



SACEP NEWS

Newsletter of the South Asia Co-operative Environment Programme

NO.1: Issue 2

June 2002

South Asian Seas: A Heritage to Share and Protect



The second issue of the SACEP Newsletter for the year 2002 will highlight various issues related to coastal and marine environment of the region, as the second Intergovernmental Ministers Meeting (IMM) of the South Asian Seas Programme is scheduled to be held between 28th June to 1st July, in Colombo Sri Lanka.

Initiated in 1983, the South Asian Regional Seas Programme (SASP) encourages the five maritime countries of the region; Bangladesh, India, Maldives, Pakistan and Sri Lanka, who shares the Northern Indian Ocean to find regional solutions to their particular problems through an approach based on a action plan adopted in 1995 and implemented under the authority of the respective contracting parties.

The coastal area of the region contains diverse and productive habitats important for human settlements, development and local subsistence. As indicated in the table below more than 25 percent of the regions, 1.5 billion human population lives within the coastal belt and many of the regions poor is crowded in coastal cities such as Karachi, Bombay, Madras, Dhaka, Male and Colombo. Page 6 of this Newsletter highlights the major issues identified from our marine environment as indicated the recently published Global Environment Outlook-3.

Country	Coastal length (km)	Area of EEZ (km ²),	Population (Million) and annual growth rate for 1999-2015 (%) ²	Population within 50 km from coast (%)	Per cap. GDP (PPPUS \$) & pop. Below poverty line ²
Bangladesh	700	70,000	134.6 (2.4)	23	1,483 (29.1)
India	7,516	2020,000	992.7 (1.3)	25	2,248 (44.2)
Maldives	640	90,000	0.3 (3.0)	100	4,423
Pakistan	1024	240,000	137.6 (2.5)	12	1,834 (31)
Sri Lanka	1770	233,000	18.7 (0.8)	33	3,279 (6)

Although SACEP has initiated several projects and programme activities to safeguard the regions marine and coastal environment during the past two decades and specially after the adoption of the South Asian Seas Action Plan (SASAP), our region is lagging behind when compared with some of other UNEPs regional.seas programmes. Many of them have already adopted several conventions and protocols related to marine pollution, biodiversity etc. and therefore, SASP can benefit immensely from experience and expertise of these well establish programmes.

The second IGMM of the SASP provide us a good opportunity to discuss and come-up with new initiatives for strengthening and accelerating the implementation of the action plan. For example, networking of institutions dealing with research, policy, database, education and awareness is urgently needed to collaborate and strengthen the exchange of information and training and capacity building of relevant stakeholders.

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Conventions of International Maritime Organization

International Maritime Organization (IMO) established in 1958 is the only specialized agency of the United Nations, which is fully dedicated to maritime affairs. Over the years it has developed a well co-ordinated, scientifically and technically sound strategy for the protection of the marine environment from pollution from ships and related activities and the organization is now responsible for implementing more than 40 conventions and protocols. Table in the following page indicates the status of ratification of these multilateral agreements by the five maritime states of South Asia.

The Main categories of IMO Conventions:

1. Marine safety
2. Prevention of Marine Pollution
3. Liability and compensation
4. Others such as maritime traffic, tonnage and Salvage

One of the first tasks of IMO was the adoption of the International Convention for the Safety of Life at Sea (SOLAS) in 1960, the most important of all treaties dealing with maritime safety. In 1974 a new version of SOLAS was adopted, which included not only the amendments agreed up until that date but a new amendment procedure, designed to ensure that changes could be made within a specified and acceptably short period of time.

After that the organization turned its attention to matters such as the facilitation of international maritime traffic, load lines and the carriage of dangerous goods. With the growth in the amount of oil being transported by sea, a new problem began to emerge; marine pollution, therefore during the next few years IMO introduced a series of measures designed to prevent tanker accidents and to minimize their consequences. It also tackled the environmental threats caused by routine operations such as the cleaning of oil cargo tanks and the disposal of engine room wastes. The most important IMO marine environment protection regulatory structure is the International Convention for the Prevention of Pollution from Ships and its related protocols known as MARPOL 73/78. It covers not only accidental and operational oil pollution but also pollution by chemicals, goods in packaged form, sewage, garbage and air pollution.

IMO was also given the task of establishing a system for providing compensation to those who had suffered financially due to pollution and as a result the Convention on Civil Liability for Oil Pollution Damage (CLC), and the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (Fund Convention) emerged.

The latest convention adopted by the organization is the International Convention on the control of harmful anti-fouling systems on ships, which was adopted on 5 October 2001.

Under the terms of the new Convention, Parties to the Convention are required to prohibit and/or restrict the use of harmful anti-fouling systems on ships flying their flag, as well as ships not entitled to fly their flag but which operate under their authority and all ships that enter a port, shipyard or offshore terminal of a Party. The adoption of the new Convention marks the successful outcome of the task set by Chapter 17 of Agenda 21, which calls on States to take measures to reduce pollution caused by organotin compounds used in anti-fouling systems. As recommended by the 21st session of the IMO Assembly, the Conference agreed to an effective implementation date of 1st January 2003 for a ban on the application of organotin-based systems.

To cater the emerging demands by the shipping industry, IMO is now in the process of introducing two new Conventions:

1. *Regulations for Ballast water management to prevent the transfer of harmful aquatic organisms*

It is estimated that about 10 billion tonnes of ballast water are transferred globally each year, potentially transferring from one location to another species of sea life that may prove ecologically harmful when released into a non-native environment. The Marine Environment Protection Committee (MEPC) is working on developing draft new regulations and it will be adopted in a diplomatic conference planned in 2002 or 2003.

2. *Wreck Removal Convention (WRC)*

The WRC intended to provide international rules on the rights and obligations of States and ship owners in dealing with wrecks and drifting or sunken cargo, which may pose a hazard to navigation and/or pose a threat to the marine environment. The Legal Committee is currently developing the draft convention with the intend of clarifying rights and obligations regarding to the identification, reporting, locating and removal of hazardous wrecks, in particular those found beyond territorial waters. It is anticipated that the draft will be ready for consideration by a Diplomatic Conference in the 2004-2005 biennium.

Adoption of a convention by a Government, places on it the obligation to make the measures required by the convention. Often national laws has to be enacted or changed to enforce the provisions of the convention and in some cases special facilities may have to be provided, such as training to carry out the functions under the convention. IMO has actively co-operated with the Regional Seas Programme of the UNEP in the development of regional anti-pollution operations throughout the world and have assisted the South Asian Seas Programme since the early 1990s.

