
SUSTAINABLE DEVELOPMENT STRATEGY FOR THE SEAS OF EAST ASIA

Regional Implementation of the
World Summit on Sustainable Development
Requirements for the Coasts and Oceans

This document was initiated and prepared by PEMSEA in consultation with 12 participating Governments and other stakeholders of the Seas of East Asia.

Collaborators

Association of Southeast Asian Nations (ASEAN)
Global Environment Facility (GEF)
Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific, and Cultural Organization (IOC/UNESCO)
International Maritime Organization (IMO)
United Nations Development Programme (UNDP)
United Nations Environment Programme Global Programme of Action for the Protection of the Marine Environment from Land-based Activities Coordination Office (UNEP-GPA)
Food and Agriculture Organization (FAO) of the United Nations
The World Bank
Asia Pacific Federation of Environmental Journalists (APFEJ)
Conservation International (CI)
Ship and Ocean Foundation (SOF), Japan
Wetlands International, Asia Regional Office
World Conservation Union (IUCN) Asia
WorldFish Center
World Resources Institute (WRI)
World Wide Fund for Nature (WWF)

Citation:

PEMSEA (Partnerships in Environmental Management for the Seas of East Asia). 2003. Sustainable Development Strategy for the Seas of East Asia: Regional Implementation of the World Summit on Sustainable Development Requirements for the Coasts and Oceans. PEMSEA, Quezon City, Philippines.

ISBN 971-92799-2-3

Any comments and suggestions should be addressed to:

Regional Programme Director

GEF/UNDP/IMO Regional Programme on Partnerships
in Environmental Management for the Seas of East Asia
P.O. Box 2502, Quezon City 1165
Philippines
Tel. (632) 920-2211
Fax (632) 926-9712
E-mail: info@pemsea.org
www.pemsea.org

Table of Contents

List of Tables and Figures 4

List of Acronyms 5

Glossary 7

Overview of the Strategy 9

FOREWORD 10

THE SEAS OF EAST ASIA 15

The Seas of East Asia **16**

The People of East Asia **19**

Economic Development in East Asia **20**

The Environment of the Seas of East Asia **22**

The Value of the Seas of East Asia **23**

The Importance of the Coastal Area **24**

Adverse Impacts of Current Trends **26**

Poverty and the Environment **27**

Transboundary Issues **30**

RESPONSE 33

A New Paradigm for the Seas of East Asia **34**

A Shared Vision **35**

Mission **36**

Framework for the Strategy **37**

Desired Changes **38**

THE STRATEGY 41

Foundation of the Strategy **42**

Executing the Strategy **43**

How to Implement the Strategy **45**

Strategic Action Statement **46**

General Principles **48**

A Strategic Approach to Achieving a Shared Vision **49**

Sustain **50**

Preserve **57**

Protect **62**

Develop **72**

Implement **82**

Communicate **88**

MONITORING THE STRATEGY 93

Bibliography 101

Annexes 104

List of Tables and Figures

Tables

- East Asian Seas' major river basins **18**
- Population and the coastal area **19**
- Socioeconomic indicators of East Asian countries **21**
- Natural roles of ecosystems **22**
- Values of the Seas of East Asia **23**
- East Asian ecosystems at risk **51**
- Regional comparison of marine biodiversity **52**
- Action programmes for integrated implementation of international instruments **108**
- Ratification of international conventions relating to marine pollution **110**
- Ratification of international conventions and agreements relating to the marine environment **111**

Figures

- The Seas of East Asia **17**
- Poverty and the environment **28**
- Estimated BOD from domestic sources in East Asia **31**
- Pattern of oil tanker routes and oil spills in East Asia **32**
- A strategic approach to achieving a shared vision **49**
- Global center of marine biodiversity **52**
- The coastal habitats of East Asia: status and threats **60**
- Environmental risk assessment/risk management framework **63**
- Harmful algal blooms **65**
- Pollution hotspots **68**
- Sea-use zoning scheme in Xiamen **73**
- ICM program development and implementation cycle **77**
- Subregional growth areas **79**
- Coastal megacities of East Asia **79**
- Marine Electronic Highway functional diagram **91**
- International conventions in an integrated implementation framework **107**

