



# SOUTH ASIA ENVIRONMENT

Volume 1  
Issue 1  
June 1999

**NEWSLETTER OF SOUTH ASIA CO-OPERATIVE ENVIRONMENT PROGRAMME (SACEP)**

## SACEP'S 7<sup>TH</sup> GOVERNING COUNCIL REVISES ITS PRIORITY SUBJECT AREAS

The Seventh Meeting of the Governing Council of the South Asia Co-operative Environment Programme was held on 22 April 1998 at Malé, Republic of Maldives. The meeting was attended by Ministers and senior policy makers from Environment Ministries of the member countries, namely India, Maldives, Nepal, Pakistan and Sri Lanka. Representatives from UN agencies and other International Organisations were also present at the meeting as observers. Addressing the inaugural session of the meeting, His Excellency Maumoon Abdul Gayoom, President of the Republic of Maldives said: "In a few years' time, we shall bid farewell to a century that has witnessed great progress in science and technology. And, we shall enter a new one with the hope and promise of scaling even greater heights. But only if mother earth can be given a new lease of life; and only if we stop the abuse of the environment. Here in South Asia, we need a visionary approach to environmental matters. For, as we sit on the threshold of a new millennium, environmental conservation has become one of the most critical issues facing this region, and indeed the world. If we carry on business as usual, irreparable damage could be done to the earth's life support system." Heads of delegations from India, Maldives, Nepal, Pakistan and Sri Lanka made presentations of their country statements to the Governing Council. All statements reflected the initiatives taken by the countries in the area of environmental protection and management. The Country Statements clearly recognised the very crucial and pivotal role played by SACEP in the promotion of environmental management in the South Asian region and noted that this area of activity must receive priority attention. The Governing Council endorsed a revised list of priority subject areas for South Asia, which are in line with Agenda 21.

### *In This Issue*

- \* SACEP's 7<sup>TH</sup> Governing Council Revises its Priority Subject Areas
- \* Malé Declaration on Control and Prevention of Air Pollution
- \* Environmental Information Management: SENRIC
- \* South Asian Regional Seas Programme: Action Plan, Priority Activities and Projects
- \* SACEP Initiative: Biodiversity Conservation
- \* Project Activities and Events
- \* Publications, Visitors to SACEP
- \* Vision: Emerging Environmental Challenges & Priorities for action in South Asia
- \* Up-Coming Events

### Priority Subject Area

### Focal Point Country

Conservation of Biodiversity	India
Sustainable Tourism Development	Maldives
Management of Coral Island Ecosystems	Maldives
Management of Fresh Water Resources	Bangladesh
Desertification	Pakistan
Environmental Legislation	India
Participatory Forest Management	Nepal
Sustainable Agriculture and Land Use	Sri Lanka
Sustainable Human Settlements Development	Sri Lanka
Waste Management	India
Science & Technology for Sustainable Development	Pakistan
Education & Training	India
Energy & Environment	India
Air Pollution	Pakistan



## MALÉ DECLARATION ON CONTROL AND PREVENTION OF AIR POLLUTION AND ITS LIKELY TRANSBOUNDARY EFFECTS FOR SOUTH ASIA

### & STATUS OF IMPLEMENTATION

On 22 April 1998, the "Malé Declaration on Control and Prevention of Air Pollution and Its Likely Transboundary Effects for South Asia" was discussed and adopted by

Ministers of the Environment at the Seventh Meeting of the Governing Council of SACEP.

- Recognizing the potential for increase in air pollution and consequential phenomena due to concentration of pollutant gases, acid rain or acid deposition as well as the impacts on the health of humans and other living organisms in all our countries due to man made and natural causes; and also
- Recognizing the potential for increase in transboundary air pollution as a corollary of air pollution in each country; and
- Realizing that the potential for air pollution increase and its transboundary effects will accumulate in the absence of national measures to abate and prevent such potential; and
- Reiterating in this context Principle 21 of the UN declaration on the Human Environment in 1972 which stated that States have, in accordance with the charter of the United Nations and the principle of international laws, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other states or of areas beyond the limits of national jurisdiction;
- Keeping in mind that need for constant study and monitoring of the trends in air pollution with a view to understand the extent of our potential for damage to the environment and health in the member countries and taking consequential measures to strengthen and build capacity for such activities;
- Stressing the need for development and economic growth that will help build up the quality of life and incomes of all the people of all the region, in particular the poorer sections of the population, having due regard to the need to have a clean and healthy environment;

Emphasizing that air pollution issues have to be analyzed and managed in the wider frame-work of human and sustainable development within each country and within the region; and

Drawing from the experience of co-operation in the region in matters like cultural exchange and also from the experience in other regions like Europe and sub-regions of Asia like ASEAN and East Asia.

We declare that countries of this region will initiate and/or carry forward programmes in each country to:

1. Assess and analyze the origin and causes, nature, extent and effects of local and regional air pollution, using the in-house in identified institutions, universities, colleges etc., building up or enhancing capacities in them where required;
2. Develop and/or adopt strategies to prevent and minimise air pollution;
3. Work in co-operation with each other to set up monitoring arrangements beginning with the study of sulphur and nitrogen and volatile organic compounds emissions, concentrations and deposition;
4. Co-operate in building up standardized methodologies to monitor phenomena like acid depositions and analyze their impacts without prejudice to the national activities in such fields;
5. Take up the aforesaid programmes and training programmes which involves then transfer of financial resources and technology and work towards securing incremental assistance from bilateral and multilateral sources;
6. Encourage economic analysis that will help arriving at optimal results;
7. Engage other key stakeholders for example industry, academic institutions, NGOs, communities and media etc. in the effort and activities.