Source: <http://www.imo.org>



Table 1: Status of Ratification of Major IMO Conventions by the Maritime Countries of South Asia

Convention	Major objective	Entry in to force date	No. of States	South Asian Seas Region				
				B	In	M	P	SL
IMO Convention 48	Formal establishment of the International Maritime Organization (IMO) to provide a mechanism for the co-operation among Governments in the field of regulations and practices in ships involved in international trade.	17-Mar-58	162	X	X	X	X	X
1991 amendments		-	62		X		X	
1993 amendments		-	93	X	X		X	X
SOLAS Convention 1974	Regulations for safety of Merchant Ships at sea by specify minimum standards for the construction, equipment and operation of ships, compatible with their safety.	25-May-80	145	X	X	X	X	X
SOLAS Protocol 1978		01-May-81	99		X		X	
SOLAS Protocol 1988		03-Feb-00	58		X		X	
Load lines Convention 1966	Limitations on the draught to which a ship may be loaded to make a significant contribution to her safety	21-Jul-68	149	X	X	X	X	X
LL Protocol 1988		03-Feb-00	56		X		X	
TONNAGE Convention 1969	Introduction of a universal tonnage measurement system	18-Jul-82	132	X	X	X	X	X
COLREG Convention 1972	International Regulations for preventing Collisions at Sea	15-Jul-77	140	X	X	X	X	X
CSC Convention 1972	Safety of containers in marine transport	06-Sep-77	72		X		X	
1993 amendments		-	6					
SFV Protocol 1993	Provision of guidelines for safety of fishing vessels	-	8					
STCW Convention 1978	Standards of Training, Certification and Watch keeping for Seafarers	28-Apr-84	139	X	X	X	X	X
STCW-F Convention 1995	Standards of safety for crews of fishing vessels	-	2					
SAR Convention 1979	Provision of maritime Search and Rescue-especially to assist vessels in distress	22-Jun-85	72		X		X	
STP Agreement 1971	Safety requirements for special trade passenger ships in relation to SOLAS Convention.	02-Jan-74	17	X	X			X
STP Protocol 1973		02-Jun-77	16	X	X			X
INMARSAT Convention 1976	Satellite communication to assist in distress situations at sea	16-Jul-79	88	X	X		X	X
INMARSAT OA 1976		16-Jul-79	86	X	X		X	X
1994 amendments		-	39		X			
1998 amendments		-	39		X		X	X
FACILITATION Convention 1965	Prevention of unnecessary delays in maritime traffic, aid co-operation between governments and to secure the highest practicable degree of uniformity in formalities.	05-Mar-67	90	X	X			X
MARPOL 73/78 (Annex I/II)	Regulations aimed at preventing and minimizing pollution from ships - both accidental pollution and that from routine operations - and currently includes six technical Annexes: AI=Oil, AII= Noxious Liquid substances in bulk AIII= Harmful Substances carried by sea in packaged form AIV = Sewage, AV= Garbage, AVI= Air pollution from ships	02-Oct-83	120		X		X	X
MARPOL 73/78 (Annex III)		01-Jul-92	101				X	X
MARPOL 73/78 (Annex IV)		-	85				X	X
MARPOL 73/78 (Annex V)		31-Dec-88	106				X	X
MARPOL Protocol 1997 (Annex VI)		-	5					
London Convention 1972	Regulations to prevent Marine Pollution by Dumping of Wastes and Other Matter	30-Aug-75	78				X	
London Convention Protocol 1996		-	16					
INTERVENTION Convention 1969	Establish the right of coastal states to intervene in incidents on the high seas, which are likely to result in oil pollution.	06-May-75	77	X	X		X	X
INTERVENTION Protocol 1973		30-Mar-83	44				X	
CLC Convention 1969	Deals with the civil liability of the owner of ship or cargo for damage suffered as a result of an oil pollution incident.	19-Jun-75	51		d	X		d
CLC Protocol 1976		08-Apr-81	55		X	X		
CLC Protocol 1992		30-May-96	82		X			X
FUND Convention 1971	Establishment of a fund for providing compensation for oil pollution incidents beyond that provided for by the CLC convention	16-Oct-78	26		d	X		d
FUND Protocol 1976		22-Nov-94	33		X			
FUND Protocol 1992		30-May-96	77		X			X
NUCLEAR Convention 1971	Regulate civil liability in respect of damage arising from the maritime carriage of nuclear substances.	15-Jul-75	16					
PAL Convention 1974	Deals with passengers and luggage	28-Apr-87	28					
PAL Protocol 1976		30-Apr-89	22					
PAL Protocol 1990		-	3					
LLMC Convention 1976	Replacement of the International Convention relating to the limitation of the liability of owners of Seagoing ships	01-Dec-86	37					
LLMC Protocol 1996		-	7					
SUA Convention 1988	Ensure that appropriate action is taken against persons committing unlawful acts against ships (terrorist attacks on commercial ships)	01-Mar-92	68		X		X	X
SUA Protocol 1988		01-Mar-92	61		X		X	
SALVAGE 1989	Replacement of the 'no cure, no pay' principle under which a salvor is only rewarded for services if the operation is successful.	14-Jul-96	40		X			
OPRC Convention 1990	Facilitation of International co-operation & mutual assistance in preparing for & responding to a major oil spill incident & encourage states to develop & maintain an adequate capability to deal with oil pollution emergencies	13-May-95	65		X		X	
HNS Convention, 1996	Possibility of payments up to 250 million SDR as compensation to victims of accidents involving carriage of Hazardous and noxious substances such as chemicals		2					
Bunkers Convention, 2001	Ensure that adequate, prompt and effective compensation is available to persons who suffer damages caused by oil spills carried as fuel in ships bunkers.		1					

The Status of Conventions is given as at 30th April 2002.



The on-line United Nations Atlas of the Oceans

The UN Atlas of the Ocean, an internet portal providing information relevant to sustainable development of the oceans was launched at a meeting of UNESCO's Intergovernmental Oceanographic Commission in Paris on 5th June 2002. The <http://www.oceansatlas.com> is designed for policy-makers who need to become familiar with ocean issues and for scientists, students and resource managers who need access to databases and approaches to sustainability. The Atlas includes four main entry points to access information on the following:

1. **About the oceans** - history, biology, maps and statistics to research, climatology and ecology
2. **Uses of the oceans** - disposal of waste from land, energy, fisheries and aquaculture, human settlements, marine biotechnology, non-consumptive uses, ocean dumping and ship wastes, offshore oil, gas and mining, recreation and tourism, and transportation and telecommunications.
3. **Issues** - climate variability and climate change, economics, emergencies, food security, governance, human health, pollution and degradation, safety and sustainable development.
4. **Geography** - information on geographical areas

Among the issues highlighted in the website are:

