UNEP ANNUAL REPORT 1998

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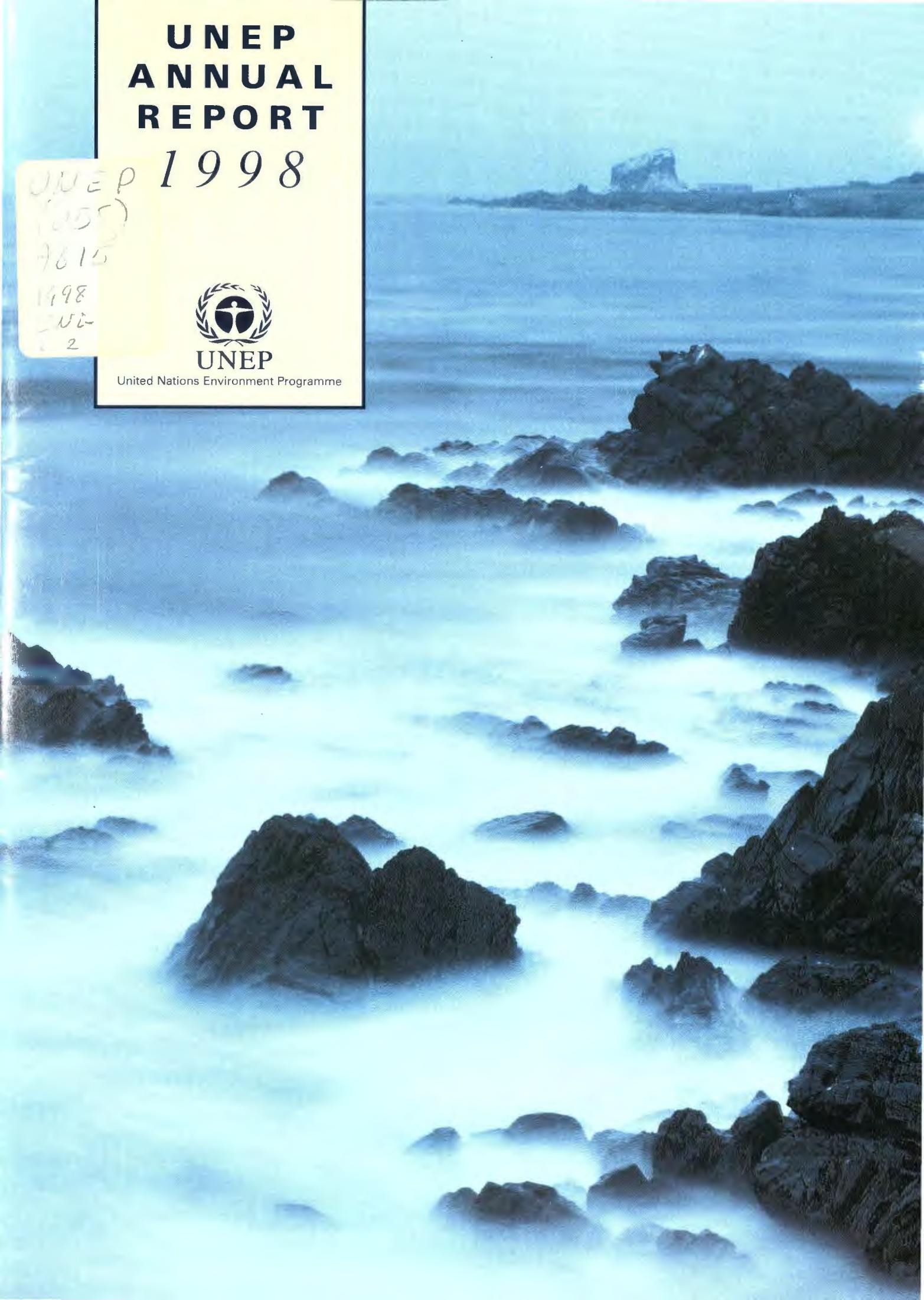
United Nations Environment Programme



UNEP's MISSION

'To provide leadership and encourage partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations.'

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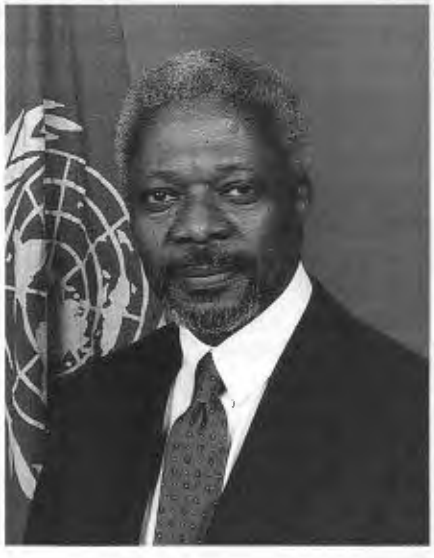
MESSAGE FROM THE SECRETARY-GENERAL



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WHEN we talk about the environment, we are not speaking only of ecosystems and resources but about most of the key issues on the international agenda. We are talking about whether we live sustainably or unsustainably; about poverty and inequality; and about peace and security, since the roots of conflict can also be found in competition over land, oil and water. We are talking about democracy, and the involvement of men and women in the decisions affecting their lives. And we are talking, not least, about shared values and goals: working jointly to see that the benefits of economic growth and development are shared not only among countries, but among generations as well. Safeguarding the environment is, in short, a quintessentially global challenge, meaning that the United Nations, as the global organization, must play a strong and well-defined role.

In more than 25 years of existence, the United Nations Environment Programme has been in the forefront of that effort: reporting on the state of the world's forests, oceans and atmosphere; cataloguing the fragility of the ozone layer and freshwater resources; and forging a response to these and other crises. UNEP's *Annual Report* for 1998 indicates that we are still far from our goal of development that is sustainable and environmentally friendly. Our failures are most pronounced in the areas of climate change and biodiversity. The loss of species persists, and greenhouse gases are still being emitted at higher levels than internationally agreed targets – trends that are all the more troubling given the existence in these areas of legally binding conventions that have long since entered into force.

UNEP's 1998 *Annual Report* also showcases an institution that is adapting itself to new challenges and implementing the recommendations of the report of the United Nations Task Force on Environment and Human Settlements. As the international community continues to address a full and complex agenda of global environmental concerns, I have no doubt that UNEP – the environmental conscience of the United Nations system – will remain an invaluable player and a dynamic force for change.

Kofi A. Annan
Secretary-General of the United Nations

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Vice-Presidents:	Mr. Sid-Ali Ketrandji (Algeria)
	Mr. T. P. Sreenivasan (India)
	Mr. Boris Maiorski (Russian Federation)
Rapporteur:	Mr. Paul Haddow (Canada)

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Vice-Chairpersons:	Mr. L. Arellano (Mexico)
	Mr. Gertjan Storm (The Netherlands)
	Mr. Xia Kunbao (China)
Rapporteur:	Mr. Wojciech Jasinski (Poland)

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OFFICERS as at 30 October 1998:

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Vice-Chairpersons:	Ms. Maria Julia Alsogaray (Argentina)
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	Mr. Wang Zhijia (China)
Rapporteur:	Mr. Phillipe Roch (Switzerland)

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United States of America **
Venezuela **
Zimbabwe *

* Members whose terms expire on 31 December 1999.

** Members whose terms expire on 31 December 2001.

PREFACE

SCHAACK

PROTECTING the health of the Earth and building a better quality of life for all its citizens go hand in hand. Recognition of this started after the 1972 Stockholm Conference, and it has shaped the international community's environmental perspective over the six years since the United Nations Conference on Environment and Development (UNCED).

But economic development and rapid technological growth must coexist with care for the environment. They are interdependent as, in the long term, bad environmental policy is bad economic policy – it is more expensive to clean up the environment than to protect it. As recently as six years ago, however, nobody could have predicted how much louder environmentalists would have to shout in order for that message to be heard above the clamour of the global money markets among failing economies.

As we try to solve the current international financial crisis, it is more important than ever to remember that fragile ecosystems are not subject to the same boom-bust cycles as economic systems. Once destroyed, an ecosystem will not recover just because the global economy returns to health.

For many of the world's citizens, care of the environment simply cannot wait until the economy improves. To the poor, the health of the environment represents nothing less than survival – it is their hopes that shrivel in the anguish of drought or drown in the fury of floods. When an ecosystem ceases to provide such basic human needs as clean water, fertile soil or grazing, the plight of the poor worsens.

The rich may be immune for a while, but not for ever. We now know that if we are reckless in our use of chemicals and dump persistent organic pollutants on developing countries, our children and our children's children will suffer, wherever on the planet they may live. And if, for short-term political gain, we fail to heed the warnings of scientists about climate change, it will not be long before billion-dollar storms and floods force us to take note. Economic deficits may grab our attention today but environmental deficits will dominate our future.

When I arrived in Nairobi in February, I promised openness. UNEP's urgent task for this year has been to put its house in order by increasing its efficiency and effectiveness, while reducing waste and duplication. The success of UNEP's reform can be achieved if there is coherence in the way the United Nations System as a whole addresses the environmental agenda, and depends decisively on the active support of governments, the non-governmental sector and civil society.

This document reports on some of the highlights of the last 12 months. It is not exhaustive in its coverage, but its message is clear. As we approach the new millennium, the challenge facing UNEP and its governing body is to reforge UNEP into an organization with the legislative authority and adequate and predictable resources to effectively exercise its mandate, called for in the Nairobi Declaration, as the 'leading global environmental authority that sets the global environmental agenda, that promotes the coherent implementation of the environmental dimensions of sustainable development within the United Nations System, and that serves as an authoritative advocate for the global environment'.

