

Chapter VI

Natural resources, energy and cartography

Natural resources exploration and energy resources development continued to be considered by a number of United Nations bodies in 1992, with the environmental aspects of increased exploitation of such resources receiving particular attention. The Committee on New and Renewable Sources of Energy met in February and considered, among other subjects, a paper on solar energy: a strategy in support of environment and development, which was submitted to the Preparatory Committee for the United Nations Conference on Environment and Development.

In January, the International Conference on Water and the Environment, in the Dublin Statement on Water and Sustainable Development, noted that scarcity and misuse of fresh water posed a serious and growing threat to sustainable development and protection of the environment. In December, the General Assembly declared that the World Day for Water would be observed on 22 March of each year, starting in 1993 (resolution 47/193).

In his annual report to the Assembly, the Director General of the International Atomic Energy Agency (IAEA) observed that expanded use of nuclear energy was an option for increasing energy generation without significantly adding to carbon dioxide emissions. The Assembly, in October, urged States to cooperate in carrying out IAEA's work and in promoting the use of nuclear energy and the application of measures to strengthen the safety of nuclear installations and to minimize risks to life, health and the environment.

The Sixth United Nations Conference on the Standardization of Geographical Names was held in New York in August/September 1992.

Natural resources

Exploration

UN Revolving Fund for
Natural Resources Exploration

During 1992, the United Nations Revolving Fund for Natural Resources Exploration (UNRFNRE), established by the General Assembly in 1973,⁽¹⁾ continued to assist developing countries in natural resources exploration and development.

Administered by the United Nations Development Programme (UNDP), the Fund was financed from voluntary contributions and donations in cash and kind, and replenishment contributions were required to be made from successful exploration projects, based on the proceeds of production. The first such replenishment was received in 1991.⁽²⁾

In 1992, pre-investment follow-up activities for successful mineral discoveries were carried out in the Congo, Guatemala and Honduras. The Yucarán gold-silver deposit in Honduras attracted several private investors. The Fund assisted Guatemala to prepare a call for bids to develop its El Pato gold deposit. It also initiated steps to collect a \$200 million reimbursable loan to the Congo for a feasibility study of an offshore phosphorite deposit; as at the end of the year, no payment had been received.

UNRFNRE had mineral exploration projects ongoing in five countries in 1992: the final report of the exploration for gold in the Suches area of Bolivia was completed; a report on the exploration for pyrophyllite deposits was submitted to China; chromite exploration in the Philippines continued with test pitting in the Mahayahay target area and the Fund announced its readiness to explore for epithermal gold deposits in northern Surigao; and, in the United Republic of Tanzania, exploration for gold began in the Canuck and Geita areas.

The Fund received requests for assistance in mineral exploration programmes from the Democratic People's Republic of Korea, Guinea, Mongolia, Myanmar, Namibia, Sri Lanka and Viet Nam, as well as for geothermal projects in China, Costa Rica, Mexico and Nicaragua. It was hoped that funds would become available to enable UNRFNRE to support those activities.

Committee on Natural Resources

Continuing its efforts to restructure and revitalize the United Nations in the economic, social and related fields (see PART THREE, Chapter XVIII), the General Assembly, at its resumed forty-sixth session in 1992, considered the status of its subsidiary bodies and those of the Economic and Social Council in those fields.

By resolution 46/235 of 13 April, the Assembly proposed that the Committee on Natural

Resources should comprise 24 government-nominated experts from different Member States, elected by the Council for four-year terms. The Committee would have two working groups, one on minerals and one on water resources. Its mandate with respect to energy would be assumed by the Committee on New and Renewable Sources of Energy and on Energy for Development (see below). The Committee would meet for two weeks every two years and report to the Council with policy options and recommendations.

By decision 1992/218 of 30 April, the Council abolished its standing Committee on Natural Resources and established a new expert Committee of the same name. It requested the Secretary-General to submit recommendations for the new Committee's programme of work, and decided that it should hold its first session from 22 March to 2 April 1993.

By resolution 1992/62 of 31 July, the Council reaffirmed the mandate of the new Committee and approved the draft provisional agenda and programme of work for its first session.

Coordination of UN activities

In response to a 1991 Economic and Social Council request, (3) the Secretary-General, in his capacity as Chairman of the Administrative Committee on Coordination (ACC), included in ACC's annual overview report(4) a section on the most effective ways of enhancing coordination in the mineral and energy sectors.

Replying to a request by the Secretary-General, ACC members provided their views on the subject. New institutions and mechanisms were suggested by some organizations, while others felt that existing arrangements were adequate.

ACC members indicated a need for close coordination and cooperation among various parts of the system. In the past, ad hoc inter-agency consultations for specific purposes had been held as the need arose, a modality that should be retained.

