Governance for Integrated Approaches to the SDGs: Applications to Water Management
Understanding SDG Synergies and Trade-offs for Sustainable, Resilient and Inclusive Development
Thematic Track-4
14:30-16:00

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My entry into environmental policy research began with China’s yellow river.
I soon learned that water is a common pool resource with multiple purposes
6.1 Safely managed drinking water services (WHO, UNICEF)
6.1.1
6.2 Safely managed sanitation and hygiene services (WHO, UNICEF)
6.2.1
6.3.1 Wastewater safely treated** (WHO, UN-Habitat)
6.3.2 Good ambient water quality** (UNEP)
6.4.1 Water use efficiency** (FAO)
6.4.2 Level of water stress* (FAO)
6.5.1 Integrated water resources management (UNEP)
6.5.2 Transboundary basin area with water cooperation** (UNECE, UNESCO)
6.6.1 Water-related ecosystems** (UNEP)
6.6.1 Water and sanitation-related official development assistance that is part of a government coordinated spending plan (WHO, UNER, OECD)
6.6.1 Participation of local communities in water and sanitation management (WHO, UNEP, OECD)

Source: UNESCAP 2016
Top 6 Barriers

1. Coordination between Ministries
2. Technical Capacity of Human Resources
3. Availability of Human Resources
4. Costs of Collating Data
5. Identification of Indicators
6. Competing Demands

Source: ADB, 2019
Government

1. Horizontal Coordination
- Int Org Social Issues
- Int Org Env Issues
- Int Org Finance Issues

2. Vertical Coordination
- Ministry of Social Affairs
- Ministry of Environment
- Ministry of Finance
- Department of Social Affairs
- Department of Env
- Department of Finance

3. Stakeholder Engagement

Non-governmental actors

Academia
Civil Society
Business

Source: Amanuma and Zusman, 2018
Co-benefits Type Wastewater Treatment at a Fish Processing Factory

A fish processing factory in Jembrana, western part of Bali

- Oil trap/Equalization tank
- Anaerobic baffled reactor (Anaerobic)
- Gas holder
- Biogas generator
- Swim Bed Tank (Aerobic)
- Clarifier

Flowchart:
- Sludge (sun drying)
- Effluent (to drain)
Percentage Reduction in GHGs

-20 0 20 40 60 80 100

Aeration lagoon (Base)
1. Aeration lagoon + Activated sludge
2. Swim bed
3. Anaerobic + Activated sludge
4. Anaerobic + Swimbed

Percentage Reduction in COD

Source: MOEJ, 2015
Taking an integrated approach becomes more important as we scale up projects.

- **a. CH4 emissions**
- **b. CO2 emissions**
- **c. Total GHG emissions**

Source: Gomez-Sabrinna, 2020
ご清聴ありがとうございました。

Thank you for your attention.