- *Fishing - all 17 of the world's major fishing areas have either reached or exceeded their natural limits and according to the FAO, nine are in serious decline,*
- *Piracy - the number of reported piracy attacks worldwide for 1999 rose nearly 40 percent compared with the previous year and almost tripled compared with 1991 according to the International Maritime Bureau of the International Chamber of Commerce.*
- *Algal blooms - The number of poisonous algal species identified by scientists has nearly tripled since 1984, increasing fish kills, beach closures, and economic losses. Large parts of the Gulf of Mexico are now considered biological dead zones due to algal blooms.*
- *Coral reefs - Although distributed in 101 countries and territories, where they are vital for fisheries, coastal protection, tourism and wildlife, they occupy less than one tenth of one percent of the oceans, according to the UNEP-WCMC World Atlas of Coral Reefs*
- *Invasive species - Marine bio-invasions have been identified as a major global environmental and economic problem with several thousand species estimated to be in the ballast tanks of the world's shipping at any one time. The Atlantic box jelly, believed to have been released in a ship's ballast water, helped wipe out life in the Black Sea. In San Francisco Bay, a new foreign species takes hold every 14 weeks, scientists warn.*

The need for the Oceans Atlas was identified during the 1992 Rio Earth Summit. The Project is funded by the United Nations Foundation, while six other UN agencies have committed financial resources to its success.

South Asian Beaches: The number one Graveyard of Maritime Vessels

Ships are mobile structures of comprehensive size and constitute of about 80-90% steel, and as a result at the end of their useful life, they become a sought after source of ferrous scrap. This provides an alternative to the non-renewable resource of ore and is in particular suited for the production of simple steel products. Obsolete vessels available for scrapping is also important as a source of supply of second hand equipments, such as engines, electrical equipment, furniture, pumps and valves. Therefore, this industry contributes significantly to local and national economies.

The demand for scrap steel and the availability of low-cost labour have been the driving factors in terms of the geographical location of ship-breaking centers. Current ship breaking industry is centered in the South Asian region, which accounts for 87% in tonnage and around 55% of the annual number of ships (see Table in the following page).

India is the leading ship-breaking nation (46%) and the industry is mostly concentrated at Alang in Gujarat, which is the world's largest ship breaking yard catering to nearly 90 per cent of India's ship breaking activity while around 50,000 people are involved directly or indirectly in the business of scrapping. However, sporadic activity takes place in other locations such as Sachana, Mumbai and Calcutta.

In Bangladesh, Chittagong provides the main facility for large vessels, scrapping about 52% of all vessels above 200,000 dwt. This is mainly due to the presence of a larger inter-tidal zone suitable for beaching of larger vessels and the absence of requirements in relation precautions to carry out the operations.

Pakistan is at present, the third largest ship-breaking country. The vessels are scrapped by beaching and are mainly tankers of large tonnage.

The decommissioning of ships consist of actions which are potential threats to safety and health of the workers and the environment. Although, the exposure of workers to carcinogenic substances such as PCBs, PAHs, heavy metals and asbestos is considerably high, there are no reliable data to prove this.

Hazardous compounds released due to ship dismantling activities:

Heavy metals (lead, mercury, cadmium)
Oil and grease, Residual fuel, Petroleum, Biocides, Polychlorinated Biphenyls (PCBs), Polyvinyl Chloride (PVCs), Polycyclic aromatic hydrocarbons (PHAs), Asbestos fibers, Antifreeze fluids, compressed gases

Other harmful substances

Ballast tank sediments containing harmful bacteria and viruses



Country	By Number of Vessels (%)	By Tonnage (%)	Average vessel size (dwt)	Major Industrial Locations
India	42	46	30,000	State of Gujarat (beaches of Alang), Mumbai
Bangladesh	7	24	95,000	Chittagong (Fauzdarhat beach)
Pakistan	6	17	80,000	Karachi (Gadani beach)
China	4	7	50,000	
Others	41	6	3,500	Spain, Turkey, Mexico, Japan

Table 1: The breaking majors and their respective market share (for 1999)

Source: Andersen AB (2001): Worker safety in the ship-breaking industries; An issue paper prepared for sector activity programme of the International labor office.



By occupying and expanding the areas required for breaking, the scrapping industry affects the surrounding environment through failing fisheries and loss of ecosystems such as mangroves. Discharges and emissions to sea, sediments, ground and air cause both acute and long term pollution. The lack of containment to prevent toxins from entering the environment is a major concern and represents a threat to all organisms.

Although there is no specific international legislation governing the ship demolition process, there are various standards, norms, regulations and international conventions that may have relevance for certain segments of the process. The major stakeholders of this industry and their principle area of involvement is as indicated in the following box:

- International Maritime Organization (IMO):** Overall responsibility for co-ordinating issues associated with ship recycling and responsibility for monitoring issues arising during ship design, building and operation which might impact on recycling, including preparations for recycling on board.
- International Labor Organization (ILO):** Responsibility for establishing standards of operation in shore-based industries involved in ship recycling, concentrating on considering the application of its already existing standards and recommendations to ship recycling and developing guidance for the ship recycling industry in these and other areas-to take the lead on working conditions in and around vessels once they have been breached.
- United Nations Environment Programme (UNEP):** The Basal Convention on the Transboundary Movements of Hazardous Wastes and their disposal-recognizing the limited application of the convention to the vast majority of ships which are recycled, to concentrate on the identification and safe handling/disposal of hazardous wastes on reducing the use of materials which generate such wastes.
- The 1972 London Convention:** Continuing to monitor the disposal of ships at sea and encourage recycling as the preferable option.
- Environmental Groups:** Continuing to monitor and report on ship recycling issues in a responsible manner.

The country governments develop, adopt and enforce laws, policies, guidelines and standards which are inline with international standards.

Since the scrapping candidate is still subjected to the laws of the sea including the provisions of both SOLAS and MARPOL, there may be valid requirements that might have relevance also to the scrapping process. Annexes I, II, IV, V, and VI to the MARPOL Convention require the establishment of appropriate waste reception facilities for the reception of ship waste generated waste. (Page 3 provides the status of ratification of the Convention).

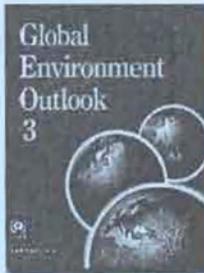
The 17th Session of the Technical Working Group of the Basal Convention, which was held in October 2000, initiated the drafting of new guidelines for the environmentally safe dismantling of ships. They detail procedures and good practices for decommissioning and selling obsolete ships, dismantling them, sorting the parts (for reuse, recycling and disposal), identifying potential contaminants, preventing toxic releases, monitoring environmental impacts, and responding to emergencies and accidents. They also address the design, construction and operation of ship dismantling facilities. These guidelines will be developed in cooperation with the International Maritime Organization, the International Chamber of Shipping, and the International labor Organization. These guidelines were finalized at the 19th Session and will be adopted at the Sixth Meeting of the Conference of the Parties to the Basel Convention, scheduled for December 2002.

