

# Global Knowledge and Development Project

## Project Report

March 5, 2003



Centre for Global Studies  
University of Victoria



agenda: PERU

# **Global Knowledge and Development Project**

## **Project Report**

### **Contents**

<b>Term of Project:</b> .....	<b>1</b>
<b>Project Objective – Enhancing International Science And Technology Cooperation</b> .....	<b>1</b>
<b>Project Scope</b> .....	<b>2</b>
Measure .....	2
Evaluate .....	2
Envision.....	3
<b>Project Results</b> .....	<b>3</b>
The Inventory of International Science and Technology Cooperation.....	3
Casting a wide net .....	3
Programs.....	4
Donor Agencies .....	4
Format .....	4
Definitions .....	5
Budgets .....	5
Outreach .....	5
Coverage.....	5
The GKD Concept Paper: The Sisyphus Challenge: Knowledge, Innovation and the Human Condition in the 21 <sup>st</sup> Century .....	6
Global Knowledge and Development Facility .....	6
<b>Conclusion – Future Directions for Research and Action</b> .....	<b>7</b>
<b>References</b> .....	<b>8</b>
<b>Annex I: Typology of S&amp;T Cooperation</b> .....	<b>10</b>
<b>Annex II: Inventory Results</b> .....	<b>15</b>
<b>Annex III: Program Listing: International S&amp;T Cooperation Programs</b> .....	<b>17</b>

## Global Knowledge and Development Project (GKD)

### Term of Project:

January 1 – December 31, 2003

### Project Objective – Enhancing International Science And Technology Cooperation

This project arose out of a widely recognized need for improved strategies and mechanisms to strengthen the endogenous scientific and technological (S&T) capacity of poor and developing countries. In spite of abundant evidence correlating economic development with the existence of effective national systems of research and innovation, the majority of least-developed countries remain marked by their continuing lack of the basic skills and infrastructure necessary for participation in the emerging knowledge-based economy. The problem continues despite considerable investments by multi and bi-lateral donors over several decades in S&T-focused initiatives.

Recently, concerns over the growing “knowledge divide” between industrialized and developing countries have contributed to renewed attention on the role of international S&T cooperation in development. In part, this is evident in the emergence of new frameworks for documenting and understanding the failure of past donor-driven S&T assistance to adequately respond to national capacity building priorities.<sup>1</sup> In addition, is the increasing interest by the mainstream science community in development issues, particularly in the context of the movement to mobilize science and technology for sustainable development.<sup>2</sup> Underlying these themes is the unprecedented expansion of alternative modes of North-South and South-South scientific collaboration and interactivity occurring as a general consequence of globalization, and signaling new optimism in the potential for more effective diffusion and utilization of knowledge through cooperation. Together, these elements are contributing to a revitalization of international S&T policy in a trend which, given adequate resources and the right kinds of political support, can become a powerful force for development.

In this project, the Centre for Global Studies (CFGs) at the University of Victoria, in collaboration with Foro Nacional/Internacional in Peru, has sought to contribute to the advancement of S&T cooperation through the production of two unique resources. The first of these is the *Inventory of International Science and Technology Cooperation Programs*, an on-line listing of 270 programs engaged in the delivery of science and technology-focused assistance to developing countries. The purpose of the Inventory is two-fold: first, to provide detailed baseline data on the existing landscape of S&T cooperation programs with the aim of assisting policy

---

<sup>1</sup> See Sagasti (2002); Velho (2001); Cetto and Vessuri (2000).

<sup>2</sup> As expressed, for example, at the 1999 UNESCO/ ICSU (International Science Council) World Conference on Science, during which the international science community pledged, in a “new contract with society”, to give greater priority in its research agendas to issues of poverty reduction, social equity, and other pressing environmental and developmental challenges. See also the Harvard-based Science for Sustainability Initiative [[www.sustsci.harvard.edu/network.htm](http://www.sustsci.harvard.edu/network.htm)], and the 2002 report to the World Summit for Sustainable Development by international science organizations calling for greater involvement in policy debates concerning applications of science and technology for sustainable economic growth (ICSU, February 2002).

makers – and the donor community in particular – with designing more effective and coordinated S&T investments; and second, to serve as a centralized information resource for researchers and practitioners in developing countries. Since there have been only limited attempts to date to compile such a resource<sup>3</sup>, the Inventory represents the first effort of its kind to profile the disbursement of S&T assistance in terms of where, in what amounts, and by what mechanisms this form of cooperation is currently being implemented.

