# 2003 SECRETARY-GENERAL'S REPORT ON OCEANS AND THE LAW OF THE SEA INPUT FROM UNITED NATIONS ENVIRONMENT PROGRAMME (UNEP)

# The UNEP Regional Seas Programme

UNEP's Regional Seas Programme, initiated in 1974, provides a legal, administrative, substantive and financial framework for the implementation of Agenda 21, and its chapter 17 on oceans in particular. The Plan of Implementation of the World Summit on Sustainable Development (WSSD, Johannesburg 9/2002) also focuses on the issue of oceans, seas, islands and coastal areas as critical elements for global food security and for sustaining economic prosperity. It restates that sustainable development of the oceans requires effective coordination and cooperation, at the global and regional levels, and between relevant bodies. The Regional Seas Conventions and Action Plans provide a platform for the implementation of this concept. The UNEP's Regional Seas Programme is based on regional Action Plans, related to a common body of water, which is usually adopted by high-level intergovernmental meetings and implemented, in most cases, in the framework of a legally binding Regional Seas Convention and its specific protocols, under the authority of the respective Contracting Parties or Intergovernmental Meetings.

Currently, 17 regions are covered by adopted Action Plans, of which 12 Action Plans are also supported by Regional Seas Conventions. UNEP has facilitated the negotiation of 13 Regional Seas Conventions and Action Plans in the developing world, the youngest of which was signed in the Northeast Pacific in 2002.

# Regional Seas Strategy and Programme

The 5<sup>th</sup> Global Meeting of the Regional Seas was held in Nairobi, Kenya, 26-28 November 2003, with the main objective to developing a concrete strategy for meeting commitments of the decision of the 22<sup>nd</sup> UNEP Governing Council, the WSSD Plan of Implementation, Agenda 21 and the Millennium Development Goals. Attended by fourteen Regional Seas Conventions and Action Plans, UNEP Divisions as well as the Global Programme of Action (GPA), Sida, and the International Atomic Energy Agency Marine Environmental Sciences Laboratory (IAEA/MESL), a new Regional Seas strategy, comprising the following main elements, was agreed:

- Increase Regional Seas contribution to Sustainable Development, through national and regional partnerships with relevant social, economic and environmental actors;
- Enhance the sustainability and effectiveness of RS through increasing country ownership, translating Regional Seas Conventions into national legislation and regulations, involving civil society and private sector, and ensuring financial sustainability;
- Enhance Regional Seas' visibility and political impact in global and regional policy setting, through establishment of a strengthened 'Regional Seas Alliance', and ensuring participation and promotion of Regional Seas in relevant regional and global *fora*;
- Increase the use of Regional Seas as a platform for developing common regional objectives, promoting synergies and co-ordinated regional implementation of relevant MEAs, global and regional initiatives and responsibilities of United Nations Agencies, as well as other international actors;
- Support knowledge-based policy making, development and implementation of relevant environmental legislation, improve knowledge on the state of the marine environment and enhance public awareness;

- Promote the development of a common vision and integrated management, based on the ecosystem approach, of priorities and concerns related to the coastal and marine environment in Regional Seas Conventions and Action Plans; and
- Further develop the Regional Seas Coordination Office at UNEP in Nairobi as a support, liaison and information and centre.

Further, the strategy identifies a number of specific activities to be undertaken at the level of the individual Regional Seas Convention and Action Plan as well as at the level of the Regional Seas Coordinating Office at UNEP Headquarters.

# **Emerging Issues**

A feasibility study on the development of a global initiative on marine litter has been initiated by the Regional Seas Coordination Office. The study will compile information on the current status of the marine litter issue; provide examples of existing management schemes; institutional structures and policies at the national level, as well as examples of regional and international level systems for management of marine litter; identify problems and threats associated with marine litter; and assess the feasibility and benefits of developing a proposal for the establishment of a global programme for the reduction, control and management of marine litter world wide.

UN General Assembly decision A/RES/58/14 on sustainable fisheries calls for measures to address fisheries bycatch and death of non-target species. Highlighting the central role of the FAO in addressing these issues, it identifies numerous areas for collaboration with UNEP, particularly its Regional Seas Programme and the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA), and other relevant partners. This warrants an ecosystem-based management approach to fisheries, with close collaboration between UNEP and the Regional Fisheries Bodies, and initial steps have been taken to further this collaboration.

#### Publications and outreach

In 2003 the Regional Seas Coordination Office, in collaboration with the Regional Seas Secretariats, technical consultants and the GEF, initiated the development of a web-based Information Centre to further the implementation of the Regional Seas Strategic Directions 2004-2007. The Information Centre will be a comprehensive web portal for the Regional Seas Programme, a source of relevant information on individual regions, issues, priorities, projects and partnerships in an accessible, structured format.

### **Partnerships**

# International Atomic Energy Agency Marine Environment Laboratorium (IAEA/MEL)

A review of Regional Marine Pollution Monitoring and Assessment in UNEP's Regional Seas Programmes has been carried out by IAEA/MEL, under a Memorandum of Understanding with the UNEP Regional Seas Coordinating Unit. The review includes information on how monitoring and assessment lead to action, management or decision-making, as defined in the relevant Conventions and their Protocols. Further, it outlines commitments to marine pollution monitoring and assessment; identifies gaps in the present marine pollution assessment strategies; identifies emerging issues and potential new technologies; discusses how monitoring activities are funded and coordinated; and make recommendations for improved monitoring and assessment systems in the Regional Seas Programmes. Initial findings were presented to the 5<sup>th</sup> Global Meeting of the Regional Seas and the final report will be released in March 2004.

# Collaboration with International Maritime Organizations (IMO)

The joint IMO/UNEP Forum on regional arrangements in emergency response to marine pollution has, in collaboration with several Regional Seas Conventions and Action Plans, continued to develop regional systems for cooperation in preparedness for and response to oil spills, including implementation of regional training courses. IMO related activities have been carried out in e.g. PERSGA, ROME and NEP (see separate sections), and in Eastern Africa a joint UNEP-IMO Regional Workshop of the London Dumping Convention will be held in April 2004, in collaboration with the NEPAD Coastal and Marine Secretariat. Discussions on the role of UNEP and the Regional Seas in preventing the spread of alien invasive species, particularly through addressing non-shipping vectors, were also initiated.

Collaboration with the Intergovernmental Oceanic Commission of UNESCO (UNESCO-IOC)

A draft Memorandum of understanding between UNESCO-IOC and UNEP Regional Seas on collaboration in the regional implementation of the GOOS programme was developed. The draft MoU, which was discussed at the IOC Assembly in June 2003, will be finalized early in 2004. The WESTPAC office in Bangkok continues to provide organizational and substantial support to NOWPAP activities related to monitoring and data and information networking.

### Collaboration with Multilateral Environmental Agreements (MEAs):

Regional Seas Conventions and Action Plans provide an effective platform for the regional implementation of the substantive issues addressed by MEAs. In particular, collaboration with the CBD on development of a representative network of Marine Protected Areas, including transboundary MPAs, and other aspects of the Jakarta Mandate, is increasing. Also, discussions are ongoing between the UNEP Regional Seas Unit and the Basel Convention Secretariat regarding residue reception facilities for the recycling of ships and on the issue of marine litter.

# Global Environment Facility (GEF)

Several GEF proposals for Regional Seas Conventions and Action Plans have been developed in collaboration with the UNEP/GEF office and the GPA. In East Africa the WIOLab PDF B Project on land-based activities has been approved and implementation will commence in 2004, and the Guinea Current LME for West Africa was approved in November 2003. Further GEF projects under implementation or development include the MSP Development and Protection of the Coastal and Marine Environment in Sub-Saharan Africa, PDF B Projects on Land Based Activities in the NOWPAP and the Eastern Northwest Pacific regions, and the South China Sea LBA full project in East Asian Seas. In the Arctic, Black Sea, Caribbean, Caspian, Mediterranean and Red Sea and Gulf of Aden projects continue to run. A new LBA project has been initiated as a PDF A in the Southeast Pacific.

