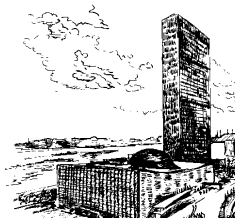
Part 5



Science, Technology, and Research

UN Environment Program (UNEP)

UNEP, with headquarters in Nairobi, Kenya, is the principal UN forum for global environmental issues. The United States has been a leading financial and technical contributor since UNEP's creation in 1972. UNEP's responsibilities are to assess the state of the environment, to provide early warning of environmental threats, and to serve as the catalyst of the United Nations in promoting international cooperation and action in response to such threats. Guidance and oversight are given by the Governing Council, which is composed of 58 elected member states, including the United States.

UNEP's success in its role as catalyst has resulted in the successful negotiation of environmental agreements on a number of issues, including atmosphere, toxic chemicals, marine pollution, and desertification and land degradation. One recent success was UNEP's role in facilitating the conclusion in December of the Stockholm Convention on Persistent Organic Pollutants. The United States was a leading proponent of this convention. These toxic substances (such as DDT), although no longer used in this country, can reach the United States over great distances and remain in the environment and food chain for a long time.

In recent years, UNEP has dealt with internal reform challenges. Top U.S. priorities have been to improve managerial efficiency; promote financial and institutional health; and advance UNEP's crucial role of providing environmental information, monitoring, assessment, and early warning of environmental threats. The United States has also joined other governments in calling for more active communications between UNEP and its member states and improved coordination with other UN bodies.

UNEP's actions to respond to these concerns are promising. For example, UNEP adopted a new organizational structure that improved internal coordination, increasing UNEP's ability to develop more effective, cross–cutting program initiatives. This enabled UNEP to help countries, especially in Africa, to develop the knowledge to enact and enforce environmental laws and improve fresh water treatment and storage. UNEP also rebuilt its financial–management structure to give the United States and

other countries greater detail on how current monies are spent and where future needs are likely to be. More work remains for UNEP on budgeting and financial management, but the United States hopes to see additional improvement by the next regular session of the Governing Council in 2001. Communications with member states greatly improved as well. In May, at the request of the United States, UNEP opened an office in Washington, D.C., with regional responsibility for the United States and Canada. The office is headed by an American citizen.

On May 29–31, 2000, UNEP convened the first annual Global Ministerial Environmental Forum (GMEF) in Malmo, Sweden. The purpose of GMEF was to call attention to international environmental issues and to give UNEP guidance in years when the Governing Council does not meet in regular session. Environmental ministers from around the world discussed major challenges in the new century; the roles of civil society and the private sector; and progress made in environmental protection since the 1992 Earth Summit in Rio de Janeiro.

Protection of World Climate

UN Framework Convention on Climate Change (FCCC)

The FCCC entered into force in March 1994, and there are currently over 180 Parties. The FCCC's ultimate objective is to promote stabilization of atmospheric concentrations of greenhouse gases at levels that would prevent dangerous human interference with the climate system. The FCCC parties later adopted the Kyoto Protocol in December 1997, which would require developed nations to reduce their collective greenhouse gas emissions by approximately 5.2 percent below 1990 levels during the period 2008–2012.

Negotiations to elaborate upon the Kyoto Protocol began at the Fourth Conference of Parties (COP–4), which met in Buenos Aires in November 1998. The most significant outcome of COP–4 was the Buenos Aires Plan of Action (BAPA). This plan set forth a two–year process to develop rules for the market–based implementation mechanisms, for the underlying compliance regime, and for the treatment of carbon sinks, among other elements.

At COP–6 in November 2000, the parties could not come to agreement on the many outstanding BAPA issues and the conference was suspended. COP–6 will resume in July 2001, in Bonn, Germany. While the United States considers climate change to be a serious environmental problem, it opposes the Kyoto Protocol because the Protocol exempts developing countries from binding emissions targets and would cause serious harm to the U.S. economy. The United States wants to work with other countries to develop alternatives to mitigating climate change that focus on market incentives, new technologies, and other innovative approaches. Toward

that end, the United States intends to continue to participate in the FCCC, including at the resumed COP–6.

Intergovernmental Panel on Climate Change (IPCC)

The IPCC was created in 1988 as a joint effort of the World Meteorological Organization and the UN Environment Program. The IPCC conducts periodic assessments of studies on the science of climate change, its potential impacts, and ways that countries adapt to it and seek to mitigate it. In 2000, scientists involved in producing the IPCC's Third Assessment Report developed draft reports to be reviewed at meetings in the first few months of 2001. Previous comprehensive assessments were issued in 1990 and 1995.

In addition to preparing assessment reports, the IPCC also contributed to international climate change negotiations through preparation and review of special reports and development of methodologies requested by the FCCC. Work was completed on studies of technology transfer, emission scenarios, land use and land use change and forestry issues, and greenhouse gas inventories. U.S. scientists chair the IPCC and co–chair its Working Group II, which considers impacts and adaptation.

UN Scientific Committee on the Effects of Atomic Radiation (UNSCEAR)

UNSCEAR was established by the General Assembly in 1955 to provide continuous review and evaluation of the effects of ionizing radiation on humans and their environment. Radiation in this context covers both natural and human–made (i.e., from atmospheric and surface nuclear explosions) environmental radiation, and medical and occupational exposures, as well as exposures from accidents and incidents. The Committee receives, assembles, and compiles reports and information furnished by its member states, members of the United Nations, specialized agencies, and nongovernmental organizations on observed levels of ionizing radiation and on scientific observations and experiments relevant to the effects of ionizing radiation on people and the environment.

The 49th session of UNSCEAR met May 8–12, 2000, in Vienna. During the year, UNSCEAR's quadrennial report on a host of important issues was published. This extensive report focused on the following topics: Natural Radiation Exposures, Exposures from Man–Made Sources of Radiation, Medical Radiation Exposures, Occupational Radiation Exposures, Dose Assessment Methodologies, Epidemiological Evaluation of Radiation–Induced Cancer, DNA Repair and Mutagenesis, Hereditary Effects of Radiation, Combined Effects of Radiation and Other Agents, Biological Effects of Low–Level Radiation, and Local Exposures and Effects from the Chernobyl Accident. The Report for 2000 was particularly valuable in that it included important analysis of minimal long–term effects from the Chernobyl accident, which has already been useful in helping to refute

contrary claims of far more extensive and significant health effects. These quadrennial reports are seen in the scientific community as some of the most authoritative sources in the world as to the effects of atomic radiation.