NARBO

Network of Asian River Basin Organizations

Aims of River Basin Organizations are to contribute to the social stability and economic growth.

ADB | ADBInstitute | JWA Japan Water Agency | CRBOM

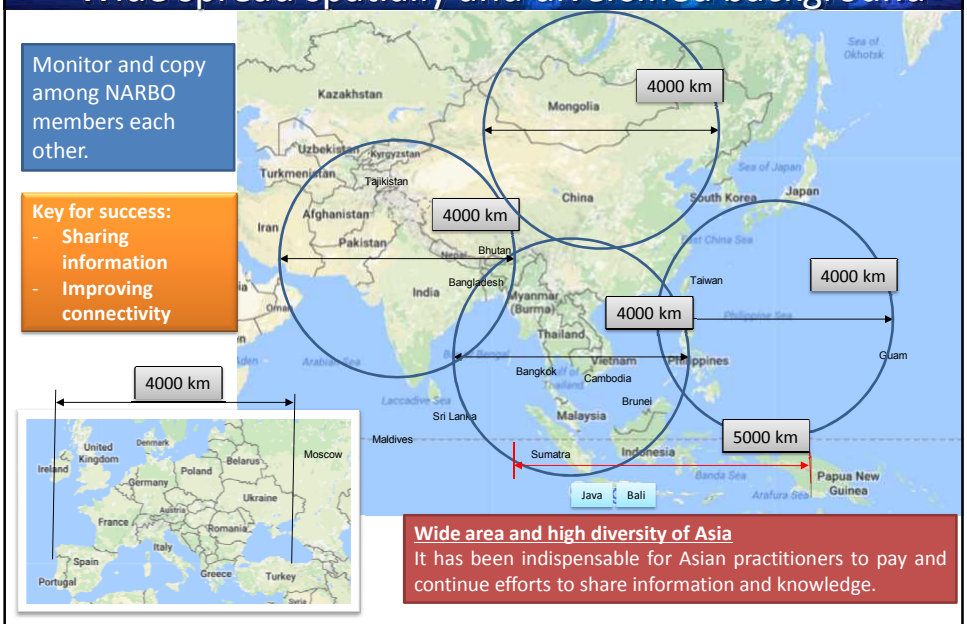
Since 2004

http://www.narbo.jp/

Asia and Pacific region
Wide spread spatially and diversified background

Monitor and copy among NARBO members each other.

Key for success:
- **Sharing information**
- **Improving connectivity**



Wide area and high diversity of Asia

It has been indispensable for Asian practitioners to pay and continue efforts to share information and knowledge.

6th General meeting in Indonesia (February 2017)

"Regional public goods in Asia"

Strengthening capacity of river basin organizations (RBOs) to promote the integrated water resources management (IWRM) principle

Supporting on-going and post ODA activities in collaboration with development partners e.g. ADB, JICA, WB, UNESCO and UNESCAP

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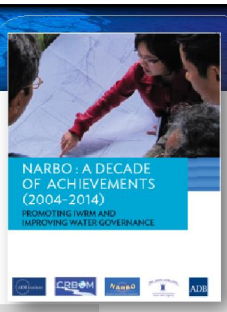
Voice from 6GM

To be the value-added network



New strategic directions
for all NARBO members
= water management practitioners

"Promoting water management fitting local conditions"

"Developing quality infrastructure"

"Sharing experiences, good examples and lessons learned"

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Consideration of sustainability and affordability

Photo by Dr. Sugiura, M. Japan Water Agency






Old electric facilities

Enough capacity of the pomp repair workshop and procurement of spare parts?

Malfunctioned water pomp and motor

Appropriate and applicable approach

Indonesia

Sustainable asset management

Installation of the field data monitoring and management system after prudent comparison of several countries' system at the sustainable point of view.

