

**THE BAHIA 2006 DECLARATION OF THE LEADERS OF
THE GROUP OF 20 ON:

KNOWLEDGE AND INNOVATION FOR
DEVELOPMENT**

Draft Communiqué¹

¹ This draft communiqué has been prepared by Francisco Sagasti for the March 7-8, 2006 Maastricht L-20 meeting on science and technology for development. It assumes that the L-20 has been established and that it will hold its 2006 meeting in Salvador, Bahia (Brazil), and its 2007 and 2008 meetings in Nagoya (Japan) and Istanbul (Turkey), respectively. It is based on the declaration signed by the members of the United Nations Advisory Committee on Science and Technology for Development in 1989, on the 10th anniversary of the UN 1979 Vienna Conference on Science and Technology for Development, and on F. Sagasti's book *Knowledge and Innovation for Development: The Sisyphus Challenge of the 21st Century*, Cheltenham, Edward Elgar Publishers, 2004.

THE BAHIA 2006 DECLARATION OF THE LEADERS OF THE GROUP OF 20 ON KNOWLEDGE AND INNOVATION FOR DEVELOPMENT

FRANCISCO SAGASTI

1. We, the leaders of the G-20 countries, meeting in Salvador, Bahía in October 2006 at the invitation of the Government of Brazil, have agreed on the following declaration and proposals for action to build science, technology and innovation capacities in developing countries.

Considering:

- That advances in science and technology have created new possibilities for all humanity to prosper, and that science-based technologies are rapidly becoming the source of new products and services that have the potential of improving dramatically the human condition.
- That a “knowledge society” has emerged in the last half century, in which the main source of economic growth and progress in living standards is the capacity to generate and utilize scientific and technological knowledge through the process of innovation.
- That, paradoxically, progress in material well being for a growing fraction of the world’s population coexists with stagnation and even deterioration in standards of living for the majority of poor people. Deprivation of food, health, education and gainful employment besets a sizeable part of humanity, giving rise to new stresses on the environment, which, in turn, undermine the basis for future development.
- That the clash between rising aspirations and the realities of omnipresent poverty, largely triggered by growing awareness of the life styles of the affluent, has become a source of social tension, intolerance and violence in many countries and regions, and that these problems have the potential for spreading widely in an increasingly interconnected world.
- That, even though large inequalities along many economic and social indicators characterize the gap between the more and less prosperous countries, differences in science, technology and innovation capacities are much larger and configure a growing “knowledge divide” that seriously limits the capacity of developing countries to improve the living standards of their people (see Annex 1).
- That without a minimum level of domestic capacities in this field, it will not be possible for developing countries to take advantage of scientific and technological advances, nor to generate the knowledge required to address problems that are specific to them.
- That there is an urgent need to bridge the knowledge divide and prevent the isolation of a large proportion of people in developing countries from the mainstream of science and technology advances. Talent, creativity and the potential to contribute significantly to the world’s stock of knowledge are present in all societies, regardless of their income levels, and all human beings should be

given the possibility of fully developing their innate capacities and of realizing their own life projects.

- That it is essential and imperative to avoid the emergence of new forms of “knowledge apartheid” that would exclude large portion of humanity from sharing the fruits of technological progress, and would thus exacerbate the mistrust, suspicion and hopelessness that create the conditions for deadly violence.
- That science and technology capabilities of the diverse groups of developing countries are different, and that international programs to help building science, technology and innovation capabilities should be tailored to their particular situations.

2. We propose a set of global initiatives on “**Knowledge Opportunities for the World**” (KNOW) to mobilize science, technology and innovation in the service of development. We urge the international community of political leaders, scientists, policy-makers, scholars, professionals, managers, workers and citizens to actively participate in the following initiatives:

- Develop a broad new strategy to ensure equality of access for all people to modern scientific and technological knowledge essential to alleviating poverty, achieving minimum standards of health and nutrition, improving educational opportunities, and promoting economic growth. We believe that, without sacrificing the incentives for individual creativity and practical imagination, it is possible to adopt a common perspective on the role that scientific and technological progress should play to foster global equity, both within and between generations;
- Embark on a global concerted effort to build the human and institutional capacities developing countries need to make independent decisions on the critical science and technology issues that will confront them, and to build the capacities to generate and utilize knowledge that it relevant to their particular needs and circumstances. International cooperation must play a mayor role in this essential task, particularly because of the huge disparities in scientific and technological capabilities between the more and less prosperous countries;
- Forge new international partnerships to achieve environmentally sustainable human development. The times when humanity could act on the physical and biological environment with impunity —blindly trusting in the regenerative powers of ecosystems— are forever gone. New approaches in which humanity and nature jointly enhance each other’s capacities are imperative. This will demand a reevaluation of the many ways in which different cultures to the natural world, using scientific and technological knowledge to build constructively on this diversity.