Few of the national initiative of region are as follows

- In India, Environmental guidelines has been prepared by the Central Pollution Control Board to minimize the effects of ship-breaking industries on the surrounding environment through proper siting of industries and by preparing and implementing an environmental management plan and a disaster management plan. The Gujarat Maritime Board (GMB) introduced new regulation in August 2000, covering safety measures for the beaching of vessels.
- In Bangladesh a national regulatory framework for managing ship scrapping was established and under the Environmental Law of 1997 there are provisions, requiring that each and every industry including the ship-breaking must have an environmental clearance certificate from the Department of Environment. To achieve this, the site must establish and environmental management plan.
- Pakistan has introduced special Procedures for Ship Breaking Industry in 1997

References:

1. Andersen AB (2001): Worker safety in the ship-breaking industries; An issue paper prepared for sector activity programme of the ILO
2. www.basel.int
3. <http://www.ilo.org/public/english/protection/safework/sectors/shipbrk/index.htm>



Launching of GEO-3: State of the Global Environment; Past, Present and the Future

Global Environment Outlook – 3 (GEO-3) the flagship report on the state of the global environment, produced by UNEP was launched in London on 22nd May 2002. By tracking and analyzing all the important environmental issues in the past 30 years (from 1972 Stockholm Conference to 2002), it provides an integrated explanation of major trends that have shaped our environmental inheritance. The outlook section presents scenarios spanning the next 30 years, with vital lessons for the policies and actions we should adopt now.

GEO-3 says environmental degradation is also costing countries in various ways. India, for example, is losing more than US\$ 10 billion annually or 4.5 per cent of its Gross Domestic Product (GDP). Human-induced land degradation alone causes productivity losses of around US\$ 2.4 billion. The Report concludes that one of the key driving forces has been the growing gap between the rich and poor parts of the globe. Currently, one-fifth of the world's population enjoys high, some would say excessive, levels of affluence. It accounts for nearly 90 per cent of total personal consumption globally. In comparison, around 4 billion people are surviving on less than US\$ 1 to \$ 2 a day and majority of this population is found within South Asia.

Dr Klaus Toepfer, Executive Director of the UNEP, speaking at the launching of the report stated;

"GEO-3 is neither a document of doom and gloom or a gloss over the acute challenges facing us all. It is the most authoritative assessment of where we have been, where we have reached and where we are likely to go. The latest report gives us even more pause for thought as it looks out 30 years forward to the possible future. We can never know for certain what lies before us, but we know enough now to see how our actions or lack of actions might shape the environment and the inhabitants of this extraordinary blue planet by 2032. We now have hundreds of declarations, agreements, guidelines and legally binding treaties designed to address environmental problems and the threats they pose to wildlife and human health and well being. Let us now find the political courage and the innovative financing needed to implement these deals and steer a healthier, more prosperous, course for planet Earth. Ten years ago, governments met in Rio for the Earth Summit. In just three months, we have the World Summit on Sustainable Development (WSSD) in South Africa. This is a summit for sustainable development, but it is also a summit for the environment. Environment for Development is UNEP's motto, for without the environment there can never be the kind of development needed to secure a fair deal for this or future generations. We need concrete actions, timetables and we need an iron will from all sides. It cannot be the responsibility of politicians alone. We are all shareholders in this enterprise. Only then can the promises made in Rio turn into a reality". (www.unep.org/geo/htm)

What GEO-3 says about the state of Marine Environment of the South Asian Region

The GEO-3 highlights the following aspects for the state of marine environment for the South Asian Seas region:

- **Over exploitation of fish stocks and poor aquaculture practices** are of concern in Bangladesh, India and Sri Lanka. Mangrove clearance for shrimp culture has emerged as a major issue in the recent years. In India, prawn farms have been constructed in low-lying coastal areas, depriving impoverished farmers of agricultural land, causing salinization of ground water in coastal villages and polluting waterways with excess nutrients. India, Maldives and Sri Lanka have developed legislation to address problems associated with pollution and overexploitation of fish stocks. These countries have imitated steps for fisheries management by reducing fishing subsidies and regulating fishing access rights.
- **Coral reefs are under stress**, especially those near shallow shelves and dense populations. Most of the South Asian reefs were adversely affected by bleaching in mid 1998 due to increase in seawater temperatures and dissolved carbon dioxide. International Coral Reef Initiative, establishment of Global Coral Reef Monitoring Network for South Asia in 1997 to facilitate monitoring, training, networking and management of coral reefs.
- **Marine Pollution** in the region is due to increased waste from land-based urban, industrial and agricultural activities as well as from off-shore oil exploitations. The shipping of oil coupled with increasing emphasis on offshore oil exploration makes the northern Indian Ocean extremely vulnerable to oil pollution. *Oil spills* also cause severe pollution in ports in Bangladesh and Pakistan. In addition, the cleaning of oil tanks in and around ports has led to the frequent formation of tar-balls on the southwestern beaches of Sri Lanka. The *enhanced use of agrochemicals* on land and discharge of chemicals into seawater is also a common problem. As estimated 1,800 tons of pesticides enter the Bay of Bengal. *Sediment load* in the coastal zones of South Asia is high, mainly as a result of soil erosion caused by poor land-use practices and construction activities. Annually, about 1.6 billion tons of sediment reach the Indian Ocean from rivers flowing from the Indian sub continent. The total sediment load of the river system of Bangladesh alone amounts to about 2.5 billion tons, of which the Brahmaputra carries 1.7 billion tons.



Overview on Physical Alterations Effecting the Regions Coastal Habitats

The Major threats to the health, productivity and biodiversity of the marine environment result from human activities on land and according to recent publications some 80% of the pollution load in the oceans originates from land-based activities. In the South Asian region, the marine environment is particularly threatened by the physical alteration of the coastal zone due to expansion of development activities to sustain the increasing economic growth and to cope with rapidly expanding human population. As indicated in the table below some of the critical habitats that are directly effected by the physical alternations in the coastal zone are mangroves and coral reefs. Expansion of aquaculture activities and diversion of river water for irrigation purposes have reduced the mangroves of the region while construction and mining activities poses a threat to the coral reefs. A recent IUCN publication indicates that the endangered marine mammal-dugong is vanishing from the region due to siltation of the sea grass beds which provides the animal with food and shelter. Human interventions such as conversion of seasonally flooded low-lands in to settlement areas has resulted in increased flooding, specially in coastal areas of Sri Lanka. Poorly developed ports and harbors also poses a threat to the survival of coastal habitats of the region through increased erosion and siltation.