List of Acronyms

ADB	Asian Development Bank
APEC	Asia-Pacific Economic Cooperation
APFIC	Asia-Pacific Fisheries Commission
ASEAN	Association of Southeast Asian Nations
BOD	biochemical oxygen demand
CBD	Convention on Biological Diversity, 1992
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora, 1973
CLC	International Convention on Civil Liability for Oil Pollution Damage, 1969 and its 1992 Protocol
DPRK	Democratic People's Republic of Korea
EAS/RCU	East Asian Seas Regional Coordinating Unit
EEZ	exclusive economic zone
EIA	environmental impact assessment
ESCAP	Economic and Social Commission for Asia and the Pacific
FAO	Food and Agriculture Organization of the United Nations
FUND	International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971 and its 1992 Protocol
GEF	Global Environment Facility
GESAMP	IMO/FAO/UNESCO/WMO/WHO/IAEA/UN/UNEP Joint Group of Experts on the Scientific Aspects of Marine Pollution
GDP	gross domestic product
GMA	Global Marine Environment Monitoring and Assessment
GPA	Global Programme of Action for the Protection of the Marine Environment from Land-based Activities
HABs	harmful algal blooms
HNS	International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996
ICM	integrated coastal management
IEIA	integrated environmental impact assessment
IMF	International Monetary Fund
IMO	International Maritime Organization
IOC/ WESTPAC	International Oceanographic Commission Sub-commission for the Western Pacific
ISO	International Organization for Standardization
IT	information technology

IUCN	The World Conservation Union
LME	large marine ecosystems
MARPOL 73/78	International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto
NGO	nongovernment organization
ODA	Official Development Assistance
OPRC	International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990
PEMSEA	GEF/UNDP/IMO Regional Programme on Partnerships in Environmental Management for the Seas of East Asia
PPP	public – private sector partnerships
RCF	Regional Cooperation Framework
ROK	Republic of Korea
SDR	Special Drawing Rights
SDS-SEA	Sustainable Development Strategy for the Seas of East Asia
SEAFDEC	Southeast Asian Fisheries Development Centre
SEMP	strategic environmental management plan
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea, 1982
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change, 1992
WRI	World Resources Institute
WSSD	World Summit on Sustainable Development
WWF	World Wide Fund for Nature

Glossary

- Civil society** – Collectively refers to groups of society, who, not motivated by profit, are organized nationally or locally for the advancement of particular purposes that relate, directly or indirectly, to the coastal and marine area. This includes NGOs, conservation and advocacy organizations, civic organizations, people’s organizations, mass media, religious groups, and less organized groups such as subsistence resource users, landowners, and indigenous communities.
- Coastal and marine area** – The area and resources starting from the point on land where it interacts with the sea and the sea interacts with the land, up to the point at sea where human activities affect it.
- Community** – The people or entities in a particular area, not formally organized but with common interests particularly in relation to specific issues.
- Corporate responsibility** – The duty and accountability of corporations, or any group of people organized for the purpose of conducting business, to the community and all that they affect.
- Economic instruments** – Mechanisms in the form of market-based incentives that work through price signals, thereby affecting costs and benefits of alternative actions, hence influencing decisions and behaviors of individuals, firms and governments, so that environmentally superior options are chosen. They are designed to serve as alternative to, or to complement, legal or regulatory mechanisms.
- Ecosystem management** – Management of ecosystem values and uses recognizing the interactions with the environment and responding to signals from the ecosystem to control anthropogenic activities and uses.
- Eco-efficiency** – Efficient use of resources and energy in any operation.
- Ecotourism** – Tourism focusing on environmental and cultural resources and usually based on a conservation theme.
- Environmental risk assessment** – The process to estimate the likelihood of harm being done to human health and/or ecosystems through factors emanating from human activities that reach their target via the natural environment.
- Environmental risk management** – The application of identified management interventions to address environmental concerns identified through the environmental risk assessment process.
- Integrated coastal management** – A natural resource and environmental management framework which employs an integrative, holistic approach and an interactive planning process in addressing the complex management issues in the coastal area.
- Land-based activities** – Activities occurring primarily on land.
- Large marine ecosystem** – Regions of ocean space encompassing coastal areas from river basins and estuaries out to the seaward boundary of continental shelves and the seaward margins of coastal current systems. They include upwellings, semi-enclosed seas, shallow shelf ecosystems on western ocean boundaries, coral reefs, and ocean shelf-deltaic-riverine interactive systems.
- Local government** – The political institution exercising legislative and executive authority over persons and property within a certain geographical area that is part of a larger political entity, i.e., the country or state.
- National government** – The political institution exercising legislative, executive, and judicial authority over a country, whether unitary or federal.
- Nongovernment organization** – A nonprofit group or association organized outside of institutionalized political structures to realize particular social objectives or serve particular constituencies.