## Food and Agricultural Organization (FAO) and the Regional Fisheries Bodies (RFB)

In response to General Assembly Decision A/RES/58/14: 'Sustainable fisheries, including through the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, and related instruments', the Regional Seas Coordination Office has entered into a dialogue with FAO and the RFBs on increased collaboration, particularly in relation to the environmental aspects of fisheries and the ecosystem approach.

### Global Marine Assessment

In the area of environmental assessment, UNEP, particularly through the Division of Early Warning and Assessment, continues to cooperate with partners, contributing to the regular process through its programmes and collaborating centres, such as the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities (GPA), the

Regional Seas Programme, the World Conservation Monitoring Centre (WCMC) and through its assessment activities, *inter alia*, the Global Environment Outlook (GEO), the Global International Waters Assessment (GIWA), the Millennium Ecosystem Assessment (MA), the International Coral Reef Action Network (ICRAN), the Global Coral Reef Monitoring Network (GCRMN).

UNEP provided its views and inputs to the report of the Secretary-General (A/58/423) for the establishment of a regular process under the United Nations for global reporting and assessment of the state of the marine environment. The "modular partnership approach" suggested enhances the cooperation of participating United Nations agencies and international organizations based on their core mandate and competencies in the assessment of the marine environment. It also promotes the use of existing and ongoing programmes and available resources of different agencies and organizations, and supports the capacity building at national and regional levels.

In accordance with this a planning meeting on the development of a UNEP module for the assessment of the coastal and marine environment was held in Nairobi 19-21 November 2003, aimed at systematically organizing various existing assessments scattered within UNEP to best address the user needs and gaps in coastal and marine assessment. The idea of a multipurpose coastal and marine environment assessment module was developed based on science and experience from GEO, GIWA, MA, GPA, the Regional Seas Programme, WCMC as well as inputs from other organizations and scientific community, as part of the contribution of UNEP to the regular process of the global marine assessment.

# **Regional Seas Conventions and Action Plans**

## The Mediterranean Action Plan (MAP)

# Institutional and legal issues

The 13<sup>th</sup> Ordinary Meeting of the Contracting Parties (Catania, November 2003) adopted the 'Catania Declaration', stressing co-operation with the European Commission in the preparation of the European Marine Strategy as well as the preparation by MAP of the Mediterranean Strategy for Sustainable Development (MSSD); urging the ratification by the Countries of the new/amended Convention and its Protocols; and requesting a strategy for the prevention of and response to pollution from ships.

The State Union of Serbia and Montenegro has joined the Barcelona Convention by succession. Consequently there are now 22 Contracting Parties (21 Mediterranean bordering Countries and the EC). It is expected that all or most MAP legal instruments will enter into force in 2004.

A Reporting System for the Convention and its Protocols has been adopted. Comprehensive national reports were satisfactorily prepared on a voluntary basis by five countries, and it was decided to extend the reporting process to all countries to cover the period 2002-2003, with assistance as appropriate.

A specific regime of liability and compensation for damage resulting from pollution of the marine environment in the sea area is under consideration and a feasibility study will be undertaken.

Evaluation of five Regional Activity Centers (RACs)/Programmes have been completed, the

evaluation of two other RACs and MED POL are on going and the overall evaluation of MAP structure will be undertaken during the 2004-2005 biennium.

Upon the request of the CP, the reference and operating currency for UNEP/MAP will be the Euro, as more than 90% of its financial resources are coming from EU countries, and that its activities and expenditures will be settled in Euro, avoiding the risks of rates of exchange.

### Environment and sustainable development activities

Preparation of the Mediterranean Strategy for Sustainable Development (MSSD) was launched in 2003, with several thematic studies and workshops, resulting in the elaboration of a Regional Vision for SD and Framework Orientations for the MSSD. A draft MSSD will be presented to the next COP by end 2005.

Significant progress was made in the implementation of the Strategic Action Programme (SAP) to Address Pollution from Land-based Sources. The CP decided to reduce 50% of industrial BOD by 2010 and by the same year to reduce by 20% the generation of hazardous wastes, based on the application of cleaner technology. All countries prepared a national baseline budget of pollution releases and emissions, and with assistance from GEF, preparation of National Action Plans in each country is on going, expected to be operational in 2005. Cleaner Production is being promoted through case studies and guidelines on topics such as application of best available technologies and best environmental practices.

The Parties adopted the Strategic Action Programme on Biodiversity (SAP/BIO). It includes an assessment of the marine biodiversity in the region together with needs, priority actions and best approaches at the national and regional levels to protect and enhance biodiversity in the Mediterranean. Implementation of various Action Plans and identification of Specially Protected Areas of Mediterranean Interest (SPAMI) have shown encouraging results.

Coastal Area Management Projects were implemented or initiated in several countries. A long-term strategy, linked to a new Protocol on Integrated Coastal Zone Management that is under elaboration, has been prepared, in accordance with the broader scope of the revised Barcelona Convention. Use of information and communication technologies for environmental protection and sustainable development is being promoted and a major report on environment and development is under preparation.

A public participation and awareness strategy is under preparation. UNEP/MAP keeps on strengthening its cooperation with Civil Society and various regional and international institutions (e.g. IUCN, EC, World Bank, METAP, Arab League, etc) and promotes exchange with the private sector.

# OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic (OSPAR)

OSPAR held its second Ministerial Meeting, back to back with the HELCOM and OSPAR joint Ministerial Meeting in Bremen, June 2003, to review progress on its strategies on biodiversity and ecosystems, eutrophication, hazardous substances, the offshore oil and gas industry and radioactive substances, and adopted revised strategies on all these issues, together with a new strategy on the Joint Assessment and Monitoring Programme to prepare for the next OSPAR overall assessment of the North East Atlantic in 2010.

The meeting also saw the first main outputs from the OSPAR strategy on biodiversity and ecosystems. Annex V to the OSPAR Convention, which extended the scope of the Convention and the OSPAR Commission to the protection and conservation of the marine environment from

adverse impacts of human activities other than pollution came into force for the first seven Contracting Parties to have ratified it in 2000. Under the four-fold approach adopted by the OSPAR strategy on biodiversity and ecosystems the Commission is required:

- a. to set objectives for the protection and conservation of marine biodiversity: OSPAR 2003 confirmed the work on the North Sea pilot project on ecological quality objectives, as a basis for considering how to extend the approach to the whole OSPAR maritime area;
- b. to identify the species and habitats in need of protection: OSPAR 2003 adopted the Texel/Faial criteria for identifying such species, and the Initial OSPAR List of Threatened and/or Declining Species and Habitats;
- c. to protect specific areas or sites: OSPAR 2003 adopted a Recommendation on a Network of Marine Protected Areas, together with guidelines for identifying and selecting and for managing such areas;
- d. to analyse human activities with potential adverse effects and develop measures to control them: OSPAR 2003 adopted agreements on offshore wind-energy farms, sand and gravel extraction, and a Recommendation on a framework for reporting encounters with seadumped munitions.

In addition, OSPAR completed the identification of the eutrophication status of the different parts of its maritime area, to serve both as a basis for further harmonization of criteria for identifying eutrophication problems and for assessing what additional action is needed. The OSPAR list of chemicals for priority action was further revised and action has been taken on 21 substances. A Recommendation was adopted on mercury emissions from crematoria. A Recommendation on environmental management systems in the offshore oil and gas industry was adopted. Further progress was made in implementing the radioactive substances strategy.