Bangladesh	<ul style="list-style-type: none"> • In Charika Sudarbans large scale deforestation has taken place to make room for shrimp and finfish cultivation • During the past 25 years over 14 major cyclones hit the coastal belt of the country causing great damages to structures within the cyclone path
India	<ul style="list-style-type: none"> • Due to the construction of brackwater for Chennai Port, there is an annual accretion of 1.5m of sand in the Southern part, while there is erosion at a rate of 1.7m per year in the Northern part. • 100,000 ha of mangrove areas have been destroyed for aquaculture activities • Lagoons such as Chilka, Godavari have become highly siltated due to diversification of river waters to agricultural activities. • The construction of East Coast Highway, a 737km coastal highway from Chennai to Kanyakumari, lead to the clearance of mangroves and other trees along the coast leading to increased erosion and greater destruction during cyclones.
Maldives	<ul style="list-style-type: none"> • Land reclamation schemes by pumping sand from the atoll lagoon floor into reef flats for human settlements destroys the reef communities and enhance coastal erosion • Coral rock and aggregate mined from reefs are major building material
Pakistan	<ul style="list-style-type: none"> • Indus river flow has decreased due to the construction of irrigation canals – declining of mangrove forests. • Construction of the International highway linking Karachi with Gwadar and the Islamic Republic of Iran – the highway will pass through Hingol National Park and is a threat to the biodiversity. • Damming of Hub river and Dasht River – decline of estuarine fauna and flora • Dredging activities are being undertaken along the Sindh and Balochistan coast for land reclamation, maintenance dredging of navigational channel of ports and harbours and for planned ports along the Balochistan coast at Gwadar. • Dredging activities for the navigational channels of Port Qasim and Karachi Port have changed the hydraulic regime in the areas. • In the Karachi Metropolitan, much of the land filled sediment is obtain by dredging nearby sediments from the coastal area.
Sri Lanka	<ul style="list-style-type: none"> • 600 ha of coastal area have been destroyed between Puttalam and Chilaw due to shrimp farm construction. • Lagoons in Chilaw, Negambo and Mawella area severely impacted by encroachment and land reclamation. • 92% of the sand mind for construction activities come from rivers. • Coral supplies 90% of lime needed for the construction industry • Poorly designed fishery harbours have increased coastal erosion in certain areas.

Therefore, the project on “ Physical alteration and destruction of habitats: guidelines for action and the role of stakeholders” now implemented by UNEP-GPA in this region will assist the member countries to overcome the unsustainable practices. This project will assist sectors such as tourism, mining, ports and aquaculture through the development of checklists and guidelines. The GPA-Clearing house mechanism will also disseminate case studies and examples illustrating the environmental, socio-economical benefits of positive actions.



Present Status of the Gulf of Mannar Biosphere Reserve of India



The Gulf of Mannar Biosphere Reserve (GMBR) located in the Northern coast of Tamil Nadu, India, is recognized as one of the world's richest area of marine biodiversity, as it provides a home for more than 3,600

species. The reserve is comprised of a 560 km² core area of 21 islands and shallow marine habitat surrounded by a 10km wide, 160km long buffer zone which contains coral reefs, mangroves and sea grass beds. Declared as India's first marine national park in 1980, and upgraded in to Biosphere reserve under UNESCO's Man and Biosphere Programme due to its bio-physical and ecological uniqueness, economic, social, cultural, scientific importance, and national and global significance. Despite this international recognition, GMBR is under threat as indicated in the box in the following page.

Importance

Sea grass beds -The reserve has the highest concentration of seagrass species along India's coast line. Six of the world's twelve sea grass genera belonging to eleven of the world's fifty species have been recorded and they provide feeding grounds for endangered dugong (*Dugong dugong*), all five species of marine turtles, and many species of crustaceans, mollusks, gastropods and fish larvae

Coral reefs -137 species belonging to 37 genera

Mangroves - 17 species have been identified and this habitat act as a nursery for animals

27 marine mammal species- 11 species of whales, 14 dolphins, 1 species of dugong and 1 species of porpoise. All of them fall in to categories of vulnerable or endangered species.

It is also home for 168 migratory bird species and the sandy shores are important nesting grounds for marine turtles.

Fish – around 450 species

Commercial fishery – More than 138 villages and towns spreading over five districts of Tamil Nadu depend heavily of the fishery resources of the Gulf

Oil reserves – India has drilled around 700 wells since 1989

In India, biosphere reserve and national park management responsibilities are primarily vested with the state government and therefore, the state of Tamil Nadu (TN) is responsible for taking care of the GMBR. As indicated below, several institutions have the legal and policy mandates for activities within the reserve.

Act

The Tamil Nadu Forest Act 1887
The wildlife Protection Act 1972

The TN Marine Fishing Regulation Act 1983
Water Prevention & Control of Pollution Act 1974
Air Prevention & Control of Pollution Act 1974
GOI's Coastal Zone Regulation, 1986

Responsible Agency

TN Forest Department
TN Forest Departments Wildlife wing

TN Fisheries Department

TN Pollution Control Board

Responsibility

Sustainable management of forests
Enforce wildlife protection measures and formulate policies
Regulate the fishery activities

Prevent and control land-based pollution along the Gulf's coast.

A new approach to conserve the GoMBR:

Under the UNDP/GEF funded project "Strengthening the Management of the Gulf of Mannar Marine Biosphere Reserve" a management programme will be developed and implemented for the conservation and sustainable management of globally significant biodiversity in the GMBR. The preparatory phase will involve consultations with stakeholders, develop mechanisms for stakeholder participation, identification of system boundaries and priority activities to address the root causes of the threats to biodiversity in the area. It will also identify baseline and incremental costs, project execution modalities, and implementation arrangements for a marine biosphere reserve management programme. The full project is intended to build national capacity in the area of marine reserve management, including the development and initiation of a management plan. It will also identify and develop alternate sustainable economic activities within the reserve in a participatory manner involving local communities.

References:

1. Raghavan, R (2002): Bioaccumulation of certain heavy metals in edible oyster. *Crassostrea madrasensis* off Tuticorin coast, Gulf of Mannar, India and Present pollution threat and measures for conservation of Gulf of Mannar, the first marine biosphere reserve in South and South East Asia. Proceedings of Coastal Zone Asia Pacific Conference, Bangkok, Thailand.
2. UNEP/GEF (199): Conservation and sustainable-use of the Gulf of Mannar Biosphere Reserves Coastal biodiversity. Project of the Government of India and the State Government of Tamil Nadu.



