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IMPLEMENTATION OF THE INTERNATIONAL COVENANT ON
ECONOMIC, SOCIAL AND CULTURAL RIGHTS

Third periodic reports submitted by States parties under
articles 16 and 17 of the Covenant in accordance with
the programmes established by Economic and
Social Council resolution 1988/4

Addendum
MEXICO */ **/

[18 July 1997]

*/ The second periodic report concerning rights covered by articles 1 to 15 (E/1990/6/Add.4) submitted by the Government of Mexico was considered by the Committee on Economic, Social and Cultural Rights at its ninth session (see E/C.12/1993/SR.32-35 and 49).

The annexes referred to in the present report are available for consultation in the Secretariat.

**/ The information submitted by the Government of Mexico in accordance with the guidelines concerning the initial part of reports of States parties is contained in the core document (HRI/CORE/1/Add.12/Rev.1).

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SCIENCE AND TECHNOLOGY

Legislative and other measures adopted between 1992 and 1996 to realize the right of everyone to enjoy the benefits of scientific progress and its applications, including those aimed at the conservation, development and diffusion of science

572. In the context of the severe economic constraints of recent years the Mexican Government has maintained its support for science and technology as an indispensable means of providing society with higher standards of living, for the acquisition and use of knowledge have become more important than reserves of natural resources for obtaining comparative advantages over other countries and for accumulating wealth. Accordingly, the Government's policy is to produce increasing numbers of qualified personnel to conduct basic and applied research to support the production, diffusion and use of technological innovations. It also seeks to combine public funds and private capital in scientific research and technological development, in accordance with the social demands and the objectives of decentralization in this area set out in the National Development Plan 1995-2000.

573. Resources for scientific research and technological development totaled 7,266 million pesos in 1995, an increase of 26 per cent over 1994. External loans and the resources of the Mexican Science Support Programme and the Research and Development Fund for Technological Modernization (FIDETEC) were used to consolidate scientific and technological activities, develop far-reaching multi-year projects, provide incentives for researchers, and promote scientific and technological decentralization, in which the universities and research centres have played important roles. Attempts have also been made to consolidate a culture of technological modernization in enterprises, especially small and medium-sized ones, and to encourage closer links with the academic world.

Financial resources by administrative agency

| | |
|---|-------|
| Ministry of Public Education | 62.3% |
| Ministry of Energy | 22.2% |
| Ministries of Agriculture, Livestock and Rural Development, Health and Social Welfare, and Environment, Natural Resources and Fisheries | 11.6% |

574. In education the resources were used mainly for the training of top-level professionals and the strengthening of the institutions involved in the advance of knowledge.

575. In 1995, in order to encourage the contribution of public and private resources to fund these activities, several international organizations, foundations and private enterprises contributed 134.1 million pesos, to add to the more than 85 million dollars which the external relations sector received for these purposes. The main external sources of financing are the World Food Programme, the United Nations Fund for Population Activities, the World Health Organization, and the Pan-American Health Organization; contributions were also made by Germany, Spain, the United States, the United Kingdom and Japan. In addition, negotiations were begun with the World Bank for a loan of 300 million dollars.

576. A number of taxation and financial measures were introduced to encourage the technological modernization of industry: increase of the depreciation rate for intangible assets from 10 to 15 per cent; 50 per cent increase in the deduction for contributions to technological research and funds; 25 per cent deduction for investments in computer peripherals; and the granting of loans. Important among these loans was the one obtained by Nacional Financiera from an Italian Bank for 40 million dollars at preferential rates and for terms of up to eight years for the import of technology for use in the agro-industrial, electricity, textiles, and leather and footwear sectors, amongst others.

Measures taken in 1992-1996 to ensure the application of scientific progress for the benefit of everyone, including measures aimed at the preservation of mankind's natural heritage and at promoting a healthy and pure environment, and information on the institutional infrastructures established for that purpose

577. As part of its promotion of top-quality research the Federal Government supports scientific research and technological modernization projects which strengthen the links between the nation's research centres and production apparatus, facilitate the advance of knowledge, and increase the technological capacity to meet the people's demands for higher living standards. The projects supported also facilitate progress in the acquisition of know-how and provide incentives for leading researchers, as well as assisting enterprises wishing to increase their competitiveness.