Secondly, the project has produced a major work of investigation into the character and progress of scientific and technological cooperation in a compendium report by Francisco Sagasti at Foro Nacional/Internacional entitled *The Sysiphus Challenge: Knowledge, Innovation and the Human Condition in the 21<sup>st</sup> Century*. This study, which introduces a variety of practical aids and tools for the analysis of S&T cooperation initiatives within a detailed historical overview of the field, adds significant original insight to the knowledge/development nexus in a format that will provide continuing value for policy-makers and practitioners in a number of different contexts.

As a related activity, the project organized a meeting of international science and technology policy experts in Lima, Peru in October 2002 to discuss the two project elements as well as themes related to the idea of a new Global Knowledge and Development Facility. The proceedings from the Lima meeting are included with this report.

## **Project Scope**

### **Measure**

A primary aim of the project was to produce a comprehensive tally of the major international S&T cooperation programs, from which it would be possible to identify gaps, measure and compare different modes of intervention, and point to new opportunities. The major focus of the research would be on programs funded through bilateral and multi-lateral agencies, NGO's and private foundations. Given the less direct role of the private sector in cooperation, and the perceived difficulty in recognizing it from among the broader operations of corporations in developing countries, this dimension of cooperation was given only secondary focus. The research was primarily interested in documenting North-South S&T cooperation, as this comprises the dominant form of cooperation activity, and it was expected that the main audiences for analysis generated from the inventory would be northern-based donors and policy-makers interested in a refocusing their S&T policies, and southern-based practitioners seeking information on potential funding and partnership opportunities. As such, the Inventory would document current initiatives only. Of particular value would be the collection of budget data enabling a determination of total global expenditures in the sector, information that has remained elusive in most related research to date. The final product would be comprised of a print publication and possible CD-ROM version of the Inventory and accompanying analysis.

### **Evaluate**

In a second and more complex dimension of the project, the researchers hoped to conduct evaluation of the programs through application of the 'integrative conceptual framework' developed in the Foro Concept Paper (pp. 7-13). In particular, the study would attempt to situate programs within the Typology of S&T Cooperation [Appendix I], a tool for assessing the quality of capacity building resulting from different forms of cooperation. The Typology classifies S&T cooperation initiatives within the three spheres of "scientific research," "technical cooperation"

---

<sup>3</sup> The major example being the 2002 report of the Swiss Commission for Research Partnerships with Developing Countries' (KFPE) "Overview of Donors' Main Activities Related to Research for Development," which documents the activities of 21 mostly bi-lateral S&T focused programs.

and “productive activities,” and situates them along a multi-dimensional grid in which the least advanced forms are identified as those providing narrowly-focused assistance in a single sphere of cooperation, while the most effective examples support a dynamic two-way integration of northern and traditional knowledge and technologies within locally-driven productive activities. This latter configuration is facilitative of “endogenous S&T capacity”, a term that reflects the growing consensus that the maximum benefits of S&T cooperation are obtained when policies are mutually supportive of firms, educational institutions, researchers and technology transfer mechanisms in the application of locally developed innovations.

### **Envision**

At the end of this exercise, the project would be able to highlight successful models of cooperation, make recommendations on the kinds of supports needed to strengthen cooperation within specific regions or sectors, and generally provide new direction for improving the design and coordination of future S&T cooperation initiatives.

### **Project Results**

In the course of implementation, the project has realized all of its objectives, but with some re-ordering of the parameters along the way. The scope of the Inventory, for example, has narrowed to become more of a descriptive rather than an evaluative tool, while the evaluative and prescriptive aspects of the project have evolved much more as a product of the Foro Concept Paper than was first envisioned. At the same time, through its adoption of a dynamic web-based interface, the Inventory has acquired added value as a versatile information resource for the S&T and development communities. The project has also given new momentum and definition to options for the creation of a Global Knowledge and Development facility or initiative, an idea that emerged as a key theme of the meeting in Lima