The question of establishing new formal coordination mechanisms in the mineral and energy sectors would be taken up following action on restructuring by the General Assembly.

Mineral resources

In 1992,(5) the United Nations Department of Economic and Social Development (DESD) carried out 79 projects, with a total delivery of \$13.1 million, in 40 countries in all phases of mineral development—prospecting, geological mapping, airborne geophysical surveys, establishment of a geological computerized database using the Geographic Information System, mineral policy and investment promotion advice, mineral economic

surveys, mine design and engineering, and environment protection and management. Many projects included institutional and human resources development components. Africa received 66 per cent of assistance provided, with the needs of least developed and land-locked countries, notably in the Sahel area, being stressed.

Some 20 short-term advisory missions took place, providing assistance in such areas as mineral-sector review, impact assessment of geological, geographic and environmental factors on life and poverty, the role of geological surveys in mitigating risks, evaluation of geological hazards, strategies for mitigation of volcanic hazards, formulation of legislative regulation, diamond exploration methodology and promotion, on-site evaluation and small-scale mining.

Most projects included a mining investment promotion component, including the constitution of user-friendly computerized geo-scientific databases, and many included the provision of legal and investment promotion services. Projects were implemented in Angola, Bolivia, Burkina Faso, Chad, Gabon, Guinea-Bissau, Jamaica, Mali, Mozambique, the Niger, Pakistan, the Philippines, Togo, Uganda and Yemen. DESD organized an Interregional Seminar on Foreign Investment and Joint Ventures in the Mining Sector (Haikou, China, 7-11 December).

Small-scale mining activities gained recognition, particularly as a means of providing employment opportunities in rural areas: in Mali, river-beds were dredged for mining cooperatives; in Burkina Faso, auriferous alluvials were processed; in the Lao People's Democratic Republic, alluvial gold targets were evaluated and testing for sluice recovery of gold from the Mekong River was about to start; and in Jamaica, a mobile mining task force successfully opened seven marble quarry sites. Projects also included training components: in Ethiopia, national personnel would be trained to provide advisory services to mines and prepare models for demonstrations at selected sites; and, in Mozambique, coal degasification techniques were taught.

The protection of the environment was a major concern in formulating new projects. Environmental baseline studies were carried out as a part of feasibility studies of mineral deposits in Nepal, Pakistan and Thailand.

Water resources

During the year, DESD executed 95 projects in water resources development, with a total delivery of \$15.4 million. Projects and advisory missions covered water resources planning, engineering, legislation, rural water supply (including well drilling), maintenance and community participa-

tion and computer applications to surface and groundwater development and management.

Innovative large-scale projects were developed in the Central African Republic and Guinea-Bissau, financed by the United Nations Capital Development Fund and UNDP, focusing on the socio-economic aspects of water supply and sanitation in rural areas, with special emphasis on community participation and the role of women. The goal of a project in southern Africa was the integrated and environmentally sound management of the area's water resources to allow sustainable development. Projects in China, Pakistan and the Lake Chad basin (involving Cameroon, Chad, the Niger and Nigeria) also had a strong environmental component.

Interregional workshops were organized on the role of women in environmentally sound and sustainable development (Beijing, China, 9-15 September) and on the testing of training modules on women, water supply and sanitation (Bangkok, Thailand, 21-25 September).

International Conference on Water and the Environment

The International Conference on Water and the Environment (Dublin, Ireland, 26-31 January 1992) adopted, at its closing session, the Dublin Statement on Water and Sustainable Development. In March,(6) the Conference's Secretary-General submitted the Statement and the report of the Conference to the Preparatory Committee for the United Nations Conference on Environment and Development (UNCED) (see PART THREE, Chapter VIII). The Dublin Conference, attended by 500 participants, including government-designated experts from 100 countries and representatives of 80 international, inter-governmental and non-governmental organizations, was convened by the World Meteorological Organization on behalf of the organizations of the United Nations represented in the ACC Intersecretariat Group for Water Resources.

The Dublin Statement noted that scarcity and misuse of fresh water posed a serious and growing threat to sustainable development and protection of the environment. Human health and welfare, food security, industrial development and the ecosystems on which they depended were all at risk unless water and land resources were managed more effectively. The Statement listed four guiding principles on which action recommended in the Conference report was based: fresh water was a finite and vulnerable resource, essential to sustain life, development and the environment; water development and management should be based on a participatory approach, involving users, planners and policy makers; women played a central part in providing, managing and safeguarding

water; and water had an economic value and should be recognized as an economic good.

Based on those principles, the Statement proposed an action agenda covering alleviation of poverty and disease, protection against natural disasters, water conservation and reuse, sustainable urban development, agricultural production and rural water supply, protecting aquatic ecosystems and resolving water conflicts. It also addressed the need for an enabling environment to implement the action agenda and the need for follow-up mechanisms.