Klaus Töpfer
Under-Secretary General of the United Nations
and Executive Director of UNEP

RESTRUCTURING UNEP

UNEP/ROGER LEMOYNE

A SPECIAL session of the Governing Council, only the fifth in the organization's 26-year history, met in Nairobi at the end of May 1998, and approved a wide-ranging restructuring of UNEP.

The proposals arose from a request by the Secretary-General, Kofi A. Annan, for a review of all environmental work undertaken within the United Nations. A high-level task force was established to report directly to Mr. Annan so that he could develop recommendations to be made to the UN General Assembly in September 1998.

The Executive Director, Klaus Töpfer, proposed measures for reforming UNEP to reflect the organization's urgent priorities and essential areas of concentration. His stated aim was to make it once again 'the environmental voice of the United Nations'.

The restructuring was to reflect the Secretary-General's goal, expressed in his plans for United Nations reform, for 'a system that delegates more day-to-day authority while establishing clear lines of responsibility, clarifying objectives and performance standards and establishing appropriate oversight, rewards and sanctions'.

As well as reflecting the new direction and emphasis of UNEP's work, the organizational changes should achieve significant economies. Klaus Töpfer pledged that this resulting 'environmental dividend' would be ploughed back to fund UNEP programmes.

UNEP will renew its efforts to promote sustainable development in Africa.

The 58-member Governing Council gave its backing to the Executive Director's plan to focus primarily on four areas which he described as expressing 'the substance of the Nairobi Declaration', the plan for UNEP's future approved by the 19th session of the Governing Council and upheld by the Special Session of the United Nations General Assembly last year. The Special Session of the Governing Council agreed that the new areas of concentration should be:

1 ENVIRONMENTAL INFORMATION, ASSESSMENT AND RESEARCH INCLUDING AN EMERGENCY RESPONSE CAPACITY AND STRENGTHENING EARLY WARNING AND ASSESSMENT FUNCTIONS

Events associated with the El Niño phenomenon – floods in Mexico and Peru, forest fires in Brazil, Mexico and Southeast Asia, and drought in East Africa – highlight the need for a rapid response mechanism. Strengthening UNEP's assessment capabilities is intended to prevent manageable emergencies developing into humanitarian crises.

2 DEVELOPING AND COORDINATING ENVIRONMENTAL POLICY INSTRUMENTS

At present UNEP administers most global environmental conventions and related agreements as well as several regional seas conventions and action plans. However, it has responsibilities for all major global and regional seas conventions,

THE NAIROBI DECLARATION

The Nairobi Declaration was agreed by ministers of the environment and heads of delegation attending the nineteenth session of the Governing Council held during January and February, 1997. The declaration outlining proposals for the future role and mandate of UNEP was forwarded to the special session of the United Nations General Assembly held in New York in June, 1997.

[The Heads of Delegation] declare:

1. *That the United Nations Environment Programme has been and should continue to be the principal United Nations body in the field of the environment and that we, the ministers of the environment and heads of delegation attending the nineteenth session of the Governing Council, are determined to play a stronger role in the implementation of the goals and objectives of the United Nations Environment Programme;*

2. *That the role of the United Nations Environment Programme is to be the leading global environmental authority that sets the global environmental agenda, that promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system and that serves as an authoritative advocate for the global environment;*

3. *That to this end, we reaffirm the continuing relevance of the mandate of the United Nations Environment Programme deriving from General Assembly resolution 2997 (XXVII) of 15 December 1972 and further elaborated by Agenda 21. The core elements of the focused mandate of the revitalized United Nations Environment Programme should be the following:*

(a) To analyse the state of the global environment and assess global and regional environmental trends, provide policy advice, early warning information on environmental threats, and to catalyse and promote international cooperation and action, based on the best scientific and technical capabilities available;

(b) To further the development of its international environmental law aiming at sustainable development, including the development of coherent interlinkages among existing international environmental conventions;

(c) To advance the implementation of agreed international norms and policies, to monitor and foster compliance with environmental principles and international agreements and stimulate cooperative action to respond to emerging environmental challenges;

(d) To strengthen its role in the coordination of environmental activities in the United Nations system in the field of the environment, as well as its role as an Implementing Agency of the Global Environment Facility, based on its comparative advantage and scientific and technical expertise;

(e) To promote greater awareness and facilitate effective cooperation among all sectors of society and actors involved in the implementation of the international environmental agenda, and to serve as an effective link between the scientific community and policy makers at the national and international levels;

(f) To provide policy and advisory services in key areas of institution-building to Governments and other relevant institutions;

4. *That, for the effective discharge of its focused mandate and to ensure the implementation of the global environmental agenda, we have decided to improve the governance structure of the United Nations Environment Programme. In doing so, we have been guided by the following considerations:*

(a) The United Nations Environment Programme should serve as the world forum for the ministers and the highest-level government officials in charge of environmental matters in the policy and decision-making processes of the United Nations Environment Programme;

(b) Regionalization and decentralization should be strengthened through the increased involvement and participation of regional ministerial and other relevant forums in the United Nations Environment Programme process, complementary to the central coordinating role of the Programme's headquarters in Nairobi;

(c) The participation of major groups should be increased;

(d) A cost-effective and politically influential inter-sessional mechanism should be designed;

5. *That, in order to operationalize its mandate, the revitalized United Nations Environment Programme needs adequate, stable and predictable financial resources and, in this regard, we recognize the interrelationship between excellence, relevance and cost-effectiveness in programme delivery, confidence in the organization and a consequent increase in the competitive ability of the Programme to attract funding;*

6. *That ways must be sought to assure financial stability for the implementation of the global environmental agenda. In this regard, the predictability and early notification of expected contributions to the Environment Fund would facilitate an effective planning and programming process;*

7. *That we reaffirm the central importance of the Environment Fund as the principal source of financing for the implementation of the programme of the United Nations Environment Programme;*

8. *That we are convinced that the expeditious implementation of our decisions and the principles contained in this Declaration, adopted in the year of the twenty-fifth anniversary of the founding of the United Nations Environment Programme, will revitalize and strengthen the organization and place it at the forefront of international efforts to protect the global environment for present and future generations and in the pursuit of sustainable development;*

9. *That we request the President of the Governing Council to present this Declaration to the high-level segment of the fifth session of the Commission on Sustainable Development and to the special session of the General Assembly for the purpose of an overall review and appraisal of the implementation of Agenda 21.*

ENVIRONMENTAL AWARDS

The UNEP-Sasakawa Environment Prize

Ian Kiernan, Australian environmentalist and yachtsman, and founder of the 'Clean up the world' campaign, received 1998's UNEP-Sasakawa Environment Prize, awarded to individuals or organizations that have made outstanding contributions to the environment. In 1998, more than 40 million volunteers from 120 countries participated in improving their local environments over the sixth annual clean-up weekend.

The Global 500

Twenty-three individuals and organizations were elected to UNEP's Global 500 Roll of Honour on World Environment Day 1998, including Yuri Luzhkov, Mayor of the City of Moscow, and Aga Akbar, a zoo-keeper from Afghanistan who remained with his animals at the front-line zoo during 18 months of fighting and bombardment.

Ozone Award

The 1998 UNEP Global Ozone Award was given to former Executive Director, Dr. Mostapha Tolba, in recognition of his efforts in establishing the Montreal Protocol and the Ozone Secretariat, and in continuing to contribute to their success.

so the proportion available for spending on non-staff and operational costs decreases further. For 1998-1999 the sum available for programme work is only $60.5 million, compared with $75.9 million in 1994-1995.

Member states have been warned that the organization may not be able to implement its approved programme of work in the biennium 1998-1999, and that if UNEP is to enter the new millennium able to defend the global environment, it must have more resources. This plea received a favourable echo at the Fifth Special Session of the Governing Council which met in May.

In his policy statement to the Governing Council, the Executive Director outlined his philosophy and strategies, which include further developing UNEP's existing expertise in environmental law and encouraging economic instruments, particularly in the context of the United Nations Framework Convention on Climate Change (UNFCCC). To that end UNEP organized regional meetings to look at ways in which developing countries could cooperate with those of the developed world to achieve the targets set out in the 1997 Kyoto Protocol.

Klaus Töpfer also emphasized the importance of UNEP's work in the area of trade, particularly in the wake of increasing globalization and trade liberalization. In June UNEP called for dialogue with the World Trade Organization (WTO) on making environmental and trade objectives mutually reinforcing.

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In honour of the thousands of victims of the terrorist bomb attack in Nairobi on 7 August 1998, a commemorative garden of trees has been planted at United Nations headquarters in Gigiri.

COMMUNICATION

UNEP believes that access to environmental information empowers people to become responsible. On 25 June 1998 the International Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention) was signed in Denmark by environment ministers and senior officials representing 35 countries and the European Union.

Commissioning of the Mecure satellite telecommunications system, donated by six member countries of the European Space Agency, has considerably enhanced the flow of communication between UNEP's member states and its Nairobi Headquarters. The newly installed video-conferencing facility has also enabled senior personnel to talk to United Nations representatives in Geneva, New York and Rome.