The Bonn Agreement on the Protection of the North Sea from oil and other hazardous substances adopted a new Oil Appearance Code, which enables observers to classify oil spills from their appearance from the air and thus to estimate the thickness of the oil film. Together with estimates of the area of the spills, this enables calculations to be made of the amount of oil in the spill, as a basis for decisions on the appropriate response to an incident and for any prosecutions of the ships involved.

## The Baltic Marine Environment Protection Commission (HELCOM)

The annual Commission meeting and a joint HELCOM/OSPAR meeting took place at Ministerial level. Areas of special priority were discussed and Declarations adopted. It was agreed that issues should be addressed according to an ecosystem approach to the management of human activities. Emphasis was given to changes likely to occur in connection with the accession of new members to the EU. By May 2004 eight of the nine countries around the shores of the Baltic Sea will be EU members.

# **Environmental Monitoring and Reporting**

HELCOM is currently reviewing monitoring and reporting procedures, taking into account the ecosystem approach and the need to ensure these activities are compatible with the requirements of other international activities. A pilot study into the development of Ecological Quality Objectives (EcoQOs) for the Baltic Sea has been initiated. Reports have been finalized providing e.g. an assessment of the state of the Baltic Sea and an assessment of Radioactivity in the Baltic Sea.

## Eutrophication and hazardous substances

A review of the strategic 50% reduction target for nutrient loads showed good progress at point sources. However, nutrients releases from agriculture have not met the targets, and eutrophication has considerably reduced oxygen levels even in shallow coastal waters. A HELCOM Hazardous Substances Project Group has compiled data on sources, pathways, markets and the legal situation relating to selected hazardous substances and a project regarding integrated Dioxin and PCB Monitoring has been initiated.

# The Baltic Sea Joint Comprehensive Environmental Action Programme (JCP)

Ten regional workshops and one bilateral meeting were held under the JCP. Reductions in pollution loads from Hot Spots have made a substantial contribution to the overall pollution load reductions in the Baltic Sea. Out of the 132 original HELCOM Hot Spots a total of 47 have been deleted. The reported investments made at the deleted Hot Spots amounts to about 1.1 billion Euros. The Programme Implementation Task Force (PITF) has now been closed down.

# Navigational safety and oil spills

HELCOM has compiled a detailed inventory on maritime transportation, identifying high-risk areas. Three Expert Groups are examining the feasibility of potential measures to improve navigational safety: mandatory pilotage in high risk areas, a special transit route for ships carrying oil and other harmful substances, and new regulations for winter shipping traffic. The possible designation of the Baltic Sea as a Particularly Sensitive Sea Area (PSSA) has been discussed but not agreed.

# Harmonizing and compliance with HELCOM Recommendations

The Recommendations have been reviewed and some have been aggregated and new have been adopted. It was decided to cease work on industrial Recommendations covered by the EU IPPC Directive. A new recommendation is being elaborated to cover the effective use of Best Available Technologies (BAT). Implementation of Recommendations has improved since 1998, although only few Recommendations have been fully implemented by all Contracting Parties. There is a need for proposals on how implementation can be accelerated and better enforced. A \$12 million World Bank GEF project aiming to improve the Baltic environment based on the Large Marine Ecosystem approach has been started.

## **HELCOM and OSPAR**

HELCOM and OSPAR held their first joint Ministerial Meeting in June 2003 in Bremen, Germany. The main outcomes of this meeting were commitments:

- a. on how they would apply the ecosystem approach to the management of human activities affecting the marine environment;
- b. to help the development of a European Marine Strategy. The two Commissions set out the role of regional marine conventions in such a strategy;
- c. to create by 2010 an ecologically coherent network of well-managed marine protected areas covering the two regions;
- d. to help integrate all the policies needed to manage the environmental impact of fisheries. The two Commissions set out fields where cooperation would be valuable between fisheries and environmental managers;
- e. to promote measures to reduce the adverse environmental impacts of shipping, both through steps already being taken in other forums and by joint work to implement global agreements regionally.

# **Caspian Environment Programme**

The Caspian Environment Programme was launched in 1998 as an inter-governmental umbrella environmental programme of the five Caspian littoral countries, namely Azerbaijan, Iran, Kazakhstan, Russia and Turkmenistan, supported by international partners including GEF, the EU, and UN agencies and the oil and gas industry. GEF was instrumental in developing, launching and implementing the programme, with over \$ 9 million funding up to 2003 and a further \$ 6 million for the second phase starting in 2004. EU has funded the programme to the tune of \$ 5 million up to 2003 and has approved close to \$ 4 million for 2004-2006. The World Bank, other UN agencies and the industry have contributed close to \$ 1 million, and the littoral countries have substantially supported the programme through in-kind contributions.

The programme has been a major success in three inter-related areas: establishing a platform for regional environmental dialogue; carrying out transboundary diagnostic analytical work; and resource mobilization.

# Platform for Environmental Dialogue

The programme has engaged the five littoral countries and partners in a constructive dialogue towards improved management of the environment of the Sea. The success is most notable when compared with the no-dialogue situation of the Soviet era between the south and north of the Sea.

In the absence of a Convention Secretariat or similar body in the region the CEP institutional arrangements provide the sole platform for regional environmental management and dialogue. The programme has established a Steering Committee, a Programme Coordination Unit, five National Focal Points, five national Inter-sectoral Coordinators, five national Public Participation Advisors and a number of Caspian Regional Thematic Centres (CRTCs) and/or Thematic Regional Advisory Groups.

The signature of the Framework Convention for the Protection of the Maritime Environment of the Caspian Sea in Tehran in November 2003, after eight years of negotiation, is the most important achievement of the programme. It provides a solid framework for regional cooperation in pollution control and monitoring, biodiversity protection, emergency response, integrated coastal development, transboundary environmental impact assessment and exchange of data and information. The location of the Convention Secretariat is being discussed.

## Transboundary Analytical Work

The programme's other major achievement has been the Caspian Strategic Action Programme (SAP), which was regionally approved simultaneous with the Convention. The SAP lays down the regionally agreed Environmental Quality Objectives and Targets vis-à-vis the identified environmental areas of concerns and lists a set of costed interventions each linked to an indicator for implementation monitoring. The SAP provides voluntary guidelines for regional environmental cooperation, thus complimenting the Convention. In addition to the Convention and the SAP the programme has also succeeded in finalizing a Regional Cooperation Plan and Protocol in Case of Major Oil Spills, and a Regional Guideline Transboundary EIA.

The Transboundary Diagnostic Analysis (TDA), the National Caspian Action Plans (NCAP) and the SAP were all the outcomes of participatory processes which for the first time in the region brought together and networked a large number of policy makers, industry representatives, scientists, environmentalists, implementing bodies and NGOs. Tens of regional and national

meetings coupled with participation in the analytical and policy formation processes such as the formulation and the development of the TDA and the SAP helped the regional stakeholders to become familiarized with the issues of common concern and become sensitized to the need for joint action. The programme public participation activities including formation of Coastal Caspian Concern Groups also helped the process. The inter-agency cooperation, which has been a major feature of the programme, was instrumental in ensuring the success of the analytical studies.

The analytical work identified four major areas of regional environmental concerns namely fisheries management; pollution abatement & monitoring; biodiversity protection including invasive species and protection and sustainable development of coastal communities. The work also resulted in a consensus regarding five regional Environmental Quality Objectives: conservation and sustainable use of bioresources; conservation of biodiversity; improved water quality of the Caspian; sustainable development of coastal zones; and strengthened stakeholders participation in Caspian environmental stewardship. To link the areas of concern to the EQOs a total of 20 targets and 79 interventions were developed in the SAP. The SAP was costed at approximately \$ 170 million for the first five years.

