



Japan Water Forum
日本水フォーラム

www.waterforum.jp

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3rd World Water Forum

March 16th – 23rd 2003, Kyoto, Shiga & Osaka

Forum

Total Number of Participants 24,060

-6,050 Overseas Participants

-Many VIPs

-8 UN Executive Secretaries

-140 Ministerial level

Number of Countries & Territories 183

351 Sessions

1,200 Registered Press

Mizu-En

Total Number of Visitors 225,000





Impact of the 3rd World Water Forum

Commitments & Actions

Commitment on more than 500 concrete actions

***From “conflict” to “sharing” of opinions
(privatization, dam development)***

Raising awareness on global water issues

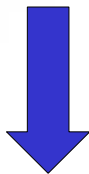
More than 10,000 articles published in the world

Input into UN and international processes

***G8 Evian Summit Chair’s summary and
Action plans***

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The Secretariat of the 3rd World Water Forum

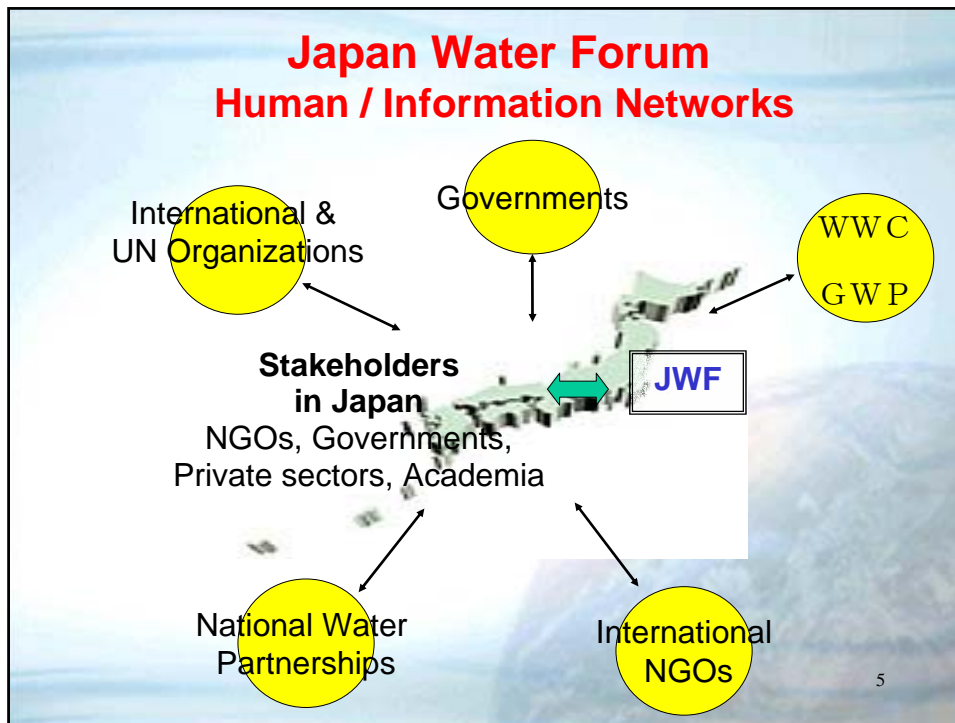


To maintain and expand
extensive networks

Japan Water Forum (JWF)

JWF is set up through cooperation of all stakeholders, including NGOs, Governments, Private Sectors and Academia in Japan for the purpose of solving water problems in the world.

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Officials of the JWF

President: Mr. Ryutaro HASHIMOTO
Former Prime Minister of Japan

Vice President: Mr. Hiroshi OKUDA,
Chairman of Japan Business Federation (Nippon Keidanren)

Vice President: Ms. Yukiko KADA,
President of Forum for Children, Rivers and Neighboring Environment

Vice President: Mr. Norihito TAMBO
President of the University of the Air
Former President of IWA

