ESCAP Regional Workshop: Strengthening National Policies for Improving Water Use and Limit Water Pollution in Key Industrialization Sectors in Asia

The Role of Multi-stakeholders Platforms in the Policy Development Process
Experience from Malaysia and Indonesia

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Malaysia’s Experience

The cases for oil palm and rubber industry in Malaysia
Malaysia’s experience

- 1974 -- Environmental Quality Act, 1974
  - Water effluent regulated under Regulations
- 1975 -- Established Department of Environment
- 2002 -- National Environmental Policy launched

- Main points for industrial pollution control
  - License conditions for effluents (volume and concentration)
  - Staggered implementation of effluent limits
    - Rubber & Oil palm industry
- Others
  - Ambient River Water Quality Standards, Water Quality Index
  - River Basin & Pollution Control Management Plans
  - Marine Water Quality, Lake Water Quality
Policy-making Consultations

Ministry of Health

Local Authority agencies

Professional / Engineering associations

Industry associations

Federation of Manufacturers

Small and Medium Enterprises

Environmental NGOs

Relevant agencies

Land / Planning Departments

Academia

Department of Environment

Ministry of Trade & Industry

Consumer bodies

Ministry of Health
Oil Palm Industry Effluents

• Licensing system
  • Based on effluent standards and effluent charges
  • Biological oxygen demand (BOD) the key parameter

• Progressively stringent effluent standards
  • Recognition of initial difficulties to meet standards
  • One year to install treatment facilities & reduce BOD

• Effluent charges levied on BOD loads
  • In 1978 allowed up to BOD = 5000 mg/L
  • By 1984 to achieve BOD < 100 mg/L
  • Steady progress towards meeting target by industry

• Not possible without industry co-operation
Reduction in BOD Load from Palm Oil Mills

Source: Markandya and Shibli, 1995, in, Igwe and Onyebando, 2007, Table 1

Studies also show that these policies did not result in loss of competitiveness for the palm oil industry.
Rubber Industry Effluents

• Similarly for the Rubber industry

• But
  • Oil palm industry given total 6 years to reduce pollution loads, from 1978 to 1984
  • Rubber industry given only 4 years, from 1979 to 1983

• More mature industry, better technological capability
  • In 1979, BOD ≤ 6000 mg/L; COD ≤ 12000 mg/L
  • By 1983, BOD ≤ 100 mg/L; COD ≤ 400 mg/L
  • Again, good progress to target by industry
References


• Environmental Quality Act, 1974. Environmental Quality (Prescribed Premises) (Crude Palm Oil) Regulations 1977

• Environmental Quality Act, 1974. Environmental Quality (Prescribed Premises) (Raw Natural Rubber) Regulations 1978
The Role of Multi-stakeholders Platforms in the Policy Development Process

Cutting through the noise
Network at work

**Aim:** Populations have access to safe, sufficient and affordable water to meet basic needs for drinking, sanitation and hygiene; to safeguard health and well-being; and to fulfill basic human rights

**Relevant topics:** Drinking water, Wastewater, Solid waste, Hygiene, Health

**Human Well-being Theme**

**Economic Activities & Development Theme**

**Aim:** Adequate water supplies are available for economic and development activities

**Relevant topics:** Food and energy production, industry, trade, transport, tourism, etc.

**Water-related Hazards Theme**

**Aim:** Populations are resilient to water related hazards, including floods, droughts and pollution.

**Relevant topics:** Floods, Droughts, Robs, (tidal flood), land subsidence

Vision

Credible and neutral multistakeholders platform in the facilitation and adoption of sustainable integrated water resources development and management

**Missions**

1. Consolidate inputs of existing discussion mechanisms in the regions
2. Systematically structure and consolidate the challenges, solutions, good practices, lessons learned and innovations
3. Facilitate joint development and cost & benefit sharing
4. Facilitate joint knowledge production & management
Brunei Darussalam

- National Development Plans and National Environment Strategy for broad policy statements on waste management
- Administrative procedure manuals and guidelines for waste handling and disposal

Cambodia

- Law on Environmental Protection and Natural resources management
- Sub-Decree on Solid Waste Management
- Sub-Decree on Water Pollution Control

Lao-PDR

- Ministry of Industry and Handicraft Decree on Industry Management, 1992
- Ministry of Industry and Handicraft Decree on Discharges and Emissions, 1994
- Environmental Action Plan 1993, revised 1995
- Environmental Protection Law
Indonesia