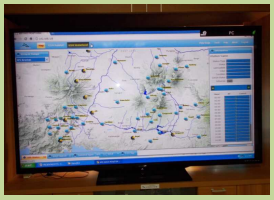
Source: Water Resources Corporation 2, Indonesia (PJT 2)

Appropriate and applicable approach

Indonesia

Source: Water Resources Public Corporation 1, Indonesia (PJT 1)

Office for observed data collection



Display (observed rainfall)

Data processing

Transceiver (mobile phone)

Developed by PJT1, Indonesia and 100% working !

Observational point (water level)

Transceiver (mobile phone)

Water level gauge

Observational point (rainfall)

Transceiver (mobile phone)

Rain gauge

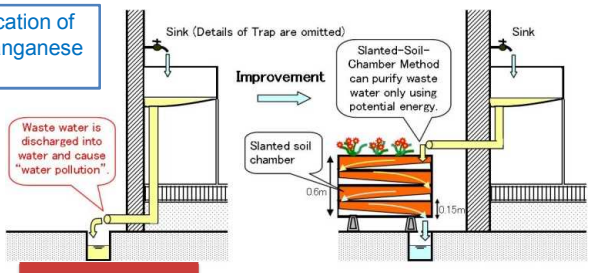
Key for success: **All the parts could be procured from the local market with low cost**

Appropriate and applicable approach

Community based water treatment in Bangladesh, Nepal, Viet Nam, and Japan

In Bangladesh, the function of purification of metals such as arsenic, iron and manganese in groundwater were confirmed.

Japan



Bangladesh

Metallic contamination (exp. Arsenic)

Key for success: **Low cost, simple & powerless system**

Appropriate and applicable approach

Environment friendly bank protection only using local materials in Lao PDR and others

Vietnam **Lao PDR**

Only use fascine and stones

This method was introduced and developed in Japan with Dutch engineers early 20th century.

"*Soda*-mattress" used for foot protection has high flexibility, so it is less influenced by fluctuated river bed.

It is applicable for foot protection with slow-flowing rivers.

Materials used for fascines are mainly broadleaf trees which are readily available locally.

Key for success: **Use of low-cost domestic materials**

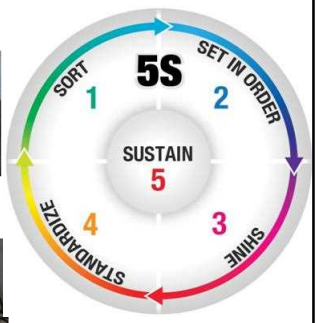
Appropriate and applicable approach

Vietnam

Source: Web of VAWR

Institute for Pump and Water Resources Machines

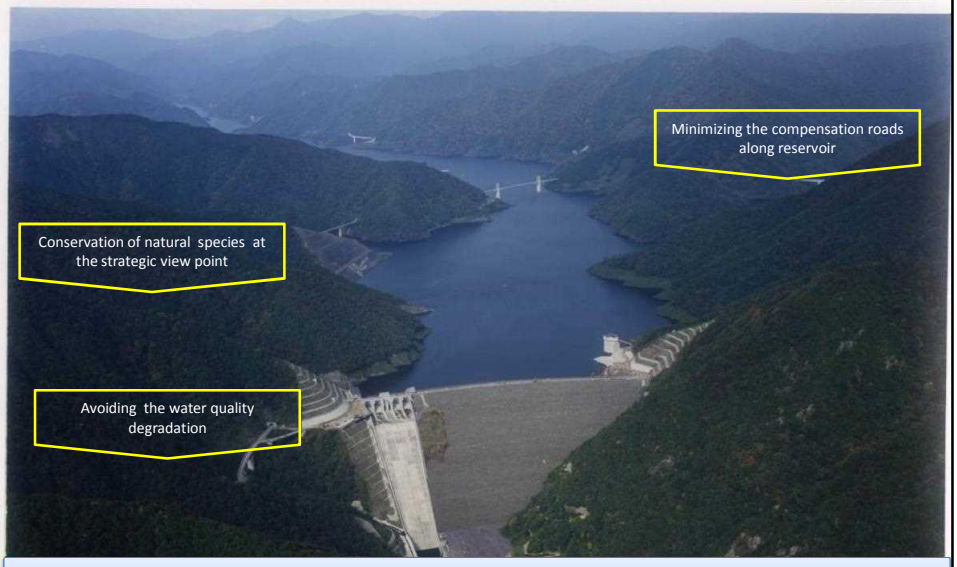
Japan



Source: ETRUST

Pump repair workshop in Japan.