### **The Inventory of International Science and Technology Cooperation**

#### *Casting a wide net*

The Inventory of International S&T Cooperation Programs provides a comprehensive empirical overview of the field in terms of describing the stated activities and intentions of the major donor –initiated programs. Although it was not possible within the timeframe of the project to conduct the close study of programs required for evaluative assessment, the process has produced a strong foundation from which a more qualitative investigation could proceed. In part, the time shortage stemmed from the large investment of labour required to obtain a minimum degree of accurate program data within the identified priority areas. Researchers encountered multiple obstacles in collecting data on S&T programs in developing countries, mostly related to the limited capacity of most of these agencies for maintaining and communicating up-to-date information on their activities. In particular, efforts to conduct outreach to agency contact persons were limited by language barriers, time zone differences, poor connectivity, the non-availability of key informants during the summer vacation period when most of the research took place, and the fact that some agencies are unwilling to provide certain types of information. In the end, the team succeeded in achieving close to 100% coverage of the data fields for 130 + agencies and over 270 programs (with the exception of budget data), but this was only through a much greater expenditure of time than was originally planned for.

A secondary issue in this regard relates to the challenges involved in establishing clear criteria for the classification and interpretation of data. The crux of the problem lies in the fact that within most donor and multi-lateral programs, S&T cooperation is a cross-cutting theme that occurs across a continuum of sectors (agriculture, health, energy, enterprise development, education, etc.). In order to identify the most relevant examples, it was necessary to review, sort, and extract

from among thousands of development activities with a potential stake in S&T outcomes, those programs for which S&T is the *primary* rather than an indirect focus of services provided.

As such, faced with the choice approximately halfway through the project of proceeding to an evaluative stage with a small sample of programs, or seeking to maximize the quantity of cooperation activities represented in the Inventory, the latter was deemed to be most feasible, and most consistent with the objective of producing a comprehensive landscape of the field. It was also decided that casting the widest net possible in terms of the number of programs represented would be facilitative of more effective evaluative studies down the road.

### *Programs*

There are approximately 270 programs listed in the Inventory [see Annex III for a complete listing], which receive funding through a total of 133 sponsoring bi-lateral, multi-lateral, national, non-governmental, and private foundations. A small sampling of private enterprise initiatives is also included. Programs are classified within the following sectors:

- |                          |                                   |                                |
|--------------------------|-----------------------------------|--------------------------------|
| • Agriculture            | • General Science                 | • Intellectual Property Rights |
| • Biological Science     | • Health Sciences                 | • Mariculture                  |
| • Climate Change         | • Housing and Building Technology | • Sustainable Development      |
| • Conservation           | • Hydrology and Water Resources   | • Transportation               |
| • Educational Management | • Industry/Production Technology  |                                |
| • Forestry               | • ICT                             |                                |

For each program entry, the inventory provides the following information:

- |                       |  |                            |
|-----------------------|--|----------------------------|
| • Program Description | • Budget Details                                     | • Contact Information      |
| • Sector              | • Duration of Funding                                | • Donor Agency Information |
| • Eligibility         | • Level of development of targeted country or region |                            |

### *Donor Agencies*

Program data in the Inventory is also cross-referenced by donor, allowing for general analysis of the funding sources of S&T cooperation. Donors are cross-listed in two ways: by their organization structure (defined as IGO, NGO, National Development Agency, or Private Enterprise); and by their organization function, which relates to the type of assistance provided. This list comprises the following:

- |                     |                           |                        |                       |
|---------------------|---------------------------|------------------------|-----------------------|
| • Academic Training | • Funding                 | • Research             | • Technology Transfer |
| • Direct Aid        | • Networking/Coordination | • Technical Assistance |                       |

### *Format*

The Inventory was created as a database in Microsoft Access, and converted to web format using ASP language on an IIS 5.0 platform. Although the project had initially intended to produce print and CD-ROM versions of the research, it became increasingly apparent that a web-based format

would enable a more accessible and cost-effective presentation of the information, with the added benefits of supporting search functionality, and the ability to perform unlimited updates to the data on a continuing basis. The database is currently housed with a web hosting company in Victoria, BC, and can be located directly at <http://139.142.245.96/index.asp> or through the CFGS Website at <http://www.globalcentres.org/html/project1.html>. The site design includes two components: a client site with multiple search functionality and a web-form enabling users to submit new programs or updates; and a password protected Administrator site, which allows the administrator to screen and edit any additions received from the client end.