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Japan Water Forum

1. Think Tank Functions

- Research Activities
(w/ WB, IDB, JBIC and Japanese Government)
- Supporting the Chair of UN SG's Advisory Board

on Water & Sanitation

2. Human/Information Networks

- Organizing conferences/workshops
- Supporting the 4th World Water Forum

3. Capacity Building and Educational Activities

- Children & Youth Water Forum
- Water Publications

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Japan Water Forum Week

	Monday December 6	Tuesday December 7	Wednesday December 8				Thursday December 9	Friday December 10
Exhibition	11:00-18:00	8:30-18:00	8:30-18:00				8:30-17:00	
Morning	10:00-11:00 JWF Inaugural Meeting	8:45-12:00 WRM Conference Plenary 1 WRM-Sustainable Water Management	9:00-11:00 Session 3 Risk Management in WRM	9:00-11:00 Session 5 The role of the N-N Partnership	9:00-15:00 Session 6 @ Arakawa River Water use for various needs	9:30-15:00 Session 7 @ Tsunami River Integrated River Basin Management (RBM)	9:00-11:00 Second Meeting of the UN SG'S Advisory Board On Water and Sanitation Opening	9:00-12:00 Advisory Board Plenary
			11:00-13:00 Session 4 WRM for Environment	11:00-13:00 Session 2-2 WRM in Practice (GEF)			11:00-12:30 Advisory Board Working Group Session	
Lunch time								
Afternoon	13:30-17:30 WRM Conference Opening and Public Symposium	13:00-15:00 Session 1 Governance, Capacity Building and Public Participation	13:00-15:00 Session 2-1 WRM in Practice (GEF)	14:00-16:00 Session 2-3 @ Prince Hotel Discussion Panel (GEF)		14:00-17:00 Special Program N-N Partnership Workshop on Consensus Building Process	14:30-17:00 Advisory Board Working Group Session (cont.)	
		16:15-17:45 WRM Conference Plenary 2 Brainstorming Session on Draft Recommendation	16:15-16:50 Ad hoc Session Towards the 4 th World Water Forum					
			17:00-18:30 WRM Conference Plenary 3 Presentation by chairs of the Parallel Sessions Discussion on the revised Recommendation					
Evening			19:00-20:30 Asia and the Pacific Link Off Meeting of the 4 th World Water Forum - for Effective Asian Coordination towards Mexico					

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Conference Overview

December 6 – 8, Tokyo, Japan

Organized by: **Japan Water Forum**
Co-organizers: **UNDESA, GEF, WWC, GWP, DWF, NWP**

More than 200 participants
from all around the world



Objectives:

- To exchange and discuss knowledge and experience to translate the **IWRM** concept into actions
- To develop **recommendations regarding the 2005 goal of preparing integrated water resources management and water efficiency plans, committed in the Johannesburg Plan of Implementation**

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05/12/2004
JWF

International Conference on IWRM, Tokyo, Japan Dec 6 - 8 Draft Recommendation*

1. All countries should prepare integrated water resources management and water efficiency plans (IWRM Plan¹) by 2005 as committed in the Johannesburg Plan of Implementation
2. The plan should focus on the followings:
 - A. The ways the country will change water management in the context of IWRM they envisage
 - B. The first-step action(s) that the country plans to take in order to move towards their version of IWRM
3. Emphasis should be put on the strategic planning and mobilization process of IWRM, ensuring the participation of various stakeholders

Introduction

Water is essential to human development. Water supports economic growth through, for example, food production, industrial processing, energy, transportation and tourism. Water also helps sustain a healthy population and contributes to the quality of life of households and population at large by providing appropriate drinking water supply combined with appropriate sanitation. On the other hand, water can also cause social and economic damages through water related disasters, such as floods, droughts and epidemics. The relevance of the Millennium Development Goals impels us to consider that water plays an important role in meeting these goals and achieving sustainable development.

However water is a finite resource, not only essential for all of humanity's endeavors but also vital for sustaining life on Earth. Fragmented water use, management and development are often the causes for constant trade-offs and conflicts among users, uses, development and environmental goals. Such situations have driven the quest for more integrated and coordinated management of water and other related resources.

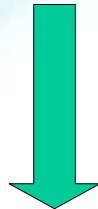
¹ In this document, integrated water resources management and water efficiency plan is being referred to as IWRM Plan (a decision provided in page 3, first paragraph)

*Please note that a modification has been made to the version included in the conference bag

International Conference on IWRM

December 6 - 8, 2004

Recommendation (draft)



- ← Symposium
- ← brain storming
- ← drafting advisor's meeting
- ← sessions (organized by JWF, GEF, N-N, etc.)