The report of the Conference contained further recommendations dealing with integrated water resources development and management, water resources assessment and impacts of climate change on water resources, protection of water resources, water quality and aquatic ecosystems, water and sustainable urban development and drinking-water supply and sanitation in the urban context, water for sustainable food production and rural development and drinking-water supply and sanitation in the rural context, mechanisms for implementation and coordination at international, national and local levels, and options for follow-up.

UN Conference on Environment and Development

Agenda 21, adopted in June 1992 by UNCED,(7) contained a chapter on the protection of the quality and supply of freshwater resources: application of integrated approaches to the development, management and use of water resources.

The Conference proposed a number of programme areas: integrated water resources development and management; water resources assessment; protection of water resources, water quality and aquatic ecosystems; drinking-water supply and sanitation; water and sustainable urban development; water for sustainable food production and rural development; and impacts of climate change on water resources. For each programme area, the Conference set a number of objectives and recommended activities to achieve them.

Inter-agency coordination

The ACC Intersecretariat Group for Water Resources (New York, 7-9 October 1992)(8) discussed strengthening coordination and cooperation in the field of water resources, including follow-up action on issues stemming from the Dublin Conference and UNCED.

GENERAL ASSEMBLY ACTION

On 22 December 1992, on the recommendation of the Second (Economic and Financial) Committee, the General Assembly adopted without vote resolution 47/193.

Observance of World Day for Water

The General Assembly,

Recalling the relevant provisions of chapter 18 of Agenda 21, adopted by the United Nations Conference on Environment and Development,

Considering that the extent to which water resource development contributes to economic productivity and social well-being is not widely appreciated, although all social and economic activities rely heavily on the supply and quality of fresh water,

Considering also that, as populations and economic activities grow, many countries are rapidly reaching conditions of water scarcity or facing limits to economic development,

Considering further that the promotion of water conservation and sustainable management requires public awareness at local, national, regional and international levels,

1. Decides to declare 22 March of each year World Day for Water, to be observed starting in 1993, in conformity with the recommendations of the United Nations Conference on Environment and Development contained in chapter 18 of Agenda 21;

2. Invites States to devote the Day, as appropriate in the national context, to concrete activities such as the promotion of public awareness through the publication and diffusion of documentaries and the organization of conferences, round tables, seminars and expositions related to the conservation and development of water resources and the implementation of the recommendations of Agenda 21;

3. Invites the Secretary-General to make recommendations on ways and means by which the United Nations Secretariat could, within existing resources and without prejudice to ongoing activities, assist countries in organizing their national activities for the observance of World Day for Water;

4. Requests the Secretary-General to make the necessary arrangements in order to ensure the success of the observance of World Day for Water by the United Nations;

5. Also requests the Secretary-General to focus observance of World Day for Water by the United Nations on a particular theme relating to the conservation of water resources;

6. Recommends that the Commission on Sustainable Development, in the execution of its mandate, attach priority to the implementation of chapter 18 of Agenda 21.

General Assembly resolution 47/193

22 December 1992 Meeting 93 Adopted without vote

Approved by Second Committee (A/47/719) without vote, 16 December (meeting 51); draft by Malaysia (A/C.2/47/L.63), orally amended by Morocco; agenda item 79.

REFERENCES

- (1)YUN 1973, p. 408, GA res. 3167(XXVIII). 17 Dec. 1973. (2)YUN 1991, p. 469. (3)Ibid., p. 472, ESC. res. 1991/90, 26 July 1991. (4)E/1992/11. (5)DP/1993/39/Add.1. (6)A/CONF.151/PC/112. (7)Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992, vol.I (A/CONF.151/26/Rev.1, vol. I), Sales No. E.93.I.8. (8)ACC/1992/29 & Corr.1.

dealing with changing consumption patterns. The Conference recommended a number of activities to encourage greater efficiency in the use of energy and resources, noting that reducing the amount of energy and materials used per unit in producing goods and services could contribute to both the alleviation of environmental stress and greater economic and industrial productivity and competitiveness. It was therefore recommended that Governments should encourage the dissemination of existing environmentally sound technologies and promote research and development in such technologies, assist developing countries to use those technologies efficiently and develop technologies suited to their own circumstances, encourage the environmentally sound use of new and renewable sources of energy, and encourage the environmentally sound and sustainable use of renewable natural resources.

Energy resources development

In response to a General Assembly resolution of 1990,(2) the Secretary-General submitted in May 1992 a report on energy exploration and development trends in developing countries.(3) The report analysed trends in energy consumption, exploration, development and production and made projections for future financial requirements and investments. Forecasts to the year 2010 indicated that energy demand in the developing countries would grow at an average annual rate of 4.4 per cent, much higher than the expected rate of 1.8 per cent in the developed market economies. Half of the increase in world energy demand would be in the developing countries. However, on a per capita basis, only marginal improvement could be expected in the current situation, where the level of energy consumption in those countries was about 10 per cent of that in the developed market economies.