### *Definitions*

The Inventory Website includes a glossary of the key terminology within the site. With regard to project's broader themes and concepts – for example ‘cooperation,’ ‘capacity building,’ and the meaning and application of terms like “knowledge,” “science” and “technology,” these are fully operationalized in various models and schemas elaborated in the Foro Concept Paper.

### *Budgets*

In this iteration of the research, it was not possible to extrapolate total spending for global S&T cooperation. This is due to the lack of standardization in accounting practices of donor agencies, only some of which calculate S&T expenditures as an exclusive budget category, and which apply different criteria to the measurement of activities such as technology transfer, training, and technical assistance, etc. At the program level, it was not possible to obtain any budget data at all in roughly a third of the sample. Given these limitations, Chart #5 offers a basic breakdown in the budget size of the programs surveyed.

### *Outreach*

An unintended outcome of the inventory research is the high quality of rapport obtained with developing country S&T programs and organizations. In the earlier part of the study, correspondence was established with 17 organizations that have expressed ongoing interest in and support for the project. During the final months of the project, a Web-form was added to the site, enabling the addition or revision of content by users. When the revised site was sent out in January 2003 to the full sample of organizations listed, researchers received back numerous replies and submissions of new information. This indicates the value of the resource for practitioners, and the potential for its further expansion as an interactive and participatory tool for the sharing of information.

### *Coverage*

In terms of its coverage of the field of as a whole, The Inventory is neither a complete nor a representative sample of international S&T cooperation. There are entire areas of cooperation - for example South-South cooperation, and private sector cooperation - as well as particular categories of activity related to Information and Communications Technology (ICT), intellectual property, and biotechnology development, etc. that are under-represented due to the time constraints involved. What the site does provide however, is a highly informative “snapshot” of the major international initiatives, within an adaptable template that is designed to enable further data collection, classification, and interpretation subject to the specific needs of researchers and users.

Examples of the type of findings that can potentially be drawn from Inventory results are indicated in some sample charts displayed in Annex II.

## **The GKD Concept Paper: The Sisyphus Challenge: Knowledge, Innovation and the Human Condition in the 21<sup>st</sup> Century**

The GKD concept paper, prepared by Francisco Sagasti and his staff at Foro, was conceived as a short issues document that would provide guidance and content expertise for the Inventory research. In effect, it has evolved into a much more substantial framework for linking S&T capacity with the social and economic development of countries, and strengthening the case for renewed national and international strategies of S&T cooperation. The paper is extremely comprehensive in scope, combining a robust historical account of conditions contributing to the current global inequalities in knowledge capability, with close analysis of the entire repertoire of S&T policy instruments and initiatives applied by donor agencies over the past 60 years of postwar development assistance. Of particular value for the project is the S&T Capacity Index (pp.73-81), a highly nuanced set of indicators for measuring a country's capacity for generating and utilizing knowledge.<sup>4</sup> The Index is cross-referenced with the UNDP's Human Development Index (and other similar indexes developed by Rand and UNESCO) and applied to a ranking of 85 different countries.

The overlay of the policy instrument analysis with outcomes revealed through the S&T Capacity Index (Table 9, p.105) informs some valuable conclusions and recommendations for the international development community. Of special relevance is the observation of how particular types of cooperation instruments can undermine the capacity base of developing countries, for example through the promotion of imported technologies; through a focus on research activities that are isolated from local issues and problems, and especially from local productive systems; or through incentives that result in the outward emigration of qualified scientists (brain drain). These types of outcomes are especially associated with the cooperation programs of the large bi-lateral and multi-lateral donors. At the other end of the spectrum are examples (fewer in number) evident in the work of specialized agencies like the International Development Centre (IDRC) and RAWOO (Netherlands Development Assistance Council), as well as several private foundations, which have been more successful in facilitating linkages among local research, production, and innovation systems, within a more participatory style of partnership arrangement between donor and recipient countries. Other important principles in the design of successful S&T development strategies include the importance of long-term investment in and commitment to a country or region (usually lacking in conventional development approaches), and the coordination of S&T assistance with national authorities in the context of a strong, nationally owned and managed policy of endogenous S&T capacity building.