1998 OVERVIEW *continued*

MAY *continued* • Fourth Meeting of the Parties to the Convention on Biological Diversity, Bratislava, Slovakia • Fifth Special Session of the Governing Council, UNEP • Third Session of the Greenhouse Emissions Trading Policy Forum, London, United Kingdom **JUNE** • World Environment Day celebrations, Moscow, Russia • Third UNEP Conference on Insurance and Environment, Cologne, Germany • European Environment Ministers' Conference, Aarhus, Denmark which adopted the Aarhus Convention • First Meeting of the Intergovernmental Committee on Persistent Organic Pollutants, Montreal, Canada **JULY** • Seventeenth Meeting of the Open-ended Working Group to the Montreal Protocol, Geneva, Switzerland • The Pan-African Conference on Integrated Coastal Management, Maputo, Mozambique **SEPTEMBER** • Meeting of the

CLIMATE CHANGE

THIS last year the world has been confronted with the vulnerability of humankind – particularly the poorest in developing countries – and nature to climate extremes. Severe El Niño and La Niña events combined with man-made changes to land use have caused devastating floods, droughts and fires around the world, and brought home to the international community the havoc that climate extremes can wreak.

The Executive Director described these events, and the fact that nine of the past 11 years have been the hottest on record, as a 'wake-up call'. There was already a sense of urgency, therefore, when senior ministers and officials representing more than 170 governments met in Buenos Aires in November 1998 for the Fourth Conference of the Parties to the UNFCCC.

UNEP/P. JALLAGEAS/TOPHAM

The Buenos Aires process

Progress was not expected to come easily, as the conference's task was to develop the 'flexibility mechanisms' of the Kyoto Protocol to the UNFCCC – drawn up in Japan less than a year earlier – to reduce greenhouse gas emissions. In Japan, in December 1997, industrialized nations for the first time accepted legally binding emission-reduction targets – at least 5 per cent below 1990 levels in the period 2008-2012 – in the Kyoto Protocol.

In Buenos Aires industrialized countries had to make these targets credible and start defining the national strategies which they would use to achieve them. The use of market mechanisms for helping countries reduce the costs of reaching emission-reduction targets has been seen as controversial, particularly emissions trading which allows countries that are already below their target to sell emissions reductions to other nations, particularly developed countries, that have not yet reached their targets.

The refinements to the 'Clean Development Mechanism' were welcomed by most countries. This will give industrialized countries credits for financing emissions-avoiding projects in developing countries and is seen as an important vehicle for the transfer of advanced clean technology.

By the end of the Buenos Aires Conference governments had begun the process of deciding the rules for the flexibility mechanisms agreed in Kyoto; the United States of America had signed the Kyoto Protocol and the Government of Argentina announced that it would develop commitments similar to those accepted by industrialized nations.

In his speech to the Conference, Klaus Töpfer announced that UNEP was submitting a project proposal to the Global Environment Facility for a Climate Awareness Programme, as the Climate Change Convention and its Kyoto Protocol will only succeed if they are widely supported by the public and key constituencies and interest groups, with awareness, education and training being a key to this. The Kyoto Protocol will only become legally binding when at least 55 countries have ratified it, including a sufficient number of industrialized nations to cover 55 per cent of developed country emissions. It is hoped that this will happen by the year 2001.

1998 OVERVIEW *continued*

Plenipotentiaries on the Prior Informed Consent Procedure, Rotterdam, The Netherlands • Cleaner Production Seminar, Seoul, Republic of Korea **OCTOBER** • Fourteenth Session of the Intergovernmental Panel on Climate Change • Special consultations of the AMCEN on the Kyoto Protocol and other multilateral environmental agreements, Nairobi, Kenya **NOVEMBER** • Third Conference of the Parties to UNFCCC, Buenos Aires, Argentina • Third HLCMO meeting, Buenos Aires • Tenth Meeting of the Conference of the Parties to the Montreal Protocol, Cairo, Egypt • The International Children's Conference, Nairobi, Kenya **DECEMBER** • ACOPS meeting, Cape Town, South Africa • Third Meeting of the Parties to the Convention on Desertification, Dakar, Senegal.

UNEP IN ACTION

ASSESSMENT

THE growing incidence of fires and floods around the globe during 1998 underlined the need for accurate environmental data and information systems. Data collection and scientific assessment are two of UNEP's strengths, but the need to disseminate and distribute this information efficiently has never been greater.

The Nairobi Declaration identified the strengthening of the organization's information, monitoring and assessment capabilities as a priority to ensure that any new knowledge of emerging trends and emergencies reaches those who need it as quickly as possible.

The continuing forest fires in Southeast Asia are a stark reminder of the importance of early warning systems. UNEP, through its Global Resource Information Database (GRID) was able to supply weekly status reports on the emergency to the relevant United Nations emergency response agencies. But Southeast Asia was not the only area where wild fires caused concern (see page 11).

ENVIRONMENT OUTLOOK

Work is under way on a new region-by-region assessment for *GEO-II – Global Environment Outlook*, due to be published in mid-1999. Building on the acclaimed *GEO-I*, this assessment focuses on environmental policy successes and failures. The central message is that environmental considerations remain to be integrated into policy making: the environment remains an 'add-on' rather than an integral part of the social, economic and institutional fabric of life.

With the aim of instilling this sense of integration at an early age, a youth version of the

UNEP/TOPHAM

Strengthening UNEP's assessment capabilities should prevent manageable emergencies developing into humanitarian crises.

research is now being prepared. The participation of children in compiling a youth version of *GEO-I* will be funded by a grant of $350,000 made by the United Nations Foundation, with the project being jointly managed by UNEP and the United Nations Children's Fund (UNICEF).

Continuing their long-standing partnership, UNEP, the World Resources Institute and the World Bank have initiated work on *World Resources 2000: the Millennium Report*, which will look at the world's ecosystems in order to catalyse a comprehensive scientific assessment of their condition around the world at the onset of the new millennium.

WATERS ASSESSMENT

Understanding that the supply and quality of fresh water is becoming an increasingly vexing political as well as environmental issue, UNEP has made it one of the organization's four main priorities. The stresses caused by shortages will not only affect poor countries, but will become significant even in apparently water-rich areas, including parts of Europe. The Global International Waters Assessment (GIWA) takes an holistic approach – involving political, economic and social considerations as well as environmental concerns, and covering other major water-related topics including coastal/marine waters and their living resources – to making a comprehensive assessment of the world's water-related environmental problems. The initial four-year phase of the project was formally inaugurated when UNEP signed cooperative agreements with the Municipality and University of Kalmar and the Government of Sweden on a $13.5 million project jointly funded by the Global Environment Facility (GEF), UNEP's Environment Fund and national governments, including that of Sweden. Its objective is to provide policy makers with information that will help countries manage their water resources in a sustainable manner.

MARINE POLLUTION

GIWA is also establishing cooperative arrangements with the Joint Group of Experts on the Scientific Aspects of Marine Environmental Pollution (GESAMP) in areas of mutual interest. As one of the sponsoring agencies of GESAMP and as lead agency for the Working Group on Marine Environmental Assessments, UNEP is facilitating the preparation of comprehensive but periodic reports on the state of the global marine environment. UNEP has also undertaken to complete, by the end of 1999, an assessment of the impacts of land-based activities on the marine environment, to be followed, by the year 2002, with an exhaustive state-of-the-marine-environment report.

FOREST FIRES

THERE was widespread reporting of the fires in Southeast Asia in 1997 and 1998 but they also burned in Canada and the United States of America, parts of Europe including Brazil, Central America, Greece, Spain, Mexico, Mongolia and the Russian Federation.

In Asia, Indonesia was worst affected, although fires also raged in Brunei, Malaysia, the Philippines and Thailand. International support

UNEP/W. A. BORGES/TOPHAM

augmented local efforts to put out the fires in 1997, but continuing drought conditions in 1998 led to the fires again spreading out of control.

In February, the Executive Director attended a meeting of environment ministers of the Association of Southeast-Asian Nations (ASEAN) to discuss how UNEP could help. In recognition of the scale and duration of the fires the Secretary-General asked Klaus Töpfer to coordinate the United Nations response to the emergency. Subsequently, Indonesian authorities and representatives of United Nations and other international and bilateral relief agencies discussed the provision of immediate relief and longer-term prevention measures. UNEP and the Office of Coordination of Humanitarian Affairs (OCHA) convened expert and donor meetings to mobilize resources, and many countries and agencies responded with material and direct support of people, equipment and/or direct grants-in-aid.

Although the East Kalimantan fire emergency was resolved with the onset of rains in mid-1998, UNEP, ASEAN and various organizations continue to work together on fire prevention and preparedness, focusing on lasting solutions to the underlying causes, while a UNEP/GEF project is helping develop an early warning and response system. The Television Trust for the Environment/ British Broadcasting Corporation produced a film: *Forest Fires – Primates, Palm Oil and Pyromania* which UNEP supported financially.

EL NIÑO

ONE of the severest El Niño events of the past century began in 1997 and continued into the latter half of 1998, with linked weather anomalies including drought, flood and severe storms causing havoc all over the world. Now climate modellers and forecasts suggest the strong probability of a La Niña event developing in late 1998, persisting into 1999.

The UN General Assembly recognized the seriousness of El Niño and its impacts by adopting a resolution on International Cooperation to Reduce the Impact of the El Niño Phenomenon. This calls for governments and United Nations agencies to take appropriate action within the framework of the International Decade for Natural Disaster Reduction, whose Secretariat has established an Inter-agency Task Force to develop a United Nations System-wide Strategy on El Niño.

UNEP/ISARA SAMEORNPO/TOPHAM

The United Nations Foundation has approved funds for UNEP's project proposal for improving knowledge of both El Niño and La Niña through a review of the current predictions, early warning and preparedness systems, and an assessment of how these may be improved. The requirements of vulnerable sectors of societies, including information, will also be considered. Based on these, the project will then identify research needs; develop preliminary guidelines for regional and national preparedness for incidents of El Niño and La Niña and their impacts; and initiate programmes for capacity building, including post-graduate education, fellowships and training, and outreach to the international academic and scientific communities.