We also declare that we shall constantly endeavor to improve national reporting systems and strengthen scientific and academic effort in the understanding and tackling of air pollution issues.

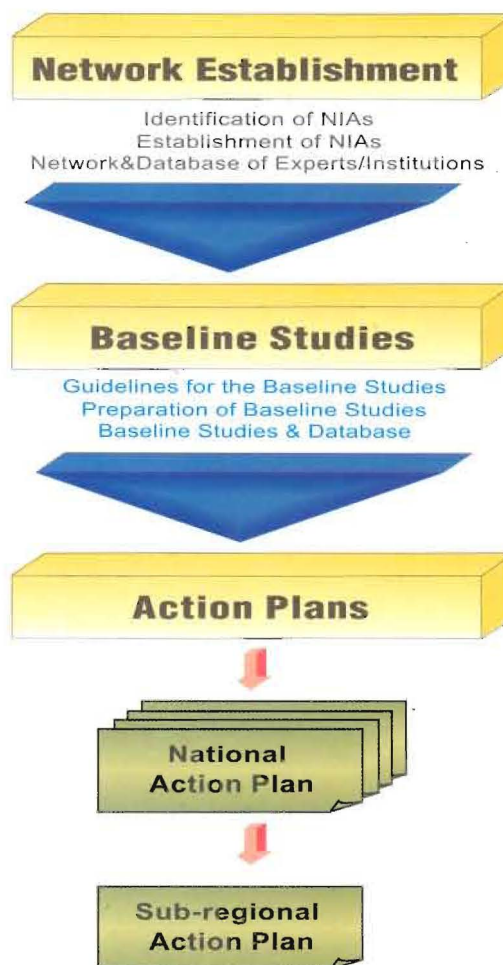
We further declare that we shall continue this process in stages with mutual consultation to draw up and implement national and regional action plans and protocols based on a fuller understanding of transboundary air pollution issues.

We declare that in pursuit of the above, we shall evolve, as appropriate, institutional structures at the national level, including networking, both for the purposes of policy and the technical requirements, and we shall use the good offices of regional, international bilateral and multilateral agencies in this, as appropriate.

In addition to the Malé Declaration on Control and Prevention of Air Pollution, a follow up action plan has also been agreed. Follow up activities will be implemented at three levels: National, sub-regional and regional. In addition to the baseline studies and national action plans, a network will be established with the objectives to develop links between regional experts and policy-makers. At the sub-regional level, national level activities will be aggregated through SACEP.

The Inception Workshop for the implementation of the Malé Declaration on the Control and Prevention of Air Pollution and its Likely Transboundary Effects for South Asia was held in Kathmandu during 22-23 February 1999. The meeting was organised by United Nations Environment Programme / Environment Assessment Programme for Asia and Pacific (UNEP/EAP.AP), in collaboration with SACEP and Stockholm Environment Institute (SEI). The local organiser was International Centre for Integrated Mountain Development (ICIMOD). The meeting was funded by SIDA as a part of the programme on Atmospheric Environment Issues in developing countries which is being co-ordinated by SEI and implemented in collaboration with organisations and institutions world wide. The meeting was attended by representatives from the Ministries of Environment and National Implementing Agencies (NIAs), SACEP, ICIMOD, SEI, UNEP/EAP.AP and an independent regional advisor. The meeting adopted guidelines to prepare the baseline studies and guidelines to prepare the Malé Declaration Action Plan (National). The time frame for implementation of the programme was also agreed on.

## OUTLINE OF IMPLEMENTATION



## ENVIRONMENTAL INFORMATION MANAGEMENT

### SACEP Environmental Natural Resources and Information Centre (SENRIC)

SACEP with agreement and support from UNEP-EAP.AP and initial support from the Asian Development Bank established an EAP's node for South Asia to complement the UNEP's Regional Environmental Information Network for the Asia and Pacific Region. The Centre aims to provide assistance to the regional governments in *Capacity Building; Data Management; Assessment and Reporting* activities.

With the continuous growth since its inception in 1982, SACEP has gradually built up its tools to assist regional governmental agencies in utilising state-of-the art technologies for decision making. Through the SENRIC Project SACEP is now in a position to develop case studies/advise the national agencies in building up environmental databases and to develop models for

practical situations to assist the decision making process. To assist the agencies, through the SENRIC project, SACEP established links with proper agencies to aid Institutional Capacity Building which are well-equipped to train the nodal agencies to introduce the state-of-the art technologies for information processing through Geographical Information Systems (GIS) and Image Analysis.

#### Training and Facilities

SENRIC through the initial years since its inception in 1994 trained a number of agencies in the fields of GIS and IP. In 1995, the project established a training facility at the University of Peradeniya in Sri Lanka and trained the Lecturers of the University to assist the training Programmes offered through the

facility. The facility can now accommodate up to 12 trainees. The facility at the University is now equipped with proper hardware / software and more appropriately, the training material to offer courses on GIS for decision making and environmental management.

#### Institutional Capacity Building

**ERDAS Remote-Sensing Software**  
SACEP with the agreements through the UNEP/EAP.AP is in a position to assist the regional government agencies by providing the ERDAS-IMAGINE Image Processing System at a very special discounted price.