The five NCAPs each determine both the transboundary and the national areas of concern, identify the root causes at the national level and recommend regional and national interventions. The NCAPs provide a policy framework for Caspian related activities in the littoral countries and form pillars of the SAP.

The Transboundary Diagnostic Analysis (TDA) published in 2002, a Biodiversity Strategy and Action Plan released in 2003, the five NCAPs, and tens of supporting studies are available on the programme website (www.caspianenvironment.org).

### Resource Mobilization

A Caspian Fund has not been established. However, fundraising from industry has been successful, with over \$ 300,000 mobilized to assist the programmes pollution studies and emergency response management. Further, the World Bank has taken a leading role in resource mobilization activities, and supported numerous activities in the member countries, e.g. managing the Matched Small Grant Programme.

The programme is evolving towards enhanced regional ownership; increased country funding of activities and technical assistance focus on activities rather than on funding management and institutional structures. Under its new projects the programme will focus on SAP implementation including the associated NCAPs. In particular the programme will concentrate on the four identified major areas of environmental concerns with EU/Tacis focusing on fisheries management and sustainable development of coastal areas with an approximate budget of Euro 3.5 million and GEF focusing on pollution abatement and monitoring and biodiversity protection with an approximate budget of \$ 6 million. The region will contribute over \$ 21 millions to the programme.

# Nairobi Convention (Eastern Africa/Western Indian Ocean) Abidjan Convention (Western and Central Africa)

A Nairobi Convention Coral Reef Taskforce (CRTF) has been established to co-ordinate work on coral reefs throughout the region, including the development and implementation of national action plans or strategies. The task force members also act as Group of Experts on Marine

Protected Areas (GEMPA). The 2<sup>nd</sup> meeting of GEMPA discussed the development of a toolkit for MPA managers on the establishment and management of MPAs in the Western Indian Ocean Region, which will be published early 2004.

Under a Memorandum of Understanding signed between UNEP and the Western Indian Ocean Science Association (WIMOSA), the association will act as a Regional Activity Centre for the Eastern African Programme. WIOMSA also implement GPA projects in Eastern Africa on behalf of the secretariat.

UNEP/the Nairobi Convention Secretariat, WWF and IUCN have signed a Memorandum of Understanding aiming to strengthen coordination between the Secretariat and the NGOs in implementing aspects of the Convention Work Programme. Consequently a programme on marine mammals, notably the Dugong, has been initiated.

UNEP/the Nairobi Convention Secretariat and the Office of the Global Programme of Action organized a coastal erosion workshop in Nairobi, November 2002, to provide information on lessons learnt, enhance technical and institutional capabilities for monitoring, assessment, restoration, prevention and mitigation of coastal erosion in the region and to prepare an action strategy with practical demonstration activities to be applied in the region.

### **NEPAD**

Both the Abidjan and Nairobi Conventions participated in the African process for protection and development of the Marine and Coastal environment, and in the development of the Action Plan for the Environment Initiative within NEPAD. The secretariat has been chosen as the framework through which to implement projects and programmes that fall under the NEPAD Environment sub-component of the Coastal and Marine, with political guidance from Senegal, Kenya and Nigeria.

Within the NEPAD framework, the Nairobi and Abidjan Conventions and the GPA office have developed a USD 11 Million GEF funded project with Norwegian co-financing entitled Addressing land-based activities in the Western Indian Ocean. This project is a direct follow-on to the African Process and the World Summit for Sustainable Development (WSSD), and addresses International Waters (IW) strategic priorities elucidated in the Draft IW support for WSSD decisions. The project, focusing on addressing major land-based activities in the region, represents a strong partnership between the countries, the Norwegian government, UNEP, and the Global Environment Facility (GEF). The three main objectives are 1) Reduce stress to the ecosystem by improving water and sediment quality; 2) Strengthen regional legal basis for preventing land-based sources of pollution through GPA; and 3) Develop regional capacity and strengthen institutions for sustainable, less polluting development.

Within the Abidjan convention, the secretariat of the together with the GPA office, UNIDO and UNDP developed a USD 21 Million GEF funded project with Norwegian co-financing entitled Combating Living Resources Depletion and Coastal Area Degradation in the Guinea Current LME through Ecosystem-based Regional Actions. The project's focus is on the priority problems and issues, e.g. unsustainable fisheries and use of other marine resources and degradation of marine and coastal ecosystems by human activities, as identified by the 16 Guinea Current Countries. The long-term development goals of the project are to recover and sustain depleted fisheries; restore degraded habitats; and reduce land and ship-based pollution by establishing a regional management framework for sustainable use of living and non-living resources in the GCLME.

### **ICRAN**

UNEP/the Nairobi Convention Secretariat signed a Memorandum of Understanding with IUCN on assessment of MPA management effectiveness. The report "ICRAN/UNEP/Project Assessment of Management Effectiveness in Selected Marine Protected Areas in the Western Indian Ocean" will be distributed early 2004.

Further, UNEP/the Nairobi Convention Secretariat supported ICRAN activities in the Malindi-Watamu, Kenya and Dar-es-Salaam, Tanzania, through collaboration with Kenya Wildlife Services (KWS) and Dar-es-Salaam Marine Reserves System (DMRS). Activities were aimed at improving management of the MPA as well as demonstrating means and ways of alleviating poverty among the front-line stakeholders. Involving both the management arms of the MPA and the local communities to selected key priority activities, the ICRAN project has e.g. rehabilitated boat repair workshops, developed new and novel income generating ecotourism projects and enhanced the management practices by improving existing infrastructure in the MPA.

# The Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden (PERSGA)

PERSGA is the executing agency for the *Strategic Action Programme (SAP)* for the Red Sea and Gulf of Aden, an interdisciplinary project funded through the Global Environment Facility (GEF) implementing agencies (UNDP, UNEP, the World Bank), the Islamic Development Bank, and the PERSGA member states. The SAP provides a framework for the long-term conservation and management of the coastal and marine resources of the Region.

### Sustainable Use and Management of Living Marine Resources

PERSGA has established a regionally standardized system for the collection of fisheries data. New data collection stations operate at fish landing sites in four countries, and two regional fisheries training centres have been established and equipped. A Regional Fisheries Management Committee for the Red Sea and Gulf of Aden has been established, led by the governments of Saudi Arabia and Sudan. A report on elasmobranch identification and stock assessment was produced, and standard survey methods for key species/ornamental fish, including a management plan, is being developed.

## Habitat and Biodiversity Conservation

PERSGA has developed standard survey methods for key habitats and species. Following training of regional specialist teams, surveys were carried out to assess the regional status of mangroves, turtles and breeding seabirds. Regional Action Plans have been developed for the conservation of coral reefs, mangroves, turtles and breeding seabirds.

## Development of a Regional Network of Marine Protected Areas

PERSGA is establishing a network of marine protected areas (MPAs) to assist in conserving habitats and biodiversity, and to benefit both migratory species and transboundary stocks. *A Master Plan for the Regional Network of Marine Protected Areas* and site-specific management plans have been prepared, and detailed surveys were carried out in proposed MPAs in three countries. An MPA at Isles des Sept Frères (Djibouti) was officially declared by the Djiboutian Government.

# Support for Integrated Coastal Zone Management

ICZM plans for the coast of Aden, prepared through extensive consultation with local stakeholders and accepted by the Aden Governorate were submitted to the Council of Ministers for government approval. Similar cooperative engagements are underway in Sudan and Djibouti.

## Public Awareness and Participation

One hundred and seventeen school environmental clubs have been established within the region, including several 'Community Participation Programmes'. Projects are being executed by local NGOs on activities such as rehabilitation, stock assessments and protection of key species. An on-line regional environmental information management system and GIS has been established with the assistance of CEDARE. PERSGA regularly publishes the newsletter Al Sanbouk

### Control of Land Based Activities

With the support of GPA/UNEP, PERSGA has prepared a regional Programme of Action for the prevention of pollution from land based activities and is executing two national Programmes of Action. A regional pollution-monitoring programme is being developed in cooperation with the Coordinating Unit of the Mediterranean Action Plan and the IAEA Marine Environment Laboratory.