GLOBAL RESOURCE INFORMATION DATABASE

GRID is part of UNEP's environmental information network. In September 1998 its 16th node was opened in Tbilisi, Georgia with the help of funding from the World Bank. Located within the Georgian Ministry of Environment with a staff of six, it has already started to disseminate information via the Internet. In June, UNEP signed a three-way GRID-Geneva partnership agreement with the University of Geneva and the Swiss Government covering financial support to enable GRID-Geneva to expand its role in early warning and disaster-related emergency response.

INFOTERRA

INFOTERRA is UNEP's global environmental information exchange network in which almost every country in the world participates – the Republic of Croatia became its 178th member during 1998. In June, as part of World Environment Day, INFOTERRA published its *Guide to Environment and Development Sources of Information* on CD and the Internet.

INFOTERRA has advocated implementation of the Aarhus Convention supporting citizens' access to environmental information, public participation and justice in environmental matters. INFOTERRA policy makers and environmental information representatives of 30 pan-European countries met in Aarhus, Denmark when the Convention was signed, and pledged to promote its principles.

MERCURE

Fifteen Mercure stations are now operational world-wide, linking UNEP with many of its regional offices and partners in developed and developing countries alike. This major achievement was consolidated in April 1998 with the signing of an agreement between the Government of Kenya and UNEP to authorize full data services between UNEP Headquarters in Nairobi and the world at large. Negotiations continue with the Government of Kenya to provide voice communication over Mercure and access to the system for all United Nations agencies in Nairobi in the future.

WORLD RESOURCES

UNEP has forged collaborative arrangements with other United Nations agencies and leading non-governmental organizations (NGOs), such as the World Resources Institute (WRI), for environmental data and information exchange. In May, *World Resources 1998-1999*, containing data from 157 countries on environmental resources, consumption and waste, as well as new information on poverty, inequality and food security, was published jointly by UNEP, WRI, United Nations Development Programme and the World Bank. The report found that environmental degradation has a far more serious impact on health than had previously been acknowledged, particularly in the poorest regions of the world. The researchers found that each year some 11 million childhood deaths could be attributed to environmental causes.

UNEP recognizes the importance of economic instruments in ensuring the implementation of international environmental agreements at the national level. Their aim, according to Klaus Töpfer, must be 'to make the cost of pollution more expensive than the cost of preventing it'.

Cleaner production is just one area in which economic instruments can be effective, in this case by curbing excessive resource use and pollution, with the intention of encouraging a shift to environmentally sustainable production.

Practical ways in which countries can integrate environmental considerations into their macro-economic policies, including trade policy, were the subject of five pilot studies initiated by UNEP during 1998 in Bangladesh, India, the Philippines, Romania and Uganda.

UNEP has also organized a variety of workshops aimed at training participants in environmental policy and law.

In September it signed an agreement with the Center for International Environmental Law (CIEL) to provide four Central American countries, El Salvador, Guatemala, Honduras and Panama, with environmental law handbooks to help establish national environmental legislation. In Singapore UNEP helped to organize a training programme, funded by the Asian Development Bank, for university teachers of environmental law.

UNEP is working to establish a global programme for the integrated management of freshwater resources.

ATMOSPHERE

UNEP's work on the atmosphere falls into three main categories: climate variability and change; risks to the ozone layer; atmospheric pollution. Climate change and ozone protection activities are covered elsewhere in this report. UNEP's work on the third element – atmospheric pollution – is organized under the auspices of the UNEP Global Environment Monitoring System (GEMS) Air Programme and/or carried out in cooperation with the World Meteorological Organization.

Transboundary as well as urban air pollution is now becoming a major environmental concern in many developing regions, and the problems are likely to increase. The transport of POPs in the atmosphere is of particular concern and will form part of the negotiations on a POPs convention.

UNEP's work in combating atmospheric pollution was also given a boost in September 1998 with the signing of the International Declaration on Cleaner Production and the international agreement on supporting and monitoring its implementation (see page 17).

Also during 1998, UNEP completed case studies on climate change in various countries including Estonia, Pakistan and Zimbabwe.

LAND

More than 600 experts from more than 140 countries met at the Second Conference of the Parties to the United Nations Convention to Combat

UNEP/GLEN PETIT/TOPHAM

Desertification in December 1998 in Dakar, Senegal, which provided an opportunity for UNEP, with other agencies, to contribute to its work in this area. Economic instruments and linkages with other conventions were high on the agenda.

Regional work on desertification has been undertaken in Africa, Asia and Latin America and the Caribbean, particularly in the realm of developing national and sub-regional action programmes to combat desertification. An agreement has been signed with the secretariat of the convention and the Mexican Government to host a coordination unit for convention implementation in the region within the UNEP Regional Office in Mexico City.

The GEF has been asked to increase support for projects on land degradation and to study the connections between desertification, climate change and the loss of biodiversity. Global programmes continued on assessing and monitoring the status and causes of land degradation, exchanging information, raising awareness on dryland issues and supporting training initiatives.

FRESH WATER

The development of strategic approaches to fresh water is a major priority both for UNEP and Habitat, with the Executive Director and UNEP's High-Level Committee of Ministers and Officials underlining the centrality of this sector to UNEP.

Because inadequate supplies of clean water and shortages threaten survival, security and the peaceful coexistence of neighbours as well as development, UNEP is attempting to establish a global programme for the integrated management of freshwater resources along the lines of The Hague-based Global Programme of Action for the Protection of the Marine Environment from Land-based Activities. UNEP believes any global programme must take an holistic approach, linking such elements as science, technology institutions, legal frameworks, economic realities, human health needs and social development into a comprehensive package that effectively addresses the world's current and future freshwater needs. UNEP already has experience of such an approach through its promotion of freshwater and coastal-zone management activities.

During 1998 the GEF approved a multi-million dollar, longer-term UNEP project to carry out a GIWA. The goal is to provide governments and the GEF with information on major water issues including the scarcity and pollution of fresh water and the underlying causes. UNEP is also developing strategies in support of the Barbados Programme of Action for Small Island Developing States to address specific problems, including assisting governments to prepare Strategic Action Programmes for the sustainable management and use of fresh water; producing, with the World Business Council for Sustainable Development, a policy on water, industry and sustainable development; and exploring the possibility of a global action programme on the environmental aspects of integrated freshwater management.

One in five children will die of diseases related to the environment before their fifth birthdays

HUMAN HEALTH

This programme provides scientifically validated assessments of the risks to human health attributable to environmental conditions – an estimated one in five children will not live to see their fifth birthday because of environment-related diseases. This tragedy translates into 11 million childhood deaths a year from such things as malaria and respiratory and diarrhoeal diseases. Recent work has included looking at the effects of pesticides and the health impacts of climate change, ozone-layer depletion and lead poisoning in children. Evidence is growing of the health impact of POPs, including reproductive disorders which are thought to result from chemicals that function as 'endocrine disrupters'. Indeed there is particular concern that these interfere with fertility and arrest development in children.

The human health and well-being unit has worked with UNICEF on a series of booklets on children and health and has also been involved in United Nations responses to disasters through the joint UNEP/OCHA Environmental Emergencies Unit.