**Arc/Info and Arc-View GIS Software**  
A similar assistance as the foregoing is being offered to the agencies of the member countries to provide the most renowned software in the field of GIS. SENRIC Project would assist

the national agencies in establishing their local GIS / IP capability by providing training and assisting them in developing case studies for decision making for Environmental Management.

### **Environmental Assessment and Reporting**

The Environmental Assessment and Reporting for the region will be the focus for the next biennium. The national and sub-regional reports are being pursued as the main activity with support from the UNEP/EAP.AP and



## **South Asian Seas Programme Action Plan, Priority Activities and Projects**

The emergence of SACEP in 1982 saw with it the revival of interests towards the establishment of a Regional Seas Programme for the South Asian Seas, which was long pending for a variety of historical reasons.

A Meeting of Plenipotentiaries on the Action Plan for the Protection and Management of the Marine and Coastal Environment of the South Asian Seas Region was convened, at the request of the Governments of the region, by the Executive Director of the United Nations Environment Programme pursuant to the decision 11/7 of the General Council, adopted on 24<sup>th</sup> May 1983 which requested "... the Executive Director to designate the South Asian Seas as a Region to be included in the Regional Seas Programme."

The meeting was held in New Delhi, India at the invitation of the Government of India. Bangladesh, India, Maldives, Pakistan and Sri Lanka were among the states invited. The South Asia Seas Action Plan was formally adopted at the meeting. The South Asia Co-operative Environment Programme (SACEP) has been designated as the secretariat for the implementation of the Action Plan. The Action Plan adopted for the South Asian Seas Programme is probably unique in the sense that four priority activity areas have already been identified with specific programme areas spelt out. These priority areas are Integrated Coastal Zone Management, Development and Implementation of National and Regional Oil and Chemical Spill Contingency Planning, Human Resources Development through Strengthening Regional Centres of Excellence and Protection of the Marine Environment from Land-based Activities.

### **Objective of the Action Plan**

The overall objective of the Action Plan is to protect and manage the marine environment and the related coastal ecosystems of the South Asian Seas Region. This objective is to be achieved through the enhancement of technical co-operation and collaboration among the member countries. It also aims to create awareness of the economic and social importance of resources of the marine and coastal environment and to establish a regional co-operative network of activities, concerning

the Norwegian Government. The modalities and the activity framework are being finalised targeting the report generation in the year 1999. As a part of the global assessment, Global Environment Outlook (GEO) is the outcome for the region. GEO I was released by UNEP in 1997 and the GEO II is expected to be published during the third quarter of 1999. Sub-regional consultations for South Asia with the Regional Governments on GEO II took place at Nagarkot, Nepal in May 1998.

subjects and projects of mutual interest for the entire South Asian Seas Region.

### **Priority Activities of the Action Plan**

Four priority activities have been identified for implementation in the South Asian Seas Action Plan (SASAP) namely,

#### **1. Integrated Coastal Zone Management**

- Preparation of Coastal Profiles
- Analysis and Forecasting
- Definition of Goals and Strategies
- Integration of detailed Plans and Management Policies
- Implementation of Plans

#### **2. Development and Implementation of National and Regional Oil and Chemical Spill Contingency Planning**

- Updating the South Asian Marine Pollution Emergency Plan
- Risk analysis and assessment of infrastructure requirements for pollution emergencies, and development of mechanisms for implementation of the plan
- Assistance in developing and updating National Marine Pollution Contingency Plans
- Preparation of national training and manpower development plans for marine environmental monitoring, response and combat including surveillance of oil spills and information collection and management
- Collection, storage and dissemination of data through SENRIC of SACEP
- Assistance in the development of national legislation where necessary
- Preparation of technical guidelines and dissemination to member states.

#### **3. Human Resources Development through Strengthening Regional Centres of Excellence**

- Development of research programmes and projects and sharing of experience in the empowerment of local communities
- Development of guidelines for multidisciplinary

research in Integrated Coastal Zone Management (based on the implementation of the pilot projects) and for the replication of pilot experiences

- Training of personnel involved in pilot projects on ICZM in all aspects of ICZM and for future ICZM projects and preparation of training manual
- Refinement and testing of methodologies and techniques for participatory research and for eliciting community participation that would facilitate plan implementation.

#### 4. **Protection of the Marine Environment from Land-based Activities**

- Development of a strategy, including refinement of the Programme of Action, for the Protection of the Marine Environment of the South Asian Seas from land-based Activities
- Development of a regional programme for monitoring of marine pollution in the coastal waters of the South Asian Seas and regular exchange of relevant data and information
- Development of pilot activities in countries of the South Asian Seas
- Training of personnel involved in these pilot projects to control the degradation of the marine and coastal environment from land-based activities, including preparation of a training manual
- Development of a regional programme to identify the special problems of the large coastal cities and of the island States
- Development of a regional programme for identification of industrial technologies which are clean, environmentally friendly and existing in the countries of the region, and their introduction to ensure minimization of effluent generation and efficient disposal
- Development of a special programme to address the problems of the island States and territories in terms of regulating use of non-biodegradable and hazardous substances imported from outside.

The First Intergovernmental Meeting of Ministers of the South Asian Seas (SAS) Programme was held on 26 March 1999 in Islamabad, Pakistan. The meeting agreed on the

following priority projects, which have been identified for the Programming Cycle 1999-2002 under the four Priority Activities stipulated in the Action Plan. The criteria selected for identification of these projects are based on the current level of environmental problems prevalent in the South Asian countries under each priority area of activity and also to fill the gaps existing in the capacity building areas.

