

NARBO Activities toward the Next Stage TO ENHANCE WATER SECURITY - Revision of the IWRM Guideline -

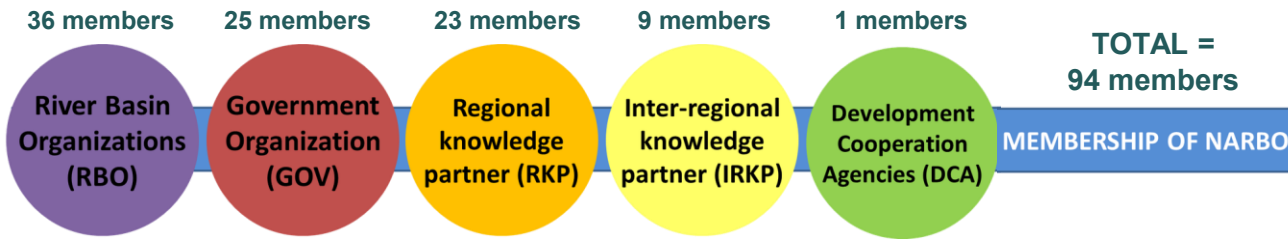
DR. Imam Santoso
Chairman of NARBO
CEO of Jasa Tirta II



**27th HIGH-LEVEL EXPERTS AND LEADERS PANEL (HELP) MEETING
ON WATER AND DISASTERS**

Paris, France, on Tuesday, May 5, 2026

Network of Asian River Basin Organizations (NARBO)



NARBO, established in 2004, aims to strengthen the capacity and effectiveness of river basin organizations (RBOs) in promoting Integrated Water Resources Management (IWRM) and improving water governance across Asia.

Activities

- Capacity Building
 - NARBO IWRM Training
 - The International Training-Workshop on IWRM at River Basin Level
 - Twinning Program between RBOs
- NARBO Webinars
- International Agenda
- Knowledge Products
- Others



NARBO IWRM Training, Malaysia (2018)



Twinning Program, Indonesia & Japan, (2019)



- NARBO Webinars
- International Agenda
- Knowledge Products
- Others



NARBO Webinar Series (2021, 2022, 2023, 2024, 2025)



IWRM workshop, the Philippines (2022)



6th General Meeting NARBO Field Visit to NARBO Forest, Jatiluhur (2017)



Water Organization Partnerships for Resilience Program (WOP4R, 2025-2026), ADB, WECS Nepal, NARBO, and Ministry of Public Works Indonesia



Participation at 10th World Water Forum (May 2024)



The 20th Meeting of HELP, Indonesia, (2022)



Regarding the future action plan, **NARBO with other international organizations will collaborate to enhance capacity, collaboration, promotion, discussions among RBOs, and implement IWRM & water governance through various activities, including:**

Co-Organization of RBO's events

Participation in Global Activities and Initiatives



Research and Development in the field of Integrated Water Resources Management (IWRM)

Revision of IWRM Guideline

Contribution to International Publications

Maintaining the collaboration that has been established in the 10th World Water Forum

