



10th World Water Forum - Water for Shared Prosperity

JAPAN WATER FORUM

21 May 2024 - Bali, Indonesia

1 Keynote Lecture

The Bandung Spirit Water Summit by His Majesty the Emperor of Japan

Video: www.kunaicho.go.jp

2 Nature-based solutions and ecosystem protection and restoration to improve water supply

The effective deployment of nature-based solutions and healthy water-related ecosystems are essential to ensure water and economic resilience to shocks and long-term prosperity. The session focused on showcasing the best practices and challenges for the implementation of nature-based solutions for sustainable water supply.

Ecosystem Services of Paddy Fields as Green Infrastructure

NODA Keigo, Associate Professor at the University of Tokyo

- **Multiple** benefits from paddy fields as green infrastructure: groundwater recharge, flood mitigation, desalination. No maintenance costs are required.
- **Combination** of green and grey infrastructure, such as dams and canals, is necessary to supply ecosystem services.

Seeking Ways to Improve Nature-Based Solutions in Agriculture

MATSUSHITA Kyohei, Professor at Shiga University

- **Externalities** are the mechanism through which agricultural nature-based solutions improve our welfare.
- **Additional** costs may be incurred upon by farmers to provide important external values for our well-being.
- **Payment** for ecosystem services may compensate as government support or market price premium.

3 Incorporating Sociocultural Dimensions in Water Resources Management: Policies, Practices, and Challenges

The session emphasized the need for policies and strategies that integrate sociocultural aspects into water resource management. The lessons learned underscore the importance of integrating local knowledge, traditions, and customs into water resource management approaches, promoting cooperative governance, and adapting strategies to evolving sociocultural dynamics.

Sociohydrological Development in Japan

OKI Taikan, Vice-President of the Japan Water Forum (2024 Stockholm Water Prize)

- **Evaluate** the benefits of flood management systems, in coproduction with local communities.
- **Use** the results of such evaluation to build consensus in the community.

- **Traditional** circular levees resisted better to the 1976 flood in Anpachi than modern ones.

Sustainable Water Resources Management in Asia: A Sociocultural Perspective

ISHIWATARI Mikiyo, Board Director, Japan Water Forum

- **Local** knowledge, traditions, and customs need to be integrated to incorporate sociocultural aspects.
- **Cooperative** approach is key, especially community participation.
- **Indigenous** knowledge useful to adapt to climate change with state-of-art technology.

Novel Approaches in Flood Management Policies in Japan: Integrating Sociocultural Wisdom in Climate Change Adaptation

IKEUCHI Hiroaki, Chief Official, Ministry of Land, Infrastructure, Transport and Tourism

- **New** policy of River Basin Disaster Resilience and Sustainability by All to adapt to climate change.
- **Traditional** measures are used, in addition to conventional structure measures.
- **Storage** function preservation area approach inspired by the open levee indigenous method.



4 Smart Water Management for Resilience and Inclusive Water Services

Water scarcity is a growing issue. According to several UN reports, it will directly affect nearly 20% of the human population by 2025. By 2040, roughly 1 in 4 children worldwide will be living in areas of extremely high-water stress. Smart water management systems can provide a more resilient and efficient water supply system, reducing costs and improving sustainability.

Introduction to Japanese Initiatives on Sewage Management

KUDO Makoto, Director for Overseas Projects of Water Supply and Sewerage; Ministry of Land, Infrastructure, Transport and Tourism

- **Comprehensive** flood control by sewerage needs to combine hardware and software.
- **Circular** economy of wastewater management. Artificial intelligence used for energy saving.
- **Cooperation** with other countries through the Asia Wastewater Management Partnership for SDG 6.3.