#### **(a) Integrated Coastal Zone Management:**

- (i) Capacity Building for the control of Coastal erosion in the context of ICZM in the South Asian Seas Region, 1999 – 2000
- (ii) Integrated Management of the Environmentally Sensitive Coastal and Marine Ecosystems, 2001 – 2002
- (iii) Assessment of Areas Vulnerable to Sea Level Rise in the South Asian Seas Region

#### **(b) National and Regional Oil Spill Contingency Planning:**

- (i) Capacity Building in the Development and Operation of National Oil Spill Contingency Planning, 1999 – 2000
- (ii) Updating and finalising of the South Asian Seas Oil Spill Contingency Plan, 2001 – 2002

#### **(c) Human Resource Development through Strengthening Regional Centres of Excellence**

- (i) Identification of Capacity Building Requirements in Coastal and Marine Environmental Protection and Management, 1999 – 2000
- (ii) Strengthening the Capacity of the Regional Centre of Excellence in the Protection and Management of the Coastal and Marine Environment, 2001 – 2002

#### **(d) Protection of the Marine and Coastal Environment from Land-Based Activities**

- (i) Identification and Assessment of the nature and extent of the problems and causes of Marine Pollution from Land-based Activities. Preparation of a National Programme of Action for Control of Land-based Sources of Pollution, 1999 – 2000
- (ii) Development of National Water Quality Criteria for different uses of Sea Water, 2001 – 2002
- (iii) Draft Project Proposal to GEF for a PDF Block B Grant

## SACEP Initiative: Biodiversity Conservation

South Asia is composed of highly stratified life forms and represented by an equally rich biological diversity (ecosystem, species and genetic diversity). This diversity is a result of the extreme altitudinal differences and associated change in climate, various soil types, topography and vegetation. The flora and fauna in the region shows a very high degree of endemism. South Asia is also the centre of diversity of important crops. During the last few decades, the species and their habitats in many areas of the region are under stress from human and natural influences. Consequently, many of the species including endemic and useful



Photo: Anjan Rajasuriya

species are now threatened, endangered and are facing extinction. The major causes of the decline and loss of biodiversity in the region include loss and fragmentation of habitat, unscientific land use, unsustainable use of bio-resources, uncontrolled forest fires, over grazing, illegal hunting and poaching of wild animals, unplanned development activities, international trade, introduction of non-native species and pollution. The impacts due to these causes are not only *in-situ*, but they also cross the regional boundaries affecting climate and biodiversity over the long term. The magnitude at which these problems are increasing in many countries indicate that the need for action is urgent.

Significant progress has been made in the decade in confronting these environmental problems. The greatest progress has been in the realm of institutional developments, and international co-operation. In addition, this also includes the formulation of conservation strategies and their implementation, establishment of parks and reserves, public participation and emergence of local communities and NGO action. Legal frameworks and environmentally sound management practices have also been developed and applied in various countries of South Asia. Internationally, Agenda 21 and Convention on Biodiversity Conservation, CITES, Convention on Climate Change have provided the guidelines for sustainable biodiversity management. Many programmes and activities are under implementation. Despite the formulation and implementation of various policies and programmes for biodiversity conservation, the list of degraded ecosystems and threatened species is expanding. At present, it has been realised that an integrated approach is urgently needed to deal with this issue effectively. In response to this, SACEP has initiated two projects (**Assessment of Faunal Biodiversity in the South Asian Region** and **Assessment of Floral Biodiversity in the**

**Countries of South Asia**) with the financial support from the Norwegian Agency for Development Co-operation. The projects were designed according to the need of the member countries of SACEP. All member countries are involved in the implementation of these projects. Under this project, SACEP in collaboration with the Zoological Survey of India has published "**An Assessment Manual for Faunal Biodiversity in South Asia**". Another publication related to the Regional Action Plan on Faunal Biodiversity Conservation is being released shortly.

Under the project relating to Conservation of Floral biodiversity in the region, a 5 day workshop on Assessment of Floral Biodiversity in the Countries of



Photo: Kumjanti

South Asia was organised by the Botanical Survey of India in collaboration with SACEP at Calcutta, India. At present the National Co-ordinators of the member countries of SACEP are preparing their respective Country Reports on present status of Floral Biodiversity, based on which an Action Plan for Floral Biodiversity Conservation will emerge. It is expected that a Regional Action Plan for Floral Biodiversity Conservation will be prepared and published by the end of 1999.

## Programme Activities and Events

### CAPACITY BUILDING

#### Environmental Management Seminar for South Asia

An Environmental Management Seminar for South Asia was held in Islamabad, Pakistan from 28 September to 2 October 1998. This activity was jointly organised with UNEP - ROAP, SACEP and Ministry of Environment, Local Government and Rural Development, Government of Pakistan. H. E. Asghar Ali Shah, Minister of Housing and Works, Pakistan, inaugurated the seminar. Dr. Suvit Yodmani, Regional Director and Resident Representative of UNEP- ROAP, Dr. Ananda Raj Joshi, Director General of SACEP and Mr. Muhammad Zubair Kidwai, Secretary, Ministry of Environment, Local Government and Rural Development, Pakistan addressed the inaugural session.

The participants of the seminar included representatives

from Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. In addition to Government Representatives, the NGOs and private sectors were also represented. The seminar concentrated on exchange of ideas based on country experiences in meeting the challenges of sustainable development. The major focus was on integration of environment considerations in decision-making, management of industrial pollution including sustainable production, regional transfer of environmentally sound technology, cleaner production, voluntary compliance mechanisms, waste management, international conventions and their status of implementation, environmental information systems and participation of the private sector.