Other wetlands - Wetlands as defined by the Ramsar Convention (areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide do not exceed 6 m) which are in the coastal area and are not coral reefs, mangroves, or seagrass beds.

Pollution hotspots - Areas where the pollution load is high and poses serious impacts on marine and coastal ecosystems and threat to public health.

Pollution of the marine environment - The introduction by man, directly or indirectly, of substances or energy into the marine environment (including estuaries) which results in such deleterious effects as harm to living resources, hazards to human health, hindrance to marine activities including fishing, impairment of quality for use of sea water and reduction of amenities.

Private sector - Collectively, people or entities conducting business for profit.

Reception facilities - Facilities for the reception of wastes from ships at port for appropriate disposal.

Regional mechanism - A structured arrangement among countries within the region that may or may not be based on a legal instrument, entered into for the purpose of undertaking common, integrated, collaborative, and coordinated approaches to address the issues and problems relating to the coastal and marine environment.

Resource use - Any utilization of natural resources in the Seas of East Asia, including the sustainable use and conservation of coastal and marine living resources and conservation and management of nonliving resources.

Sea-based activities - Activities or phenomena occurring primarily at sea.

Semi-enclosed sea - A gulf, basin, or sea surrounded by two or more States and connected to another sea or the ocean by a narrow outlet or consisting entirely or primarily of the territorial seas and exclusive economic zones of two or more coastal States.

Special Drawing Rights - An artificial "basket" currency serving as the International Monetary Fund's unit of account and as a basis for the unit of account for a number of other international organizations.

Stakeholders - Persons or entities who, directly or indirectly, positively or negatively affect or are affected by the policies relating to, or activities or phenomena in, the coastal and marine area.

Strategic environmental assessment - Environmental assessment at national, regional, subregional, or sectoral level.

Subregional growth area - A region, usually contiguous, comprised of areas under two or more countries or jurisdictions, which is governed by agreements between such countries or jurisdiction on deregulated economic activity and investments.

Subregional sea - A relatively large area of the marine environment that geographically forms a single management area but is politically under two or more jurisdictions.

Sustainable development - Development that ensures the continuance of natural resource productivity and a high level of environmental quality, thereby providing for economic growth to meet the needs of the present without compromising the needs of future generations.

Sustainable financing - Mechanism of raising or allocating financial resources to provide sustained funding of a programme, project, activity, or sets of environmental management interventions.

Transboundary - Moving beyond the territorial jurisdiction of a country, state, or other political entity.

Overview of the Strategy

The Strategy is arranged in the following manner:

The FOREWORD provides background information on the preparation of the Strategy, its purpose, philosophy, and approach.

THE SEAS OF EAST ASIA section provides the basic information about the region's coastal and marine areas and the problems and issues associated with them, and shows why there is a need for the countries of the region to cooperate. Topical information is provided in text boxes throughout the document.

The RESPONSE section addresses how the countries of the region can pursue common issues individually and collectively. It expresses a shared vision and mission, as well as an integrated management approach and framework for action.

THE STRATEGY is the main body of the document. Specific strategies and action programmes are spelled out in this section, providing a holistic and integrated perspective on sustainable development and management of coastal and marine areas regionally, nationally, and locally.