### Regional Legal Instruments

The draft *Protocol Concerning the Conservation of Biological Diversity and the Establishment of Protected Areas*, prepared for the PERSGA and ROPME regions with the assistance of UNEP-ROWA, was amended at a legal/technical joint expert meeting. The draft *Protocol on the Protection of the Marine Environment from Land-based Sources of Pollution in the Red Sea and Gulf of Aden* has been sent to member states for review in preparation for the first legal/technical joint expert meeting.

# Reduction of Navigation Risks and Marine Pollution

New navigation charts for the southern Red Sea, with important new safety directions, have been produced under the vessel traffic separation scheme approved by IMO in 2002. Following recommendations from the IALA (International Association of Lighthouse Authorities) the establishment of a lighthouse and an automatic vessel monitoring system is underway on Hanish Al Kubra. A regional Marine Emergency Mutual Aid Centre (MEMAC) is being established in Hurghada, to coordinate activities in the event of oil spills and act as a focal point for training and information distribution among member countries. The IMO Marine Environment Division, in cooperation with PERSGA, has funded the preparation of a Regional Action Plan for the Development of the national systems and regional and subregional mechanisms for the preparation and response to major marine oil spills in the Red Sea and Gulf of Aden. Also, IMO has supported regional workshops on marine contingency planning.

# Regional Organization for the Protection of the Marine Environment (ROPME), The Kuwait Convention and Action Plan

The ROPME Secretariat has prepared the "State of the Marine Environment Report-SOMER 2003" based on information from Member States, two Oceanographic Cruises and pollution data from the Contaminant Screening Project jointly carried out with IAEA/MEL. SOMER 2003 will be published in Arabic, English and Farsi and released on CD for distribution to Member States and regional and international environmental organizations.

The Remote Sensing Laboratory of ROPME has been active in acquiring the aerospace remote sensing materials and preparing the satellite thematic mapping and habitat characterization and distribution in the region for over a decade. As of January 2003 ROPME installed a Receiving Station, which is operating with Moderate Resolution Imaging Spectrometer (MODIS) on board of TERRA1 and AQUA satellite platforms, as part of NASA EOS family. The satellites provide good coverage and revisit time for the ROPME region.

ROPME, in collaboration with the UNEP Regional Seas Coordination Office and UNEP/ROWA, initiated the establishment of a digital database system in 2003. A consultant will undertake a technical assessment of capacity and needs, as well as design and develop the system. The digital database system will integrate data on the state of marine environment, geographical information of the coastal and marine environment, and the remotely sensed derived data on environmental conditions and trends.

Three training courses for the analyses of Hydrocarbons in Marine Materials were conducted in three Member States during 2003, with both theoretical and practical sessions. A Training Course for the Analyses of Trace Metals in Marine Materials was also conducted.

A regional intercalibration between designated laboratories of Member States was carried out for the assessment of analytical procedures and validation of analytical methods on the measurements of trace elements, chlorinated compounds and petroleum hydrocarbons.

An Extraordinary Meeting for Oil Spill Response Officers (OSRO) of Member States (2003) reviewed and revised the national preparedness programs to provide for effective response to pollution emergencies in case of conflict in the region. A Committee composed of OSRO members and the representatives of UN-Multi-national Interception Forces was formed to follow-up cases of marine emergencies. Subsequently, an Emergency Oil and Chemical Spill exercise was carried out at the Marine Emergency Mutual Aid Centre (MEMAC).

The Modeling and Monitoring of Coastal Marine Processes Training Programme (MAMCOMP-2003) was conducted, co-sponsored by IOC/UNESCO and ROPME The main objectives were to provide the participants with basic information on ICAM, various coastal marine processes and modeling techniques, as well as modern methods of pollution assessment. The MAMCOMP Training Programme will be held every second year.

ROPME and IMO/GloBallast jointly organized a Regional Conference on Invasive Species in Ballast Water-GloBallast in October 2003. The Conference established a Regional Task Force on GloBallast, decided on short-term activities for the "Regional Action Plan on Invasive Species" and adopted a resolution in support of GloBallast programme.

IOC/UNESCO and ROPME jointly organized a Regional Workshop on Coral Reef Monitoring and Management in 2003. The workshop received excellent participation and valuable contributions from such organizations as ICRI, GCRMN, ICRAN, Reef Check, CORDIO and UNESCO. The workshop provided an overview of existing activities on coastal habitat protection, an assessment of capacities for coral reef monitoring and management and introduced common methods used for monitoring coral reef ecosystems. The workshop welcomed the offer by the Iranian National Centre for Oceanography to host the Regional Node for Coral Reef, and the offer of UNESCO to proceed with a transboundary diagnostic analysis of coastal and marine environmental issues in the ROPME region.

# South Asian Seas Action Plan (SAS)

The South Asia Co-operative Environment Programme (SACEP) is the Secretariat for the implementation of the South Asian Seas Action Plan. The member countries Bangladesh, India, Maldives, Pakistan and Sri Lanka, will hold the 3<sup>rd</sup> Inter-Ministerial Meeting during the first half of 2004. The South Asian Seas Action Plan identifies four priority areas: 1) Integrated Coastal Zone Management; 2) Development and Implementation of National and Regional Oil and Chemical Spill Contingency Planning; 3) Human Resources Development through Strengthening Regional Centres of Excellence; and 4) Protection of the Marine Environment from Land-based Activities.

During 2003 workshops were held on Integrated Management of Coastal and Marine Protected Areas and Integrated Coastal Area and River Basin Management (ICARM) for the South Asian Seas Region, as well as training courses in collaboration with UNEP and IMO on OPRC, implementation of MARPOL 73/78 and development of Port Reception Facilities in the region. The Regional Oil and Chemical Pollution Contingency Plan for South Asia has been finalized, and SAS is developing a Glo-Ballast Regional Action Plan in collaboration with IMO.

Coral reef research and management related activities continue, with SAS acting as a nodal agency for ICRI, GCRMN and CORDIO. SAS is also collaborating with the IOSEA Marine Turtle MoU Secretariat on the Conservation and Integrated Management of Marine Turtles and their Habitats in the South Asian Seas Region.

A GPA South Asian Seas Workshop was organized during 2003. SAS has also identified priority Activity Clusters for the region from the GPA strategic plan: Promote and facilitate non binding regional agreements; Contribute to regional assessment and analysis for action; Capacity building; Development of a clearing house mechanism for SAS; Strengthening capabilities of local, national and regional authorities for implementation of GPA; Development and implementation National Programmes of Action on LBA; Support governments to initiate and implement national regional actions to address GPA source categories; Integrated coastal zone management; and Awareness building.

Implementation of a US \$ 2 million project supported by the Norwegian Institute for Water Research (NIVA), 'Development of National Environmental Quality Criteria for Seawater for the South Asian Seas', will commence in 2004. Further, Two GEF Projects for the South Asian Seas region are also proposed for development during 2004: "Reducing Pesticide Runoff to the South Asian Sea and Reducing Reliance on Agricultural Pesticide Use in selected River Basins through Integrated Production and Pest Management", and "A Community-based Pollution Prevention System". Proposals are being developed in collaboration with UNEP's Regional Seas Unit and the GEF POP's Unit in Nairobi.

## **East Asian Seas Action Plan**

The East Asian Seas Regional Coordinating Unit (EAS/RCU) is the secretariat of COBSEA. Over the past years pledges from both member countries and the UNEP Environment Fund have been reduced and thus the secretariat spent large efforts in 2003 to find funding for its operations.