The seminar made the following major recommendations:

- Greater emphasis to be placed on promoting compliance through partnerships between government, industry, business and community organisations and NGOs, while maintaining effective enforcement schemes.



- Efforts to be directed at strengthening partnerships between government and the business sector, establishing bonds of confidence and enlisting the active participation of the private and public sectors in setting environmental standards and procedures, and in promoting voluntary compliance
- SACEP and UNEP to take further initiatives to provide for a regular forum for representatives of the business sectors of countries in South Asia to come together for and exchange of views on the challenges they face in pursuing the goal of sustainable development and to share their experiences – both successes and failures –

and information to strengthen sub-regional co-operation among the business sectors to promote environmentally friendly development

- SACEP and UNEP should, with the assistance of the private sectors of the countries in South Asia, initiate action to promote information networking among the South Asian countries, so that information on achievements in the area of environmentally friendly industrial development, including new technological developments and management techniques, such as the safe waste disposal techniques which provide for recycling and re-use of components of such wastes could be shared by countries in the region
- Greater efforts to be made to disseminate important and useful work information related to the area of integrating environmental considerations in development decision making
- Emphasis to be given to capacity building activities in countries of South Asia, for promoting monitoring, compliance and enforcement of environmental regulations and international and regional environmental conventions and agreements
- SACEP and UNEP to take initiatives to organise a regional workshop of leading environmental management institutions of the seven South Asian countries in consultation with the respective governments to build the frame work for developing co-operation and networking among these institutions in South Asia to promote environmental protection and management in the region.

### Geographical Information Systems (GIS) Training

Through the training facility set up at the University of Peradeniya, a ten day training programme in March 1999 was organised on the application of GIS and Data Management at this institution. 20 participants from various departments and institutions participated in this training course. The course included sessions on training

for use of the Arc Info software in particular and also the basic principles of Data Management and GIS concepts. Automated data capturing methods and in particular the Global Positioning Systems (GPS) through Trimble GPS Units were also introduced at the training course.

### Regional Training in Integrated Management of Coastal and Marine Protected Area

A Regional Training Course in Integrated Management of Coastal and Marine Protected Areas was designed by SACEP with consultation with Focal Points of the South Asian Seas Programme. The main objectives of this training was to improve knowledge and skills of participants in integrated coastal and marine protected

areas management; to increase capacity of participants to plan and manage marine protected areas; and to improve reference materials and contracts for future use. In order to achieve the objectives, 7 modules were developed according to the specific needs of the region:

- |                 |   |
|-----------------|---|
| <b>Module 1</b> | Coastal and Marine Ecosystems and Ecological Processes  |
| <b>Module 2</b> | State of the Environment Reporting - Key indicators for Management  |
| <b>Module 3</b> | Stakeholder involvement in Management of Coastal and Marine Protected Area - <i>what, why, when and how</i> |
| <b>Module 4</b> | Planning for Coastal and Marine Protected Areas   |
| <b>Module 5</b> | Environmental Impact Assessment in Coastal and Marine Protected Areas                                       |
| <b>Module 6</b> | Tools for Coastal and Marine Protected Areas  |
| <b>Module 7</b> | Programming for Operational Management of Coastal and Marine Protected Areas                                |



The First Regional Training Course on Integrated Management of Coastal and Marine Protected Area in South Asia was held in Male, Republic of Maldives, from 2-10-September 1998 sponsored by NORAD. The inaugural address was given by Hon. Mohamed Saeed, Deputy Minister for Tourism, Maldives. Dr. Ananda Raj Joshi, Director General, SACEP, Dr. John Baldwin, Course Co-ordinator from the Great Barrier Reef Marine Park Authority, Australia, Mr. Maizan Hassan Maniku, Director General, Fisheries Research and Development, Marine Research Centre, Ministry of Fisheries and Agriculture and Mr. Prasantha Dias Abeyegunawardene, Deputy Director Programmes SACEP addressed the opening session. A total of 20 participants from Bangladesh,

India, Maldives, and Sri Lanka attended the course. The training course consisted of lectures and workshop sessions, case studies and a field trip to an area of Environment Concern. Various topics under each module were presented by Dr. John Baldwin and Dr. David Hopley of the Great Barrier Reef Marine Park Authority, Australia, and



Resource Persons Dr. B. R. Subramanian of the Department of Ocean Development, India, Mr. Maizan Hassan Maniku of the Ministry of Fisheries and Agriculture, Maldives, Mr. Jason Rubens Interim Regional Co-ordinator, IOC / UNEP / IUCN Global Coral Reef Monitoring Network and Mr. P.K. Kotta from SACEP.