Oil would continue to dominate consumption in the developing world. Coal would retain its overall position and be of great importance to a few countries, particularly China and India. Natural gas, the third most important fuel, would be more widely used, and the fast growth in electricity consumption would continue. In the absence of technological breakthroughs in new and renewable sources of energy, their contribution would remain static. Massive capital investments and the application of modern technologies would be required in the developing countries to meet domestic demand. New arrangements would be needed to promote international cooperation in the energy area of the world economy.

Energy

In June,(1) UNCED (see PART THREE, Chapter VIII) adopted Agenda 21, which contained a chapter

Technical cooperation

During 1992,(4) DESD carried out 50 missions to developing countries to provide advice on energy policy, resource evaluation and exploration, proj-

ect design and feasibility studies in the areas of petroleum, coal, natural gas, electric power, energy planning and conservation, geothermal, solar, wind and multi-source renewable energy packages, information systems and microcomputer-based energy analysis. The Department executed 89 projects in the energy field with a total delivery of \$10.5 million.

On the basis of a survey at sites in 41 developing countries during the 1980s, DESD in 1992 launched a programme on enhancement of small-scale hydropower resources in developing countries. The programme included environmental and socio-economic considerations. DESD continued to review and update existing studies and to select sites for further investigation.

At their request, DESD assisted the countries of Eastern Europe and the Commonwealth of Independent States to restructure energy-sector institutions, in energy/environmental impact assessment and with energy efficiency advisory services. In Viet Nam, DESD and the World Bank undertook a review of energy-sector investments and policies, covering energy/economic interactions, the feasibility of building a refinery and developments in the coal sector. It also analysed an option to interconnect the northern and southern electricity grids, and assessed the condition and investment requirements of existing hydro and thermal powerplants.

Embarking on a programme to expand and improve coal utilization, China assigned priority to implementing the following DESD-formulated programme elements: control of environmental pollution from coal combustion in four cities; transfer and development of methods to predict, mitigate and eliminate karst water inflows into coal beds under development; and access to and training in high-production mining techniques in thick coal seams through seminars, visits to productive mines and technical workshops with manufacturers of high-seam equipment.

Meetings organized by DESD included a study tour on small-scale hydropower (China, 14-27 June) and reinjection of geothermal fluids (Costa Rica, 10-12 November).

ECONOMIC AND SOCIAL COUNCIL ACTION

On 31 July 1992, on the recommendation of its Economic Committee, the Economic and Social Council adopted without vote resolution 1992/56.

Development of the energy resources of developing countries

The Economic and Social Council,

Reaffirming the critical importance of the development of energy resources of developing countries and the need for measures by the international community to assist and support the efforts of developing countries, in particular the energy-deficient among them, to develop their

energy resources in order to meet their needs through cooperation, assistance and investment in the fields of conventional and of new and renewable sources of energy: consistent with their national policies, plans and priorities,

Reaffirming also that the developing countries have the primary responsibility for the strategies and policies for exploration and development of their energy resources,

Recognizing the importance of sustainable development,

1. Takes note with appreciation of the report of the Secretary-General on energy exploration and development trends in developing countries;

2. Reaffirms that an adequate flow of external resources in support of the national efforts of developing countries, in particular the energy-deficient among them, is needed to finance, within the legislative framework of each country, the exploration and development of their energy resources;

3. Requests the Secretary-General to, keep the matter under constant review and to submit to the Economic and Social Council at its substantive session of 1994 a report on the efforts made in this regard;

4. Also requests the Secretary-General to report to the Economic and Social Council at its substantive session of 1994 on the role of the United Nations in devising ways and means of mobilizing the international community to increase efforts for comprehensive national, bilateral and multilateral measures to accelerate the exploration and development of energy resources in developing countries, with full respect for their national sovereignty;

5. Further requests the Secretary-General to draw this matter to the attention of the Committee on New and Renewable Sources of Energy and on Energy for Development at its first substantive session.

Economic and Social Council resolution 1992/56

31 July 1992 Meeting 42 Adopted without vote

Approved by Economic Committee (E/1992/109/Add.) without vote, 28 July (meeting 16); draft by Vice-Chairman (E/1992/C.1/L.18), based on informal consultations on draft by Pakistan for Group of 77 (E/1992/C.1/L.1); agenda item 12 (h).

GENERAL ASSEMBLY ACTION

By decision 47/435 of 18 December, the General Assembly took note of the Secretary-General's report on energy exploration and development trends in developing countries.