Recommendation



UN SG's Advisory Board on Water and Sanitation (December 9-10)



IWRM Plan (2005)

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UN Secretary General's Advisory Board on Water & Sanitation

Chair : Ryutaro HASHIMOTO

19 Board Members



**Japan Water Forum
supports**



1st Meeting, 22-23 July 2004 in the
United Nations Headquarters in New
York

2nd Meeting, 9-10 December 2004 in Tokyo

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UN Secretary General's Advisory Board on Water and Sanitation 2nd Meeting



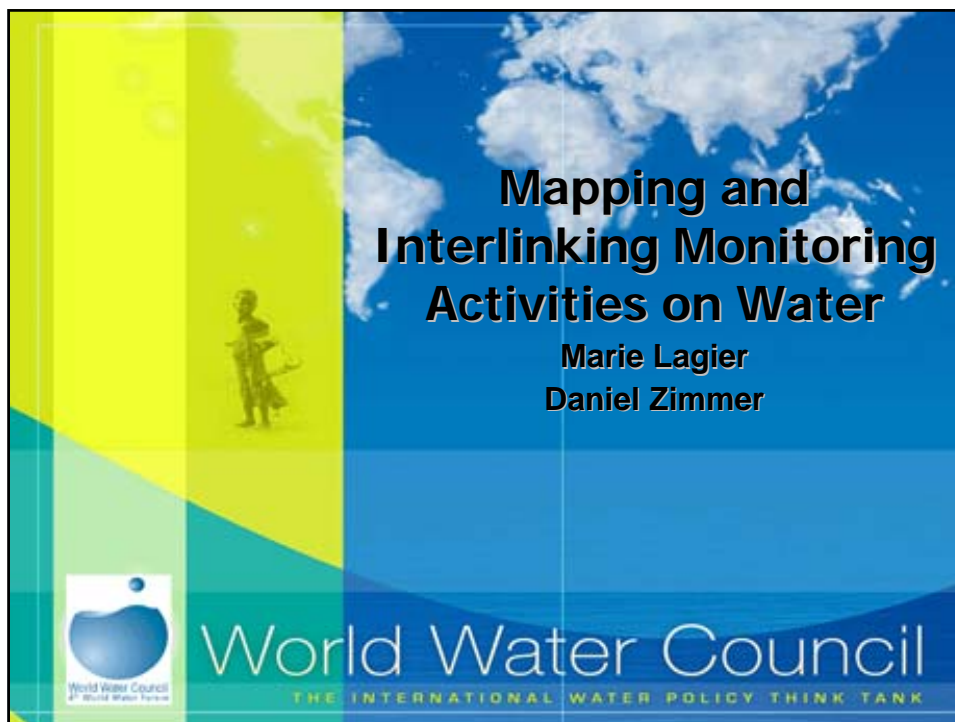
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(Tokyo IWRM Conference)

Urgent Appeal to the UN Advisory Board on Water and Sanitation

- 1 . The following target should be adopted as UN MDGs:
To halve, by 2015, the number of flood-related human loss of life.
- 2 . To achieve the target, the following actions should be taken by all countries as important step:
 - Water-related risk management strategies should be incorporated within the IWRM,
 - Establish and reinforce monitoring, forecasting, warning and emergency response systems,
 - Establish global solidarity support system for flood disasters.

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JWF Monitoring Activities

- 1. PWA (GoJ)
(Portfolio of Water Actions)**
- 2. Progress of IWRM Plan**
- 3. FVI
(Flood Vulnerability Index)**

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1 . Portfolio of Water Actions (PWA)

- The PWA is a compilation of concrete actions submitted voluntarily from
 - 43 governments**
 - 18 international organizations.**
- More than **500 actions** were presented.

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PWA-Website Network

Search for Water Actions

Updated Water Actions

Event Information

Download for the User's manual

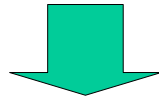
Water Actions by Themes

Pls. ACCESS www.pwa-web.org !!!