We further state that a climate of openness and participation at all levels is essential for these initiatives to succeed. Tolerance for cultural and religious diversity, respect for human rights, active encouragement of individual freedom and creativity, and sensitivity to the damaging effects of inequalities of knowledge and power are essential for linking science, technology and innovation to the advancement of humanity.

3. We commit ourselves and our governments to support the **Knowledge Opportunities for the World (KNOW)** initiatives, and to this effect we agree to undertake the following actions:

- Convene an L-20 “KNOW Task Force” of government representatives to identify the immediate actions that our governments should undertake to begin putting in practice the set KNOW initiatives. This Task Force should pay particular attention to drawing the lessons of experience in supporting the creation of science, technology and innovation capacities in developing countries; identifying promising areas for collaboration between countries with different levels of capacity in this field; and to outlining the types of programs that are likely to succeed in mobilizing science and technology for development and could attract international financing. This Task Force should report to the next L-20 meeting to be held in Nagoya at the invitation of the Government of Japan in the Fall of 2007.
- Establish a Working Group of senior government and international experts to explore the need for and feasibility of establishing a “Global Knowledge and Development Financing Facility” to mobilize resources from a variety of public and private sources to support capacity building in science, technology and innovation in developing countries (see Annex 2). This Working Group should pay particular attention to the efforts under way to establish an “International Financing Facility” proposed by the Government of the United Kingdom and its associated initiatives, and in addition to government representatives, it should actively involve participants from private corporations, foundations, capital markets and civil society organizations. The Working Group will present a progress report at the Fall 2007 Nagoya meeting of the L-20 and its conclusions at the Fall 2008 L-20 meeting that will take place in Istanbul at the invitation of the Government of Turkey.
- Instruct our representatives at the United Nations to formally propose convening a World Summit on Knowledge and Development, which should take place no later than 2009, to coincide with the 30th anniversary of the United Nations Conference on Science and Technology for development held in Vienna in August 1979. This conference should agree on and formally launch a program of action to make the KNOW initiatives a reality, so as to reduce the knowledge gap that prevents the international community of nations from achieving the Millennium Development Goals. We further agree that the L-20 KNOW Task Force and the Working Group on the “Global Knowledge and Development Financing Facility” will make the results of their deliberations available to the Secretariat of the World Summit on Knowledge and Development at the earliest possible time.

4. We reaffirm our belief in international cooperation as the most effective way to transcend the conditions that deny the power and benefits of science, technology and innovation to those most in need. International cooperation and assistance must evolve beyond charity, or narrowly conceived national interest, into expressions of collective responsibility for the well being of all the humanity in present and future generations.

ANNEX 1

Economic Disparities and the Knowledge Divide (2002)

<i>Indicator</i>	<i>Values and ratios</i>				
	(A) OECD countries	(B) Low income countries	Ratio (A)/(B)	(C) Low income countries (excluding India)	Ratio (A)/(C)
Gross domestic product <i>per capita</i> (constant 2000 US\$)	27,601.10	407.40	67.70	346.80	79.60
Gross capital formation <i>per capita</i> (constant 2000 US\$)	5,747.20	88.90	64.60	71.90	79.90
Trade <i>per capita</i> (imports + exports of goods and services) (constant 2000 US\$)	12,011.30	181.50	66.20	208.50	57.60
Scientific output: Scientific publications per 100,000 inhabitants (2001)	58.80	0.60	99.30	0.20	294.00
Technological Output: Patent applications by residents per 100,000 inhabitants *	94.00	0.07	1,342.80	0.13	723.00
Production Output: High-technology exports <i>per capita</i> (2001)*	936.00	0.90	1,040.00	0.10	9,360.00