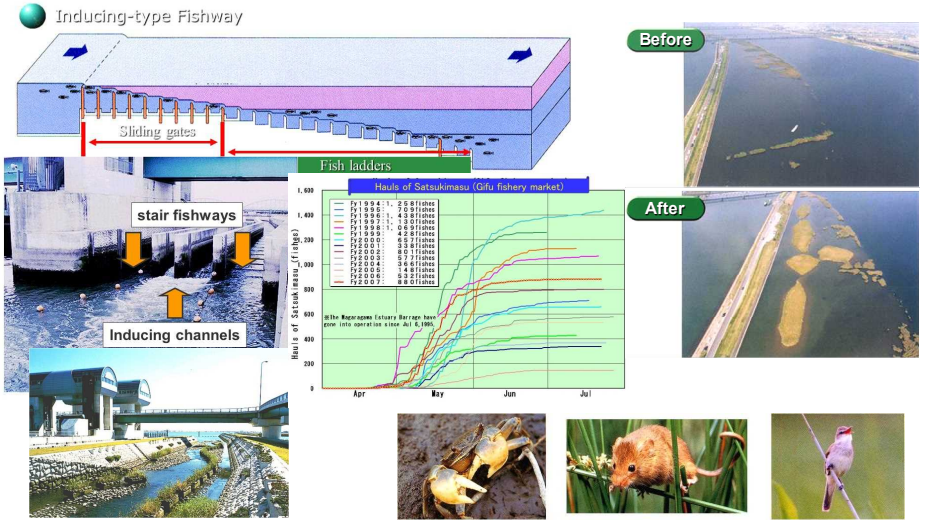
Policy approach for the mitigation of environment



The Tokuyama dam project also implemented a various and lot of environmental conservation programs in collaboration with organizations concerned and resettled peoples.

Environmental Conservation with KAIZEN (structural improvement and continuous monitoring)

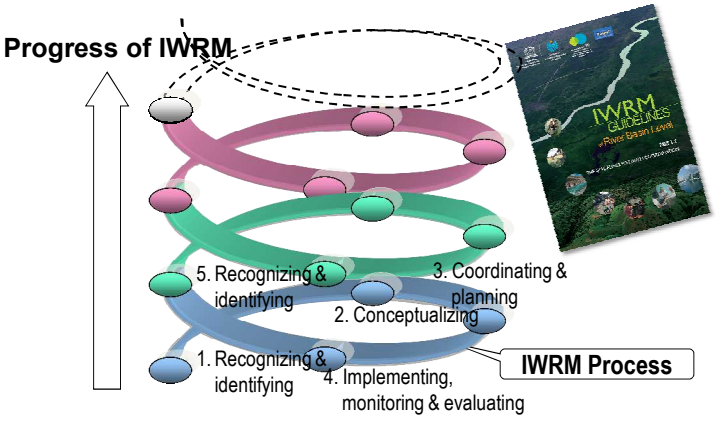
The pro-active policy approach at the impactful investment point of view makes the effective and efficient profit especially on the environmental conservation. In case of the Nagaragawa estuary barrage, a various measures on environmental conservation approach are bringing much effects.



Value added activities of NARBO

- Knowledge and experience sharing
- IWRM Spiral model for step-wise water management improvement

http://www.hydrology.nl/ihppublications/169-iwrm-guidelines-at-river-basin-level.html



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Tree planting with boys & girls in the general meeting of NARBO arranged by PJT II, Indonesia

Hope to be the public goods for Asian water resources practitioners

JWA
Japan Water Agency

http://www.narbo.jp/

Thank you for your attention !