## ENVIRONMENTAL LEGISLATION

### Regional Workshop for Establishing the Asia Pacific International Network on Environmental Compliance and Enforcement (ASPAC-INECE)



Considerable advances have been made by Countries in Asia and the Pacific, particularly during the past decade, triggered by the UNCED process, to reinforce national policies, regulations and institutions for promoting the goals of sustainable development. However, one of the most serious challenges facing these countries is securing compliance with and enforcement of these new policies and regulations within the framework of the new institutional arrangements. In response to this, a Regional Workshop was held on 21- 23 September 1998 in Bangkok, Thailand for establishing the Asia Pacific International Network on Environmental Compliance and Enforcement (ASPAC-INECE). It was organised by UNEP in

partnership with South Asia Co-operative Environment Programme (SACEP), the Environmental Inspectorate of the Ministry of Housing, Spatial Planning and the Environment of the Netherlands, and the Environmental Protection Agency of the United States of America. The workshop was inaugurated by Dr. Suvit Yodmani, Director and Regional Representative of the UNEP Regional Office for Asia and the Pacific. Dr. Ananda Raj Joshi, Director General of SACEP, Ms. Jacqueline Aloise de Lardere, Director of UNEP's Environment and Industry Division and Mr. Pieter Verkerk, Co-Chairman, INECE and Inspector General for Environment Protection, Ministry of Housing, Spatial Planning and the Environment of the Netherlands addressed the inaugural session. Bangladesh, Brunei, China, Fiji, Republic of Korea, Malaysia, Magnolia, Myanmar, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, Vietnam and resources persons from the Secretariat for the Basel Convention, Climate Change Secretariat, Secretariat for Vienna Convention and Montreal Protocol, the Netherlands, United States Environmental Protection Agency, UNEP & SACEP participated. The participants expressed the view that such a network responsive to the needs of countries in the Asia and the Pacific region could be an extremely useful instrument for information exchange on compliance and enforcement issues,



promoting interaction among agencies dealing with compliance and enforcement issues in the region. It would also provide a basis for addressing common environmental problems with the benefit of experiences of countries within and outside the Asia Pacific region. Keeping in view its geographical extent and the

experience gained in addressing sub-regional environmental issues and co-operation in South Asia, South East Asia, South Pacific and North East Asia, the participants were of the view that though ASPA - INECE is organised as a regional network it should have a strong sub-regional emphasis in its operations.

### **Workshop on Environmental Law and Management, Kathmandu, Nepal**

A four day workshop on Environmental Law and Management was held in Kathmandu, Nepal from 30th March to 2 April 1999. The workshop was organised by the Ministry of Population and Environment (MOPE), United Nations Environment Programme (UNEP), South Asia Co-operative Environment Programme (SACEP) and Norwegian Agency for Development Co-operation (NORAD). Around 40 participants from several organisations from the Government Sector, NGOs, Universities, Private Sector, International Organisations attended. Rt. Honourable Chief Justice Mr. M. P. Sharma inaugurated the workshop. Honourable Mr. R. N. Pandey, Minister for Population and Environment, His Majesty's Government of Nepal stated that the government is committed to speed up the environmental activities through institutional efforts in terms of the sentiment of the Earth Summit of 1992. Opening remarks were given by

Mr. V. P. Shrestha, Secretary, MOPE, Dr. Ananda Raj Joshi, Director General, SACEP, Mr. Lal Kurukulasuriya, Chief, Regional Environmental Law Programme, UNEP-ROAP and Dr. M. P. Ghimire, Chief, Environment Division, MOPE.

In the workshop, Nepalese experts presented papers on Existing Environment Policies and Institutional Structures; Role of Judiciary in Promoting the Development and Enforcement of Legal Norms in the Field of Sustainable Development; UNFCCC and Montreal Protocol, UNCBD and UNCCD, Emerging Legal Regime Relating to Prior Inform Consent (PIC) Convention, Management of Persistent Organic Pollutants (POPs) and Basel Convention, and New Approaches for Promoting Compliance and Enforcement and Application of Economic Instruments thereto. A report with the details of proceeding, papers, and recommendation will be published shortly.

### **Workshop on National Task Force Members of South Asian Countries for the Development of the "Handbook of National Legislation & Institutions for Environmental Management in South Asia"**

The above workshop was organised jointly by SACEP, UNEP and NORAD under its Environment Law Programme and was held in Colombo, Sri Lanka from 19 - 23 April 1999. Senior legal officers from Bhutan, India, Pakistan and Sri Lanka participated at this Workshop. Resource persons from UNEP-ROAP also attended the workshop. The workshop was formally declared open by Mr. K. A. S. Gunasekera, Secretary, Ministry of Forestry and Environment, Government of Sri Lanka. The objectives of the Meeting were as follows :

- a) To enable Environmental Law officers in the Environment Ministries of countries in South Asia to examine contemporary developments in both national and international environmental law with a view to promoting their incorporation, adapted as appropriate, to the particular circumstances of the participating countries in their national, legal and institutional regimes for promoting the goals of sustainable development.
- b) To compile country papers based on discussions from the Workshop to be published in a proposed

#### **"Handbook of National Legislation & Institutions for Environmental Management in South Asia"**

The workshop finalised the structure of a handbook which will include the following chapters: Country Profile, Structure of Governance for Environment & Development, Agriculture, Atmospheric Pollution/Impact on Health, Biodiversity, Coastal and Marine Environment Resources, Culture and Heritage, Forests, Fresh Water Pollution, Industry, Land Use, Livestock Management, Mining and Minerals, Soil Pollution, Tourism including Eco-Tourism, Toxic chemicals, Trade & Environment, Transport, Urbanisation, Waste Management [Hazardous and non - Hazardous], Wildlife, Statutory Tools for Environmental Management, Voluntary Measures to promote Environmental Management, Legal and Institutional Measures for implementation of International Environmental Legal Instruments. The meeting concluded on 23 April 1999. At the concluding remarks Dr. A. R. Joshi, Director General of SACEP emphasised the need for the integration of various national efforts as well as success stories of sustainable development in the country reports.