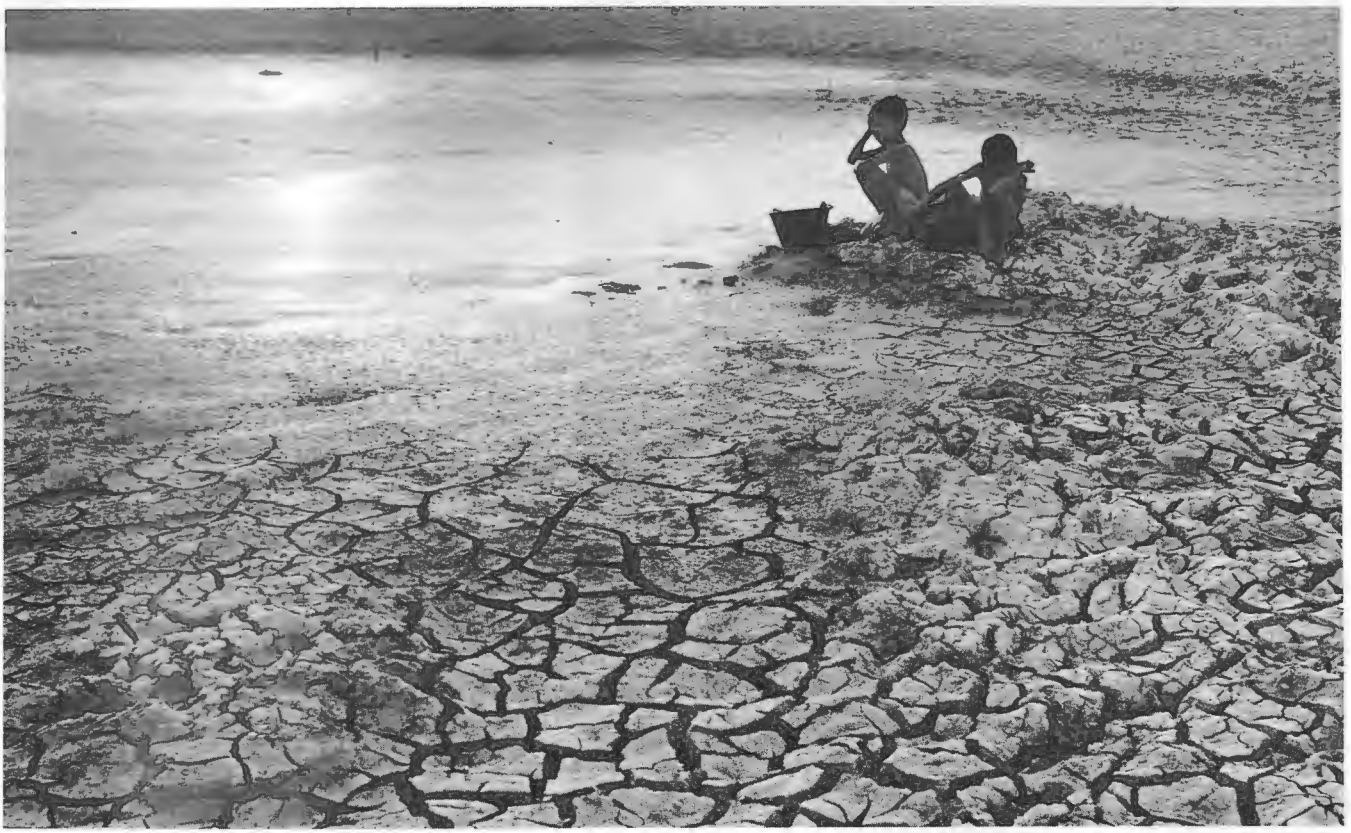
BIODIVERSITY

The Fourth Meeting of the Conference of Parties to the Convention on Biological Diversity, which met in May 1998, in Bratislava, Slovakia, was attended by more than 1,300 participants from 152 countries. It adopted 19 decisions reconfirming the ecosystem approach to marine and coastal biodiversity, as well as that of forests and inland water systems.

During the year the secretariat also organized two biosafety meetings on the problems posed by living modified organisms. Both meetings, held in February and August, took place in Montreal, Canada in preparation for a meeting early in 1999 which, it is hoped, will add a biosafety protocol to the convention. The Fifth Conference of the Parties is due to be held in the year 2000.

SUSTAINABLE CITIES

More than 20 cities are now active within the Sustainable Cities Programme (SCP), including Moscow which was host to the SCP annual meeting in June, attended by 80 participants. This coincided with World Environment Day celebrations and an urban environment forum. Four SCP source books have now been prepared for distribution at the end of 1998.



UNEP/CHUSAK UTHAIPANUMAS/TOPHAM

THE most immediate and publicly visible way in which UNEP delivers its technical and scientific expertise to the world at large is in response to environmental emergencies.

As these are becoming ever more frequent, especially in developing countries, UNEP has had to re-evaluate its method of operating in general and the way it works with other United Nations agencies. Jointly with OCHA, it has established an Environmental Emergencies Unit to coordinate international assistance and expertise from donors to countries facing disasters.

This year these have included the effects of floods and heavy rains in Bangladesh, China, East Africa and Mexico; and the consequences of El Niño-induced drought in Brazil, Cuba and Indonesia.

The Environmental Emergencies Unit also provided assistance to Armenia and Georgia following the threatened breach of two dams; to Chile following acute river pollution; to Madagascar following a serious chemical fire; to Moldova – threatened with severe underground water pollution; and to Somalia, after the alleged dumping of hazardous substances.

The Unit's task is the mobilization and coordination of immediate help, but as well as providing initial assessment and aid it also offers

UNEP and OCHA will coordinate international assistance to countries facing disasters.

UNEP'S ROLE IN THE GLOBAL ENVIRONMENT FACILITY

ONE way in which UNEP provides a bridge between scientific assessment and policy implementation is through the GEF and the support UNEP gives to the Scientific and Technical Advisory Panel (STAP) – a committee of 12 eminent scientists. UNEP also organizes expert meetings to help GEF in its funding decisions.

In March, in preparation for its first General Assembly – held in New Delhi, India in April and attended by 19 governments, 16 international organizations and 185 NGOs – the GEF Council accepted the recommendations of the Executive Director for a new composition for the STAP.

The Delhi meeting provided the opportunity for stakeholders to reassess the work of the Facility, first established as a pilot project in 1991. A joint undertaking between UNEP, UNDP and the World Bank, GEF began its first phase of full operation in March 1994, with pledges of $2 billion from 27 countries. Its mandate was to find finance for projects of global environmental significance connected with loss of biodiversity, climate change, ozone depletion and the protection of international waters.

MARK WLOCH/UNEP-SELECT

UNEP endeavours to prevent rather than repair environmental damage.

post-emergency analysis for those governments that request it. This will remain its main focus, taking into account the recommendations of the United Nations Advisory Group on Environmental Emergencies.

The effect of UNEP's monitoring and evaluation work has been evident in its liaison with the scientists of the Intergovernmental Panel on Climate Change, which met in Vienna in October to formulate a Third Assessment of the current global situation in advance of the Fourth Conference of the Parties to the UNFCCC. The Second Assessment had provided the basis for the Kyoto Conference in 1997 and, concluding that humankind had a perceptible influence on climate change, was highly influential in the subsequent inter-governmental negotiations.

TRADE AND ENVIRONMENT

UNEP is working towards renewing and strengthening its work on the inter-relationship of trade and environment and has set in motion a number of cooperative ventures with the WTO, the Organisation for Economic Cooperation and Development, UNCTAD and the World Bank.

In July UNEP presented a position report to WTO on problems arising from trade liberalization and on the linkages between environmental agreements and international trade rules. UNEP has encouraged WTO to clarify potential areas of conflict and convergence between trade and the environment.

UNEP has also been involved in studying further the environmental impacts of international trade policy in many areas. One such example is a case study of the effect of trade liberalization on the mining sector in Chile.

COMMUNICATION AND PUBLIC INFORMATION

UNEP placed greater emphasis on its relations with the international media during 1998, organizing weekly press briefings, together with Habitat, producing video news releases, and improving its use of the Internet and websites both for issuing environmental news and comment and for providing listings of its activities and publications. (*Environment in Print*, UNEP's catalogue of publications, is also available in print and on the WWW.)

To enhance the message of the United Nations International Year of the Ocean, UNEP mounted an integrated international campaign including a major exhibit at Lisbon's Expo '98 and other exhibits shown around the globe, in-flight videos for the world's airlines, a Television Trust for the Environment/BBC film *Not all at sea*, and a CD of ocean songs.

UNEP also produced a special issue of its flagship magazine *Our Planet* on the oceans for World Environment Day 1998, the theme of which was 'For Life on Earth: Save Our Seas'. Other editions of *Our Planet* were produced on fresh water, widely distributed at the Commission on Sustainable Development meetings in April; on the work of the GEF at the time of its first General Assembly; on climate change, with a lead article by United Kingdom Prime Minister Tony Blair, as a contribution to the Buenos Aires process; and on tourism, to be distributed at the 20th session of UNEP's Governing Council.

INDUSTRY

A SIGNIFICANT milestone in UNEP's work on promoting cleaner technology was reached, in Seoul, the Republic of Korea, with the adoption of the International Declaration on Cleaner Production. Signatories committed themselves to adopting a preventative strategy including setting goals for establishing production methods that conserve water and energy.

The declaration is an example of private/public cooperation to guarantee development which is sound from economic, environmental and social perspectives – what UNEP terms win-win sustainable development partnerships involving businesses, NGOs and United Nations agencies.

UNEP established its industry and environment division in 1975 to encourage cooperation in promoting environmentally sustainable development and consumption. Much of the work of the Industry and Environment Office in Paris, France and the International Environment Technology Centre (IETC) in Osaka, Japan is directed at strengthening 'responsible entrepreneurship' – the term used in *Agenda 21*.

An example of this is a three-year demonstration project on the financing of cleaner technologies, backed by the Government of Norway with the cooperation of the United Nations Industrial Development Organization (UNIDO), the World Bank and International Finance Corporation, UNDP, the International Labour Office and the International Chamber of Commerce, and run in five countries: Guatemala, Nicaragua, Tanzania, Viet Nam and Zimbabwe.

UNEP aims to demonstrate the financial merits of cleaner production.

UNEP/UNIDO National Cleaner Production Centres have already been established in all five countries and the project will focus on three key industry sectors in each. The aim is to demonstrate the financial merit of cleaner production to development banks and the private sector. To encourage further projects of this type, UNEP has published the *Cleaner Production Guide to Sources of Information*.

Another new publication, produced in April, is *Voluntary Industry Codes of Conduct for the Environment*, aimed particularly at industry associations and governments. It describes how to develop and use voluntary codes, and shows how they can contribute to sustainable development.

TOURISM

Tourism is a significant industry in many countries, but it can have serious environmental

UNEP/LENNY PROSOR/TOPHAM

UNEP/J. HINTERLEITNER/TOPHAM

impacts. As a result UNEP is encouraging the development of environmentally sustainable tourism. It cooperated with the World Tourism Organization to organize a conference in Lanzarote, Spain on sustainable tourism in small island developing states.

Tourism is also a heavy user of refrigerants, some of which are ozone-depleting chemicals. As it is in a strong position to contribute to UNEP's work on phasing out these substances, a guide book *How the Hotel and Tourism Industry can Protect the Ozone Layer* was published.

FINANCIAL SERVICES

In June, more than 140 banking and insurance executives from 15 countries met in Cologne, Germany to discuss strategies for dealing with the problem that 'billion dollar' storms can pose for the banking and insurance sectors, and hear a report of the 1997 climate change talks in Kyoto, Japan in November that year. High on the agenda at UNEP's third Financial Services Initiative Conference were preparations for the Fourth Conference of the Parties to the UNFCCC, where bankers and insurers hosted two meetings.