578. Main projects carried out by the administrative sector in 1995

(a) Agriculture: research designed principally to improve seeds and encourage the use of land, water and forest resources in such a way as to diversify their output and increase their profitability. Animal health has been an important area of livestock research, addressing in particular the diagnosis and prevention of brucellosis, tuberculosis and leptospirosis; and models were produced for maintenance of the weight of cattle and combining grazing with food supplements;

(b) Communications and transport: research connected with experimental engineering, communications, electronics and information technology, design and construction of roads, port installations, vehicle loads, bridges and covered loading terminals, etc.

(c) Trade and industrial promotion: several technological development projects in metrology and intercomparisons between national and international laboratories, in order to ensure the compatibility of 108 measuring systems with those of developed countries;

(d) Education: projects promoted by the Independent University of Mexico (UNAM), the agencies of the National Science and Technology Council (CONACYT), and the National Polytechnic Institute (IPN) in connection with liquid polymer crystals and plastic films for use in agriculture, the design of prototypes of electronic scientific instruments, a statistical weights system for the National Metrology Centre (CENAM), control of the geostationary orbit of the Satex-I satellite, food packaging, integrated treatment of effluents of the leather and footwear industry, "cable-city" project to research and test metropolitan telecommunications, the large millimetric telescope project, and projects connected with solar energy, ecology, neurobiology, bio-engineering and seismic engineering, energy savings and efficient use of resources in the design and operation of installations, environment, natural resources, health, food, energy, educational research, and computers and information technology. Resources have been channelled through CONACYT to support 650 scientific and 16 technological projects, including projects authorized under the academic world/ business world link-up programme for the establishment of the UNAM competitiveness centre, in conjunction with the Ministry of Trade and Industrial Promotion (SECOFI) and the National Chamber of Industrial Processing (CANACINTRA), and the project of the Technological University of Aguascalientes on the establishment of a network of competitiveness-support centres. Attention must also be drawn to the project on the development of green technology for recycling extruded plastics proposed by Reciclados Industriales Ecológicos S.A. in Ciudad Victoria and supported by FIDETEC;

(e) Health and social security: projects to improve the cover and quality of services in the areas of nutrition, biochemistry, neurology, epidemiology, genetics and organ transplants, with resources contributed by the pharmaceutical industry and CONACYT;

(f) Seas and oceans: allocation of a million pesos for the implementation of eight projects, of which seven have been completed, connected with research on reef ecosystems and exploitation of marine resources, coastal watches to protect the ecological system and monitor meteorological variables, periodic evaluation of the quality of the marine environment, and forecast of oceanographic and atmospheric phenomena constituting a potential hazard to the public. Hydrographic research has also been carried out with a view to the production of a topographic survey in the Laguna de Términos in Ciudad del Carmen (Campeche);

(g) Environment, natural resources and fisheries projects connected with forest health, rural and urban water supply, rural and urban technological developments affecting the environment, industrial processes and sustainable development, aquaculture, and evaluation and management of fishery resources;

(h) Energy: projects connected with engineering and technology, applied science, petrographic and hydrothermal studies of spoil samples and cores of exploration wells in geothermal fields in El Ceboruco (Nayarit) and Tres Vírgenes (Baja California Sur), studies to determine the possibilities of cogeneration in retirable thermoelectric power stations, and assessment of the atmospheric pollution caused by gases discharged by Petróleos Mexicanos (PEMEX) and their effect on the corrosion of metals;

(i) Office of the Attorney General of the Republic research on a specialized technical teaching model for use in initial training in the federal criminal investigation police force;

(j) Tourism: research connected with identification of local markets, establishment of a research system covering the main competitors of Mexico's tourist destinations, and creation of programmes to promote the country's tourist centres.

