

ORGANIZATION OF AMERICAN STATES

Inter-American Council for Integral Development (CIDI)



FIRST MEETING OF MINISTERS AND HIGH AUTHORITIES OF SCIENCE AND TECHNOLOGY

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PLAN OF ACTION OF LIMA

(Adopted at the fourth plenary session, held on November 12, 2004)

INTRODUCTION

The principles spelled out in the Declaration of Lima and the shared view of the countries of the Hemisphere are expressed in specific lines of action to pursue the development objectives agreed upon in the region and set forth in the Declaration of Cartagena, the Declaration of Nuevo León, and the agreements reached during the Fourth Regular Meeting of the Inter-American Committee on Science and Technology (COMCYT). Science, technology, engineering and innovation are major driving forces that will help the countries to foster economic and social development in the cooperative framework provided in the Charter of the Organization of American States and the mandates established for that purpose at the Summits of the Americas in Miami, in Santiago, in Quebec City, and Monterrey. The principles adopted in the Declaration will serve as the foundation for partnership with governments and all interested parties on activities of interest to the Hemisphere, a group on countries, and individual countries, with the ultimate end of promoting social inclusion and fighting poverty.

The purpose of the Plan of Action is to promote the overall objectives set forth in the Declaration of Lima, recognizing the need to create employment to face poverty and strengthen democratic governance that will promote participation and shared responsibility on the part of the state, civil society, and political society, so as to achieve real progress in the vital task of integrating the countries and fostering social and economic development to improve the living standards of our peoples.

PLAN OF ACTION

We, the ministers and high authorities of Science and Technology participating in the First Meeting of Ministers and High Authorities of Science and Technology within the Framework of CIDI, recognize and approve the following hemispheric strategies and policy proposals for science and technology, which were recommended by COMCYT at its fourth regular meeting, and confirm our commitment to the following Plan of Action, that shall focus on the following seven commitments:

I. ENCOURAGING INVESTMENT IN SCIENCE AND TECHNOLOGY FOR DEVELOPMENT

1. Investment

We recognize the priority and importance of science, technology, engineering, and innovation for the socioeconomic development of our countries. We support the commitment to a sustained allocation to those areas in the national budget, and to promote the sustained growth of investment in science, technology, engineering and innovation.

2. Intellectual Property

We encourage the development of policies and the creation or strengthening of regulatory systems allowing scientists and the entrepreneurial sector to protect their innovations and develop technology applications, with special attention to cutting-edge technologies, in order to improve living standards for our citizens and promote competitiveness.

3. Creation of Employment and Innovation

We encourage the use of technology as a national and hemispheric response to the challenges of social demands, since we believe that the high rates of unemployment in the Americas, together with the scarce opportunities available to its inhabitants to learn and be trained for decent employment, call for innovative practices in scientific and technical vocational education. We believe, therefore, that the public and private sectors should promote innovation, and participate intensively in providing good basic technical training, to create new businesses and jobs.

II. STRENGTHENING NATIONAL AND REGIONAL INFRASTRUCTURE

1. Strengthening the Scientific Community and Scientific Institutions at the National and Regional Levels

We will strengthen the scientific community and scientific institutions at the national and regional levels, fostering participation by universities, national academies of science, medicine, and engineering, and by science and technology associations, including youth science organizations, in pursuing this goal.

2. Promoting the Development of Information and Telecommunications Technology Infrastructure for Scientific Research and Education (Cyberinfrastructure, E-science)

To foster the improvement and expansion of national and regional infrastructure --human resources, networks, software, computer and archival resources, digital libraries and information management systems and services, scientific databases, digital geographic information, instruments, sensors, and laboratories of the Americas—to allow the region's countries to participate in advanced, global research projects and in the world economy.

To promote and support the development of telecommunications, advanced networks, and information infrastructure that includes digital information management systems in the

region, as well as the creation of national and regional policies and programs for digital government or e-government, so as to propel the countries of the region toward competitive, knowledge-based economies, facilitate access to science and technology resources, strengthen the areas of science, health, and education, and strengthen essential economic and social activities, maintaining and promoting cultural diversity.

3. Identifying Centers of Excellence for Training and Research in the Region

We will identify and develop national and regional centers of excellence to serve as reference to facilitate cooperation in research and researcher training in the whole region.

4. Promoting Development Clusters and Business Associations

We encourage business associations, at the national and multinational levels, to use different cooperative approaches, such as networks, development groups, and worker participation in innovation, to improve competitiveness and the quality of life of our peoples.

5. Developing National Institutional Infrastructure

We will devise policies to strengthen the development of adaptable, flexible institutions capable of: recognizing the ability of science, technology, engineering, and innovation to increase the competitiveness of the productive sectors; adapting their innovation models to respond to public and private sectors requirements; creating networks to generate and coordinate the knowledge these sectors require; and mainstreaming the gender perspective into their activities. Science, technology, engineering and innovation should be viewed not as expenditure, but as an investment.

6. Promoting the Industrial Development and the Transfer of Technology

We encourage the development of innovation centers and "startups" and mechanisms of technology transfer to promote industrial development in close association with research and development institutions, following best practices.