### *Global Knowledge and Development Facility*

In the final sections of the paper, the focus turns toward envisioning the steps needed for significantly enhancing the quality, reach, and outcome of future S&T cooperation. The section draws in large part on discussions that occurred during the project advisory meeting in Lima on the idea of a Global Knowledge and Development Facility. The GKD Facility is an idea that has been circulating for some time within the international S&T community. In the context of this project, it is advanced more as a metaphor for imagining the kinds of alternative financial mechanisms and institutional arrangements

---

<sup>4</sup> The Index defines S&T capacity in terms of 7 main indicators: number of scientists and engineers in a country; expenditures on R&D (as a percentage of GDP); hi tech exports as % of total exports; publications; number of patent applications; and the country's ICT Index.



needed to advance the diffusion of endogenous S&T capacity. As such, the basic elements of an effective global S&T strategy for the 21<sup>st</sup> century would include:

- mobilization of a significant magnitude of new private and public financing to the sector;
- launching of a major global communications and education initiative at the highest levels of political decision-making to highlight the importance of science and technology capacity building for development;
- establishment of global mechanisms for the coordination and harmonization of S&T cooperation initiatives;
- promotion of best practice principles<sup>5</sup> in support of flexible, problem-focused research and development; diversity and continuity of assistance; and appropriate collaboration of Western and traditional knowledge in support of local systems of innovation;
- replacement of outmoded international governance of S&T cooperation with institutional innovations that reflect the best elements of the new knowledge paradigm.

## **Conclusion – Future Directions for Research and Action**

The Global Knowledge and Development project has contributed to the advancement of international S&T cooperation in some tangible ways. The Inventory of S&T Cooperation Programs is a unique information resource with potential to evolve in a variety of possible directions for the benefit of the S&T development community. The Foro Concept Paper contributes advanced scholarly and technical analysis to the literature on S&T cooperation, as well as compelling empirical evidence in favour of an enhanced role for science and technology cooperation in international development policy. On the basis of these results, priorities for future research and action can be summarized as follows:

- 1) The Inventory will benefit from continuing maintenance and follow-up to stay current. It may also be beneficial in future to conduct a survey of users to determine how the resource could be improved to better serve their needs. CFGS will provide maintenance in the short term, while continuing to explore possibilities for housing and expanding the site at an appropriate location within the S&T development community.
- 2) The Inventory appears to confirm one of the chief criticisms frequently made the against S&T cooperation system - that its benefits are dispersed far too inefficiently among small, disconnected pockets of activity. Among other things, this poses challenges for obtaining financial and other statistical data needed for improving performance of the system. The Inventory could be instrumental in illustrating the problem, and in promoting efforts to improve coordination and standardization within this sector of development.
- 3) The Concept Paper goes a long way toward proving the importance of S&T capacity in efforts to improve the lives of the poor, but much more work is needed to educate and convince policy-makers of the importance of these connections. In particular, further empirical studies of S&T cooperation in all of its dimensions are required to identify more precisely the conditions and circumstances under which such collaboration can contribute to sustainable development.

---

<sup>5</sup> See Concept Paper, Box 4, p. 108, “International Support For Science And Technology In Developing Countries: A Summary Of Best Practices.”

#### Box 1:

##### **Facility to Support Best Practice in the Application of Traditional and Indigenous Knowledge**

A proposed direction for a Phase II initiative of the Global Knowledge and Development Project lies in exploring the creation of a new global facility to support the best use and application of traditional and indigenous knowledge. This would involve activities to enhance protection of traditional knowledge, and the application of intellectual property regimes for the benefit of indigenous populations. Such a facility could be constituted as an autonomous public-private collaboration, through affiliation with World Bank, or decentralized to the regional development banks.

The functions of the facility could include:

- Providing greater resources (primarily financial) to developing countries for their development of national patent plans.
- Creating traditional knowledge digital libraries (e.g. India's Honey Bee Database) to allow for the documentation of indigenous knowledge in developing nations. This information can be used to create national or patents or sui generis systems, and later as evidence if need be for the purposes of revoking foreign patenting of indigenous knowledge through the courts.
- Creating a Community Biodiversity Registration Program, similar to a digital library in end result, but including a training component that empowers individual communities to be proactive in acquiring registration skills and techniques.
- Create a consolidated database of good and bad practices of multinationals, universities, individuals and organizations in their dealings with developing countries, patenting issues and bio-piracy.
- Create a contractual framework for nations or communities wishing to engage multi-nationals or other organization for the purposes of researching and developing national resources.
- Provide swat teams including scientists, technologists, IP lawyers, financial and venture capital experts, to assist developing countries on request with promoting their own indigenous resources.

