

Singapore Resolution on Waste Management in the Coastal Areas of the ASEAN Region

issued by
The Conference on Waste Management
in the Coastal Areas of the ASEAN Region
28-30 June 1991
Singapore

Association of Southeast Asian Nations/United States Coastal Resources Management Project Conference Proceedings 9 Singapore Resolution on Waste Management in the Coastal Areas of the ASEAN Region

1991

Published by the International Center for Living Aquatic Resources Management on behalf of the Association of Southeast Asian Nations/United States Coastal Resources Management Project

Printed in Manila, Philippines

The Conference on Waste Management in the Coastal Areas of the ASEAN Region. 1991. Singapore Resolution on Waste Management in the Coastal Areas of the ASEAN Region. ICLARM Conference Proceedings 32, 12 p. International Center for Living Aquatic Resources Management, Manila, Philippines.

ISSN 0115-4435 ISBN 971-8709-09-6

ICLARM Contribution No. 739

RATIONALE

Pursuant to statements made on different occasions in support of conserving and protecting the environment and achieving sustainable development to secure the well-being of the people of the ASEAN today and in the future, including:

- 1. Policy Recommendations for Coastal Area Management in the ASEAN Region (October 1988).
 - "...The most serious management issues are the following: ... declining water quality and pollution.
 - "...Setting of water quality standards is needed. Integration of river and watershed management should be made, if possible, with water quality zones affected by upland activities. Sampling and monitoring must be standardized for the region or at least, on a national basis. Industries and sectors that violate standards should be closely monitored...."
- 2. Kitakyushu Declaration regarding solid waste management in Asian Metropolises (October 1989).
 - "...recognizing the need to consider SWM problems and issues in the broader context of rapid urbanization and its associated problems.... SWM systems should be developed with flexibility to accommodate prevailing local socioeconomic conditions in Asian metropolises which are fast changing; should be extended to areas regardless of affordability; governments have to be more committed... to formulate national action programmes; ensure adequacy of financial base and availability of basic laws; promote active community involvement; recognize the need for recycling; strengthen technical cooperation...."
- 3. The Langkawi Declaration on the Environment (October 1989).
 - "...We, the Heads of Government of the Commonwealth are deeply concerned at the serious deterioration in the environment and the threat this poses to the well-being of present and future generations;... The main environmental problems facing the world are... marine pollution, land degradation....We...commit

ourselves to the following programme of action... advance policies and programmes which help achieve sustainable development (development that meets the needs of the present without compromising the ability of future generations to meet their own needs - Brundtland Commission)... strengthen and support the development of international funding mechanisms... which will include assisting developing countries to obtain access to and transfer of needed environmental technologies;... support efforts to prevent marine pollution including curbing ocean dumping of toxic wastes...."

4. Baguio Resolution on Coastal Resources Management (March 1990).

"...Whereas, much of Southeast Asia's population lives in coastal areas... many coastal environments within the Association of Southeast Asian Nations (ASEAN) have become seriously degraded.... We, the participants of the Policy Conference, hereby resolve and further recommend that the ASEAN member-countries, donor agencies and all other groups and organizations give emphasis to the protection of these [coastal] resources for the primary benefit of coastal communities by... endorsing policies that promote and enhance sustainable development of coastal resources...."

5. The Kuala Lumpur Accord on Environment and Development (June 1990).

"Aware, that the management of the environment and the pursuit of sustainable development are imperative to secure the well-being of the people of the ASEAN today and in the future..., We, the ASEAN Ministers on the Environment agree to initiate efforts leading towards concrete steps pertaining to environmental management, including:

- a. the formation of an ASEAN strategy for sustainable development and a corresponding action program;
- b. the harmonization of environmental quality standards;
- c. the harmony of transboundary pollution prevention and abatement practices;
- d. the undertaking of research and development and the promotion of the use of clean technologies...."

and the following considerations:

WHEREAS, the ASEAN people have a right to use the coastal zone for the necessities of life and to improve conditions for society as a whole;

WHEREAS, some environmental changes as a result of human activity are inevitable;

WHEREAS, social and economic development should be pursued in a way that does not prejudice use of the coastal zone by future generations in meeting their social and economic needs;

WHEREAS, the Montreal Guidelines for the Protection of the Marine Environment Against Pollution from Land-Based Sources (1985) note that: "States should, directly and/or through competent international organizations, promote programmes of assistance to developing countries in the fields of education, environmental and pollution awareness, training, scientific research, transfer of technology and know-how, for the purpose of improving the capacity of the developing countries to prevent, reduce and control pollution from land-based sources and to assess its effects on the marine environment";

WHEREAS, the introductory statement of the United Nations Conference on Environment and Development's (UNCED) Secretary General at the first session of the Preparatory Committee(s) included "... of these issues, the need of developing countries for access to the new and additional financial resources they will require to enable them to participate fully in international environmental cooperation and integrate the environmental dimension into their own development policies and programmes undoubtedly poses the greatest challenge...";

WHEREAS, the governments of ASEAN nations have demonstrated their concerns and responsibilities in resolving national and regional environmental problems that affect sustainability of economic development in the region through the establishment of the ASEAN Committee of Senior Officials on the Environment (ASOEN) to develop common measures and collaborative environment program.