The Financial Services Initiative is now in its fourth year. More than 80 insurance companies from 25 countries have signed its environmental commitment, while over 115 banks have agreed to a statement on sustainable development for the banking industry, which includes a commitment to energy efficiency, increased environmental management, adoption of best industry practice in credit risk management and the implementation of the precautionary principle.

Promoting the development of environmentally sustainable tourism is a priority for UNEP.

The next stage of the UNEP-brokered initiatives is to collaborate with the United Nations Committee on Trade and Development on a set of training materials covering 'green accounting'.

CLEAN DEVELOPMENT MECHANISM

THE idea of industrialized countries earning 'credits' in the form of certified emission reductions – which they can use to meet their own obligations under the Kyoto Protocol in return for investing in cleaner development technology in the developing world – caused considerable debate when it was proposed during the 1997 climate change talks in Kyoto, Japan.

Klaus Töpfer welcomed the Clean Development Mechanism (CDM), stating that it 'may provide ample opportunities for early and substantial emission reductions which can involve all parties, irrespective of their regional or economic affiliations, in collaborative, cost-effective emission reduction and climate control. However, it is important that the concerns of developing countries are heard and that they actively participate in the debate on this critical subject'.

At a meeting of ministers and senior officials from 46 African countries and experts, held in advance of the Fourth Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC), it was argued that the transfer of technology was critical for the African region and that the CDM offered possibilities for attracting high-quality projects for sustainable development while contributing to the objectives of the UNFCCC.

REGIONAL FOCUS

UNEP has a strong regional dimension for facilitating the implementation of its global policies and bringing regional priorities into consideration when global programmes are being developed.

AFRICA

UNEP provides secretariat support to the African Ministerial Conferences on the Environment (AMCEN), the body which identifies regional priorities for UNEP's programming. A special AMCEN consultative meeting on the UNFCCC and its Kyoto Protocol led to the adoption of a regional position on the CDM. Proposals were also put forward to establish two funding mechanisms for developing countries: an adaptation fund and a seed fund specifically to help African countries prepare for cleaner development technology.

The Pan African Conference on Sustainable Integrated Coastal Management (PACSICOM) and the follow-up African Conference on the Protection of the Seas represented major contributions by UNEP to the recognition of the need to protect and sustainably manage Africa's marine and coastal environment.

Other activities included:

- Acting as chairman of the United Nations Special Initiative on Africa's working group on water, jointly with the World Meteorological Organization (WMO).
- Workshops for national ozone officers.
- Cooperation with UNIDO on a training manual for municipal waste management.
- A workshop on Women and Desertification Control in West Africa.

ASIA AND THE PACIFIC

UNEP has played an active role throughout the forest fires emergency, liaising with the ASEAN governments and institutions (see page 11).

The Executive Director visited Beijing and Shanghai in August 1998, as flood conditions threatened to submerge China's oil industry installations, potentially causing severe environmental pollution.

To enhance environmental policies and responses, UNEP continued to collaborate with the Economic and Social Commission for Asia and the Pacific (ESCAP), South Asia Cooperative Environmental Programme (SACEP), ASEAN, South Pacific Regional Environment Programme as well as the proposed North East Asian Regional Environmental Programme (NEAREP).

UNEP's offices around the world bring regional perspectives to global environmental programmes

Other activities included:

- Completion of an electronic report on the Environment in China.
- Support for the first Asia-Pacific Round Table on Cleaner Production, and the establishment of a cleaner production centre in Viet Nam.
- Workshops on environmental law and implementation of conventions.
- An environmental management seminar for countries of South Asia, for representatives from governments, NGOs and the business community.

EUROPE

The Environment for Europe process was established to address the priorities of the region. UNEP contributed by introducing and promoting global environmental concerns at the Fourth Ministerial Conference: Environment for Europe, held in June 1998 in Aarhus, Denmark, and by organizing events, including a joint exhibit with the European Environment Agency and a meeting on facilitating access to environmental information.

UNEP has contributed to the Second Assessment of Europe's Environment, and provided the Ministerial Conference with an analysis of the state of regional implementation of global environmental conventions. The organization also acts as the Secretariat of the Pan-European Biological and Landscape Diversity Strategy (PEBLDS), and in this capacity, together with the Council of Europe, coordinated the preparation of the biodiversity segment of the Conference. Furthermore UNEP has initiated an agreement for the harmonization of work between the secretariats of PEBLDS and United Nations Convention on Biodiversity (UNCBD).

Coordination was intensified between UNEP and two other ministerial processes, on European forests and on environment and health. Jointly with WHO and others, UNEP is supporting the preparation of a Protocol on Water and Health to the UN/Economic Commission for Europe (ECE) Convention on Transboundary Waters, and a European Charter on Transport, Environment and Health. Pilot scenarios for sustainable transport in Central Europe, to be implemented through national pilot projects, were prepared together with the Organisation for Economic Cooperation and Development and the Government of Austria.

Other activities included:

- Organization of the policy consultation for Europe and Central Asia on *GEO-II*.
- Capacity building and provision of policy and

advisory services to governments in Eastern Europe, particularly the Newly Independent States, concentrating on environmental law, biodiversity and joint implementation.
- Co-organizing, with the UNCBD Secretariat, a meeting of Eastern European countries in preparation for the Fourth Conference of the Parties to the UNFCCC. UNEP reviewed the legal framework in Uzbekistan for addressing biodiversity issues and will promote further reviews for Eastern European countries.
- Facilitating the development of a Framework Convention on Environmental Cooperation in the Caspian Region and assisting the governments in the area review their environmental legislation.
- Facilitating information exchange on Activities Implemented Jointly (AIJ) and undertaking a study on a possible AIJ coordination programme for Central Asian countries.
- Initiating a dialogue with the NATO/CCMS on Environment and Security.

LATIN AMERICA AND THE CARIBBEAN

UNEP supported the Fourth Conference of the Parties to the UNFCCC held in November 1998 in Buenos Aires.

UNEP, in collaboration with relevant United Nations agencies, continued to assist governments in identifying needs for humanitarian assistance and priority responses to environmental emergencies, including Central America's weather-related catastrophe and Brazil's forest fires.

In April, UNEP organized a regional workshop on the control and monitoring of ozone-depleting substances (ODS), aimed at providing policy and technical assistance; and at helping countries design legal systems to control and monitor ODS consumption in line with the requirements of the Montreal Protocol.

UNEP and UNICEF have cooperated on a series of booklets on children's health.

UNEP/MOHAMMAD-ALI VAHEDI/TOPHAM

Other activities included:
- The establishment of the Cleaner Production Roundtable of the Americas.
- Publication of *State of the Environment and Natural Resources in Central America 1998*.
- Signing a Memorandum of Understanding with the Government of Peru for the elaboration of a regulation to the Law on the Conservation and Sustainable Use of Biological Diversity of Peru.

NORTH AMERICA

This Regional Office has strengthened both its liaison functions with United Nations headquarters and its inter-agency coordination. It has also enhanced its networking with the scientific, research and academic communities, for example by co-sponsoring symposia on biodiversity and human health with the American Museum of Natural History, and on religion and environment with the Harvard University Center for the Study of World Religions.

Other activities included:
- Organizing a reunion workshop to look at the environmental challenges faced by the women a year after UNEP honoured 25 women leaders.
- The preparation of a television film on women and the environment for US Community Colleges.
- Facilitating a conference with Harvard Medical School and others on the value of plants, animals and microbes to human health.

WEST ASIA

UNEP continued to work closely in West Asia with a number of United Nations organizations including the UN Food and Agriculture Organization (FAO), Habitat, UNESCO and WHO. It also offered advisory services to governments on such issues as air pollution, environmental legislation and environmental standards, solid wastes and environmental management. Workshops on awareness and the implementation of international conventions were held on topics including desertification, POPs, the Basel Convention and the Montreal Protocol – in 1998, Oman became the 10th country in the region to ratify the Vienna Convention and the Montreal Protocol.

Other activities included:
- Training workshops on environmental management systems, cleaner production, biodiversity, municipal solid waste management and urban development.
- A regional conference on Children and the Environment.
- Cooperation with WHO on guidelines for medical wastes management.

ENVIRONMENTAL problems do not respect boundaries, which is why UNEP has made its work on international conventions and protocols a priority. The adoption in Rotterdam of the Prior Informed Consent Procedure covering trade in certain pesticides and chemicals (see box) was one of 1998's major achievements.

In the wake of this success, UNEP is working towards an international instrument covering POPs. Traces of these highly toxic chemicals are found thousands of kilometres from the original source of pollution – polar bears, whales and the Inuit people of the Arctic now carry high levels of dioxins and organochlorines in their tissues. POPs, which are transported in the atmosphere and on ocean currents, can take decades or centuries to degrade, before which they are naturally recycled.

In June an inter-governmental negotiating committee met in Montreal, Canada to start to draw up a legally binding instrument covering the reduction or elimination of, initially, 12 POPs: aldrin, chlordane, DDT, dieldrin, dioxins, endrin, furans, heptachlor, hexachlorobenzene, mirex, PCBs and toxaphene. More will be added to the list, and experts met in Bangkok, Thailand in October to start identifying chemicals that should be internationally monitored.

An important linked agreement is the Basel Convention which covers the transboundary movement of hazardous wastes: annually the world generates more than 400 million tons of them. The convention's Fourth Conference of Parties, which took place in February 1998 in Malaysia, adopted two lists developed by the convention's technical panel – one of wastes containing substances which will be banned, including arsenic, lead, mercury, asbestos and other chemicals; and a second describing non-hazardous materials which can be safely and profitably recycled.

UNEP/ALICE RAMIREZ/TOPHAM

Polar bears have been found to have high levels of toxins in their tissues.