7. Promoting Shared Infrastructure and Laboratories

We encourage the establishment of shared laboratory infrastructure that promotes research and horizontal cooperation, linked with metrology, biotechnology, materials science, and nanotechnology, and other relevant areas to provide access for the region's less developed countries.

8. Promoting the Development of Geographic Information Systems and Services for All

We promote the sustainable production, availability, access and application of standardized digital data and geographic information to assist both policy formulation and decision making processes, to support research and scientific processes, and to disseminate science and knowledge to the general public.

III. STRENGTHENING NATIONAL, REGIONAL, AND HEMISPHERIC POLICIES

1. Formulating National Strategies and Policies in Each Member State

We will formulate, as appropriate, national policies and strategies in our respective states to develop science, technology, engineering, and innovation in accordance with our needs and in relation to our main endeavors, in consultation with the other major stakeholders, by the year 2007 as a goal of the member states of the OAS.

2. Encouraging Support for Countries with a Science and Technology Gap

We will focus our efforts on responding to the needs and expectations of our countries, promoting horizontal collaboration and cooperation in science and technology and encouraging partnerships, taking into account our diversity and the uneven levels of development in science and technology, with the ultimate aim of reducing existing gaps.

3. Encouraging Collaborative Research Projects That Promote South-South and North-South Interactions

We will develop regional initiatives related to programs and projects for bilateral and multilateral collaboration in specific areas that could be improved, expanded, adapted to other countries, and publicized.

4. Promoting Science and Technology to Promote and Expand Democracy

We support and promote the application of science and technology and related information services as one of the means for democracy-building, so that all citizens may participate actively in informed decision-making and oversee the implementation of those decisions, which will contribute to the development of appropriate mechanisms for the inclusion of marginalized and underprivileged groups.

IV. STRENGTHENING AND DISSEMINATING SCIENCE, TECHNOLOGY, ENGINEERING, INNOVATION, AND SCIENCE EDUCATION

1. Importance of Hemispheric Cooperation to Popularize Science and Technology

We foster the popularization of science and technology, and science education, which have a central role in the socioeconomic, cultural, and environmental development of our countries. To that end we promote the establishment of a hemispheric program that coordinates strong and effective action among countries and permits the expansion of efforts to improve the population's scientific and technical literacy.

2. Education and Human Resource Training to Increase Capabilities in Science, Technology, Engineering, and Innovation

We will work to achieve advanced training with scholarship programs at the postgraduate level on multidisciplinary programs and subjects closely related to the problems of our countries -given that human resource training is one of the essential components in strengthening science and technology capabilities- with special attention to those countries

that have the widest science and technology gap. In this endeavor, we encourage building upon existing programs, such as the OAS Scholarship Program.

We will favor the establishment of science education programs for all citizens, starting with early education, using innovative, collaborative approaches to promote creativity and critical thinking.

3. Gender Equity and Equality in Capacity Building

We promote gender equity and equality in all human resource training programs for science and technology development, giving the highest priority to improving the quality of science and technology education at all levels, with particular attention to eliminating the effect of gender bias and promoting creativity and a critical point of view at all levels, especially at the earliest stages.

V. STRENGTHENING PROGRAMS FOR SCIENCE AND TECHNOLOGY INDICATORS, DATABASES, PORTALS, PUBLICATIONS, AND SCIENCE JOURNALS

We will work to create a regional science and technology indicators program, taking into consideration the existing experiences in the Hemisphere, and recognizing the importance of assessing the social impact of national and regional science and technology development programs. We also promote the formulation of sectorial indicators in the various areas of science and engineering.

We will work to expand regional information networks, databases, portals, and the dissemination and cataloguing of web-based science journals and publications, which strengthen science, technology, and innovation, to make them available and affordable to all countries in the region.

VI. HEMISPHERIC INITIATIVES

We strengthen our commitment to support concrete hemispheric initiatives aimed at the development and implementation of topics of interest to all member states, including *inter alia* the following:

1. "Recommendations for Integrating a Gender Perspective in Science and Technology Policies and Programs in the Americas"

Develop the necessary actions to integrate the gender perspective in science and technology policies and programs of the member states, in order to achieve full participation of women and men. Women and men should be equal partners in the design, production and in sharing the benefits of the knowledge society.

2. "Engineering for the Americas"

Build local engineering capacity to create knowledge that ensures the solution of local needs and opens the chance to compete for global opportunities. Engineering excellence is a key ingredient in the application of science and technology to the solution of the world's economic and social problems to achieve economic growth.

3. "Inter-American Materials Collaboration through the Inter-American Materials Collaboration (CIAM) Programs"

Support collaboration for joint research in materials and nanotechnology, strengthening the coordinated multi-agency program CIAM and its efforts to expand networking between scientists in participating countries in the Americas.

4. "National Research and Education Networks (NRENs) in the Americas, and the Latin American Advanced Networks Cooperation (CLARA)"

Develop advanced networks and infrastructure to interconnect human capacities, specialized resources and shared laboratories, sensors and instruments, databases, and their research organizations to strengthen education, science and technology and health in the Americas in the 21st century, using existing mechanisms such as the CLARA Project.