New and renewable energy resources

The Committee on the Development and Utilization of New and Renewable Sources of Energy, established by the General Assembly in 1982,(5) held its sixth session in New York from 3 to 14 February 1992.(6) The Committee discussed the implementation of the 1981 Nairobi Programme of Action for the Development and Utilization of New and Renewable Sources of Energy(7) and mobilization of financial resources for its implementation. It also considered two substantive themes: the contribution of new and renewable sources of energy to decentralized energy systems and to specific multi-purpose medium- to large-

scale applications; and promotion of rapid and effective transfer of technology in new and renewable sources of energy to developing countries. The Secretary-General submitted reports on the first(8) and second(9) themes. He also submitted a report on the activities of the United Nations system regarding the two themes.(10)

Also before the Committee were reports by the Secretary-General on the following subjects: a strategy for solar energy in support of environment and development;(11) activities being carried out by the entities within the United Nations system in the field of new and renewable sources of energy;(12) mobilization of financial resources and inter-agency coordination;(13) and progress achieved in the follow-up of substantive themes selected for detailed consideration by the Committee at its 1988 and 1990 sessions.(14) The Committee also considered the report of the 1991 meeting of the Intergovernmental Group of Experts on New and Renewable Sources of Energy(15) and the report of an October 1991 symposium on hydropower, held at Oslo, Norway.(16)

On 14 February, the Committee adopted two decisions. By the first,(17) it requested the Secretary-General to transmit to the Preparatory Committee for UNCED his report on solar energy,(11) the report of the Intergovernmental Group of Experts on New and Renewable Sources of Energy,(15) the report of the symposium on hydropower(16) and a pre-feasibility survey on a proposed network of centres of excellence on new and renewable sources of energy. By the second decision,(18) the Committee approved the provisional agenda and documentation for its seventh (1994) session.

The ACC Inter-Agency Group on New and Renewable Sources of Energy (New York, 3 and 4 February)(19) also discussed the substantive themes chosen for consideration by the Committee.

On 7 February, the Economic and Social Council, by decision 1992/207, decided that, when considering the report of the Committee on its sixth session, it would not consider new draft proposals, except for specific recommendations that required action by the Council and proposals related to coordination aspects of the Committee's work. By decision 1992/299 of 31 July, the Council took note of the Committee's report.

On 18 December, the General Assembly also took note of the Committee's report by decision 47/434.

Committee name change

As part of the process of restructuring and revitalization of the United Nations in the economic, social and related fields, the General Assembly, by resolution 46/235 of 13 April, changed

the name of the Committee on the Development and Utilization of New and Renewable Sources of Energy to the Committee on New and Renewable Sources of Energy and on Energy for Development. In addition to its current mandate, the new Committee would take over the mandate of the old Committee on Natural Resources (see above) as it pertained to energy.

By decision 1992/218 of 30 April, the Economic and Social Council established the Committee on New and Renewable Sources of Energy and on Energy for Development. On 31 July, by resolution 1992/62, the Council reaffirmed the mandate of the new Committee.

Energy use and air emissions

In response to a 1988 General Assembly request,(20) the Secretary-General submitted in October 1992 a report(21) on structural change in the world economy and the implications for energy use and emissions of carbon dioxide, sulphur dioxide and nitrogen oxides. The report discussed macro-economic trends and gave projections of production and air emissions to the year 2020 under three different scenarios for economic growth, with particular reference to the energy-intensive economic sectors. Based on the same scenarios, future structural changes in the world economy were also considered; the possible changes were determined by projected trends in the level and composition of investment, foreign trade and consumption, and by assumed interregional patterns of moderate technology diffusion. In turn, those projected trends were used to determine different rates of growth of economic activities and thus of energy and materials requirements and levels of air emissions.

The report concluded that output of energy-intensive materials such as metals, chemicals, cement, fertilizers and paper typically grew rapidly during the intermediate stage of industrialization. That pattern of structural transformation was already taking place in a number of developing countries and was expected to continue. Even with considerable increases in energy-use efficiency and reductions in air emissions per unit of gross domestic product, the world's annual consumption of fossil fuels would double by the year 2020. Emissions of carbon dioxide and nitrogen oxides would increase proportionately, while emissions of sulphur dioxide would rise by more than 40 per cent.

To reduce or at least limit the long-term growth of global emissions, especially of carbon dioxide, options considered needed to be extended beyond slowing the world's economic growth. Technologies already existed to reduce nitrogen oxides and sulphur dioxide emissions substantially at costs that would be acceptable with high economic

growth. The growth of carbon dioxide emissions could be limited through higher efficiency in energy use and lower inputs of materials in various production processes, and through a better mix of carbon fuels and substitution of other, carbon-free energy sources.