An independent review and assessment of the future direction of COBSEA was carried out in 2003, aiming to review relevant previous and on-going programmes carried out by other international organizations in the region complementary to the objectives of the East Asian Action Plan, to prepare a concrete proposal to strengthen the East Asian Seas Action Plan for 2003-2005, and to provide an analysis of the secretariat functions to the Action Plan. The review report, containing recommendations in the areas of financial sustainability, secretariat structure and function, geographic focus, and programme focus, will be presented to the COBSEA intergovernmental meeting in March 2004 for approval.

The implementation of the East Asian Seas Action Plan included: implementation of the UNEP/GEF Project entitled, "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand,"

### Coral Reef Monitoring

This project's objective is to form a network of monitoring sites using standardized methods to illustrate the state of the region's coral reefs. International Coral Reef Action Network (ICRAN) sites are used to test the agreed monitoring methods and parameters.

Achievements under this project consisted of local-scale coral reef monitoring activities throughout the region. The activities resulted in collection of additional information on coral reefs and associated organisms, a metadatabase hosted by SEA START RC, and an MPA network of coral reef monitoring. Parameters for biophysical and socio-economic monitoring have been agreed on, and will be tested in the coming year. In the public awareness area, two journalist workshops were held in Thailand and Philippines to expose journalists to the importance of coral reefs, and to encourage the journalists to advertise the need to protect the reefs. Children's activity booklets in local languages were printed and distributed to schools.

A Small Grants Fund Programme was held in collaboration with the ICRAN Project. The two projects pooled together some funds to implement activities addressing coral reef monitoring for management. Other collaborative activities included training workshops in Cambodia, sharing equipment and personnel to implement activities, and using results from one project as guidelines for activities at another.

The collaboration between the coral reef monitoring and ICRAN projects has resulted in a wide range of successes whose momentum should not be lost. The two projects are encouraged to maintain its collaborative efforts to continue protecting the marine resources in the region.

# The International Coral Reef Action Network (ICRAN)

Eight project sites were selected for activity implementation based on a study on management gaps, based on their management strategies: multiple use, community-based management, or sustainable tourism. Activities and achievements included: training workshops to increase management capacity; preparation and distribution of public awareness materials in local languages; stakeholder meetings; coral reef monitoring; tourism carrying capacity studies; and feasibility studies on pilot projects for alternative income livelihoods.

Activities have implemented at each site include :Handbook on coral reef monitoring for management translated into Khmer, Thai, Chinese, and Viet Namese, and distributed to park managers, schools, dive shops, government agencies, NGOs; Feasibility studies for alternative livelihoods (Ninh Thuan, Sanya, Gilli); Training in ReefCheck and LIT monitoring methods (Koh Rong, Gilli); Training on cooperative management (Bunaken, Gilli); Preparing guidelines for

developing sustainable tourism practices (Bunaken, Gilli); and Training on identifying and minimizing socio-economic impacts on coral reefs (Ninh Thuan).

# **Land-Based Sources of Pollution**

The project, "Identification of Regional 'Hot Spots on Land-based Pollution, Their Characteristics and Impacts – Towards Better Management," will provide a means for participating countries to control and manage pollutant discharge into the seas of the region. A workshop was held to identify hot spots of pollution from land-based sources and the format of the information to be included in the GIS database established.

# **Enhancing Regional Coordination**

A project to enhance regional coordination of coastal and marine environmental activities has been initiated, and an inception workshop was held in December 2003, where EAS/RCU and Sida agreed on an implementation plan. Activities will commence in 2004. The objectives of this project are: to improve and enhance coordination of national and regional projects; assist countries with developing "strategies" to address national and regional priorities in coastal and marine environmental management; develop sustainable mechanisms addressing coastal and marine environmental issues; facilitate the development of regional agreements in addressing environmental priorities; and direct the EAS/RCU Action Plan to provide a service-oriented platform.

# **Northwest Pacific Action Plan (NOWPAP)**

The Regional Seas Coordinating Unit, in its capacity of interim secretariat of NOWPAP, has been supporting the implementation and the strengthening of the Action Plan. The Seventh Intergovernmental Meeting in Vladivostok, Russian Federation, 2000, requested the Executive Director to proceed with the establishment of the co-hosted RCU and to recruit the staff for the RCU under UNEP auspices. During 2002-03 UNEP and the two host countries negotiated a Host Country Agreement (HCA), and the HCA for the Toyama, Japan office was signed on 16<sup>th</sup> September 2003. Negotiations between the Government of the Republic of Korea and UNEP are ongoing and it is expected that they will be finalized soon, after which staff will be recruited for the two offices. The Regional Seas Coordinating Unit in UNEP will continue to facilitate in the establishment process and will continue to support NOWPAP through guidance and advice during the first years of the operation of the RCU.

The 8<sup>th</sup> Intergovernmental Meeting of NOWPAP was held in Sanya, China, in November 2003. As an interim operational arrangement, the meeting adopted a Regional Oil Spill Contingency Plan as technical and operational guidelines for cooperation in case of emergencies, until the Memorandum of Understanding on regional cooperation regarding preparedness and response to oil spills in the marine environment of the Northwest Pacific region comes into effect.

UNEP has assisted NOWPAP to vitalize the activities of the four Regional Activity Centers. All four RACs have established National Focal Points Fora and held Focal Point meetings during 2003. The 8<sup>th</sup> IG meeting approved the Terms of Reference for all the RAC Focal Point Meetings.

CEARAC (Special Monitoring and Coastal Environmental Assessment Regional Activity Center), located in Toyama, Japan, at the Northwest Pacific Region Environment Cooperation Center (NPEC), has defined the activities of its working groups on Harmful Algal Blooms (HAB) and Remote Sensing (RS), and elaborated its work priorities for 2004-05.

DINRAC (Data and Information Regional Activity Center), located in Beijing, China, at the State Environment Protection Administration (SEPA), in collaboration with the Marine Information Research Center/Japan Hydrographic Association (MIRC/JHA), has initiated preparation of comprehensive documents on Establishment of a NOWPAP Policy on Data and Information Sharing and Establishment of Principles and Guidelines for NOWPAP Meta-database Management System. DINRAC is finalizing national reports on data and information network and is developing a database on institutions and experts for the NOWPAP region.

MERRAC (Marine Environmental Emergency Preparedness and Response Regional Activity Center), located in Taejon, Republic of Korea, at the Research Institute of Ships and Ocean Engineering/Korea Ocean Research and Development Institute (KRISO/KORDI), has completed three MOUs on Oil Spill Prediction Modelling, Sensitivity Mapping and Oil Dispersants, and held a NOWPAP Regional OPRC course (IMO Level 2 course) in Korea in November 2003.

POMRAC (Pollution Monitoring Regional Activity Center) located in Vladivostok, Russia, at the Pacific Geographical Institute (PGI), has developed a workplan and guidance for its Working Groups on Atmospheric Deposition and River and Direct Inputs.

# The La Antigua Guatemala Convention (Northeast Pacific Action Plan NEP)

The Central American Commission for Maritime Transportation (COCATRAM) and UNEP organized the Second Intergovernmental Meeting of the La Antigua Barbuda Convention in Managua, Nicaragua 6-7 March 2003. The meeting took a decision to initiate the elaboration of national contingency plans in preparedness and response to oil spills and hazardous substances, and a project is under development by UNEP, in collaboration with IMO, GPA, COCATRAM. Implementation of a Sida-supported three-year project on strengthening the institutional capacity of the region to address pollution arising from shipping and land based sources will commence in 2004, with an inception meeting to be held in March.

