Water Governance & Law

In case of Japan

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A Regional Consultation Workshop on Improving Water Governance

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Contents

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   i  Integrated Water Resources Management Process
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   iii Many measures to implement WRM

II. Implementation of Law

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What’s the **Asian Development Bank Institute**?

**[Outline]**
- Established in December 1997
- A subsidiary of the Asian Development Bank (ADB)
- 55 staffs from 16 countries

**[Purpose]**
- Identification of effective development strategies
- Improvement of capacity for sound development management

[http://www.adbi.org](http://www.adbi.org)
**Relationship ADBI and Water**

- **Network of Asian River Basin Organization** was initiated by Asian Development Bank (ADB), ADB Institute (ADBI) and Japan Water Agency (JWA).

- Formally announced by signing the LOI on March 21, 2003, during the 3rd World Water Forum at Kyoto-Shiga, Japan.

- Established on February 24-26, 2004 in Malang, Indonesia.

**Ownership is the basis of network activity**
Goal and Objective of NARBO

Goal
To help to achieve

**Integrated Water Resources Management (IWRM) in river basins throughout Asia.**

Objective
To strengthen the capacity and effectiveness of RBOs in promoting IWRM and improving water governance, through training & exchange of information and experiences among RBOs and their water sector agencies & knowledge partner organizations.
IWRM Process

1. Recognizing & identifying
2. Conceptualizing
3. Coordinating & planning
4. Implementing, monitoring & evaluating
5. Recognizing & identifying

Impacts (Social, Environmental, etc.)

Progress of IWRM

Source: IWRM Guidelines by UNESCO
4 Periods according to the change of Economic Condition

- **DGP growth rate (%)**
- **Population**
- **GDP**

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<th>Period</th>
<th>GDP (Trillion YEN)</th>
<th>Pop. (Million)</th>
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(1) The Postwar Reconstruction Period (1945 – 1960)

1. Land Improvement Law (1947)
3. Electric Power Development Promotion Law (1952)
4. Waterworks Law (1957)
5. Specified Multipurpose Dam Law (1957)
"IWRM Spiral" concept model

Progress of IWRM

Impacts (Social, Environmental, etc.)

The Postwar Reconstruction Period (1945 – 1960)

IWRM Process
(2) High-Level Economic Growth Period (1960 - 1973)

- Yokkaichi Air Pollution
  Source: Yokkaichi-city

- Tokyo Olympic (1964)
  Source: Japan Olympic Association

- Drinking water delivery in drought
  Source: Tokyo-Metropolitan Water Bureau

- River Pollution of Tama river
  Source: MLIT, Government of Japan
(2) High-Level Economic Growth Period (1960 - 1973)

Promotion of water resource development
3. Revision of River Law (1964)

Measures to prevent ground subsidence
4. Industrial Water Law (1956)
5. Building Water Law (1962)

Measures to preserve water quality
6. Water Quality Conservation Law
7. Factory Effluent Control Law (1958)
8. Water Pollution Control Law (1970)
"IWRM Spiral" concept model

Progress of IWRM

Impacts (Social, Environmental, etc.)

High-Level Economic Growth Period (1960 - 1973)

IWRM Process
(3) Period of Stable Growth and the "Bubble" Economy (1973 - 1990)

Drought in Fukuoka, 1978
Source; Fukuoka City Water Bureau

Source; Foundation of River & Watershed

Source; Japan Water Agency
Need for a nationwide water demand and supply plan, based on a comprehensive, long-term perspective

1. Long-Term Water Demand and Supply Plan (1978)

Efficient implementation for water resource development such as dam construction

1. Special Measures Act for Reservoir Area (1973)

Measures to deal with frequent water shortages
"IWRM Spiral" concept model

Progress of IWRM

Period of Stable Growth and the "Bubble" Economy (1973 - 1990)

Impacts
(Social, Environmental, etc.)

IWRM Process
(5) Period of the “bubble economy” in the early 1990s to the present
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Consideration for environment and process

New efforts to secure water resources
   - Optimization of facility management
   - Diversion of water use rights to different applications
   - Reuse of reclaimed water and other

Need for comprehensive efforts
   1. New National Comprehensive Plan for Water Resources
(6) Future

Climate Change in Japan

Average rainfall trend
Variability

Annual Precipitation

Source: MLIT
"IWRM Spiral" concept model

Progress of IWRM

1. Recognizing & identifying
2. Conceptualizing
3. Coordinating & planning
4. Implementing, monitoring & evaluating
5. Recognizing & identifying

Progress of Water Governance

Impacts
(Social, Environmental, etc.)

Source: IWRM Guidelines by UNESCO
Water Resources Management by law

For: Promotion of water resource development to meet the rapid increase of water demand

Water Resources Development Promotion Law (1961)

Water Resources Public Corporation Law (1961)

Basic Plan for Water Resource Development ("Full Plan") for focused river basin
iii Many measures to implement WRM

- Fixed assets tax
- Grant for Power supply region
- Grant for Water resources region

Sustainable support system by Law

Municipality can develop and maintain their facilities and welfare for resident.

Source: MLIT, Government of Japan & Kiyokawa Village
Water right for hydropower was cancelled because illegal intake was done for 20 years. The point is that electricity which is generated by this hydropower plant is used for train system at Tokyo metropolitan area.

- Necessity of management against illegal action by law.
- Accountability of the authorized river manager.
II Implementation of Law

The article of 53rd of River Law
Coordination mechanism in case of drought

Amount of intake is discussed and decided there.

Source: MLIT, Government of Japan
III New Challenges

Water Right for Environment

Before

After

Urban Area

Irrigation canal

Paddy field Area

Maintenance of this canal is done by collaboration with local government, farmers association, regional community and volunteer.

Source: MOE, Government of Japan
"IWRM Spiral" concept model

Progress of Water Governance

1. Recognizing & identifying
2. Conceptualizing
3. Coordinating & planning
4. Implementing, monitoring & evaluating
5. Recognizing & identifying

Impacts
(Social, Environmental, etc.)

Source: IWRM Guidelines by UNESCO
We lost many things such as "Intact river".
Thank you very much for your kind attention.

More Information

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http://www.adbi.org

http://www.narbo.jp