Source: World Bank, *World development indicators 2005*, CD-ROM

Notes: High income OECD countries (2004 gross national income above US\$ 10,066): Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Korea Rep., Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States. Low income countries (2004 gross national income below US\$ 825): Afghanistan, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Eritrea, Ethiopia, Gambia, Ghana, Guinea, Guinea-Bissau, Haiti, India, Kenya, Korea (Democratic Republic), Kyrgyz Republic, Lao PDR, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Moldova, Mongolia, Mozambique, Myanmar, Nepal, Nicaragua, Niger, Nigeria, Pakistan, Papua New Guinea, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, Sudan, Tajikistan, Tanzania, Timor-Leste, Togo, Uganda, Uzbekistan, Vietnam, Yemen Republic, Zambia and Zimbabwe. Also, please note that Angola, Armenia, Azerbaijan, Indonesia, Turkmenistan and Ukraine were classified as low-income countries in 1999, but were not included in this category in 2002. As Ukraine accounted for a high number of patents and Indonesia a high proportion of high technology exports, while the large population of India leads the value of these ratios differs for 2004 significantly from those calculated for 1999 in Francisco Sagasti, *Knowledge and Innovation for Development: The Sisyphus Challenge of the 21st Century*, Cheltenham, UK, Edward Elgar Publishers, 2004 (Table No. 4.1).

ANNEX 2

Towards a Global Knowledge for Development Financing Facility

The proposed “Global Knowledge for Development Financing Facility” could become one the first of a new generation of international financial institutions to promote international cooperation and development. The previous generation of such institutions—comprising the United Nations and its agencies, the multilateral development banks, the International Monetary Fund and the European Community, among others—emerged in the years following World War II. They should now be complemented by institutions attuned to the demands of the 21st century, and particularly with the need to bridge the knowledge divide between rich and poor nations. Based on what we have learned about financing international science and technology cooperation initiatives The Box below suggests some criteria for designing such a Global Knowledge for Development Financing Facility.

The financial aspects of the facility should take into consideration that there is a new landscape for international development financing. Government sources of development assistance have stagnated during the last decade and have began to edge up only recently for some countries such as the United Kingdom, France and, to a much lesser extent, the United States. It is unlikely that official sources will play anytime soon the leading role in transfers to developing countries—as they did in the mid-1980s—except for the least developed countries. Moreover, the growing list of demands for official development assistance—humanitarian relief, debt reduction, support of economies in transition, halving world poverty by 2015—may make it a rather uphill task to persuade bilateral agencies to support something like the Global Knowledge for Development Financing Facility outlined here.²

Nevertheless, there are many encouraging signs that the international community may be ready to explore alternative arrangements to finance development programs. For example, even though the UK government proposal to create a large “International Financing Facility” to mobilize about US\$50 billion in additional development assistance did not get support from other donor countries, a scaled-down version has been launched to focus on immunization for children in developing countries.³ Similarly, even though many developed countries, and particularly United States, have been opposed to the creation of international taxes to finance development programs, in December 2005 the

² On this matter see: Francisco Sagasti: “Official Development Assistance: Background, context, issues and prospects”, paper prepared for the L-20 seminar on development assistance, Petra, Jordan, November 2005.

³ The International Financing Facility for Immunization (IFFIm) was launched in September 2005 by the governments of the United Kingdom, France, Spain, Italy and Sweden, as well as the Global Alliance for Vaccines and Immunization (GAVI). It aims to provide an additional US\$4 billion over the next ten years to support the work of the Vaccine Fund (largely supported by the Gates Foundation) and of GAVI to improve access to underused vaccines and speed the development and introduction of new vaccines in developing countries. It will issue bonds in international capital markets that will be repaid from bilateral ODA allocations of the participating countries. The resources obtained from bond issues will allow front-loading the expenditures associated with the vaccine programs. See: www.vaccinealliance.org and www.iffim.com.

BOX : Design Criteria for a Global Knowledge and Development Facility

The creation of a Global Knowledge and Development Facility, which should be viewed as a set of interrelated financial and institutional mechanisms, should be guided by several design criteria that would ensure its relevance and impact. Among these criteria it is possible to identify:

Quantitative increase. The proposed facility should lead to a major increase in the amount of resources allocated to bridge the knowledge divide and to create endogenous science and technology capabilities in developing countries.