4) Project findings as a whole confirm the critical lack of international vision and leadership necessary for responding quickly to the rising problem of the global knowledge divide. There is a sense that the pace of technological innovation has not been matched by parallel innovations in the structure and governance of international development regimes. The most promising direction for development cooperation at this time is one that gives priority to high-level initiatives (such as the example described in Box 1, above) for promoting sustainable development through knowledge innovations at the global, regional, national and community levels. As such, a continuing task for the GKD Project will be to advocate for the advancement of international S&T capacity building objectives along these lines.

## References

Amsden, Alice H, Ted Tschang and Akira Goto. *Do Foreign Companies Conduct R&D in Developing Countries? A New Approach to Analyzing the Level of R&D, with an Analysis of Singapore*. Tokyo: ADB Institute Working Paper #14, March 2001.

Belfer Center for Science and International Affairs, Harvard University. *Global Governance of Technology: Meeting the Needs of Developing Countries: Synthesis Report*. Cambridge, MA, June 2001.

Cetto, Ana Maria, and Hebe Vessuri. "Latin America", in the UNESCO Science Report 2002.

Cusmano, Lucia. *Technology Policy and Co-operative R&D: the Role of Relational Research Capacity*. Copenhagen: Danish Research Unit for Industrial Dynamics, April 2000.

Evaluation Office of the Inter-American Development Bank. *Science and Technology Program Evaluation Synthesis Report*. Washington, D.C.: IADB, January 1998.

International Council for Science (ICSU), World Federation of Engineering Organizations (WFEO). *Report of the Scientific and Technological Community to the World Summit on Sustainable Development: Dialogue Paper to the Second Preparatory committee for the WSSD, 28 January - February, 2002*.

Juma, Calestous, Victor Konde. "Technical Change and Sustainable Development: Developing Country Perspectives." Paper presented to the American Association for the Advancement of Science (AAAS), February 14-19, 2002, Boston, USA.

Mayer, Jörg. "Technology Diffusion, Human Capital and Economic Growth in Developing Countries." Geneva: UNCTAD Discussion Paper No. 154, June 2001.

Rath, Amitav, Sherry Lealess, "The Forum on South-South Co-operation in Science and Technology (FOSAT), and Overview Document." Background paper prepared for the UNDP Forum on South-South Co-operation in Science and Technology (FOSAT), Seoul, February 2000.

Sagasti, Francisco, Juana Kuramoto, "Integrating Local And Global Knowledge, Technology And Production Systems: Challenges for Technical Cooperation", in Sakiko Fukuda-Parr, Carlos Lopes and Khalid Malik (eds), *Capacity for Development: New solutions to Old Problems*. London, New York: Earthscan Publications/UNDP, 2002.

*Science, Technology and Globalization: Challenges and Opportunities for International Cooperation*. Proceedings from the International Conference on Globalization of Research and Development, 11-13 September, 2001, Grado, Italy.

Velho, Léa. *North-South Collaboration and Systems of Innovation*. United Nations University/INTECH, October 2001.

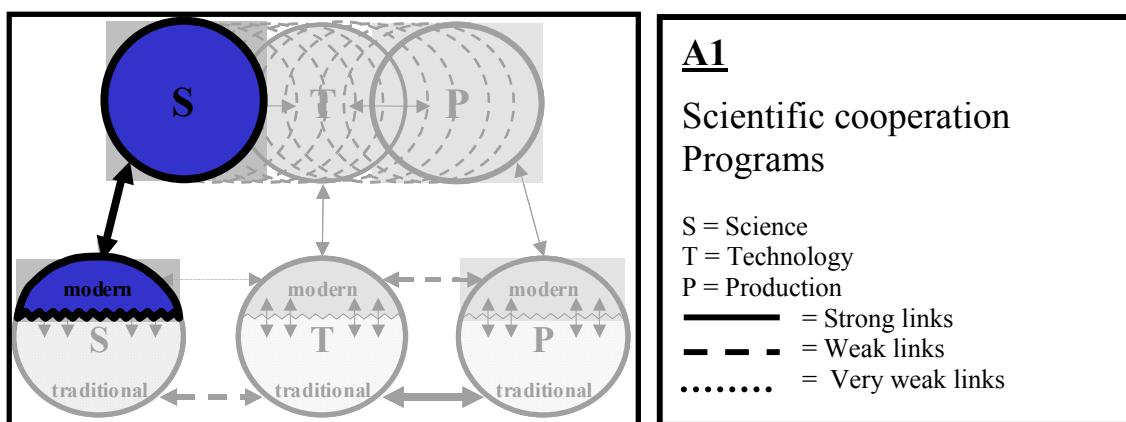
UN Conference on Trade and Development (UNCTAD) Secretariat. *Systems and National Experiences for Protecting Traditional Knowledge, Innovations and Practices*. Geneva: UNCTAD Trade and Development Board, Commission on Trade in Goods and Services, and Commodities, August 2000.