- Environment Management Act Number 23, 1997
- Government Regulation Number 82, 2001 (Water Quality Management and Wastewater Controlling)
- Local Government Regulation – each district
- Government Regulation Number 18, 1999 juncto Government Regulation Number 85, 1999 about Hazardous Waste Management
- Presidential Decree Number 61, 1993 about Basel Convention Ratification on the Control of Trans-Boundary Movement of Hazardous Waste and Their Disposal
- Number Kep-01 to Kep-05/BAPEDAL/09/1995 Various procedures and requirements for hazardous and toxic wastes
- Number Kep-68/BAPEDAL/05/1994 on procedures for license for hazardous waste storage, collection, operations of treatment equipment, treatment and final disposal.
Philippines

- Integrated Environmental Protection and Natural Resources Management Policy 25
- Presidential Decree 1586 The Environmental Impact Statement (EIS) System
- Presidential Decree 984 Pollution Control Law, 1978: Water Quality Management Program
- Clean Air Act 1999 (RA 8749)
- Solid Waste Management Act (RA 9003), Ecological Solid Waste Management Act of 2000
- Toxic Chemicals and Hazardous Waste Management (RA 6969)
- The Philippine Agenda 21

Myanmar

- Pollution Control and Cleansing Rule
- The Protection of Environment Directive
- The Municipal Act
- The City of Yangon Municipal Act
- The Union of Myanmar Public Heath Act
- Mandalay City Development Committee regulation
Water Management & Industrialization: How does it work?

Big industries are not working alone
(Linkages between SMEs and large industries – global value chain)
1. Collective efficiency
2. Risk management (risk and cost-sharing)
3. Regulation on locally-made component

Who then exactly use water?
As more and more works are subcontracted out to SMEs, water use are spread out to many companies with higher difficulty to monitor.

Water pollution by whom?
- Sharing risk, cost and responsibility includes the issue of waste water management.
- How well these SMEs in managing the waste water? do they have the capacity? And is there any regulation at this level?
- As the governments are promoting SMEs, how ready are the SMEs to subscribe to the regulation?

Some cases...

Thousands of Vietnamese protest at Formosa Steel Plant in Ha Tinh

The protesters converged peacefully at the Taiwanese steel factory, but were met with hundreds of policemen lining up, fire fighter trucks and weapons.


Source: https://www.theguardian.com/world/2013/jun/04/china-villages-cancer-deaths

Inside China's 'cancer villages'

Death rates in communities near chemical, pharmaceutical or power plants exceed the national average, but residents face a wall of denial and intimidation

Source: https://www.theguardian.com/world/2013/jun/04/china-villages-cancer-deaths
More industries found violating environmental laws as Manila Bay rehabilitation continues

Metro Manila (CNN Philippines, January 31) — A leather processing plant in Bulacan is just one of the latest to receive a cease and desist order from authorities as Manila Bay rehabilitation efforts continue.


In Indonesia, cleaning up the Citarum, ‘the world’s dirtiest river’, is now a military operation

• President launched a seven-year clean up of the Citarum River, but critics believe the move more political than ecological.
• Activists say that by supplying jobs and occasionally bribes, polluting textile industry unlikely to be tamed.

Meanwhile...

“Southeast Asia’s water treatment sector is worth some US$20 billion”
- Italian electrochemical technologies giant De Nora -
Role of MSP in policy development processes & strategic program development

Industry A
Industry B
Industry C
Industry n

Water efficiency/demand and Wastewater management program (by the Government)

Water efficiency/demand and wastewater management policy (by the government)

Multi-stakeholder platform (GWP and friends)

MSP Position paper on program development

MSP Position paper on policy development

Facility supports the implementation of the program

Water Audit
Water management certification
Water management technology education
Water management technology association

MSP facilitates the establishment of water efficiency and wastewater management Facility

Partners with relevant expertise can join the facility

Water efficiency and wastewater management Facility
Network at Work

POSITION PAPER

WATER AND SANITATION HYGIENE NETWORKS’ RECOMMENDATION TO THE HOUSE OF REPRESENTATIVE REPUBLIC OF INDONESIA FOR THE DRAFT OF WATER RESOURCES LAW

(This recommendation was developed based on the 23rd April 2019 version of the draft)

- Multistakeholders’ recommendation to the decision-makers for the Indonesia’s draft of water resources law (Multistakeholders’ Position paper)

- A strategic product of the network
  - Partners are engaged in a meaningful way to produce a multi stakeholders position paper (high partner’s ownership of the product itself)

Note:

Not all GWP SEA’s partners were engaged for this position paper as this paper is only focusing on water supply and sanitation → only partners who are interested for the “human well-being” theme
UNESCAP - Strengthening national policies for improving water use & limit water pollution in key industrial sectors in Asia

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GWP online library for water resources management: www.gwptoolbox.org

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Thank you