Measures taken to promote the diffusion of information on scientific progress

579. Modern information systems are required today to disseminate the advances in technological know-how and innovation which facilitate industrial development and to promote a culture of systematized information management to streamline decision-taking. Thus, the increasing use of information systems and telecommunications is having an impact on the various activities of the production, social and economic sectors.

Information systems promoted by the administrative sector

580. In communications and transport there are the DATA TREK programme (barcodes) and the on-line RED-UNAM service for the transmission and exchange of information among the country's academic and research institutions. In addition, the Centre for Information on

Standardization of Communications has been put on a firm operational footing; this Centre provides advisory services on official Mexican standards (NOM), draft Mexican standards (NMX), and the main telecommunications standards established by national and international bodies.

581. In education the industrial information and documentation fund (INFOTEC) provided assistance for 398 enterprises, facilitating in particular developments in chemicals, petrochemicals, food production, pharmaceuticals and metallurgy. The national technological network (RTN) was also expanded from four to 25 regional units, facilitating links with other information networks and access to electronic data sheets and systems, and a laboratory for the development of the RTN services was established; the first Spanish-language search facility was initiated on the Internet, and the data bank consultation service gave 660 expert opinions and 86 consultations; RTN also subscribes to seven users with installed terminals and to the NECOMEX, SIDABASE, DIRLAC and BIVE national data banks.

582. Among the activities of institutions in the SEP-CONACYT system, attention must be drawn to the production of electronic spreadsheets for the Internet, the updating of the geographical and statistical information system, the start-up of computerized libraries with compact discs which can be remote-accessed, bibliographic data bases, and two information centres.

583. UNAM has transmitted data to educational and research institutions through RED-UNAM; furthermore, in order to expand its service for the postgraduates whose work it coordinates, it established a distance-learning and on-line services programme (UNAM-EUA), which links a number of Mexican institutions with research centres in San Antonio, Texas; it coordinated various systems such as UNAM-DUREC, which contains information about legislation, VALLARTA and JUICEDATA, which record the resolutions of the Supreme Court of Justice, and the ARIES system, which has information on more than 23,000 research projects; and it coordinated the information and documentation unit of the Centre for Technological Innovation, which offers advisory services to enterprises and research institutions.

584. In health a satellite telemedicine project has been initiated in order to facilitate the diagnosis and treatment of complicated medical problems requiring the attention of specialists; a computerized system has been developed to record research projects and ensure their proper monitoring; and information about the latest developments and practical applications in various specialist areas of medicine and about the national health campaigns has been transmitted via satellite to 336 receiving centres in Mexico and 11 abroad. This has established closer links in medical education with health professionals in the regions of Latin America and the Caribbean.

585. In the environment, natural resources and fishery sector an agreement was signed with the National Statistics, Geography and Information Technology Institute (INEGI) for the transfer of technological information and provision of technical advice on geographical matters; the national aquatic health programme was coordinated with the national system for diagnosis and prevention of disease in aquatic organisms; the Fishery Operations Register and the

National Fishery Register were combined; and a sectoral information committee was created, together with five committees on the use of Internet information services.

Measures taken to prevent the use of scientific and technical progress for purposes which are contrary to the enjoyment of all human rights

586. Mexico has no specific legislation prohibiting the use of scientific and technical progress for purposes contrary thereto. Respect for the person and personal freedoms is a principle of its domestic law, as stated in the articles of the Constitution concerning individual guarantees. 587. Furthermore, as pointed out in the preceding report, in 1990 the Federal Executive created the National Commission on Human Rights, which is responsible for ensuring respect for human rights. Similar institutions have been created in every state of the Republic.

Legislative and other measures taken to realize the right of everyone to benefit from the protection of the moral and material interests resulting from any scientific work

588. The Industrial Property Act protects the moral and material interests resulting from a scientific work, if the work was patented as an invention or registered as an industrial model or industrial design in accordance with the various procedures established in the Act.

589. In addition, the Federal Copyright Act protects such moral and material interests if the scientific work was published in a book or in any other printed medium which established its authorship.