PWA Sheet	Date	Dec. 17, 2003
	Region	Asia
	Country	Japan
	Sectorial Topic	Water Resources Management and Benefit Sharing
	Actor(s) (Nation (Ministry, Agency)/Organization)	- Ministry of Land, Infrastructure and Transport, Japan(MLIT)- Ministry of Economy, Trade and Industry(METI)- Ministry of Agriculture, Forestry and Fisheries(MAFF) - Asian Development Bank(ADB)
Actor/ Partner	Partner(s)	GWP, IWRM, Mekong River Commission, IFPRI, Asia Pacific Association of Hydrology Engineers(APAHE), Murray-Darling River Basin Commission, River basin organizations in developing countries Laos, Malaysia, Philippines, Sri Lanka, Thailand, and Viet Nam
	Title	NETWORK OF ASIAN RIVER BASIN ORGANIZATIONS (NARBO)
	Objective	- Regional cooperation in establishing Network of Asian River Basin Organizations
Project Descriptions	Contents	(i)To advocate and raise awareness for IWRM in the region among water sector apex organization, good practices, and lessons learned among the organizations concerned(ii)To establish a common policy, institution, and legal framework for IWRM(iii)To coordinate (ⅴ)to foster regional cooperation for improved management of transboundary river basins
	Means of Implementation	- Hold a regional workshop-Create the web site of NARBO - Diagnose issues and solutions- Organize training courses for NARBO members
	Target Year	February 2004/organize seminar, August 2005/hold a preparatory meeting for WWF4, March 2006/hold a preparatory meeting for WWF5
Expected Outcomes	Target Area / Place	Asian and Pacific Region
	Expected Outcome(S)	- water sector will be properly reformed- institutional capacity will be strengthened- public participation will be enhanced- commitments in IWT made at the 3WWF by the organizations concerned will be implemented
	Relevance to the Plan of Implementation of WSSD	Para 25
State of Progress	Progress	from July to September 2003/confirmed the will of the organizations to join NARBO, No formal agreement yet
	Link	http://www.narbo.jp/
	Other Information	
	Contact Person	MLIT, Water Resources Planning Division Land and Water Bureau +81-3-5253-8390, 8446, Japan Water Agency +81-48-600-6553
	Position	Director, Strategy & Coordination Division,JWA
Contact Person	Email	takeyoshi_sadahiro@water.go.jp
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	Fax	+81-48-600-6550
	Address	11-2 Shintoshin, Chuo-ku, Saitama-shi, Saitama-pref., JAPAN #330-6008

PWA

- **Mutual Monitoring**
- **Sharing Information**



- **Enhance Transparency**
- **May Attract Other Countries/ Donors/ Experts**

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2 . Progress of IWRM Plan

All countries should prepare IWRM Plans as committed in Johannesburg Plan of Implementation

- **CSD 13**
- **MDG Review Meeting**
- **4th World Water Forum**

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Survey on the status of IWRM

Simple questions on the current status of water management in the country



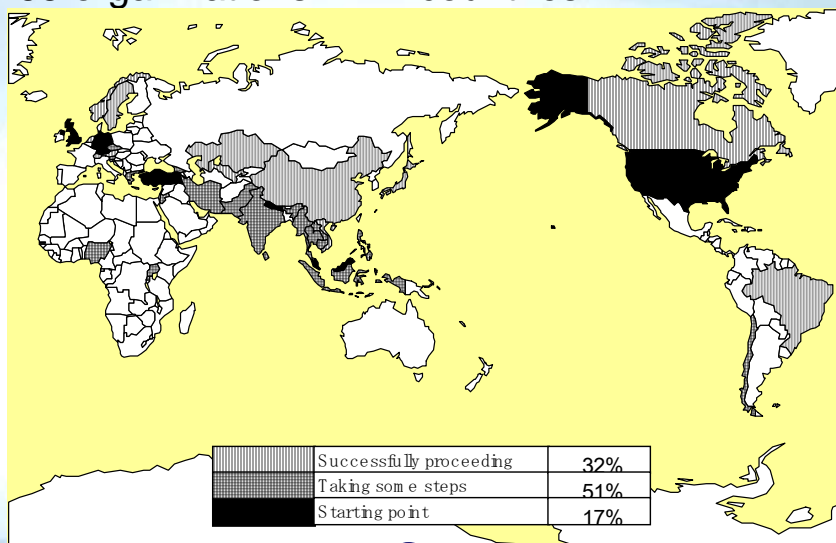
- Considering the natural system in a holistic manner
- Coordination among various water uses and institutional sectors
- Participation of and coordination among water related stakeholders