Reductions of carbon dioxide emissions through fuel switching would be feasible in many regions, especially those with large natural gas reserves. A massive change-over from coal and oil to natural gas, however, would require greatly expanded exploration and production, and the collaboration of the world's major coal and oil users. High capital investment would be required to develop an integrated system for world trade in natural gas and to develop the vast hydropower potential of developing countries, which was estimated to equal half of the world's annual consumption of oil.

By decision 47/444 of 22 December, the General Assembly took note of the Secretary-General's report.

Nuclear energy

IAEA report

In an August note, (22) the Secretary-General transmitted the 1991 report of the International Atomic Energy Agency to the General Assembly. Presenting and updating the report in the Assembly on 21 October, the IAEA Director General recalled that IAEA had been established 35 years earlier to promote the peaceful uses of the atom for development and to verify that commitments to exclusively peaceful uses were respected (see PART SEVEN, Chapter I, for further information on IAEA activities).

The Director General addressed the issue of non-proliferation of nuclear weapons (see PART ONE, Chapter II), IAEA's safeguards system, including inspections to monitor Iraq's compliance with Security Council resolutions (see PART TWO, Chapter III), peaceful applications, environmental protection and nuclear safety and public opinion.

The peaceful applications of nuclear technology were significant. For example, 17 per cent of the world's electricity came from nuclear-power reactors; every third patient in industrialized countries was being examined or treated by a nuclear-related method; and the cotton crop in Pakistan and the rice crop in Indonesia had been boosted by the use of suitable mutagens, new strains produced through mutations induced by irradiating seeds.

Nuclear techniques were also being used to monitor and protect the environment. Isotopes were a tool in the fight against groundwater and soil contamination through excessive use of fertilizers; they allowed precise measurement of the amount of fertilizer that went into the plant so that

the most appropriate fertilizer regime could be established. Similarly, nuclear techniques allowed the determination of the amount of nitrogen that different crop plants obtained from the soil, leading to better fertilizer strategies. Most controversial was the question of how helpful nuclear power could be in generating the increasing amounts of electricity which the world would need without emitting carbon dioxide into the atmosphere and thereby contributing to a possible global warming. There was a growing awareness that expanded use of nuclear energy was one of the few options for increasing energy generation without significantly adding to carbon dioxide emissions.

However, it was still true that the use of nuclear power was opposed by a sizeable segment of public opinion for fear of accidental radioactive releases or from concern about the disposal of nuclear wastes. A draft convention on nuclear safety was being negotiated within IAEA and efforts were under way to work out internationally agreed radioactive-waste safety standards.

GENERAL ASSEMBLY ACTION

On 22 October 1992, the General Assembly adopted resolution 47/8 by recorded vote.

Report of the International Atomic Energy Agency
The General Assembly,

Having received the report of the International Atomic Energy Agency to the General Assembly for the year 1991,

Taking note of the statement of the Director General of the International Atomic Energy Agency of 21 October 1992, which provides additional information on the main developments in the activities of the Agency during 1992,

Recognizing the importance of the work of the Agency to promote further the application of atomic energy for peaceful purposes, as envisaged in its statute,

Also recognizing the special needs of the developing countries for technical assistance by the Agency in order to benefit effectively from the application of nuclear technology for peaceful purposes as well as From the contribution of nuclear energy to their economic development,

Conscious of the importance of the work of the Agency in the implementation of safeguards provisions of the Treaty on the Non-Proliferation of Nuclear Weapons and other international treaties, conventions and agreements designed to achieve similar objectives, as well as in ensuring, as far as it is able, that the assistance provided by the Agency or at its request or under its supervision or control is not used in such a way as to further any military purpose, as stated in article II of its statute,

Further recognizing the importance of the work of the Agency on nuclear power, applications of nuclear methods and techniques, nuclear safety, radiological protection and radioactive waste management, including its work directed towards assisting developing countries in planning for the introduction of nuclear power in accordance with their needs,

Again stressing the need for the highest standards of safety in the design and operation of nuclear plants so as to minimize risks to life, health and the environment,

Noting the statements and actions of the Agency concerning non-compliance by Iraq with its non-proliferation obligations,

Bearing in mind resolutions GC(XXXVI)/RES/577 on the nuclear capabilities of South Africa, GC(XXXVI)/RES/579 on non-compliance by Iraq with its safeguards obligations, GC(XXXVI)/RES/582 on measures to strengthen international cooperation in matters relating to nuclear safety and radiological protection, GC(XXXVI)/RES/583 on revision of the Basic Safety Standards for Radiation Protection, GC(XXXVI)/RES/584 on education and training in radiation protection and nuclear safety, GC(XXXVI)/RES/585 on liability for nuclear damage, GC(XXXVI)/RES/586 on strengthening the effectiveness and improving the efficiency of the safeguards system, GC(XXXVI)/RES/587 on strengthening of the main activities of the Agency, GC(XXXVI)/RES/588 on practical utilization of food irradiation in developing countries, GC(XXXVI)/RES/592 entitled "Plan for producing potable water economically", and GC(XXXVI)/RES/601 on the application of safeguards of the Agency in the Middle East, adopted on 25 September 1992 by the General Conference of the Agency at its thirty-sixth regular session,