RECOMMENDATIONS

The participants at this conference agree that environmentally sound waste management strategies are vital to the sustainable development of coastal areas. As residents of the global commons and as citizens with clear opportunities to shape our nations' future, we recommend the following principles be incorporated into the environmental policies of ASEAN.

1. ASEAN nations should cooperate:

- to develop, harmonize and coordinate their waste management strategies and measures, including technology, manpower and information exchange;
- b. to monitor and assess the creation and disposal of waste that may affect their regional neighbors;
- to enhance the effectiveness of existing regional mechanism concerned with transboundary pollution of coastal areas;
- d. to establish legal, financial, social and technical structures and capability which recognize the different economies of nations and which will eventually reduce dependency on external financing; and
- to ensure the availability of the necessary technical and financial assistance and manpower development objectives.
- 2. Regional and national goals for environmental quality of coastal zones should be based on integrated coastal resources management strategies and should be defined in order to establish:
 - communication with the peoples of ASEAN in regard to the importance of appropriate waste management strategies to mobilize public support and participation;
 - priorities for waste management measures, including those addressing sewage, garbage, industrial and agricultural waste, toxic substances, hazardous waste and environmental emergency planning and response;

- c. efficient use of financial resources;
- d. measurable objectives for desired uses of coastal areas;
- e. scientific and other environmental quality criteria needed to sustain these uses; and
- f. standards for environmental quality or environmental planning, as appropriate.
- 3. Proposed activities or waste management measures that may adversely affect the environmental quality of coastal zones, or the resources that depend upon that quality, should be subject to prior environment assessments that will determine the impacts on the environmental and socioeconomic sectors. Such assessments should include mitigating measures and a requirement for subsequent monitoring to assess compliance and effectiveness.
- 4. Waste management strategies and measures should be guided by the following principles:
 - there should be no transfer of damage or hazards from one area to another, directly or indirectly, or transformation of such pollution into another type of pollution;
 - b. a Precautionary Principle' should be applied to selected substances as a goal wherever feasible. This means the reduction of contaminant discharges, irrespective of the probable impacts on environmental quality, to account for the uncertainty of scientific knowledge of those impacts on coastal resources now or in the future;
 - c. innovative processes for waste treatment and disposal that are applicable to the economic, sociocultural and physiographic characteristics of the region;
 - d. effective participation of the private sector in the implementation of waste management programs through appropriate legislation, fiscal policy, resource use policy and incentives; and
 - e. adoption of practices and encouragement of the use of technologies that minimize the use of space, raw materials, energy, and the generation of waste;

- 5. The ASEAN nations should take all practical steps to prevent, control, reduce, or eliminate the discharge of substances to the coastal zone that cause harm to humans, marine life and other living resources, or that damage amenities associated with coastal environments. They should:
 - a. develop a "Black List" and a "Grey List" of polluting substances based on their persistence, toxicity or other noxious properties and their tendency to bioaccumulate; measures should be taken to eliminate those substances on the "Black List" and to limit and reduce the discharge of those on the "Grey List";
 - develop mechanisms in accordance with their legal systems for prompt and adequate compensation or relief, as well as rehabilitation, in respect of damage caused by pollution of coastal areas under their jurisdiction;
 - c. introduce effective programs to recycle and reuse waste;
 - d. promote the use of science and technology to develop cleaner technologies and innovative waste management strategies; to define the linkages between waste discharges and environmental impacts; and to assess the risks and uncertainties associated with waste management practices or the lack thereof;
 - e. encourage education of the public, policymakers and the producers of waste, in the public and private sectors, about the opportunities for social and economic benefits to be derived from effective waste management strategies as well as the detrimental effects of inadequate or inappropriate management;
 - f. adopt programs that require polluters to bear the costs of pollution prevention, abatement and compensation; and
 - g. develop institutional arrangements that integrate waste management into development programs and projects.
 - 6. The participation of nongovernmental and community organizations should be encouraged in the development and implementation of waste management strategies in

- order to promote the wider participation of the public, especially women and children.
- 7. As part of a global responsibility for sustainable development, bilateral and multilateral funding agencies, including regional and international development banks, should develop more and vigorous technical assistance, financing programs and policies for waste management projects, including the integration of environmental concerns into development programs and projects, especially those that help protect the coastal living resources and the marine environment.