## ENVIRONMENTAL INFORMATION AND REPORTING

### Workshop for Strengthening the Environment Assessment and Monitoring Capabilities in South Asia and Greater Mekong Sub-Region – Global State of the Environment Report (SEAMCAP)

The inception Workshop for Strengthening the Environment Assessment and Monitoring Capabilities in South Asia and Greater Mekong Sub-region - the Global State of the Environment Report was held in Bangkok, Thailand 19-20 April, 1999. At the official opening of the workshop, the Director General of SACEP Dr. Ananda Joshi welcoming the participants stated that this workshop is a good opportunity to discuss the State of Environment (SoE) Reporting. Mr. Surendra Shrestha, Regional Co-ordinator, UNEP/EAP.AP, briefed the meeting on its background and purpose and stressed the need for improving the approach of SoE Reporting and enhancing the substance of the document. The workshop was attended by senior Government officers of the Ministries

of Environment of Bangladesh, Bhutan, Nepal, Sri Lanka and the Collaborating Centres from Bangladesh and India. In addition there were representation from ICIMOD, SACEP and UNEP. The workshop briefed the participants on the SoE approach, the principles of the SoE Data collection and the agreed format of the national and sub-regional SoE reports. This project will eventually yield a major supporting document for the ESCAP Regional Report on SoE and the Global SoE Report in the year 2002. Based on the discussions and comments, the workshop agreed on the proposed project implementation plan. The participants of the meeting also agreed on a time frame for the completion of the various stages in the development of the Report.

## SACEP PUBLICATIONS



1. An Assessment Manual for Faunal Biodiversity in South Asia

2. Compendium of Summaries of Judicial Decisions in Environment Related Cases (With special Reference to countries in South Asia)
3. Report of the Regional Symposium on the Role of the Judiciary in Promoting the Rule of Law Area of Sustainable Development
4. Harmonising Environment and Development in South Asia
5. Co-operation in Capacity Building for Environmental Training in South Asia
6. South Asia Handbook of Treaties and other Legal Instruments in the Field of Environmental Law
7. Report of the Regional Workshop on Strengthening Legal and Institutional Arrangements for Implementing Major Environmental Conventions in South Asia

## VISITORS TO SACEP

1. Prof. Leslie Gunawardana, Vice-Chancellor, University of Peradeniya, Peradeniya, Sri Lanka.
2. Dr. Robert Glaser, Inspector, International Affairs/IMPEL Co-ordinator, Ministry of Housing, Spatial Planning and the Environment, The Netherlands.
3. Prof. Ian Bryceson, Centre for International Environment & Development Studies, (Noragric), Norway.
4. Mr. James F. Cole, First Secretary Environmental Affairs, Embassy of the United States of America, Nepal.
5. Mr. Maizan Hassan Maniku, Director General Fisheries R&D, Ministry of Fisheries and Agriculture, Republic of Maldives
6. Dr. George D. Grice, Senior Assistant Secretary,

- Ocean Sciences and Living Resource Programme, UNESCO IOC, France
7. Dr. Olof Linden, Professor of Zoology, Stockholm University, Sweden.
8. Mr. Yihang Jiang, Programme Officer, UNEP East Asian Seas Regional Co-ordinating Unit, Bangkok, Thailand
9. Dr. Robert Riethmuller, Regional Planning Advisor, Regional Rural Development Programme, Kandy.
10. Mr. Jason Rubens, Interim Regional Coordinator, IOC/UNEP/IUCN Global Coral Reef Monitoring
11. Mr. Lal Kurukulasuriya, Chief, Regional Environmental Law Programme UNEP-ROAP, Bangkok, Thailand
12. Dr. Clive Wilkinson, Chief Technical Advisor, Australian Institute of Marine Science, Australia.

**VISION**  
**EMERGING ENVIRONMENTAL CHALLENGES**  
**&**  
**PRIORITIES FOR ACTION IN SOUTH ASIA**



Dr. Ananda Raj Joshi  
Director General, SACEP

We approach the new millennium facing many environmental challenges. For countries in South Asia, our greatest challenges lie in five areas: sustainable land management, natural resource conservation and management, cleaner production, extension of national policies to the local level, and enabling multi-stakeholder participation.

One of the major areas of concern for the South Asian region, indeed for the world, is the issue of land degradation. Deforestation has accelerated the process of land degradation beyond a point, which can be sustainable. Ecosystems, which are critical to the functioning of the life support system of the earth, continue to be undermined. Land degradation also carries with it numerous adverse social implications. Inextricably linked to the problem of land degradation is the issue of poverty. As arable land diminishes, food stocks diminish and the spectre of famine looms closer. This social dimension of land degradation must be recognised as no programme for protecting the environment can succeed without alleviating the day to day pressures of poverty. These pressures leave people little choice by which to secure their future to such an extent that they fail to protect their resource base which ensures their own and future generations' well-being.

Closely linked to the issue of land degradation is conservation of natural resources including biodiversity. Perhaps the single challenge facing our world is the preservation of natural resources and a healthy environment while improving the conditions of the world's poor. Conservation and protection of natural resources coupled with their sustainable use is the proposed solution to the challenge of harmonising aspirations of nature conservation on one hand and people's need for economic development and prosperity on the other. Solving this problem can only be meaningfully achieved through co-operation at all levels, particularly regional. SACEP is responding to this challenge with a country driven programme of work on assessment of environmental resources, legislation and preparation of action plans for biodiversity conservation and state of environment report .