5. "Global Change Research through the Inter-American Institute for Global Change Research (IAI)"

Support the strengthening of the Inter-American Institute for Global Change Research (IAI) recognizing the importance of developing the capacity for understanding the integrated impact of global change on regional and continental environments in the Americas, and to promote collaborative research and informed action at all levels.

6. "Inter-American Program of Indicators for Science, Technology and Innovation"

Support the creation of a Regional Program on Science and Technology Indicators, utilizing the current mechanisms of cooperation of the Ibero-American/Inter-American Network on Science and Technology Indicators (RICYT), recognize the importance of measuring the differentiated social impact of national and regional science and technology programs for development, and promote the formulation of sectorial indicators, taking into account the desegregation by sex.

7. "Popularization of Science"

Support programs and activities to strengthen the public understanding of science, at both the national and regional levels, recognizing the critical role that the popularization of science and technology plays in the socioeconomic, cultural and environmental development of the countries in the Americas.

8. "Geographic Spatial Information for Integral Development in the Americas"

Promote and consolidate the renovated role of geographic information systems for the integral development of the Hemisphere, and facilitate projects that stimulate geographic information services as a basis for planning and decision-making in our countries.

9. "Legal Metrology for the Caribbean"

Support the creation of a reliable metrological infrastructure for the Caribbean countries, composed of good standards, calibration services, testing laboratories, quality control systems and recognized certification, to overcome technical barriers to trade and facilitate their more efficient integration in the global market economy.

10. "Advanced Networking for the Caribbean Region"

Support the establishment of advanced networks in the Caribbean region with interconnections through Central America and the other countries of the Western Hemisphere, recognizing that networking and information infrastructure is a critical vehicle for propelling countries of the region into competitive knowledge-based economies. This will enhance projects such as the Latin American Cooperation of Advanced Networks (CLARA).

11. "Scientific Education with Support from the Inter-American Network of Academies of Science (IANAS)"

Support science education initiatives in the Americas, in particular the Inter-American Network of Academies of Sciences (IANAS) Inquiry-Based Science Education (IBSE), through which our peoples can understand the importance of scientific endeavor for their cultural and socioeconomic development. Science education is the most important way through which national societies of all countries learn about science, its values, concepts and objectives.

12. "Biotechnology for the Americas"

Stimulate the formulation of a biotechnology program for the Americas that allow the countries in the region to increase their commitment in research and development and establish collaborative efforts at the hemispheric level, develop human resources and infrastructure, and establish a legal framework within which biotechnological development may occur. Special attention will be given to the application of biotechnology in tropical agriculture in order to enhance the nutrition of staple foods.

13. "Digital Government in the Americas"

Support a collaborative regional initiative in digital government that would permit the active development and application of science and technology to the implementation of digital government, in order to provide the potential for reductions in public expenditures and improved services to citizens; facilitate inter-country and inter-agency data sharing for economic, social, scientific and technological development; and permit governments to benefit from and enhance each other's digital automation efforts.

14. "Databases, Portals, Publications and Scientific Journals"

Support the expansion and dissemination of regional information networks, databases, portals, catalogs of magazines and scientific publications - Internet based, that strengthen the management of scientific and technological activity and of innovation, such as the ScienTI Network (International Network of Information and Knowledge Sources for

Science, Technology and Innovation Management), Platform Lattes of Brazil, INFOCYT Network (Information Network on Science and Technology for Latin America and the Caribbean), SciELO (Scientific Library Online), and Latindex (Regional Information System for Online Scientific Periodicals of Latin America, the Caribbean, Spain and Portugal), in order to make them available in other countries of the region.

15. "Productive Competitiveness and Employment for the Americas"

Support the implementation of a Program of Productive Competitiveness and Employment for the region that considers a social and labor agenda.

VII. FOLLOW-UP TO THE MEETINGS OF MINISTERS AND HIGHEST AUTHORITIES IN SCIENCE AND TECHNOLOGY

- 1. The governments, through their ministers and high authorities in science and technology, will continue to meet periodically to enhance and devise new forms of cooperation and understanding among the countries of the Americas, strengthening the hemispheric framework of institutions and conveying those suggestions to the Summit of the Americas process.
- 2. To reiterate the commitment assume during the meeting of ministers responsible for science and technology, held in Cartagena de Indias, to hold ministerial meetings at least every three years and those of COMCYT every year.
- 3. The governments will have the primary responsibility for implementing the mandates set forth in the Declaration and Plan of Action of the Ministerial Meeting. The Inter-American Committee on Science and Technology will continue to act as liaison to all government organizations involved in the fulfillment of the Declaration and the Plan of Action, in keeping with the activities supported by the OAS Secretariat for the Summit Process.
- 4. The governments will invite the organizations of the Inter-American System, including the Inter-American Development Bank (IDB), and the World Bank, inter alia, as well as other cooperation agencies, to strengthen existing agreements to promote science and technology development in the Hemisphere through cooperation and mutual support, with the aim of complementing specialized technical knowledge and thus making more financial resources available for more ambitious projects. Support will be sought from private-sector and civil society organizations.