Current status of IWRM

→ a discussion material for the conference 23

Current status of IWRM (tentative)

63 organizations in 41 countries



iwrm_survey@waterforum.jp 24

3 . FVI : Purpose of the study

- Development of the Flood Vulnerability Index (FVI) at basin level.



FVI can be an important
policy-making tool for
raising public awareness

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4 key components

FVI

Meteorological
Component

Hydrogeological
Component

Socio-Economic
Component

Countermeasure
Component

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List of Indicators

Component	indicator
Meteorological	Frequency of heavy rainfall
Hydrogeological	Specific discharge
	Number of typhoon
Socio- Economic	Population in flood plain
	Property in flood plain
	Child mortality rate
	Elderly and child population rate
	TV penetration rate
	Status of typhoon forecasting
	Literacy rate
Countermeasures	Investment amount for river works
	Status of non- structural measures

Two types of FVI

- **FVI_H** : Focus on the human damage (i.e., casualties)
- **FVI_M** : Focus on the material damage (i.e., economic loss)

Decision-makers can select!

Multiple Linear Expression

$$\text{FVI}_H \quad \frac{y}{x_{pop}} = a_1x_1 + a_2x_2 + \cdots + a_nx_n + a_0$$

$$\text{FVI}_M \quad \frac{z}{x_{pro}} = b_1x_1 + b_2x_2 + \cdots + b_nx_n + b_0$$

x_{pop} : population in flood plain

x_{pro} : property in flood plain

y : casualties

z : damage cost

x_n : indicators

a_n, b_n : coefficients.

- Target : the whole of Japan
- Data period : 50 years (1946 - 2000)

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Estimated Equation of FVI_H in Japan

$$\frac{y \times 10^6}{x_{pop}} = -0.3814x_1 - 42.97x_2 - 0.3408x_3 + 16.73x_4 + 0.1488x_5 - 57.93$$

y : casualty

x_{pop} : population in flood plain

x_1 : TV penetration rate (%)

x_2 : investment amount (\ 100 million)

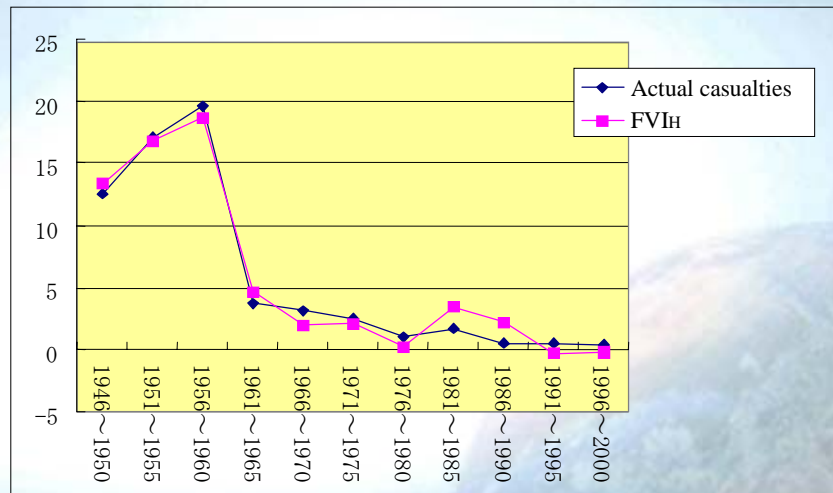
x_3 : advancement rate in high schools

x_4 : elderly population rate (%)

x_5 : specific discharge ($\text{m}^3/\text{s}/100\text{km}^2$).