The transportation of living modified organisms (LMOs) is also causing concern. In August, more than 100 governments met, again in Montreal, to develop the text of a protocol designed to minimize risks to human health and the environment posed by LMOs. The aim is to reach agreement on a Biosafety Protocol to add to the United Nations Convention on Biological Diversity (UNCBD).

The Fourth Meeting of the Conference of the Parties to that convention, sponsored by UNEP, was held in Slovakia in May and attended by 1,300 participants from 152 countries. This meeting adopted work programmes covering fresh water ecosystems, marine and coastal areas, as well as forest and agricultural biodiversity. In addition the UNCBD has established an Internet-based electronic database.

The UNCBD, like the Framework Convention on Climate Change, came out of the UNCED process. A Global Biodiversity Forum was held in Dakar, Senegal in December (GBF-12) where another UNCED treaty, the United Nations Convention to Combat Desertification, held its Second Conference of Parties. On the agenda were the links between the biodiversity and desertification conventions and funding the fight against desertification.

Under the terms of the Montreal Protocol, now ratified by 168 nations, developing countries must by 1999 begin to reduce their consumption of the five main chlorofluorocarbons (CFCs), with a view to eliminating them altogether.

Scientific assessment of ozone depletion during 1998, released by WMO, confirmed that in the past 10 years the world's consumption of ODS fell by 80 per cent. Industrialized countries have nearly phased out the production and use of CFCs and have contributed $760 million to the Multilateral Fund for ozone-related projects in some 100 countries.

In July, 300 delegates from 97 countries attended a meeting on the Montreal Protocol which recommended national management

THE NEW CONVENTION ON HAZARDOUS CHEMICALS AND PESTICIDES

COOPERATION between UNEP and the FAO came to fruition in September 1998 with the formal adoption of the Rotterdam Convention, covering the growing trade in hazardous pesticides and chemicals. Now an importing country must give explicit informed consent before specific chemicals can cross its borders – particularly important to countries without the scientific expertise or equipment to deal with them safely. Indeed the use of some of these chemicals has left a legacy of problems including cancers and birth defects.

The Rotterdam Convention, which replaces various voluntary systems, will initially cover 22 pesticides and five industrial chemicals, including chlordane and heptachlor, banned in Europe and North America but still used in developing countries; DDT, which continues to be released into the environment where it poisons wildlife; and polychlorinated biphenyls (PCBs) – highly toxic to humans and found in blood and tissue thousands of kilometres from where the chemicals were released.

strategies for substances which could be marketed as replacements for ODS, and for reducing halon emissions.

On the International Day for Preservation of the Ozone Layer on 16 September, the Executive Director was able to report that recovery of the ozone layer would begin in a few years. The Montreal Protocol is undeniably successful and is seen as a model for future international cooperation.

But while confirmation that the ozone layer had begun to repair itself was cause for some celebration, this must be balanced by the fact that just weeks before the Tenth Meetings of the Parties to the Montreal Protocol, held in Cairo in November, scientists reported that largest ever Antarctic ozone 'hole'.

The Meeting of the Parties strengthened measures to close down CFC production – just before the meeting 10 donors pledged $19 million to shut down Russian CFC and halon production. Also at Cairo new measures were agreed to limit the export of new and used products and equipment that require ODS. The Parties recommended that each country identify those items it does not want imported, with the register being maintained by the Protocol Secretariat which would circulate it to the Parties on a regular basis. At a subsequent meeting the Executive Committee of the Protocol's Multilateral Fund noted the completion of an audit of China and India's ODS production facilities and announced plans to promote new projects to phase them out.

The illegal trade in ODS demonstrates the need for constant vigilance. UNEP drew the attention of the media to this smuggling in a Television Trust for the Environment video, which closely documented the movement of CFCs from sources in developing countries which may still produce them, or from countries producing them illegally, to industrialized nations which have phased out production.

At their meeting, the Parties also took up the challenge of coordinating policies designed to protect the ozone layer with those of the UNFCCC to reduce emissions of greenhouse gases. Several gases that are being used as ozone-safe replacements for CFCs, notably hydrofluorocarbons (HCFs) and perfluorocarbons (PFCs) have been found to contribute to global warming and are thus targeted for reduction under the Kyoto Protocol.

Global warming may also slow the ozone layer's healing process because scientists believe that the warming of the atmosphere near the ground will cause the stratosphere to become even colder. Based on a report by its Working Group, the Meeting of the Parties agreed on a process for coordinating the work of their scientific, technological and economic assessment panels on ozone, with similar panels and committees linked to the UNFCCC. This decision mirrored one taken just a few weeks earlier in November by the Parties to the UNFCCC at their Fourth Conference in Buenos Aires.

'For the first time, we are seeing the emergence of an integrated approach to the global atmosphere,' said Klaus Töpfer. 'We need to ensure that the scientific and policy responses underlying these two most important agreements of the global atmosphere – the Montreal Protocol and the Kyoto Protocol – are mutually supportive and fully coordinated.'

PROTECTING OUR PLANET – SECURING OUR FUTURE: LINKAGES AMONG GLOBAL ENVIRONMENTAL ISSUES AND HUMAN NEEDS

THE interlinkages assessment report, entitled *Protecting Our Planet – Securing Our Future: Linkages Among Global Environmental Issues and Human Needs*, was produced by UNEP, the World Bank and the National Aeronautics and Space Administration (NASA), with the support of many scientists, policy makers and technical specialists. It is directed at policy makers who represent their governments at the negotiating sessions of environmental conventions, as well as managers and planners at the national level in ministries such as environment, agriculture, forestry, water resources, natural resource management, economic planning, energy, industry and health.

At a time when we are coming to the end of the millennium, the report clearly shows that environmental degradation is accelerating and the human condition deteriorating in many parts of the world. Both are inextricably linked: these global environmental problems are caused by the same driving forces of population size, level of consumption and choice of technologies. The report clearly signals that the current rate of global environmental degradation is unprecedented and that reversing environmental damage, depending on the problem, can take decades or even centuries. In the case of loss of biological diversity, the damage is irreversible.

Three important recommendations emerge from the report:

1 To effectively respond to global environmental problems, and in turn meet human needs more effectively, global environmental issues must be addressed in an holistic, integrated manner, building on the same technologies and policy instruments, such as global and regional environmental conventions, that are currently used to contend with these issues in a sectoral manner.

2 New institutional partnerships involving governments, the private sector, academia, NGOs and civil society are needed at the global, regional and national levels to achieve a sustainable world.

3 Taking into account that most changes to the global environment cannot be reversed quickly, and despite scientific uncertainties, decision makers need to adopt wise, cost-effective and adaptive management approaches that can be implemented now.