Major threats to the survival of GMBR

- **Rapid industrialization and population increase** around the reserve
- **Over-exploitation of natural resources** like corals mangroves and sea grass and species such as chanks, pearl oysters, halothurians and the green tiger prawn (*Penaeus semisulcatus*). Around 50,000 people dwelling in 47 villages along the coast-line bordering the Gulf directly depend on the reserve for their livelihood
- **Proposed development projects** such as Sethu Samudram Ship Canal Project on the coast of Tamil Nadu – The project entails the dredging of a canal to enable faster sea travel between the east and west coasts to prevent ships having sail 700 miles around Sri Lanka.
- **Unsuitable fishing practices** such as Intensive trawling and dynamite fishing
- **Release of effluents** containing organic compounds, chlorinated hydrocarbons and mercury by two major chemical industries.
- **Poaching** of threatened species including sea turtles and dugongs
- **Release of sewage** waters of the coastal towns bordering the Gulf with out proper treatment (9 to 20.6x10³ m³/day)
- **Discharge of untreated effluents** of seafood processing plants and shrimp culture systems
 - Effluent discharged by the shore based coal-fired thermal power plant - Hot salty water and residual chlorine effluents.
 - Disposal of fly ash from the thermal Power station at Tuticorin is responsible for the relative enrichment of lead and aluminum in water, sediment and in the edible oyster, *Crassostrea madrasensis*.
- **The lack of cooperative relationship** between park management and buffer zone communities hampers enforcement of existing laws.

South Asia Gets Ready For Johannesburg

It is less than two months from now for the Rio+10 meeting in Johannesburg, South Africa, which is designed to review the progress made towards aims set out in Agenda 21 and to accelerate the implementation of its commitments. The meeting supposed to focus on 'action oriented' decisions in areas where further efforts are needed, find out new challenges and opportunities and to obtained renewed political commitment and support to implement the blue print on sustainable development.

UN Secretary General Kofi Annan's special report to the General Assembly notes that governments suggested issues to be addressed in the 2002 agenda, including poverty and sustainable development, climate change, biodiversity, the protection and sustainable management of water resources, energy, sustainable forest management, access to financial sources and technology, education, distributional equity and environmental security. Consequently, deadlocks in cross-cutting issues such as finance, technology transfer, capacity building, trade and governance will also be addressed at the meeting.

It is also believed that the conference can also be successfully promoted as a target date for the entry into force of a number of key multilateral environment agreements, including the Kyoto Protocol on climate change, the Cartagena Protocol on Biosafety, the Rotterdam Convention on Prior Informed Consent and the Stockholm Convention on persistent organic pollutants.

In this context the conference provides a good forum where the South Asian Countries can come up with new initiatives to improve our regions environment together with the living standards of our people under one voice.

Therefore, the Environment Ministers and Heads of delegations of the member countries of SACEP will meet in Colombo on 30th June 2002 to discuss the draft South Asian Regional position on Sustainable Development for the Johannesburg Summit. The position paper will especially cover issues such as poverty reduction, political and economical stability and capacity building.

On line Resources for WSSD

The International Institute for Environment and Development has prepared several publications for the World Summit on Sustainable Development. The following list gives a list of publications that are available on line:

The Future is Now : vol.1 : http://www.iied.org/pdf/Rio_Volume1.
 The Future is Now vol.2 : http://www.iied.org/pdf/tfin_Volume2.pdf
 The Future is Now vol.3 : http://www.iied.org/pdf/tfin_Volume3.pdf

Financing for Sustainable Development :
 <http://www.iied.org/pdf/wssd_ffsd.pdf>
 How good forest governance can help reduce poverty :
http://www.iied.org/pdf/wssd_26_forests_and_poverty_short.pdf
 More society in markets :
 <http://www.iied.org/pdf/wssd_27_RING_more_society.pdf>



Coral Reef Corner

ICRAN Comes to South Asia

UNEP Regional Seas Programme office in Nairobi is financially supporting SACEP for extending International Coral Reef Action Network (ICRAN) activities to the South Asian Region through the development of project proposals to strengthen the coral reef management in the region. The proposals are supposed to be implemented under the ICRAN umbrella and therefore, should be complementary to ICRAN activities in other regions such as Wider Caribbean, Eastern Africa and the South East Asia.

The proposals prepared will be included in the ICRAN fundraising campaign and are intended to be submitted as "Type 2" activities under ICRAN to the Secretariat of the World Summit on Sustainable Development (WSSD). Type 2 projects are defined as new, result-oriented international partnership initiatives, preferably with north-south co-operation, that can be linked to political declarations and commitments related to implementation of Agenda 21

Alternative Livelihoods: An Optional Tool for Sustainable Coral Reef Management in Sri Lanka

Two per cent of the 1,585 km long coastline of Sri Lanka is covered with fringing reefs while some larger offshore reef areas are found in Gulf of Mannar and along the northwest coast. About 183 species of hard corals have been recorded while larger number of fish, marine turtles, dolphins and various invertebrates live in association with them. These reefs serves as important fishery grounds, attract tourists and protect the coastlines from erosion.

According to the Reef at Risk Assessment, the Sri Lankan reefs are at highest risk within the South Asian Region. 86 per cent of the reefs are facing degradation due to coral mining, destructive fishing practices, pollution from land based activities, increased pressure from tourism, coral bleaching and predation and invasions. Considering the vulnerability of reefs and the range of impacts to which they are subjected, it is clear that concret actions are required to maintain their health.

Provision of alternative livelihoods to the reef resource users is one of management options available for sustainable reef ecosystem management. SACEP secured funding from Coral Reef Degradation in the Indian Ocean (CORDIO) programme to look at the possibilities and practicalities of providing ornamental fish collectors, reef fishermen, and the coral miners with alternative livelihood options that will mitigate the effects their economic loss by abandoning the current livelihoods.

The first stake holder workshop was held on 24th April 2002, where more than 40 participants showed their interest to assist SACEP secretariat to come up with a concluding Report (see Box).

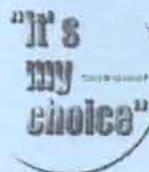
SACEP secretariat welcomes new ideas comments and recommendations from the readers., Please contact Nishanthi Perera, Programme Officer for further information about this project. (np-sas@eureka.lk)

The Report will include the following ::

- Description of the present livelihood practices in selective coral reef ecosystems in the country including their positive and negative aspects and impacts.
- Identify past/current/future government and donor driven projects and programmes focused on alternative livelihood initiatives in the country in regard to coastal resources management and the opportunities, constraints and effectiveness of these activities.
- Review alternative livelihood best practices from other parts of the world and recommend those that are applicable to Sri Lanka.
- Prepare specific programmatic recommendations for the development of alternative livelihoods.

Online game for kids

If you are on the look out for material to help educate children about life on the coral reefs check out <http://www.bbc.co.uk/nature/blueplanet/webs/index.shtml>. These games were designed to go with the BBC Blue Planet film on coral reefs.