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Chronological change of FVI_H



The coefficients of determination is 0.98

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Estimated Equation of FVI_M in Japan

$$\frac{z}{x_{pro}} = -0.00029x_1 - 0.0007926x_2 + 11.21x_3 + 4.551 \times 10^{-6}x_4 + 0.0215$$

z : damage amount (\ 1 million)

x_{pop} : property in flood plain

x_1 : TV penetration rate (%)

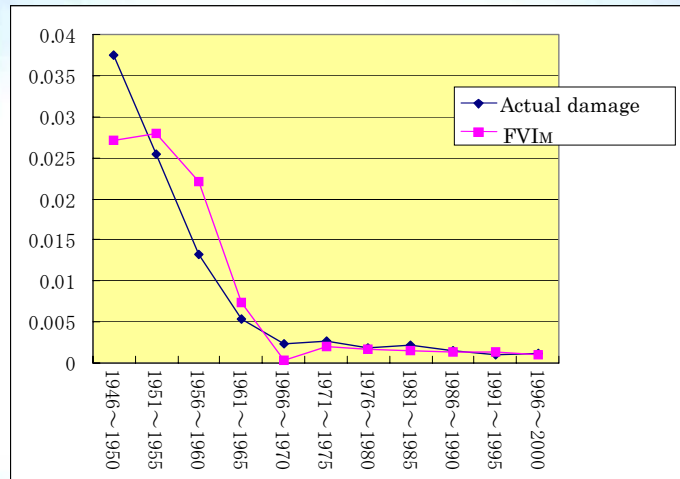
x_2 : investment amount (\ 100 million)

x_3 : frequency of heavy rainfall

x_4 : specific discharge ($m^3/s/100km^2$)

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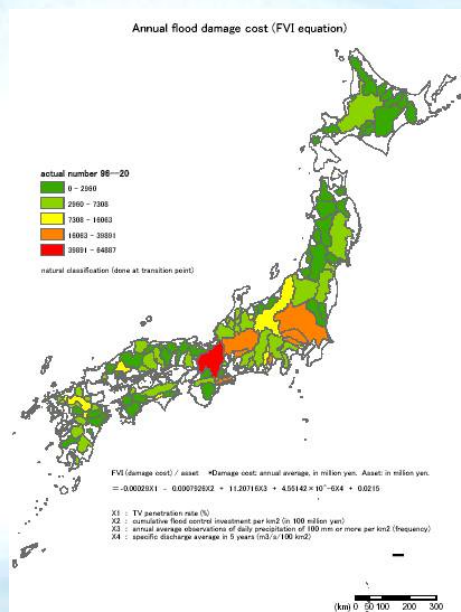
Chronological change of FVI_M



The coefficients of determination is 0.86

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FVI map of Japanese basins



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Flood Vulnerability Index

- Index
- Political Tool
- 4 Key Components
- Multivariate Analysis
- Different Scenarios
- Japan, then to the World

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North-North Partnership for Water

- A loose network in the North for sharing knowledge, linking stakeholders, raising awareness and organizing meetings
- JWF was identified as the secretariat of this initiative during the 3rd World Water Forum
- Apply the outcome of North-North Network in solving water issues in the developing regions



< Signing of MOU for North-North Network >

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JWF as a secretariat for North-North Partnership

ACTION ORIENTED!!

- **Thursday December 9, 14:00 – 17:00**

Special Program

**“N-N Partnership Workshop on
Consensus Building Process”**



- **Friday December 10, 8:30 – 17:00**

Special Program

One day Excursion to Water Treatment Plant

(by some Japanese Private Companies, JWF membership)

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Northern Water Network

The core members are: Australia, Denmark, Japan, The Netherlands and Sweden, WWC, GWP.

We will support other countries in their development of similar initiatives (USA, Canada...)

We will work out co-operational modalities; how to share experience and information, specify our roles and functions and collectively develop a work-plan for closer co-operation etc.

We will build the further process around ongoing global activities, such as the World Water week in Stockholm and the World Water Forums.

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Towards the 4th World Water Forum in Mexico City in March 2006

JWF is expected to play roles of Asian Regional Coordinators

- to draft the regional position papers
- to make inputs from the regions at the Forum
- to organize the regional preparatory meetings
- to help organize local workshops and to find the cases of local projects to be presented at the Forum
- to help the selection of the topic sessions

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