The final section, MONITORING THE STRATEGY, identifies a number of indicators for monitoring the status of the Strategy's implementation.

The Bibliography cites the sources of information contained in the Sustainable Development Strategy for the Seas of East Asia.

The Annexes list the relevant international and regional conventions, agreements, and programmes of action on which the SDS-SEA is based. The relevance of international agreements is also discussed.

Foreword

The decision to prepare a Sustainable Development Strategy for the Seas of East Asia arose from an intergovernmental meeting of 11 countries of East Asia held in Dalian in July 2000. The countries are Brunei Darussalam, Cambodia, China, Democratic People's Republic of Korea, Indonesia, Malaysia, Philippines, Republic of Korea, Singapore, Thailand, and Vietnam. The March 2002 Intergovernmental Meeting of PEMSEA, now joined by Japan, endorsed the Strategy in principle and agreed to pursue intersectoral consultations at national, regional, and international levels. The Strategy is a product of joint efforts by the concerned countries and other stakeholders through 3-year consultations and consensus-building at all levels.



What is the Sustainable Development Strategy?

The Sustainable Development Strategy is a package of applicable principles, relevant existing regional and international action programmes, agreements, and instruments, as well as implementation approaches, for achieving sustainable development of the Seas of East Asia. It offers a regional framework for the interested countries and other stakeholders to implement, in an integrated or holistic manner, the commitments they have already made, without assuming new legal obligations. It addresses linkages among social, cultural, economic and environmental issues. It embodies the shared vision of the countries and other stakeholders for the Seas of East Asia, and the ways by which they will achieve that shared vision. The Strategy does not reflect any individual country, international organization, or sectoral interest but presents a regional perspective, principles, and guidelines, and a platform for each to play and strengthen its respective role and to cooperate with one another in addressing common issues and concerns.

The Sustainable Development Strategy is based on a programmatic approach and the consensus reached among the countries and other stakeholders particularly with regard to needs, nature and purpose, basic role and functions, scope of application and essential elements.

Why Do We Need a Sustainable Development Strategy?

The Sustainable Development Strategy represents implementation approaches for the integrated management and sustainable use of the environment and resources therein, with a view to bringing about the following benefits:

- promoting regional partnership arrangements among government agencies, NGOs, private sector, and other stakeholders;
- enabling the concerned organizations and programmes, operating in the region at all levels, to promote synergistic and cumulative impacts of their efforts and expertise for the benefits of the countries and other stakeholders;
- providing the countries and other stakeholders with a set of guidelines, references, and examples for assisting in their development of strategies, policies, and implementation plans in order to address specific national, local, and sectoral needs;

-
- offering a set of operational approaches and measures for sustainable coastal and marine development that have been proven suitable and effective through a decade of demonstration and extension activities in the region;
 - facilitating the sharing and transfer of experiences, knowledge, technology and techniques, as well as mutual assistance among the countries currently at different stages of socioeconomic development; and
 - facilitating the flow of support and assistance from the interested financing institutions and donor agencies, and the creation of self-sustained financing mechanisms and investment opportunities for sustainable coastal and marine development.

What is Its Scope?

The Strategy is not intended to focus on development issues of individual sectors, e.g., agriculture, industries, and services, as these types of issues fall under sectoral policies and programmes. It does not limit itself to environmental protection and management. Rather, the Strategy represents a paradigm shift in our management approach that focuses on the interactions between environment and development; and addresses issues and impacts across sectoral, administrative, and legal boundaries that are constraints and bottlenecks for sustainable development in the East Asian Seas Region. Thus the Strategy deals with:

- the relationship among economic development, social development, and environmental protection as related to the Seas of East Asia;
- linkages among programmes concerning poverty alleviation, sustainable livelihood, reduction of vulnerability to natural hazards, long-term security, economic growth, and the health of human beings, ecosystems and the natural resource base; and
- intersectoral, interagency, intergovernmental and interproject partnerships for the sustainable development of the region.