Diversity and differentiation. The proposed facility should be able to tailor its interventions to the characteristics of the developing countries, the economic and social sectors, and the type of science and technology activities involved.

Coordination and spread of best practice. The proposed facility should coordinate the large number of dispersed initiatives currently under way. This implies promoting exchanges of views and experiences, organizing networks of researchers and practitioners, and disseminating best practices regarding science, technology and innovation policies, policy instruments, programs and organizations. To this end, the facility should sponsor regular seminars and training courses, briefings for policy makers, and publications in printed and electronic media.

Flexibility and continuity. The proposed facility should balance the need for continuous evaluation and renewal on the one hand, with the need to maintain support for long periods on the other. One option is to organize the facility's activities on the basis of temporary programs of variable duration, subject to sunset clauses. The idea is to avoid the pitfall of creating permanent organizations that eventually outlive their usefulness, and that as time passes begin answer to the concerns of their staff rather than those of its clients and beneficiaries.

Effective governance. The multiplicity of stakeholders involved in mobilizing knowledge for development requires innovative approaches to governance in the proposed facility. Procedures to ensure, transparency, accountability, participation and representation need to be carefully examined, so as to ensure the legitimacy of the facility and to ensure the necessary level of support from all stakeholders.

Existing and new elements. There are many initiatives under way which could eventually become closely associated with the proposed facility. It is important to allow room for accommodating the specific features of current initiatives, so as to incorporate them to the proposed facility. The facility should also specify clearly the characteristics of the new programs to be launched under its auspices.

Learning from similar initiatives. There are some precedents that provide useful points of reference for the proposed facility. The Global Environment Facility, launched by the World Bank, the United Nations Development Program and the United Nations Environment program more than a decade ago; and the Global Alliance for Vaccines and Immunization, which puts together private foundations, government agencies and international institutions, offer valuable lessons for the design of the proposed facility.

French parliament approved a tax on air travel for this purpose. In addition, public-private partnerships to address specific problems in developing countries (for example, water supply) have multiplied in recent years. Taking this into consideration, the time appears to be ripe to begin a systematic exploration of options that may lead to the creation of a Global Knowledge and Development Facility.⁴

The highly successful 50 year-old model of the multilateral development banks, which have mobilized a large amount of resources from private capital markets for development purposes, provides an indication of what could be done to establish new financial mechanisms to support science and technology in developing countries. The broad range of highly sophisticated financial instruments now available to individual and institutional investors—swaps, guarantees, derivatives, mutual funds, synthetic indexes, among many others—, suggests that it should be possible to devise a set of instruments with the appropriate levels of risk and return for the proposed facility to tap into the vast amounts of private capital searching for investment opportunities. The idea would be to leverage grants from bilateral assistance agencies, foundations, developing country governments, private corporations, wealthy individuals and international institutions by using a portion of these resources to provide an appropriate and attractive level of comfort to private investors. This would allow a relatively modest initial amount of resources to increase significantly by accessing international capital markets.

The proposed facility should be able to take in contributions from different types of partners, some of which are likely to be in kind rather than in cash. Contributions should also be commensurate with the relative financial strengths of the partners. In addition, those responsible for the management of the proposed facility should be free from interference by political or commercial interests and be given autonomy to operate without excessive and cumbersome controls, but with clearly defined lines of accountability to all stakeholder participating in the scheme. Moreover, there is also the possibility to link the proposed Global Knowledge for Development Financing Facility to the growing international interest in the provision of global public goods. Knowledge is clearly a public good, at least in principle. It is non-rivalrous (the use by one person or firm does not diminish the amount available to another) and it is also non-excludable (once it has been generated it is available to all).⁵

⁴ On strategic options to mobilize development finance in general see: Francisco Sagasti, Keith Bezanson and Fernando Prada, *The Future of Development Financing: Challenges and Strategic Choices*, New York, Palgrave-Macmillan, 2005.

⁵ The Task Force on Global Public Goods established by the governments of Sweden and France, which will complete its report by the end of 2006, is including knowledge as one of the case studies regarding the provision of global public goods.