ADOPTED by resolution at the Conference on Waste Management in the Coastal Areas of the ASEAN Region, 30 June 1991, Republic of Singapore.

LIST OF PARTICIPANTS AND RESOURCE PERSONS

Brunei Darussalam

Dato Paduka Haji Ibrahim bin Haji Mat Yassin Commissioner Department of Town and Country Planning

Mr. Mohd Salleh bin Haji Mohiddin Administrative Officer Ministry of Development

Mr. Sabri bin Haji Mohd Taha Fishery Officer Department of Fisheries

Hadijah Haji Mohd Idris Officer Ministry of Foreign Affairs

Indonesia

Mr. Nabiel Makarim Assistant Minister State Ministry for Population and Environment

Dr. Aprilani Soegiarto
Chairman
ASEAN Subcommittee on
Marine Sciences
Deputy Chairman for
Natural Sciences
Indonesian Institute of
Sciences-LIPI

Mr. Sukotjo Adisukresno Director Fisheries Resources Management Directorate General of Fisheries Ministry of Agriculture

Malaysia

The Honorable
Mr. Law Hieng Ding
Minister
Ministry of Science, Technology
and the Environment

Dr. Abu Bakar Jaafar
Director-General
Department of Environment
Ministry of Science, Technology
and the Environment

Mr. Patrick Tan State Director of Environment State Government of Johore

Ms. Ch'ng Kim Looi National Coordinator ASEAN/US CRMP Malaysia Head, ASEAN Secretariat for COST

Mr. Low Chee Choy Press Secretary to the Minister Ministry of Science, Technology and the Environment

Philippines

The Honorable Senator Heherson Alvarez Chairman Senate Committee on Environment

The Honorable
Fulgencio S. Factoran, Jr.
Secretary
Department of Environment
and Natural Resources

The Honorable Mayor Jejomar Binay Chairman, Metropolitan Manila Authority

The Honorable Vicente Mayo Governor Batangas City

Dr. Delfin Ganapin, Jr.
Assistant Secretary and
OIC-Undersecretary
Department of Environment
and Natural Resources

Dr. Rafael D. Guerrero III
Chairman
Project Steering Committee,
ASEAN/US Coastal Resources
Management Project and
Executive Director
Philippine Council on Aquatic
and Marine Research
and Development (PCAMRD)

Atty. Glenn Fox Legislative Staff Officer and Executive Assistant Office of Senator Alvarez Senate of the Philippines

Singapore

The Honorable
Dr. Ahmad Mattar
Minister
Ministry of the Environment

Mr. Cheong Quee Wah Permanent Secretary Ministry of the Environment

Mr. Khoo Chin Hean
Director
Environment Policy and
Management
Ministry of the Environment

Dr. Tan Wee Kiat National Council on the Environment (NCE)

Dr. Ngiam Tong Tau Director Primary Production Department Ministry of National Development

Mr. Lee Yuen Tong Director Fisheries Division Primary Production Department Ministry of National Development

Mr. Lim Lian Chuan Senior Primary Production Officer Primary Production Department Ministry of National Development

Mr. Eng Tiang Sing International Environment and Policy Department Ministry of the Environment

Mr. Tan Eng Gee
Chief Engineer (Planning
and Design)
Sewerage Department
Ministry of the Environment

Mr. Peter Tan Nam Song Chief Engineer Engineering Services Department Ministry of the Environment

Dr. Chia Lin Sien Associate Professor Department of Geography National University of Singapore

Thailand

Dr. Suvit Yodmani
Deputy Secretary General
to the Prime Minister for Political Affairs
Government House

The Honorable Chalerm Phromlert Governor Phuket Province

Mr. Siwa Sirisoawaluk Chief of Phuket Governor's Office Phuket Province

Mr. Pornchai Taranatham Director of Environmental Quality Standards Division Office of the National Environment Board

Mr. Songphon Sukijbumrung Environmentalist Office of the National Environment Board

Canada

Mr. Rex P. Armstead Vice Chairman Globe 92

Mr. John P. Bell
Senior Advisor on the Environment
Environment and Energy Division
Department of External Affairs and
International Trade, and
Ambassador to UNCED