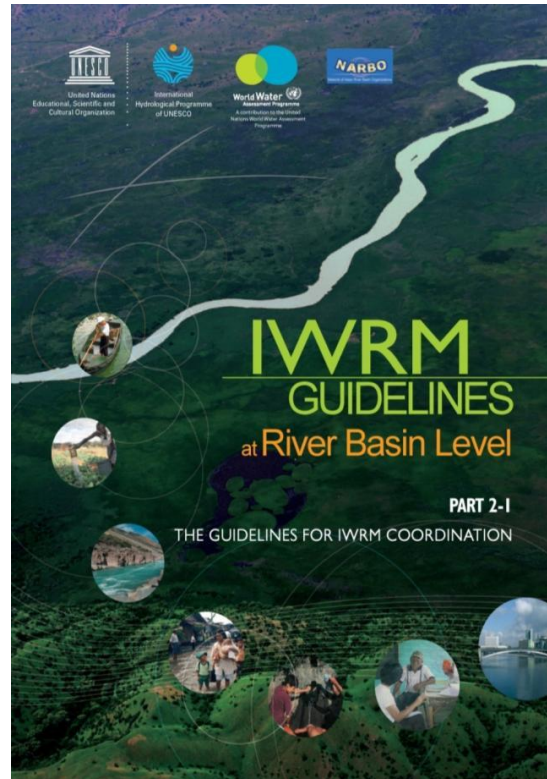
NARBO's : The Existing IWRM Guideline

Produced by UNESCO, NARBO, and the others in 2008

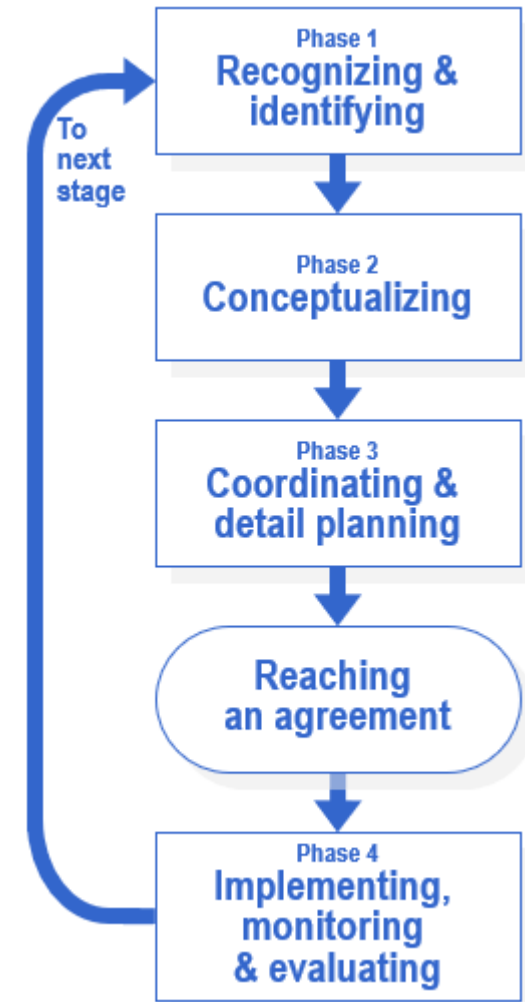
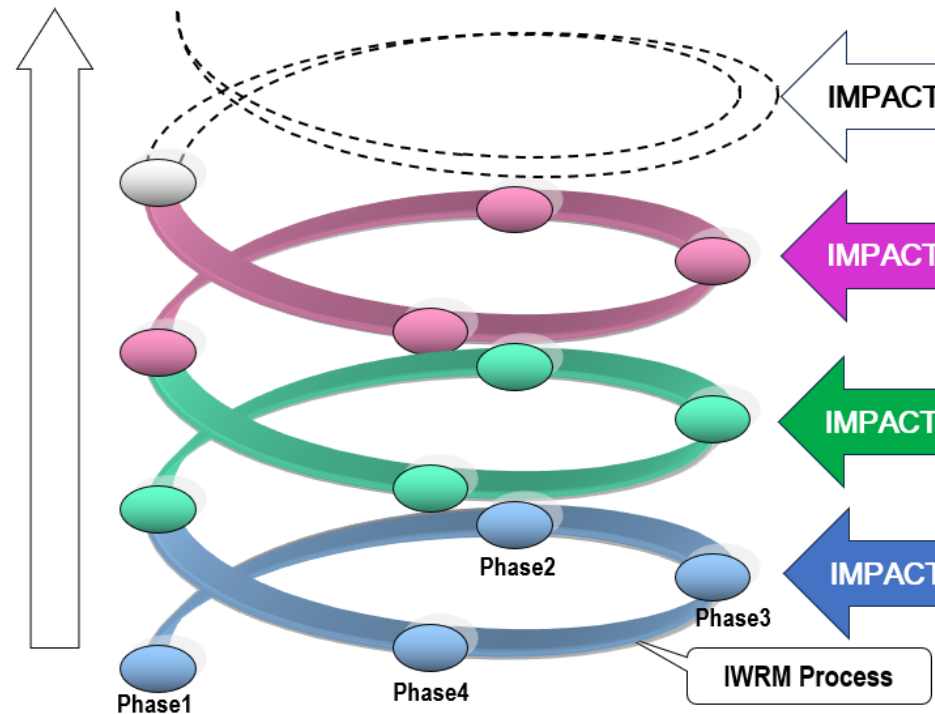
- Part 1 Principles
- Part 2-1 The Guidelines for IWRM Coordination
- Part 2-2 The Guidelines for Flood Management
- Part 2-3 Invitation to IWRM for Irrigation Practitioners
- Part 2-4 Guidelines for Environment