Measures taken for the conservation, development and diffusion of science

590. In order to upgrade the training of human resources for science and technology, 24,845 grants were awarded in 1995 through various agencies to support young Mexicans doing postgraduate work in Mexico and abroad; this figure represented an increase of 30.4 per cent over 1994. Attention should be drawn to the contribution of the agriculture, education and health sectors to this work, for they accounted for 94.8 per cent of the total. The institutions showing the biggest increases in their grants were the National Science and Technology Council (CONACYT) and the National Polytechnic Institute (IPN). Of the grants awarded in 1995, 83 per cent were for postgraduate work in Mexico and the remaining 17 per cent for study abroad.

591. In order to increase the incomes of researchers, enhance the quality of their teaching and research, and raise their productivity, as well as to facilitate the creation of new groups of scientists and technologists, in 1995 CONACYT assisted 5,868 members of the national system of research workers (SIN). The slight decline over 1994 of 11 SIN researchers was due to a drop in the number of candidates for the post of national researcher, which was offset by an increase in the number of researchers at the other three levels. Nevertheless, CONACYT allocated 234.8 million pesos to SIN, 14 per cent more than in 1994.

592. In addition, the funds for the promotion of academic excellence and retention and repatriation of Mexican researchers helped to improve

the merit and quality of the work of the country's researchers and academics. The academic excellence fund provided 26.3 million pesos to establish 243 chairs; and the repatriation fund provided 15.5 million pesos to bring 174 researchers back to Mexico, most of them to work in the Independent University of Mexico (UNAM), the University of Guadalajara, the Institute of Electrical Research, and the National Astrophysics, Optical and Electronics Institute, principally in areas connected with the applied, natural and exact sciences. In 1995, in recognition of scientific excellence, the Academy of Scientific Research awarded six prizes to members of the Academy: two to distinguished researchers in the exact sciences, two in the social sciences, one in natural sciences, and one in scientific research.

593. In order to consolidate the move towards scientific and technological decentralization, greater use was made of the potential of each region and closer links were established between universities, businesses and research institutions. CONACYT proceeded with the establishment of regional research systems to support multidisciplinary and inter-institutional projects in the interior of the Republic.

594. The National Teacher-Training University (UPN) delegated to its provincial units the power to formulate curricula and programmes, which will be assessed and revised by the Ajusco unit. IPN started up the first technological innovation and development centre in Ciudad Madero (Tamaulipas), to provide advice, technical assistance, and the latest technological information and knowhow; through the Mérida, Irapuato and Saltillo units of its Centre for Research and Advance Studies (CINVESTAV) IPN supported regional research on marine resources, plant biology and metallurgical engineering.

595. It also transformed the Semiconductor Technology Centre in Guadalajara into an academic unit offering postgraduate courses in electrical engineering; in collaboration with the Independent University of Tlaxcala it initiated research on aspects of reproductive biology and collaborated with the Independent University of Querétaro on the start-up of an advanced materials laboratory.

596. The institutions of the SEP-CONACYT system expanded their activities in the interior of the Republic by establishing new research groups and lines of research; they provided integrated services for the production sector and opened service units and windows in Culiacán (Aguascalientes) and the Quintana Roo offices of the Centre for Food Research and Development (CIAD) of the Colegio de la Frontera Sur and the Centre for Technical Research and Assistance of the State of Querétaro (CIATEQ); in Guadalajara City they opened an office of the Technological Research and Advice Centre for the Leather and Footwear Industry; and it established under CIATEQ a metallurgy laboratory in the Benardo Quintana industrial park in Querétaro.

597. In order to strengthen environmental management, the Ministry of Environment, Natural Resources and Fisheries stepped up its activities under the Mexico and northern frontier environmental programmes, and through the Mexican Institute of Water Technology (INTA) it set up a laboratory in the unit in Jiutepec (Morelos). The purpose of this move was to develop, adapt and transfer technologies, validate research, and carry out activities connected with the standardization and

certification of water products and services. Five training centres were also established, in the States of Nuevo León, México, Morelos, Veracruz and Yucatán.