With respect to cleaner production, inputs should be taken by all stakeholders from all sectors. Concerted efforts for balanced and equitable socio-economic development require fundamental changes in people's attitudes, perspectives, and lifestyles as well as re-orientation of ways to produce goods, render services and use natural resources. In the context of South Asia, consideration should be given to introducing, at the initial stage, low-cost improvement measures before taking up more sophisticated technologies. SACEP is encouraged by the initiatives already undertaken by UNEP in the areas of Cleaner Production, and the Clean Development Mechanism

of the Kyoto Protocol which enables on the basis of incentives, companies in the developed world to invest in environmentally friendly projects in developing countries. With a view to promoting partnership between Government and the private sector, SACEP has organised a meeting among Government and private sector representatives to exchange ideas on measures for promoting environmentally friendly development.

The fourth issue of critical environmental importance to South Asia is the extension of established national policies on the integration of environment and development to the provincial and local levels. The countries of South Asia have benefited greatly from national capacity building workshops that we have carried out in partnership with UNEP whereby sound programmes of environmental assessment and management have been introduced and implemented at the national level. SACEP and UNEP co-sponsored regional workshops on the implementation of major environmental conventions and have also carried out programmes to strengthen national legal and institutional arrangements in several South Asian countries. A Regional Symposium for Judges of Countries in South Asia on Environmental Law was held in 1997. The next step in this capacity building process is applying methodologies developed to the particular situations of local areas. Alongside this, recognition of the value of local practices in developing methods for undertaking environmental initiatives must be integrated. Future co-operative activities of SACEP will focus even more on capacity building, particularly at local levels.

Greater vertical as well as horizontal dialogue and synergy should be promoted for a new approach to sustainable development. Multi-stakeholder participation in all endeavours should be promoted to combat environmental degradation. Governments, the private sector, NGOs and the scientific and academic communities all have a role to play and the particular knowledge, capabilities and expertise of each of the sectors must be integrated into a unified approach to address the environmental issues of the 21<sup>st</sup> century. The Environmental Management Seminar organised jointly by SACEP and UNEP, and held in Islamabad, Pakistan last year, for the first time brought representatives of the private sector into a regional environmental workshop. We will consolidate this practice in our future joint activities with UNEP.

Clearly, most successes in addressing global and regional environmental challenges have been largely based on effective, multi-sectoral, partnerships. Much more work needs to be done, especially in the above referred areas. However, we are on the right track because we have built a solid foundation for sound and sustainable environmental management .



## SOUTH ASIA CO-OPERATIVE ENVIRONMENT PROGRAMME

The South Asia Co-operative Environment Programme (SACEP) is an association of 8 South Asian Countries namely; Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. It came into being with the adoption of the Colombo Declaration and the Articles of Association at a Ministerial Meeting held in Colombo in February 1981.



The aims and objectives of SACEP are: to promote and support the protection and enhancement of the environment of South Asia individually, collectively and co-operatively and to encourage the judicious use of the resources of the environment with a view to alleviating poverty, reducing socio-economic disparities, and improving the quality of life of the people.

Among the key functions of SACEP are: promoting co-operative activities in environmental protection and management which are beneficial to the member states; facilitating sharing of knowledge and expertise; and providing resources for project implementation through donor assistance and support.

SACEP, since its inception, has played a key role in promoting sustainable development in the region and is implementing a number of projects which are aimed at developing regional co-operation to facilitate national capacity building efforts to manage environmental issues, to develop basic infrastructure and to enhance the exchange of information in the region. SACEP has a lead role in the conservation of ecosystems and sustainable use of bio-resources, assessment of projects. The overall focus of activities of SACEP includes following areas:

- ◆ Capacity Building and Institutional Strengthening
- ◆ Conservation and Sustainable use of Natural Resources
- ◆ Ecosystems Conservation and Management
- ◆ Environmental Information and Assessment

### UP- COMING EVENTS

- \* **Environmental Legislation –**
  - *National Workshop in Bangladesh*
  - *National Workshop in Pakistan*
  - *Regional Meeting to Finalise Project Proposal for setting up of South Asian Network on Environmental Compliance and Enforcement*
- \* **Biodiversity Conservation –**
  - *Regional Workshop on Assessment of Floral Bio-diversity*
- \* **State of Environment (SoE) Training -**
  - *Regional SoE Training, Kathmandu,*
  - *In - country Training*
    - Nepal
    - Bangladesh
    - Sri Lanka
    - Maldives
    - Bhutan

**South Asia Environment** is a publication of the South Asia Co-operative Environment Programme.

The aim of South Asia Environment is to disseminate information pertaining to all aspects of the environment for use by professionals and interested individuals in the public and private sectors.

The opinions expressed are those of the contributors and do not necessarily reflect the views of SACEP. Mention of name of firm and commercial products does not imply the endorsement of SACEP.

SACEP welcomes news items, short articles, and viewpoints on environmental issues from readers in order to promote environmental awareness in the South Asian Region. The Editor reserves the right to edit and publish manuscripts in accordance with the editorial requirements of the publication.

**For information:**  
**South Asia Co-operative Environment Programme (SACEP)**  
**10 Anderson Road**  
**Colombo 5**  
**Sri Lanka**  
**Tel: 94-1-589787 / 589376**  
**Fax: 94-1-589369**

### Editorial Committee

Dr. Ananda R. Joshi, Director General  
Mr. Prasantha Dias Abeyegunawardene, Deputy Director Programmes  
Ms. Marlene Pereira, Deputy Director Administration  
Mr. P.K. Kotta, SENRIC Project Co-ordinator  
Designed by - Ms. Chandima Jayasuriya, SACEP