment by CDP water**

## One-Stop Service from EPC to Maintenance


https://www.kubota.com/products/water/index.html

# Enabling Policies for financing short and medium term water cycle management in Myanmar

- Holistic approach is needed with National Government Authority of Myanmar supported by multiple external financing.
- Necessity to create a virtuous cycle of continuous re-enforcement between investments in Infrastructure, Data and Information, and Institutions
- The central government needs to designate a ministry and division responsible for urban water service by enacting the water law, developing various standards and subsidy program, establishing a monitoring system, etc

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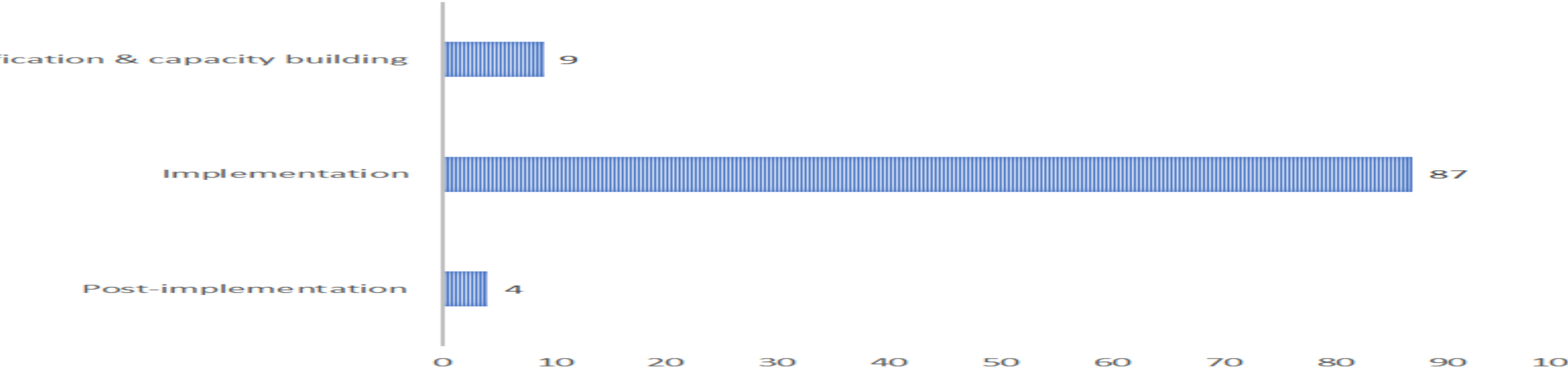
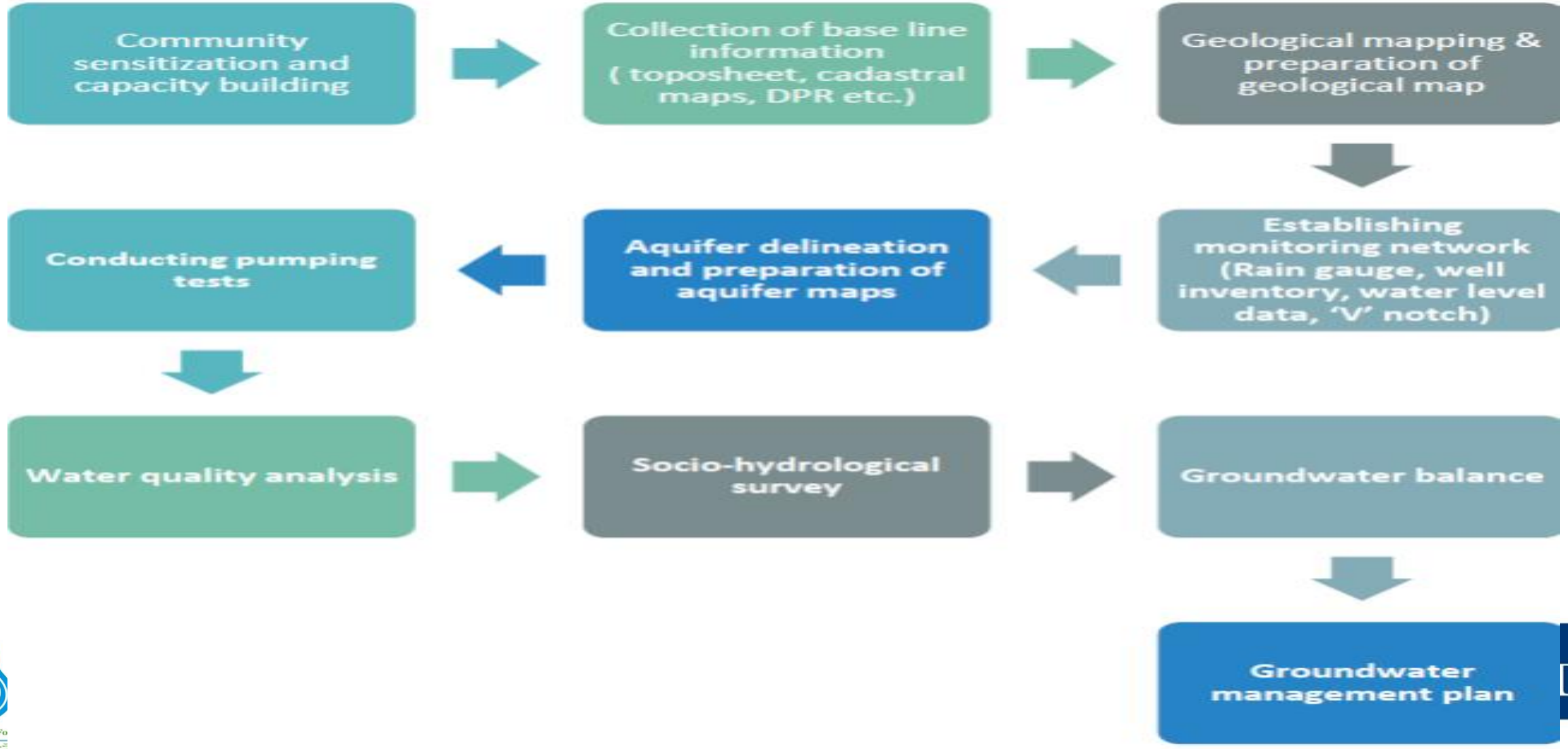
# se 3: Addressing India's Water Crisis (within semi- arid rural areas) using participatory groundwater Management Approach