598. The energy sector produced a study on the decentralization of 80 per cent of its technical services in four regions: North, with headquarters in Poza Rica (Veracruz); South, in Villahermosa (Tabasco); Ocean, in Ciudad del Carmen (Campeche); and Central, in Mexico City. And the health sector set up epidemiological research units in the States of Chihuahua, Jalisco and Nuevo León. It also concluded 34 collaboration agreements with state universities and with UNAM and CINVESTAV to promote top-quality academic training in nutrition, biomedicine, epidemiology, clinical work and health services.

599. Scientific research and updating of technological know-how require the permanent modernization of the physical infrastructure of research work, for sophisticated knowledge and its many different applications can be developed only if laboratories, equipment, instruments and inputs are available to keep pace with major international advances. In this connection, support was provided in 1995 for the construction and equipment of 152 facilities to promote Mexico's scientific and technological progress, and conservation and maintenance services were provided for 426 sites suitable for such activities.

Main measures connected with scientific and technological infrastructure

600. Improvements were made in the agricultural sector through the provision of equipment for laboratories, greenhouses, meteorological stations and mobile irrigation systems, and through the research conducted at the experimental plots in Coahuila, Durango, Morelos, Nuevo León, Oaxaca, San Luis Potosí, Veracruz and Zacatecas. This facilitated more detailed research on oleaginous and dryclimate plants, livestock, fruit trees, basic crops, parasitology, etc.

601. Improvements were made in the communications and transport sector with the provision of equipment for standards and calibration laboratories, terminal and testing equipment, and radiation and acoustic propagation, and of infrastructure for the network and teleinformatics switching laboratory to facilitate analysis of local area network (LAN) and wide area network (WAN) systems.

602. The equipment programme in the trade and industrial promotion sector facilitated the establishment of standardization and quality control services and the consolidation of primary standards and data processing transfer systems, and high-precision measurement systems, for which 143 laboratories were available.

603. In the environment, natural resources and fisherie ssector a laboratory was installed and official authorization was received for 56 tests in various modules of the hydraulics testing laboratory; and the first phase of the project to establish a national environmental research and training centre was completed, with the support of the Japanese International Cooperation Agency.

604. In the health sector plans were implemented for the biological monitoring of water, mobile drinking water plants, and cardiac monitoring and electrocardiographs systems. The equipment of the

National Institute of Cardiology and Public Health and the Mexican Institute of Psychiatry was also modernized.

605. In the education sector CONACYT approved, through the fund for the consolidation of scientific and technological infrastructure, 14 projects with a total cost of 157.9 million pesos. These funds were distributed in the following proportions: 64 per cent for exact sciences, 14 per cent for applied sciences, 7 per cent for natural sciences, 5 per cent for health sciences, 4 per cent for social sciences, 4 per cent for behavioural sciences, and 2 per cent for earth sciences. Attention must also be drawn to the construction of the UNAM campus at Juriquilla (Querétaro), which will help to establish groups of academic excellence and enhance multidisciplinary research. In addition, the Instruments Centre and the Institute of Engineering provided equipment for the Museo Universum and materials for the UNAM-SAT microsatellite.

606. The National Anthropology and History Institute (INAH) received a donation of geophysical prospecting equipment from the Government of Japan and provided maintenance for 164 archaeological sites and historical monuments. The National Polytechnic Institute allocated 45.6 million pesos for the construction of 243 units for postgraduate scientific and technological training. UNAM allocated 245,000 pesos to strengthen the infrastructure of the plant and mastozoological collections at the Iztapalapa unit, with contributions from Nacional Financiera, the National Credit Corporation, and the Commission and National Fund for the Study and Use of Biodiversity.

607. Important developments in the SEP-CONACYT system included the purchase of an X-ray diffractometer and an electron scanning microscope, the expansion of a polymer pilot plant, the completion of a plant to treat sewage and soapy water, the construction of an aquiculture laboratory, the purchase of chromatography, spectrometry and electronic microscopy equipment, the establishment of an electrochemical laboratory, and the purchase of scientific equipment and furnishings for mathematics and optical fibre laboratories.