Purpose of these Guidelines

The purpose of developing these Guidelines is to facilitate the **practical implementation of IWRM at the river basin level**, relying on available resources by making the existing system work more effectively.



Progress of IWRM



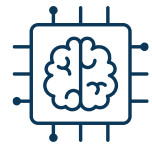
Why IWRM Guidelines Need Updating?



During the 5th NARBO Webinar on April 21st, 2025, **Prof. Shahbaz Khan, The Director of UNESCO Regional office for East Asia**, highlighted **key gaps** and **emerging challenges** in water resources management.



1. **Significant gap data** between hydrological science and local water management which **poses a major problem for water governance**

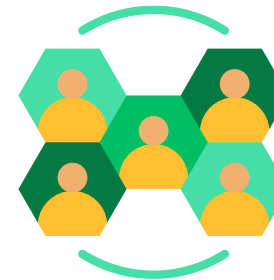


2. Challenge of how to **integrate IWRM** with AI, big data sharing, new modelling approaches **across a wide range of sectors**

UNESCO believes that after more than a decade, the **IWRM Guidelines need to be revised** to include the utilization of large-scale hydrological and meteorological data, satellite data, best IWRM practices, infrastructure developments, and technological innovations such as IoT and AI.



NARBO responses to these issues:



Over 22 years since NARBO's establishment and 18 years since the IWRM Guidelines created, Southeast and South Asia have experienced **remarkable economic development**, while the social and natural environments of river basins have also **changed dramatically**.

Based on the **NARBO Future Action Plan** and **UNESCO inputs**, the IWRM Guidelines need to be revised by integrating Open Science to address current gaps, emerging challenges, and future water management needs.

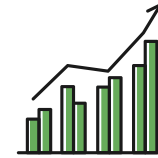
Revision of IWRM Guidelines through the Integration of Open Science Principles

NARBO'S Future Actions : Revision of the IWRM Guideline



NARBO responses to these issues:

Over the past two decades since the establishment of the IWRM Guidelines, many countries in Southeast and South Asia, where NARBO member organizations are located, have experienced significant changes.



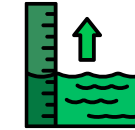
Rapid socio-economic growth and increasing water demand



Accelerating glacier loss in the Hindu Kush & Himalayas threatening regional water security



Rising risks of extreme floods & droughts



Sea level rise posing serious threats to island nations in the Asia Pacific



To address the issues outlined above, **NARBO** in collaboration with **UNESCO-IHP** is initiating the **revision of IWRM Guidelines**, to help water organizations achieve stronger IWRM.

With the revision of the IWRM Guidelines, NARBO is expected to make meaningful contributions that will significantly enrich discussions within **HELP** and, consequently, at **UN Water 2028**. These contributions are as follows:



1. **Creating a platform for the Asia-Pacific region** to build policy consistency and formulate a regional message for the 2028 UN Water Conference



2. **Towards strengthening the resilience of the entire social system** including managements of water resources, flood risk, food, health, and education through:

- Advancing Data-Driven Innovation & Digital Water Systems
- Enhancing Governance, Policy Alignment & Strategic Decision-Making
- Strengthening Climate Resilience through IWRM
- Mobilizing Inclusive Action, Investment & Community Empowerment



3. **Contributing to key messages for the Disaster Risk Reduction (DRR) agenda beyond 2030** through the application of the revised IWRM guidelines.



THANK YOU