## The PGWM Financial Model by Arghyam



# The Participatory Ground Water Management Approach



# Programme Design: Pre-Implementation, Implementation & Post Implementation

*The total PGWM cost per hectare accounts for US$ 200 to 300 per hectare.*

## Pre-Implementation (Baseline)

**Costs supported by DISTRICT ADMINISTRATION**

Inception Report

- Target district, Community Resource Persons (CRPs) from Govt. Departments and Local Institution
- Formation of master trainers or local experts team (20)

## Pre-Implementation (Capacity Building)

**Cost supported by Donor Agencies and Select Govt. programmes**

- Assessment Report on CRPs WRM training
- Baseline Report + Maps
- GW Monitoring Plan
- Recharge & demand management protocols
- WSP/DPR

## Implementation

**Cost supported by All Implementation through Govt. programmes and schemes**

- Progress Report on WSP execution by CRPs
- Verification Report by RPs
- Quality Assessment by CGWB

## Post Implementation

**Cost Supported by DISTRICT ADMINISTRATION + VILLAGE LEVEL INSTITUTIONS**

Resource Support Organization

- O&M framework by RP
- O&M fund collection by Local Institution
- Data monitoring by CRP to CGWB
- Annual WSPs

# CONCLUSION: WHAT IS NEEDED TO BE SCALED-UP

Sound water cycle management will create the opportunity for financing a comprehensive package of the implementation from the identification of intervention (investment), local capacities, technological innovation and creative partnerships.

- ✓ Empower the leadership of local governments to Improve scientific understanding in river basin management and flow of groundwater using participatory approaches
- ✓ Decentralized water management financing systems
- ✓ Ensure that “no one is left behind” by adopting appropriate technologies
- ✓ Examine how to provide service, revenue, and job opportunities,
- ✓ Policies that allow business partnerships to grow at the transboundary level of collaboration as the water cycle does not adhere to political boundaries
- ✓ Capacity building for system thinking to address nexus issues and complexities

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