1. Takes note of the report of the International Atomic Energy Agency;

2. Affirms its confidence in the role of the Agency in the application of nuclear energy for peaceful purposes;

3. Urges all States to strive for effective and harmonious international cooperation in carrying out the work of the Agency, pursuant to its statute; in promoting the use of nuclear energy and the application of the necessary measures to strengthen further the safety of nuclear installations and to minimize risks to life, health and the environment; in strengthening technical assistance and cooperation for developing countries; and in ensuring the effectiveness and efficiency of the safeguards system of the Agency;

4. Welcomes the decisions taken by the Agency to strengthen its safeguards system;

5. Welcomes also the decisions taken by the Agency to strengthen its technical assistance and cooperation activities;

6. Commends the Director General of the Agency and his staff for their strenuous efforts in the implementation of Security Council resolutions 687(1991) of 3 April 1991, 707(1991) of 15 August 1991 and 715(1991) of 11 October 1991, in particular the detection and destruction or otherwise rendering harmless of equipment and material which could be used for nuclear weapons;

7. Requests the Secretary-General to transmit to the Director General of the Agency the records of the forty-seventh session of the General Assembly relating to the activities of the Agency.

General Assembly resolution 47/8

22 October 1992 Meeting 45 146-0-5 (recorded vote)

42-nation draft (A/47/L.9/Rev.1 & Add.1); agenda item 14.

Sponsors: Albania, Argentina, Australia, Belarus, Belgium, Bolivia, Botswana, Bulgaria, Canada, Chile, Colombia, Costa Rica, Czechoslovakia, Denmark, Estonia, Finland, Germany, Greece, Hungary, Italy, Japan, Latvia, Lithuania, Luxembourg, Malawi, Malta, Netherlands, New Zealand, Norway, Poland, Portugal, Republic of Korea, Romania, Russian Federation, Samoa, Spain, Sweden, Togo, Turkey, Ukraine, United Kingdom, United States.

Meeting numbers. GA 47th session: plenary 44, 45.

Recorded vote in Assembly as follows:

In favour: Afghanistan, Albania, Algeria, Angola, Antigua and Barbuda, Argentina, Armenia, Australia, Austria, Azerbaijan, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Belize, Bhutan, Bolivia, Botswana, Brazil, Brunei Darussalam, Bulgaria, Burkina Faso, Cameroon, Canada, Cape Verde, Chile, China, Colombia, Comoros, Congo, Costa Rica, Côte d'Ivoire, Croatia, Cyprus, Czechoslovakia, Democratic People's Republic of Korea, Denmark, Djibouti, Ecuador, Egypt, El Salvador, Estonia, Ethiopia, Fiji, Finland, France, Gabon, Gambia, Germany, Ghana, Greece, Grenada, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hungary, Iceland, India, Indonesia, Iran, Ireland, Israel, Italy, Jamaica, Japan, Kazakhstan, Kenya, Kuwait, Lao People's Democratic Republic, Latvia, Lebanon, Lesotho, Liberia, Libyan Arab Jamahiriya, Liechtenstein, Lithuania, Luxembourg, Malaysia, Maldives, Mali, Malta, Marshall Islands, Mauritania, Mauritius, Mexico, Micronesia, Mongolia, Morocco, Mozambique, Myanmar, Namibia, Nepal, Netherlands, New Zealand, Niger, Nigeria, Norway, Oman, Pakistan, Panama, Papua New Guinea, Peru, Philippines, Poland, Portugal, Qatar, Republic of Korea, Republic of Moldova, Romania, Russian Federation, Rwanda, Saint Lucia, Samoa, Sao Tome and Principe, Saudi Arabia, Senegal, Singapore, Slovenia, Solomon Islands, Spain, Sri Lanka, Suriname, Swaziland, Sweden, Syrian Arab Republic, Thailand, Togo, Tunisia, Turkey, Uganda, Ukraine, United Arab Emirates, United Kingdom, United Republic of Tanzania, United States, Uruguay, Vanuatu, Venezuela, Viet Nam, Zaire, Zambia, Zimbabwe.

Against: None.

Abstaining: Cuba, Iraq, Jordan, Sudan, Yemen.

Before the vote on the draft text as a whole, separate votes were registered on two paragraphs. The eighth preambular paragraph was adopted by a recorded vote of 123 to 1 (Iraq), with 10 abstentions. Operative paragraph 6 was retained by 124 votes to 1 (Iraq), with 10 abstentions.