Swiss Commission for Research Partnerships (KFPE). "Overview of Donors' Main Activities Related to Research for Development", in *Enhancing Research Capacity in Developing and Transition Countries*. Berne: Swiss Commission for Research Partnerships, 2001.

UN Economic and Social Council (ECOSOC). Commission on Science and Technology for Development: Report on the Fourth Session, May 17-21, 1999.

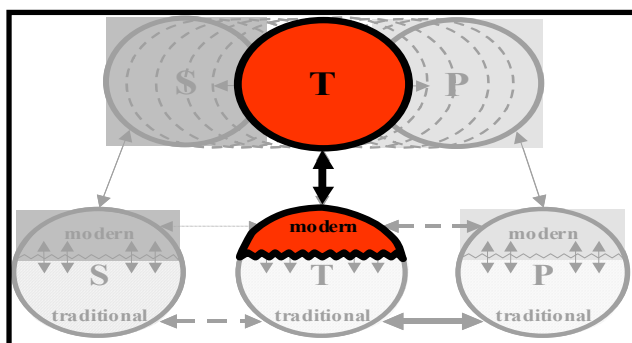
Velho, Léa, and Maria Cynthia Rose Banzon Bautista. *Comparative Study of the Impacts of Donor-Initiated Programmes on Research Capacity in the South: Report to the Directorate-General for Development Cooperation (DGIS)*. The Hague: Division for Research and Communication, Ministry of Foreign Affairs, the Netherlands, September 2001.

## Annex I: Typology of S&T Cooperation



**Type:** Highly focused programs

**Examples:** Programs organized by the Third World Academy of Sciences, the US Academy of Sciences and many joint programs between universities and research institutes in developed countries with their counterparts in developing countries. A variation would be the support provided by some foundations in the North, which although they do not conduct scientific research as such, provide financial and other type of support (travel to meetings, fellowships, access to information, equipment, books and journals, etc) to their counterpart in developing countries, such as the International Foundation for Science (located in Sweden).

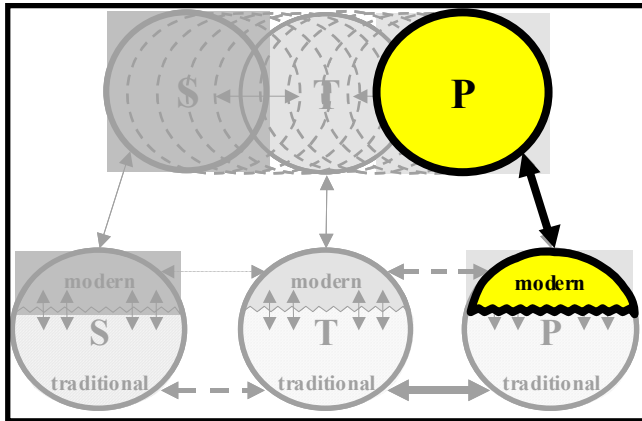


**Type:** Highly focused programs

**Examples:** These programs usually involve academic institutions in the physical, biological, health and social sciences located in the North, working with their counterparts in developing countries. The objective is not to produce research, but rather to transfer what is already known, and to help build the capacity of engineering schools, agricultural research and extension services, and technical assistance institutions in the developing region. This is done usually through fellowships, short courses, special training programs, and financial support for laboratories that test and adapt technologies.

One special kind would be the VITA (Volunteers in International Technical Assistance) in Washington DC, which identifies and sends retired professionals and managers from the north to assignments with groups in the South. In some cases, these programs overlap and are indistinguishable from those in category A4.