A document entitled "Assessment of Land-based Sources of Pollution and Activities which affect the Marine and Coastal Environment and Associated Freshwater Areas in the North-east Pacific Region" is being published in English and Spanish ("Evaluación Sombre las Fuentes Terrestres y Actividades que afectan al Medio Marino, Costero y de Aguas Dulces Asociadas en la Región Pacífico Nordeste").

# **Permanent Commission for the South Pacific (CPPS)**

The Lima Convention for the Protection of the Marine Environment and Coastal Zones of the South East Pacific and the South East Pacific Action Plan were approved in 1981. Since then, a number of protocols and agreements have been developed, e.g. Agreement on Combating Pollution from Hydrocarbons and other Harmful Substances in cases of Emergency in the South East Pacific (1981); Complementary Protocol of the Agreement (1983); Protocol for the Protection of the South East Pacific against Pollution from Land-based Sources (1983); Protocol for the Conservation and Management of Marine and Coastal Protected Areas of the South East Pacific (1989); and Protocol for the Protection of the South East Pacific from Radioactive Pollution (1989).

The 11<sup>th</sup> Meeting of the General Authority (Contracting Parties) of the South East Pacific Action Plan, taking into account the recommendations of the previous Consultative Group Meeting

(Scientific and Technical Advisory Body) reviewed, for first time since its creation in 1981, the institutional and financial framework of the South East Pacific Action Plan, approving the updated institutional and financial mechanisms as well as the organization and function of the General Authority, the Consultative Group; the Executive Secretary; National Focal Points; National Institutions and the Mechanisms of Support of the International Organizations.

Activities implemented during 2003 include: Consulting on updating of the Regional Contingency Plan on Oil Spill in the South East Pacific (with the support of IMO); Meeting of Experts on the impact of the introduction of Alien Species in the South East Pacific: Problem of the ship ballast water (IMO/CBD/CPPS); Regional Workshop on Education to the Sustainable Development of the Coastal and Marine Areas of the South East Pacific (IOC-UNESCO/CPPS); Regional Training Course on Preparedness, Response and Control in Cases of Oil Spill (UNEP/IMO/CPPS); and ICARM Workshop in the South East Pacific. The Third Meeting of Experts on Marine Mammals and the Fourth Meeting of Experts on Marine and Coastal Protected Areas are under preparation.

The Medium Size GEF Project for the Prevention, Reduction and Control of Pollutants in the Eastern Equatorial Pacific and Humboldt Current Large Marine Ecosystem: South East Pacific Component, is in the final process of evaluation of by GEF/UNEP. This project will allow the effective regional implementation of GPA, the LBA Regional Protocol for the South East Pacific and the PROSET.

CPPS is currently participating as a Focal Point in the Global International Water Assessment (GIWA) for the Sub-region 64 (Humboldt Current) and 65 (Eastern Equatorial Pacific). The project is mobilizes scientists on environment and socio-economic issues following the GIWA Methodology on Scaling and Scoping, Detailed Assessment, Causal Chain Analyses and Policy Option Analysis.

The 12<sup>th</sup> COP of the South East Pacific Action Plan will be held in Guayaquil-Ecuador in March 2004, with emphasis on the decisions of the 22 Session of UNEP's Governing Council and in particular the regional Seas Strategic Directions for 2004 – 2007, as agreed at the 5<sup>th</sup> Global Meeting of the Regional Seas, held in Nairobi, Kenya, November 2003, incorporating these new elements into the South East Pacific Action Plan.

## Cooperation with Multilateral Environmental Agreement

Regional Seas Conventions and Action Plans constitutes an efficient platform for the regional implementation of MEAs, and in 1991, CPPS entered a Memorandum of Cooperation with the Secretariat of the Convention on Biological Diversity, to promote and facilitate the regional implementation of Jakarta Mandate. Joint activities include regional workshops on alien species; mariculture; protected areas; and ballast water management.

Another agreement was signed between the Secretariat of CPPS and the Secretariat of the Basel Convention in 2002, with the purpose to develop joint regional activities for the control of transboundary movements of hazardous wastes, which includes among others the design and development of education materials and training programs; cooperation in monitoring the effects of the management of hazardous wastes of human health and on the marine and coastal environment; transfer of technology and systems regarding to environmental sound management of hazardous wastes.

Similar agreements are under development with the Secretariat of the Framework Convention on Climate Change and the Ramsar Convention on Wetlands.

Horizontal cooperation between the Permanent Commission for the South Pacific (CPPS) and the South Pacific Regional Environment Programme (SPREP)

As requested by the 22<sup>nd</sup> UNEP Governing Council and promoted by the Regional Seas Coordination Office, CPPS and SPREP signed a Memorandum on twining arrangements between the two Regional Seas Organizations in 2001. Cooperation comprises the development of joint activities such as research and monitoring of marine pollution; integrated marine and coastal area management; marine and coastal protected areas; climate change; biodiversity and natural resource conservation and environmental education, as well as the coordination of bioregional meetings to review the state of the marine environment in the South Pacific as a whole; exchange of information and the cooperation in capacity building in institutional aspects.

A Bioregional Conference between CPPS and SPREP will be held in 2004, with a technical support from UNEP and the Regional Seas Coordination Office. A joint conference between the Regional Seas Programmes of the Pacific Basin is also planned for 2004, to develop and share knowledge of the state of the marine environment in the Pacific as a whole.

## Global Programme of Action (GPA)

The Third Global Environment Outlook (GEO 3)<sup>1</sup> reports that at a global level the degradation of coastal and marine environments not only continues but has intensified. Land-based sources are responsible for approximately 80 per cent of the pollution of the oceans and affect the most productive areas of the marine environment. Sewage remains the largest source of contamination, by volume, as coastal sewage discharges have increased dramatically in the past three decades. In particular, the provision of basic sanitation, as well as urban sewer systems and sewage treatment in the developing world, has not kept pace with rates of urbanization or improved services in many developed countries.

Nitrogen levels in coastal waters are exacerbated by the widespread loss of natural interceptors such as coastal wetlands, coral reefs and mangrove forests. In some coastal areas, atmospheric inputs derived from vehicle and industrial emissions, animal manure and fertilizer, dominate anthropogenic nitrogen inputs. Excessive nutrient levels can result in blooms of toxic or otherwise undesirable phytoplankton and there is increasing evidence that these are increasing in frequency, intensity and geographic distribution.

Other serious land-based threats to the oceans include Persistent Organic Pollutants (POPs), many of which are transported globally via the atmosphere, non-biodegradable litter, and changes to natural sediment loads in rivers. Groundwater, storm water, rivers, sewerage systems and the wind all transfer terrestrially derived pollutants to the oceans where the pollutants accumulate in both biological and geophysical resources, thus reducing the economic, social and environmental value of coastal and oceanic systems. This has significant negative implications of global magnitude for human health, poverty alleviation, food security and safety, and for affected industries.

Article 207 of UNCLOS requires States to adopt laws and regulations to prevent, reduce and control pollution from land-based sources and to endeavor to establish global and regional rules, standards and recommended practices and procedures, acting especially through

<sup>&</sup>lt;sup>1</sup>UNEP, Global Environment Outlook 3, Earthscan Publications, 2002

competent international organizations and diplomatic conferences. Responding to the need for multilateral action to protect the marine environment, the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) was adopted by an Intergovernmental Conference in November 1995. The GPA is the only global programme addressing the interface between freshwater and saltwater environments.

The World Summit on Sustainable Development (WSSD) Plan of Implementation, adopted in Johannesburg, South Africa, 26 August – 4 September 2002, calls on governments to advance implementation of the GPA and the Montreal Declaration, with particular emphasis during the period from 2002 to 2006 on municipal wastewater, the physical alteration and destruction of habitats, and nutrients.