REFERENCES

- (1) Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992, vol. I (A/CONF.151/26/Rev.1, vol.I), Sales No. E.93.I.8. (2) GA res. 45/209, 21 Dec. 1990. (3) 4/47/202-E/1992/51. (4) DP/1993/39/Add.1. (5) YUN 1982, p. 896, GA res. 37/250, 21 Dec. 1982. (6) A/47/36. (7) YUN 1981, p. 689. (8) A/AC.218/1992/2. (9) A/AC.218/1992/3. (10) A/AC.218/1992/4. (11) A/AC.218/1992/5/Rev.1. (12) A/AC.218/1992/6. (13) A/AC.218/1992/7. (14) A/AC.218/1992/8. (15) YUN 1991, p. 478. (16) A/AC.218/1992/10. (17) A/47/36 (dec. 1(VI)), (18) *Ibid.* (dec. 2(VI)). (19) ACC/1992/4. (20) GA res. 43/194, 20 Dec. 1988. (21) A/47/388. (22) A/47/374.

Cartography

During 1992, (1) DESD assisted various developing countries in applying remote sensing techniques for mapping and map updating. In Uganda, for example, satellite imagery was taken of the entire territory of the country. Comparison of that imagery with existing 30-year-old maps facilitated the preparation of revised and updated maps. Surveys of deep-sea areas were completed in Trinidad and Tobago. The country would be able to undertake work to manage and protect its marine environment effectively, particularly with regard to offshore hazards and the definition of sea lanes to cope with the heavy traffic of crude-oil carriers in the area.

In collaboration with the Earth Observation Satellite Company (United States) and the International Society for Photogrammetry and Remote Sensing, DESD organized a seminar on photogram-

metry and remote sensing (Washington, DC., 2-14 August) to benefit developing countries.

Standardization of geographical names

The Sixth United Nations Conference on the Standardization of Geographical Names, held in New York from 25 August to 3 September 1992,(2) was attended by 154 representatives and observers from 67 countries, the Holy See, the United Nations Educational, Scientific and Cultural Organization and the Commission of the European Communities (for participating States, see APPENDIX III). The Permanent Observer Mission of Palestine to the United Nations and five international scientific organizations also took part.

The Conference considered reports of linguistic/geographical divisions and of Governments on the situations in their regions and countries and on progress made in the standardization of geographical names since the Fifth (1987) Conference.(3)

It established three committees—on national, technical, and international programmes—to consider national standardization, the creation of toponymic data files, the reduction of exonyms, terminology, the naming of features beyond a single sovereignty, romanization and conversion into non-Roman writing systems, and toponymic education and practice. The Conference also considered the economic and social benefits of national and international standardization of geographical names, measures taken and proposed to implement United Nations resolutions on the standardization of geographical names, technical assistance and international cooperation.

The Conference adopted 15 resolutions. It recommended that an Africa South Division, a Baltic Division, and an Eastern Europe, Northern and Central Asia Division of the United Nations Group of Experts on Geographical Names be established, reflecting changes in those regions. Noting that the linguistic/geographical division of Latin America was not represented at the Conference, it recommended that Brazil, El Salvador, Mexico, Portugal, Spain and Venezuela reactivate the division. It also noted the increasing number

of countries having toponymic guidelines for map editors and advised the United Nations to publish them in combined volumes. Owing to political changes in certain Member States, the Conference recommended that the affected countries should provide the Expert Group with information on changes of geographical names every six months. Given the sensitivity to deliberate changing of geographical names, the Conference reaffirmed a resolution of the Third (1977) Conference,(4) which had emphasized that geographical names given and/or standardized by a body other than the nationally authorized one should not be recognized by the United Nations. To facilitate uniform terminology, the Conference recommended that the Secretariat should translate the glossary of toponymic terminology, prepared in English by the Expert Group, into the live other official languages of the Organization. It also recommended that the United Nations should provide financial assistance to developing countries to organize seminars and training courses on applied toponymy.

The Conference approved the statute of the United Nations Group of Experts on Geographical Names and recommended that the Economic and Social Council also approve it. It also recommended to the Council that the Seventh Conference be held in 1997, that it accept Iran's offer to act as host and that it request the Secretary-General to take measures to implement the Sixth Conference's recommendations.

Group of Experts. The United Nations Group of Experts on Geographical Names held its sixteenth session in New York on 24 August and 4 September 1992.(5) On 24 August, it discussed the organization of the Sixth Conference and reviewed its own statute. On 4 September, it discussed the implementation of the Conference's recommendations, the status of its various working groups and the provisional agenda of its seventeenth (1994) session.

REFERENCES

- (1)DP/1993/39/Add.1. (2)E/1993/21. (3)YUN 1987, p. 575. (4)YUN 1977, p. 813. (5)GEGN/16.