THE FUNDING OF UNEP

FIGURE 1

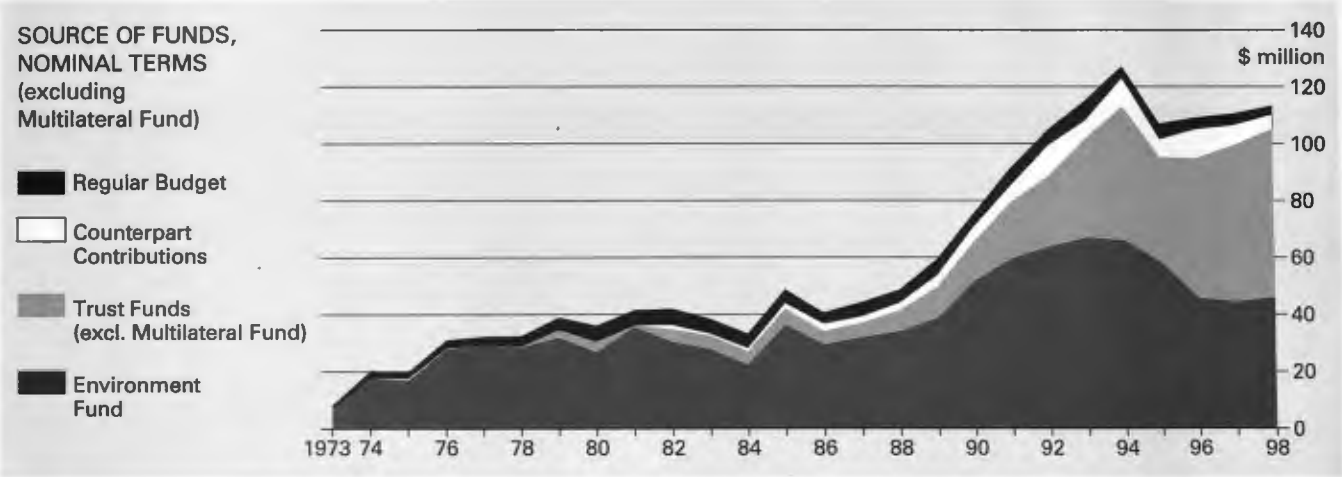


FIGURE 2

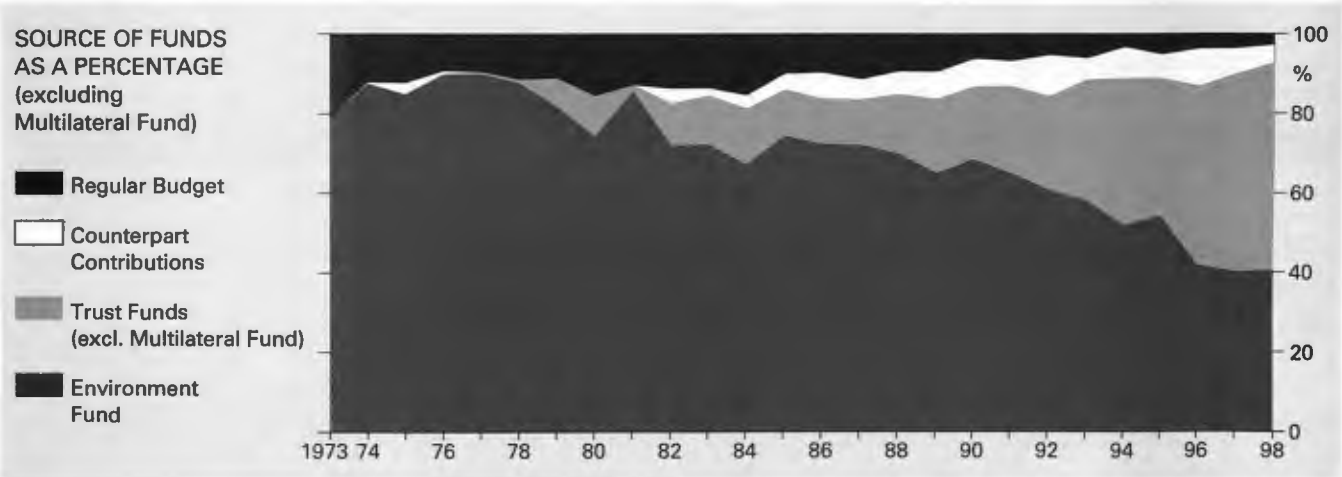


FIGURE 3

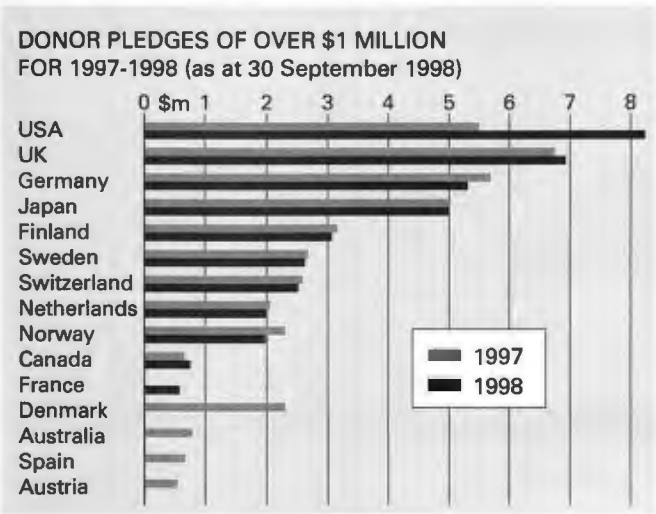
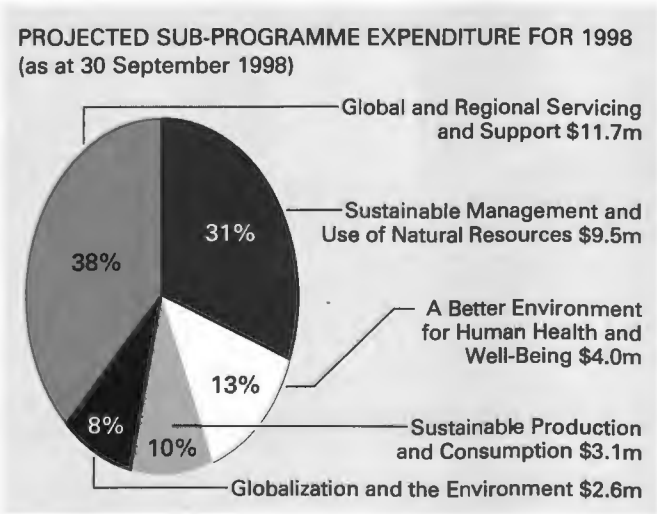


FIGURE 4



PERSONNEL

FIGURE 1

PROFESSIONAL POSTS IN UNEP BY SOURCE OF FINANCING

NUMBER OF POSTS

	(As at 1 January 1998)		(As at 30 September 1998)	
	Approved	Occupied	Approved*	Occupied*
Environment Fund				
(a) MASC	48	36	37	23
(b) Projects	105	102	97	87
Sub-total	153	138	134	110
Regular Budget	22	18	22	20
Trust Fund projects				
– conventions	78	65	78	64
– others	30	29	34	33
Junior Professional Officers agreements (Trust Funds)	17	17	18	18
Professional Officers financed by governments	2	2	8	8
Special Account for Support to Trust Funds (SASTF)	18	14	8	8
Activities financed from Counterpart Contributions	5	5	5	4
GRAND TOTAL	325	288	307	265

* Figures do not include 20 Professional posts, 11 financed from Management and Administration Support Costs (MASC) and 9 financed from OTL for staff from the former PSS and FPMB who have been assigned to BFMS in UNON effective from 1 July 1998.

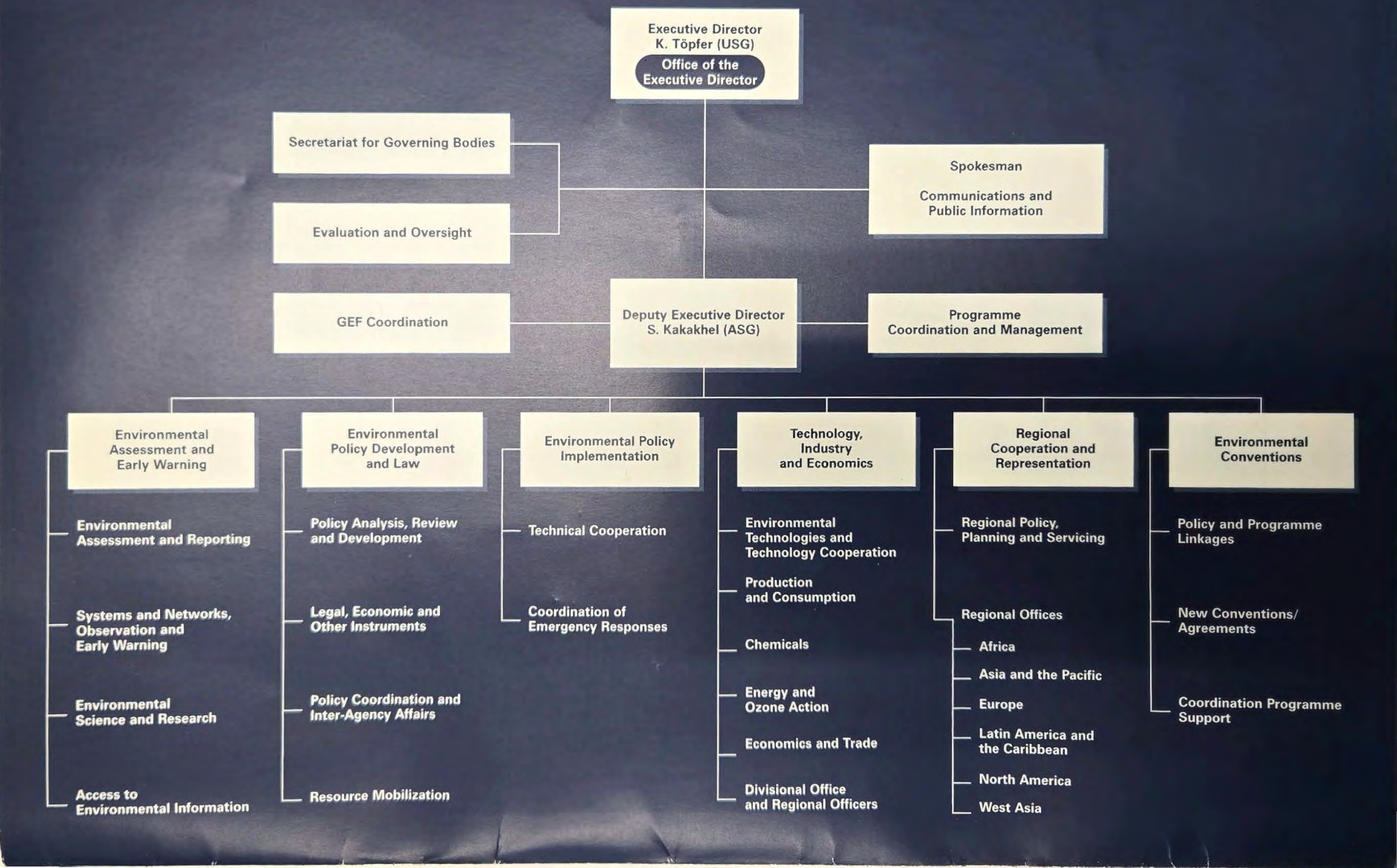
FIGURE 2

GENERAL SERVICE POSTS IN UNEP BY SOURCE OF FINANCING

NUMBER OF POSTS

	(As at 1 January 1998)		(As at 30 September 1998)	
	Approved	Occupied	Approved*	Occupied*
Environment Fund				
(a) MASC (excl. PPSC)	73	66	52	44
(b) Projects	125	122	122	121
Sub-total	198	188	174	165
Regular Budget	17	17	17	17
Trust Fund projects				
– conventions	73	59	73	58
– others	36	29	36	30
Special Account for Support to Trust Funds (SASTF)	22	20	17	16
Activities financed from Counterpart Contributions	3	3	3	3
GRAND TOTAL	349	316	320	289

* Figures do not include 26 General Service posts, 21 financed from MASC and 5 financed from OTL for staff from the former PSS and FPMB who have been assigned to BFMS in UNON effective from 1 July 1998.

UNITED NATIONS ENVIRONMENT PROGRAMME

JANUARY 1999