Related issues such as deforestation and air pollution are not addressed directly, but the awareness, regional cooperation, and confidence-building brought about by the implementation of the Strategy will contribute to the solution of such problems within an integrated management framework for sustainable development.

The scope of the Sustainable Development Strategy is broader than any individual international instrument or regional programme. Its implementation will entail a new kind of partnership, involving national governments, civil society, and regional agencies such as ASEAN, ESCAP, UNEP EAS/RCU, FAO/APFIC, IOC-WESTPAC and UNDP/RCF. The Strategy also incorporates the experiences and lessons from past and existing national, regional, and international efforts, such as those of other UN agencies, international programmes and projects, ODA programmes and international and national NGOs such as WWF and IUCN.

The Strategy recognizes the socioeconomic and political conditions among the countries of the region. Its implementation will enable strategic partners to pool their resources and to work together with a common goal.

The Strategy adopts a strategic, programmatic and problem-oriented approach to ensure effective response from policy and management interventions. It takes a long-term view in programme implementation, which depends on national capacity and resources.

How will the Sustainable Development Strategy be Adopted?

The draft Strategy has been subjected to a long and comprehensive consultation and approval process. It has stimulated debates and built up general consensus and partnership among various stakeholders including policymakers, natural resource and environmental managers, the academe, private sector, civil society, international agencies, intergovernmental financial institutions and all those who care for the coastal and marine environment and believe in sustainable development. In addition, consultations have been undertaken with a view to harnessing the objectives of intergovernmental bodies and multilateral financial institutions, including those listed as Collaborators and other stakeholders. These are the same partners who will use the Strategy to act decisively and proactively to conserve the Seas of East Asia.

The draft Strategy was reviewed and refined through senior government official meetings and submitted for consideration by a ministerial forum. The ministers adopt the Strategy collectively as a region and individually as countries, and commit to the development and implementation of national strategies and action programmes at regional, subregional, national, and local levels, taking into account national development objectives, capacities, and specific conditions of the countries and stakeholders involved.

For years, we have been leaving environmental issues of national concern to the sovereign responsibility of the nation and the respective sectors, and those of transnational issues to international bodies such as the United Nations. With the advent of globalization and regional economic realignment, this two-tiered and sectoral approach is no longer effective. A multitiered, multisectoral integrated approach at the regional, national, and local levels is necessary in order to resolve the environmental problems that face the East Asian Seas region.

Regional Governance for the Sustainable Development of the Seas of East Asia

The Sustainable Development Strategy will strengthen governance of the region's marine and coastal resources through:

1. A functional framework for regional cooperation and collaboration addressing environmental and resource use relationships across national boundaries and the region, for the purposes of:
 - promoting intergovernmental collaboration on global environmental concerns;
 - strengthening synergies and linkages among: UN agencies such as the UNEP Regional Seas Programme, IOC/WESTPAC and FAO/APFIC; regional programmes of action such as those of ASEAN, ESCAP, SEAFDEC, and UNDP/RCF; regional and international NGOs such as WRI, WWF, and IUCN; and international funding institutions such as the World Bank and Asian Development Bank;
 - encouraging active participation from the private sector, NGOs, academe, communities, and other members of civil society; and
 - identifying and developing opportunities for environmental investments and facilitating sustainable financing mechanisms.
2. An integrated approach to implementing international instruments concerning environment and natural resource use at the regional level by:
 - enhancing the synergistic relationships among multilateral environmental agreements;
 - strengthening partnerships among governments and intergovernmental bodies and across sectors, and establishing multitiered arrangements for the cost-effective implementation of multilateral environmental agreements;
 - promoting effective use of human and financial resources, for example, through shared information systems, information exchange, networking, and capacity-building programmes; and
 - establishing working models of holistic, integrated environmental management programmes at regional, national, and local levels.
3. Documentation and assessment of changes arising from implementation of the Sustainable Development Strategy and further refinement of the Strategy through:
 - integrated environmental monitoring and reporting;
 - scientific research that advances knowledge of ecosystem management and provides input to sustainable economic development; and
 - South-South cooperation, applying knowledge, innovations, practices, and technologies at the national and local levels.