Mr. James P. Melanson First Secretary Canadian High Commission

Multilateral Banking Institutions/ Donor Agencies

Mr. In Yong Chung Vice President Asian Development Bank Manila

Mr. Ivan Ruzicka Natural Resource Economist Office of the Environment Asian Development Bank Manila

Mr. Ian Robertson Executive Director Canada-ASEAN Centre Singapore

Mr. George Greene
Director
Environment and Development Policy
Canadian International Development
Agency (CIDA)
Hull, Quebec, Canada

Mr. Goh Kiam Seng
Director and Regional Representative
Regional Office for Asia
and the Pacific
United Nations Environment
Programme (UNEP)
Bangkok, Thailand

Mr. Robert T. Dakan Deputy AID Representative to ASEAN USAID-Bangkok Thailand

Nongovernmental Organizations (NGOs)

Atty. Manuel S. Satorre, Jr. President Philippine Environmental Journalists, Inc. (PEJI) Republic of the Philippines

Mr. R. Senthirajah Vice President Environmental Protection Society, Malaysia Malaysia

Ir. M.S. Zulkarnaen Executive Director WALHI Indonesia

Private Sector

Dr. Clinton J. Edmonds
Director
Environmental Engineering
UMA Engineering Limited
Canada

Mr. Anthony Kortegast
Director
Environmental Engineering Group
Tonkin and Taylor
International Ltd.
New Zealand

Mr. Ken B. Lee Director Computer Applications UMA Engineering Limited Canada

Mr. Chandran Nair Resident Associate Environmental Resources (Asia) Ltd. Hong Kong

Mr. David S. Osmond Director Gartner Lee Ltd. Canada

Mr. Thor Ramstetter Executive Director Fichtner (Asia) Pte. Ltd. Republic of Singapore

Ms. Joyce Rasmussen Country Coordinator Singapore PITO

Dr. Dale Russell Senior Resource Economist UMA Engineering Limited Canada

Mr. Thomas G. Smith Director of Corporate Development Waste Management International Hong Kong Ms. Jasmine Tambyah Assistant Treasurer Economic Research Department DBS Bank Republic of Singapore

Mr. Dan Tan
Business Development Manager
Singapore Environmental
Management and Engineering
Services Pte. Ltd. (SEMES)
Republic of Singapore

Dr. Harvey D. Van Veldhuizen Senior Environmental Scientist Dames and Moore USA

The ASEAN Secretariat

Mr. Theng Chye Yam Director III ASEAN Secretariat

ICLARM

Dr. Chua Thia-Eng Director Coastal Area Management Program and Project Coordinator ASEAN/US CRMP

Mr. Len Garces Project Specialist ASEAN/US CRMP

Members of the Conference Secretariat

Dr. Chua Thia-Eng ICLARM

Mr. Lim Chuan Poh Ministry of the Environment

Mr. Eng Tiang Sing Ministry of the Environment Mr. Len Garces ICLARM

Ms. Cory C. Guerrero ICLARM

Ms. Rachel C. Josue ICLARM

Mr. Rayner Au Communications International Associates Pte. Ltd. Ms. Sharon Quah Ministry of the Environment

Ms. Maylene Loo National University of Singapore

Ms. Beverly Goh National University of Singapore

International Center for Living Aquatic Resources Management

The International Center for Living Aquatic Resources Management (ICLARM) is an autonomous, nonprofit, international scientific and technical center which has been organized to conduct, stimulate and accelerate research on all aspects of fisheries and other living aquatic resources.

The Center was incorporated in Manila on 20 January 1977 and its operational base was established in Manila in March 1977. The interests of ICLARM are primarily in tropical developing countries worldwide.

ICLARM is an operational organization, not a granting or funding entity. Its program of work is aimed to resolve critical technical and socioeconomic constraints to increased production, improved resource management and equitable distribution of benefits in economically developing countries. It pursues these objectives in the fields of aquaculture, capture fisheries management and coastal resources management, including research, training and information activities with institutions in developing and developed countries.

The ICLARM core staff consists of internationally recruited scientists drawn from diverse disciplines in the biological, agricultural and social sciences. In addition, provision is made for interns, consultants and visiting fellows, contributing to breadth of competence and flexibility.

The core program and core staff are supported by a number of foundations and governments.

The Conference on Waste Management in the Coastal Areas of the ASEAN Region was

Organized by the
Ministry of the Environment
Republic of Singapore
ASEAN/US Coastal Resources Management
Project (CRMP), International Center for
Living Aquatic Resources Management
(ICLARM)

Sponsored by the
United States Agency for
International Development (USAID)
Asian Development Bank (ADB)
Canada-ASEAN Centre