With the support of donors the UNEP/GPA Coordination Office is supporting the development and implementation of National Programmes of Action for the Protection of the Marine Environment from Land-based Activities (NPA) with a view to realizing a target of 40 NPAs by 2006. 17 Governments have developed or are currently preparing formalized NPAs. The commencement of a further 25 NPAs in the South Pacific, South Asia, West and East Africa is expected in 2004. In May 2004 the UNEP / GPA Coordination Office, with the support of the Government of Australia, will host the Global H<sub>2</sub>O: Hilltops-2-Oceans Partnership Conference in Cairns, Australia. Emphasizing the link between freshwater and marine environments, the conference will, *inter alia*, facilitate the sharing of experience vis-à-vis the development of NPAs and assist UNEP in realising the target of 40 NPAs by 2006.

2003 In the UNEP/GPA Coordination Office continued to implement UNEP/WHO/HABITAT/WSSCC Strategic Action Plan on Municipal Wastewater. This included the articulation of Ten Keys for Local and National Action on Municipal Wastewater Management to be reviewed by the Global Ministerial Environment Forum in 2004, and submitted for adoption at the Twenty Third Governing Council of UNEP in 2005. Capacity building through the selection and implementation of pilot projects demonstrating the concepts advocated in the Ten Keys is ongoing, as is the development of training modules through the Train-Sea-Coast programme. Jointly through UNEP's Regional Seas Programme the use of regional Wastewater Emission Targets (WET) is also being explored and will be further addressed at the Global H<sub>2</sub>O: Hilltops-2-Oceans Partnership Conference in Cairns, Australia.

In 2003 the UNEP/GPA Coordination Office facilitated a number of regional reports and workshops on the Physical Alteration and Destruction of coastal Habitats (PADH). These include a diagnosis of the erosion processes in Caribbean sandy beaches; comparative reviews of coastal legislation and policies in South Asia and the Wider Caribbean region; and a review of national legislation and institutions relevant to tourism, mangroves and ports/land reclamation/damming of rivers in Eastern Africa. Key principles to guide activities in the tourism, aquaculture, ports & harbors, and mining sectors are also being developed, with a view to adoption by relevant private sector stakeholders. Discussion is currently underway with the International Association of the Dredging Companies (IADC) to promote implementation of the GPA and environmentally sound dredging practices.

In 2004 the UNEP/GPA Coordination Office will continue to draw global attention to links between Integrated Water Resource Management, Integrated River-basin Management and Integrated Coastal Area Management, including through the FreshCo Partnership (a WSSD partnership) with, *inter alia*, the Danish based UCC-Water/DHI. In March 2003 a first draft of the Integrated Coastal Area and River-basin Management (ICARM) guiding principles was presented to the 3<sup>rd</sup> World Water Forum and ICARM / FreshCo workshops were held in South

Asia and East Asia. ICARM pilot projects are currently being developed for river basins in Europe, Africa and South America.

In 2004 the UNEP/GPA Coordination Office will continue efforts to engage the private sector and civil society in the implementation of the GPA. In November 2003 the UNEP/GPA Coordination Office co-sponsored the Global Forum on Oceans, Coastal and Islands (GFOCI) Initiative in Paris, an event attended by some 250 participants, including national representatives, international organizations, NGO's and experts. The purpose of the conference was to review what has been done to date in implementing the WSSD commitments and to catalyze multi-stakeholder action on WSSD implementation. Similarly, the GPA Coordination Office contracted the Stakeholder Forum for Our Common Future to launch and disseminate to civil society a monthly GPA Newsletter in November 2003.

In 2003 the UNEP/GPA Coordination Office maintained and updated its ClearingHouse Mechanism (CHM), www.gpa.unep.org, including the source category nodes on Marine Litter and Oils. New CHM-pages on capacity building, SIDS and the GPA's involvement in the GEF-Black Sea Ecosystem Recovery Project (BSERP) have also been established.

#### SIDS

The WSSD Plan of Implementation specifically calls for action to effectively reduce, prevent and control waste and pollution and their health-related impacts by undertaking initiatives by 2004 aimed at implementing the GPA in Small Island Developing States (SIDS). The UNEP SIDS Programme is coordinated from within the GPA Coordination office and is one of the key programmes through which the GPA is being implemented. GPA activities are embedded within the SIDS Programme in the lead up to the Ten Year Review of the Barbados Programme of Action (BPoA) for the Sustainable Development of SIDS to be held in Mauritius in September 2004. UNEP has produced a database on UNEP's activities in SIDS since adoption of the BPoA, a paper highlighting Type II initiatives from the WSSD as they pertain to SIDS, and an updated version of the environment outlooks on Caribbean, Pacific Islands and Western Indian Ocean SIDS. UNEP will coordinate activities among partners to assist SIDS in finding funds to finance projects that address such problems as river, coastal and marine pollution, and assist SIDS to develop partnerships that include the private sector and civil society.

#### **Coral Reefs**

The UNEP Governing Council Decision 22/2 IV on coral reefs highlights the need for increased cooperation between national and international stakeholders within and outside the UNEP system. In response, UNEP has consolidated its programmatic support for coral reefs at the UNEP World Conservation Monitoring Centre in Cambridge (UK). The centre now hosts the Marine and Coastal Programme, the Coordinating Unit of the International Coral Reef Action Network (ICRAN), and the UNEP Coral Reef Unit (CRU), leading and advising on assessment and implementation of coral reef policies. In addition, UNEP-WCMC has provided technical and administrative support to the joint UK/Seychelles Secretariat of the International Coral Reef Initiative (ICRI) since July 2003. The co-location of these four units ensures greater collaboration and a more coherent approach to coral reef issues ranging from policy to implementation on the ground.

# CRU, Regional Seas Programmes and ICRAN

Collaboration between the coral reef units of UNEP-WCMC and the RS Programme continues to develop, particularly with MEAs and ICRI on integrating and implementing work programmes

for the sustainable development of coral reefs. The CRU also presented its work on coral reef ecosystems in both tropical and temperate/cold climates at the Joint Ministerial Meeting of the Helsinki and OSPAR Commissions, June 2003. The CRU and RS Coordination Office are working closely in the administration of counterpart contributions from the US government to support the Global Coral Reef Monitoring Network (GCRMN) and coral reef projects carried out, *inter alia*, under the Regional Seas Conventions in the Caribbean, East Africa and East Asian Seas. The implementation of ICRAN has been further strengthened at demonstration and target sites in the Wider Caribbean, Eastern Africa, East Asian Seas and South Pacific Regions, and activities expanded to include South Asian Seas and the PERSGA and ROPME region. UNEP continues to provide advice and contributions for ICRAN's strategic direction and continuation. In 2003, ICRAN launched a biannual newsletter, which particularly focuses on the achievements of site level activities implemented through UNEP Regional Seas Programmes (see www.icran.org).

# UNEP's Role in the International Coral Reef Initiative (ICRI)

The CRU is the UNEP focal point for ICRI, co-ordinating support and contributing to meetings of the ICRI Coordination and Planning Committee (Gland, May 2003; Turks & Caicos, November 2003). UNEP has recommended the inclusion of cold water corals in the ICRI programme of work. The ICRI membership will make its decision in July 2004.

## Reports and meetings

The 2<sup>nd</sup> International Tropical Marine Ecosystems Management Symposium (ITMEMS2), March 2003, Manila, was convened by ICRI, and supported by CRU and the RS Coordinating Office, to discuss multi-disciplinary approaches to sustainable management of tropical marine ecosystems. A publication is under preparation on the outcomes of the special ICRAN session at ITMEMS2. The Integrated Global Observing Strategy (IGOS) Coral Reef Sub-theme report, prepared by UNEP and the National Oceanographic and Atmospheric Administration (NOAA) was approved by the IGOS partnership and is available at http://coral.unep.ch/igoscrrp.htm