Five Communication Tools For Tourism

In response to the growing threat to coral reefs worldwide, the United Nations Environment Programme (UNEP) in association with the International Coral Reef Initiative (ICRI) have prepared five new communication tools to help the tourist industry explain to their customers the importance of protecting coral reefs during their holidays. The first of these tools, a "wall calendar", was distributed to the 1,500 hotels attending the largest travel and trade exhibition in the wider Caribbean region which took place in Cancun, Mexico in January 2002. The calendar, produced in association with the Caribbean Alliance for Sustainable Tourism (CAST), is available in English, French and Spanish. It provides recommendations on twelve areas of action (one per month) that are linked to the protection of coral reefs, including waste water treatment, solid waste management, pool management, energy use, shopping for souvenirs, and tips for snorkeling and scuba diving. Two detachable pages list contacts for organizations in the Caribbean region that can provide more assistance and information to hotel managers and tourists alike.

The other tools are a passport targeting all tourists, which explains the main biological and ecological features of coral reefs; a quiz targeting kids of the 8-12 age group; boaters chart highlighting five symbols indicating no-anchor areas, mooring buoys, protected areas, used oil containers and divers down flag; and a poster highlighting how tourists can contribute to the protection of coral reefs while on holiday.

Developed with financial support from the French Ministry of the Environment as a contribution to ICRI, the communication tools are available free of charge as electronic files on CD, which can be used to print attractive and informative materials. Available in five languages, they can be distributed with travel documents or in in-flight magazines, in hotel lobbies and rooms, or at travel agencies, airport lounges, visitor information centers, reception areas, and recreation centres. To request a CD, contact the UNEP DTIE Tourism Programme coordinator at: tel +33 1 44 371450, fax +33 1 44 371474, E-mail: unep-tie@unep.fr. A descriptive brochure is available in pdf format (279k): [coralbrochure.pdf](#). A web version of the tools is also available as *Tips for Travellers* at: <http://www.unep-tie.org/pc/tourism/sensitive/coral/>

ADB Assist Four South Asian Maritime Countries to Identify and Pilot Test High Priority Marine and Coastal Ecosystems

A Regional Technical Assistance (RETA) titled "Coastal and marine resources management and poverty reduction in South Asia" is now being implemented by IUCN-Asia with financial assistance from the Asian Development Bank. The overall goal of this TA will be to strengthen cooperation in the integrated management of regionally significant and ecologically sensitive coastal and marine ecosystems in Pakistan, Sri Lanka, Maldives and India.

The identification and proposals of interventions in selected High Priority Areas (HPAs) of significant economic and ecological importance will be done initially at the national level, and then the process will be further refined in order to identify key representative areas of regional significance. The TA is expected to provide an investment proposal encompassing the following 8 outputs:

1. A Regional Strategic Plan for sustainable coastal resources management in South Asia. The plan will encompass recommendations for regional cooperation and collaboration including mechanisms for information exchange, database development and management, and capacity building using institutions of excellence within the region.
2. A compendium of High Priority Geographical Areas (HPAs) of highest environmental and ecological significance and sensitivity.
3. An analysis of policy, institutional, regulatory, and other constraints that act as barriers to effective and efficient collaborative approaches to ICZM, and opportunities to address such constraints.
4. A Strategy for the application of ICZM approaches in the HPAs, which addresses constraints and makes use of opportunities.
5. Pilot testing of site-specific ICZM plans for selected HPAs to provide replicable models.
6. Estimates of the required investment needed for implementation of ICZM strategies for HPAs.
7. Development and implementation of improved information exchange, database development and a capacity building plan using institutions of excellence within the region.
8. A day-to-day network of coastal managers and technical and scientific personnel.

Given the wide variety of political, ecological and economic contexts operating in each of the participating countries, it is recognized that the respective scope of interventions will be diverse. This will further be compounded by the differences in the level of policy, legal and institutional capacity for integrated coastal zone management. In order to address this complexity, planned ongoing and completed activities furthering the objectives listed above will be assessed and complementary activities developed where necessary.

Visit <http://www.reta.sdnpc.org> for more information.



Bangladesh Adopts Integrated Coastal Zone Management

Until the late 1980's the GOBs effort towards the coastal zone management was dominated by an engineering paradigm through building embankment and sluices to protect the coastal zone from tidal surges, cyclones and saline intrusions. Then in 1988 a report titled "Coastal environmental Management Plan for Bangladesh" was produced by the ESCAP, which addressed the integration of socio-economic considerations into the environmental issues. After the devastating cyclone of 1991, 13 coastal districts were identified as being cyclone prone and a plan was formulated to establish a cyclone shelter network in the coastal areas.

However, during the last decade the management objectives for coastal zone moved beyond the use of plans, laws and administrative modalities and emphasized a sectoral approach, which address the coastal system as a whole. This approach attempts to identify the whole range of stakeholders, encourage a wider appreciation of the implication of their activities and foster an attitude of adaptation and therefore, it has approached the status of integrated Coastal zone Management (ICZM).

The core objective of ICZM is to strengthen horizontal integration encompassing various development policy initiatives in the field of poverty eradication, physical safety of people and reduction of vulnerabilities that limit the development of livelihoods in coastal communities.

For the implementation of a preparatory phase of the ICZM Programme, the GOB has created the Program Development Office (PDO), with the financial support from the Government of Netherlands. The PDO is an independent Unit within the Ministry of Water Resources and it is now functioning under the guidance of an Inter-ministerial Steering Committee (SC).

The SC co-ordinates the activities of PDO with the participation from all relevant stakeholders, ministries and agencies which comes under their jurisdiction. The Minister of Water Resources will chair this high level committee.

A Technical Committee comprising of heads of all the relevant departments, representatives from universities, NGO's and the civil society is assisting the SC in conducting its activities.

Further information can be obtain from www.iczmpbangladesh.com.

In the light of the objectives of ICZM, the Programme Development Office will be addressing the following Issues:

- Identify a policy and institutional framework and develop a strategy for coastal development.
- Defining measures to reduce the risk of loss of life and damage to property by cyclonic storms and tidal surges and to enhance the capacities of the coastal communities to cope with immediate natural shocks and recover from the losses with dignity.
- Develop a strategy for the management of both risks and consequences of disaster, which would include prevention, emergency response and post-disaster recovery.
- Initiate a process approach to coastal development that harmonises the policies, programmes, procedures and activities of different GoB institutions, NGOs and donor supported projects active in the coastal zone.
- Develop a strategy for enhancing civil society (including the local communities) capabilities and participation in coastal development.
- Identify strategies and activities to enhance livelihoods development and reduce vulnerabilities in the coastal zone.
- Develop the knowledge base, improve awareness and establish a monitoring and evaluation system for coastal development

Continued from page 1.....

To complement this SACEP Secretariat is proposing the set up of five Regional Activity Centres in the following areas: Land based pollution; Oil spills; Biodiversity; Assessment and Monitoring; and Integrated Coastal Zone Management. To develop a harmonized system for responding to emergency oil spills in the region, a Memorandum of Understanding (MoU) will be signed by the member countries at this meeting. This MoU will provide the basis for enhanced regional cooperation and will lead to the proper implementation of the South Asia oil spill contingency plan develop by the Secretariat with the assistance of IMO.