608. In the energy sector a laboratory was established for testing equipment and materials for a real time simulator of advanced synchronous machines; development work was continued on an electronic interface; a radioisotope production laboratory was remodelled; the tank of the Triga reactor was repaired; the molecular genetics laboratory was remodelled; and a prototype of a machine for destroying wastes by thermic plasma was designed. Sophisticated technical equipment was also acquired for petroleum laboratories and workshops, and an institutional optical fibre network was established.

609. In the maritime sector laboratory equipment and instruments were procured, together with computer hardware, and the meteorological equipment installed on five oceanographic vessels was calibrated. This facilitated the research of the Gulf and Caribbean Oceanographic Research Institutes and of five oceanographic stations located in various coastal towns. A tide gauge was installed at Puerto Balleto (Nayarit), together with two fixed coastal meteorological stations at Tampico (Tamaulipas) and Chetumal (Quintana Roo), and a meteorological forecasting centre in Mexico City for collection of satellite data for forecasting the weather in coastal areas.

Legal, administrative and judicial system designed to respect and protect the freedom indispensable for scientific research

610. The information contained in the section of this report on the freedom of cultural creativity applies equally to scientific research.

[551. The right protecting the activities of artists or any other citizens is embodied in article 5 of the Constitution of the United Mexican States, which establishes the freedom of every person to engage in the profession, industry, trade or work of his choice, provided it is lawful. Nobody may be prevented from exercising this right except pursuant to a judicial decision that the rights of a third person have been infringed, or pursuant to a governmental decision, taken in accordance with the law, when the rights of society have been infringed.]

552. The Mexican legal system in this area consists of a series of laws and regulations guaranteeing the persons who make up the State, or are living in Mexico for some reason, enjoyment of the rights entitling them to engage in any kind of creative activity.

553. The Federal Code of Civil Procedure is a compendium of rules providing the necessary legal means for bringing an action against any person who impedes freedom of choice, including freedom of choice in creative activities. The Code establishes clearly that persons may intervene in judicial proceedings, and it specifies the obligations and responsibilities of the parties, the competent judicial authorities for dispute settlement, and the general rules under which the proceedings are to be conducted.]

Measures taken to guarantee the freedom of exchange of scientific, technical and cultural information, views and experience between scientists

611. The information contained in the section of this report on the freedom of cultural exchanges applies equally to scientific exchanges between researchers.

[554. Attention may be drawn here to the support provided for the "Young Creators" fund, which has provided a new forum for exchange of aesthetic and intellectual ideas at the "young creators' encounters" organized by FONCA three times a year in order to observe the progress of the projects for which grants have been awarded. These encounters provide support for the interdisciplinary work of the new generations of artists and intellectuals, with a view to the establishment of joint projects between creative workers in different disciplines. For example, at one encounter a group of writers, composers, choreographers, painters, sculptors and photographers, aged between 20 and 32, initiated a dialogue which has revealed the fecundity of multidisciplinary work and the enormous possibilities which it offers to contemporary art.]

555. In addition, with funds provided by various CNCA agencies, FONCA is encouraging grant-holders to work with public and private

institutions, with a view to giving due publicity to the fruit of these activities. The results have been obvious in all disciplines.]

Measures taken to support the establishment of academies of science, professional associations, unions of workers and other organizations and institutions engaged in scientific research

612. The information contained in the section of this report on the freedom to form cultural associations applies equally to science and technology.

[556. It must first be pointed out that article 9 of the Constitution of the United Mexican States offers the following guarantee to all the inhabitants of the Republic: "The right to assemble or to associate peaceably for any lawful purpose cannot be restricted...". This guarantee is given effect by the Federal Labour Act, which provides in its article 354 for "... the freedom of association of workers and employers" in the defence of their common interests; and article 356 to 385 set out the conditions for the operation of trade unions, associations and other organizations of workers.

557. Every association or organization dedicated to creative activities has its own rules of procedure and constitution, which govern its operations; this is the case, for example, of the National Association of Actors (ANDA) and the National Association of Performers (ANDI).]