In order to assist the member countries to ratify and implement MARPOL 1973/78, the issue of provision of port reception facilities will be also discussed.

The Secretariat also seeks guidance from the meeting for the implementation of multilateral agreements such as Basel Convention, Convention of Biological diversity, RAMSAR Convention, Convention on Climate Change etc.,.

The Secretariat will also propose a strategy to ensure a stable financial base for future programme implementation.

The most important task of the IMM will be to adopt the proposed, and come up with additional actions to protect and share the coastal and marine heritage of South Asia.



Conventions updates

Marine Turtle Nesting Database for the Indian Ocean

The Secretariat of the Convention on Migratory Species (CMS) has sponsored a prototype project at World Conservation Monitoring Centre (WCMC) to present special data on the internet. This project is intended as a model for the delivery, revision, maintenance and exchange of information on marine turtle nesting beaches of the world and the Indian Ocean subset was released with the aim of assessing the level of demand for the data and the feasibility of maintaining data to reflect best available information.

Information for the database was obtained from published and unpublished literature and through liaison with turtle fieldworkers. The database is intended to be of use to a wide set of audience, including biologists, coastal planners and those concerned with emergency response to oil spills.

Visit www.wcmc.org.uk/marine/mturtle/home.htm for further information

Sixth Meeting of the Intergovernmental Negotiating Committee (INC) on Persistent Organic Pollutants

The above meeting will be held from 17-21st June 2002 in Geneva with the objective of establishing the INC as the oversight mechanism to coordinate and foster continuing international action on POPs and to prepare for a "quick start" to the Conference of the Parties (COP) process by advancing preparations for the first COP of the Stockholm Convention on Persistent Organic Pollutants.

During the course of the meeting, delegates to INC-6 will meet in Plenary to consider organizational matters, specifically, expansion of the size of the Bureau, and preparations for the COP, including: measures to reduce or eliminate releases from intentional production and use and register of specific exemptions, as well as measures to reduce or eliminate releases from unintentional production and from stockpiles and wastes; implementation plans; listing of chemicals; information exchange; technical assistance; financial resources and mechanisms; the interim financial mechanism; reporting; effectiveness evaluation; non-compliance; and settlement of disputes. The Legal Drafting Group is also expected to meet throughout the week, while contact groups may be set up to address particular issues. Visit <http://www.iisd.ca/chemical/pops6/> for further information.

Newest Member of the Regional Seas Family: The North-east Pacific

North-east Pacific Regional Seas Programme, comprising Costa Rica, El Salvador, Guatemala, Honduras, México, Nicaragua and Panamá now has an action plan which addresses cooperation in the protection and sustainable development of the marine and coastal environment. The member countries signed the convention on 18 February, 2002 and held the First Intergovernmental Meeting 19 - 22, February 2002 in Guatemala City, Guatemala. Visit <http://www.unep.ch/seas/dumnep.html> for further information.

First-ever Global Guidelines Adopted on genetic resources

At the two week meeting on the Convention on Biological Diversity held in April 2002 at Hague, the high level delegations of the member countries adopted detailed guidelines on access to genetic resources and benefit sharing. These guidelines promise to improve the way foreign companies, collectors, researchers and users gain access to valuable genetic resources in return for sharing benefits with the countries of origin and with local and indigenous communities. It also advises governments on how to set fair and practical conditions for users seeking genetic resources (such as plants that can be used to produce pharmaceuticals or fragrances). In return, these users must offer benefits such as profits, royalties, scientific collaboration or training.

These guidelines were developed in response to growing concerns in many developing countries that the commercial and scientific gains realized from their genetic resources were being reaped only by bioprospectors based in foreign countries.



SACEP NEWS

The mission of SACEP is to promote and support protection, management, and enhancement of the environment of the countries of South Asia, collectively and co-operatively.

Share your news with us

You are invited to submit articles or letters to the editor for consideration for publication in the upcoming issues of the Newsletter.

To include your name on our mailing list send a request to:

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The Newsletter does not necessarily reflect the official views of the contributing organizations.

SACEP Review Panel

The Governing Council of SACEP at its Eighth Meeting held in September 2001, requested UNEP for its assistance in carrying out a review of SACEP with the following objectives:

1. Evaluation of the past performance of SACEP since its inception
2. Identification of bottlenecks in the functioning of SACEP
3. Feasible future work programme for the organization and
4. Implementation mechanism to achieve the recommended strategies and measures.

Subsequently, SACEP secured financial assistance from the UNEP's Regional Resource Centre for Asia Pacific (UNEP-RRC.AP) to form a three member external review panel consisting of Mr R. Rajamani (Ex-Secretary, Ministry of Environment and Forest, Government of India); Dr Atiq Rahaman (Executive Director Bangladesh Centre for Advanced Studies); and Dr Devanesan Nesiahas (Ex-Secretary, Ministry of Transport and Environment, Government of Sri Lanka). The review panel will conduct their work from June to August 2002 and will visit the member countries, donor agencies and other relevant institutions before coming up with the final proposal to strengthen the programme and institutional structure of SACEP.

The Inception meeting of the panel will take place from 18-20th June 2002 in Colombo, where the panel members will have discussions with SACEP officials and the members of the Consultative Committee. They also will meet the donor community based in Sri Lanka and the senior officials of the Ministry of Environment and Natural Resources and other relevant stakeholders within the country.

Up coming Events (Meetings/Conferences)

Meeting	Date	Venue
Fifth Asian Focal Point Meeting, UNCCD	8-12 July	Damascus, Syria
The Annual Network Meeting of Malé Declaration	18-19 July	Kathmandu, Nepal
Prevention and Management of Invasive Alien Species: Forging Cooperation throughout South and South-East Asia	14-16 August	Bangkok, Thailand
World Ecotourism Summit	19-22 August	Quebec, Canada
The WSSD (Rio+10)	26 August – 4 September	Johannesburg, South Africa
Meeting of the Global Mercury Assessment Working Group	9 – 13 September	Geneva, Switzerland
9 th Session of the Intergovernmental Negotiating Committee, Rotterdam Convention	30 Sept. – 4 October	Bonn, Germany
SACEP MARPOL Workshop, IMO	November (Tentative)	Colombo, Sri Lanka
SACEP Regional Level 2 OPRC Course	11-15 November	Sri Lanka
12 th Meeting of the Parties to CITES	14-16 November	Santiago, Chile
1 st Session of the Committee for Review of the Implementation of the Convention (CRIC), UNCCD	18-29 November	Not yet decided
Second International Tropical Marine Ecosystem Management Symposium –ITMEMS (ICRI)	25-28 November 2002	Manila, Philippines
The 14 th Meeting of the Parties to Montreal Protocol on Substances that Deplete the Ozone Layer	25-29 November 2002	Not yet decided