Legislative and other measures for encouragement of international contacts and cooperation in the scientific field; regional and international conventions, agreements and other instruments to which Mexico is a party

613. Technical and scientific cooperation helps Mexico to close the technology gap with its main foreign trading partners and to integrate itself in the global economy with greater opportunities of development. In these matters Mexico remains a major recipient as well as expanding its contribution as a donor. This dual role allows Mexico to request assistance from more developed countries and international organizations for projects to be implemented by Mexico, to offer assistance to relatively less developed countries, and to carry out horizontal programmes with countries of a similar level of development. Mexico received a little over 85 million dollars in 1995 to fund 370 technical cooperation projects. In the period covered by this report 611 cooperation agreements were concluded, 434 of them bilateral and 177 multilateral.

614. A number of international cooperation agreements remained in force in the agriculture and livestock sector, including the one with Midamerica International Agriculture Consortium for the holding of courses and workshops, award of qualifications, teacher exchanges and information transfers. There were also 27 international agreements in operation, including 13 signed with research centres, eight with governmental bodies, four with colleges and universities, and two with agricultural enterprises. The agreements signed with the International Potato Research and Development Centre, the Agro-forestry Research Centre, and the French Scientific Research Institute also deserve mention.

615. In the communications and transport sector collaboration on transport matters was continued with Cray Research of Mexico, the Massachusetts Institute of Technology, and the Texas Transport Institute, amongst others; work was done in conjunction with the NASA Jet Propulsion Laboratory, Brazil's National Space Research Institute, and Spain's National Aerospace Technology Institute, mainly on aspects of communications.

616. The trade and industrial promotion sector was involved in regional agreements on metrology and acted as chairman of meetings held in connection with the agreements for cooperation on metrology in the Americas and in the inter-American metrology system, with the support of the Organization of American States (OAS).

617. Important measures in education were the agreements concluded by CONACYT on joint projects, exchange of information, holding of academic meetings, and support for the training of top-level professionals. The main bodies with which agreements were negotiated were the Organization for Economic Cooperation and Development, the Asia-Pacific Cooperation Mechanism, OAS, the Ibero-American programme on science and technology for development, and the Instituto Interamericano de Cambio Global. Most of the cooperation in this area was with the Governments of Germany, Canada, Cuba, France, Japan, Spain and the United States.

618. The National Polytechnic Institute joined the Latin American academic training programme in order to encourage cooperation with institutes of higher education in Latin America and Europe.

619. Important agreements concluded by the Independent University of Mexico (UNAM) included those with the University of Oriente, Cuba, and the University of Ghent, Belgium, and with the Governments of the United States, the United Kingdom, France and Japan for programmes on the environment, production processes, and health.

620. In conjunction with the National Science Foundation, NASA, and the Department of Energy of the United States, UNAM produced a study on new forms of scientific and technological cooperation between the United States and Latin America, which found that the conditions exist for cooperation in earth sciences, engineering, biology, physics, new materials, and astronomy.

621. In the health sector, agreements were concluded with Belgium, the United States and France on the following activities: studies on the effects of lipoprotein on myocardial infarction, work with the gynaecology and obstetrics laboratory at Yale University on the aetiopathological aspects of the premature rupture of membranes, and a study to be carried out in conjunction with the University of Liège, Belgium, on the mechanisms of pulmonary damage caused by ozone and parathion.

622. Under the Mexico-United Kingdom technical training programme for the environment, natural resources and fisherie ssector, three agreements on environmental projects were implemented, and a North American workshop was held on monitoring for the ecological assessment of terrestrial and aquatic ecosystems, with a view to exchange of information on environmental monitoring technology.

623. In the maritime sector, agreements were concluded with the University of Texas for the collection of hydrographic data in the Gulf of Mexico and Caribbean Sea, and with the National Oceanic and Atmospheric Administration on the Pacific tsunami warning system.

624. The governmental sector maintained close collaboration with the Japanese International Cooperation Agency and signed an interinstitutional agreement with the United States Geological Survey and the National Disaster Prevention Centre on earth sciences and cartography; and cooperation activities were carried out with the Government of Guatemala on disaster prevention in the area of the Tacaná volcano and on hydrometeorological phenomena along the border between the two countries.