Another example would be the programs sponsored by professional engineering associations such as the IEEE to help engineering schools in developing countries. Sometimes the support takes the form of awarding prizes to outstanding developing country professionals in the field of technology.



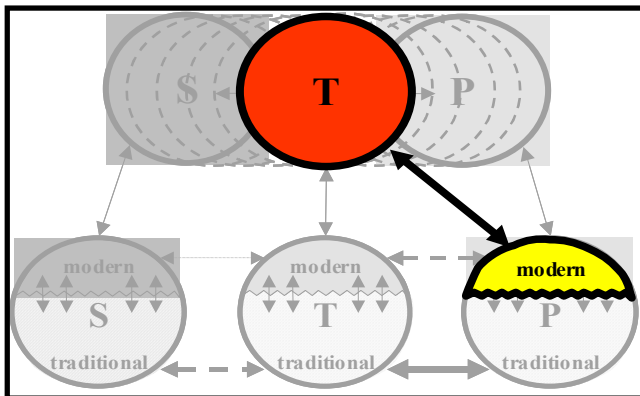
### A3

## Production Cooperation Programs

**Type:** Highly focused programs

**Examples:**

Perhaps most of the programs under classical “technical assistance” (sending expatriate experts to work in local productive activities), fall under this category, as do many international consulting activities. They usually build productive capacities, but do not build technology or science capabilities. Most bilateral technical assistance, which is tied to local suppliers (e.g. CIDA money for Canadian firms to do feasibility studies, design plants, etc.) falls under this category.



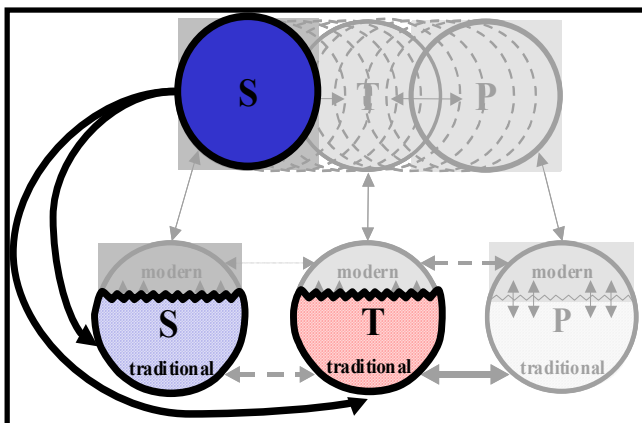
### A4

## Technical cooperation programs for productive activities

**Type:** Highly focused programs

**Examples:**

Perhaps most of the programs under classical “technical assistance” (sending expatriate experts to work in local productive activities), fall under this category, as do many international consulting activities. They usually build productive capacities, but do not build technology or science capabilities. Most bilateral technical assistance, which is tied to local suppliers (e.g. CIDA money for Canadian firms to do feasibility studies, design plants, etc.) falls under this category.



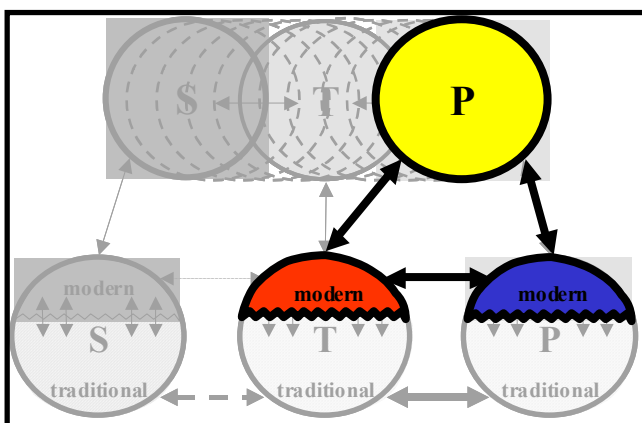
## B1

Scientific cooperation programs to recover traditional science and technology

**Type:** Medium focused programs

### Examples:

Programs under the B category involve at least two of the three (S, T, P) in developing countries. In this case, as the number of programs to assist indigenous people and local communities to identify and recover their traditional knowledge and technology has grown considerably, it is possible to place quite a few of these initiatives in this category. A colleague of mine and I did a recent paper on this subject for UNDP, and since then I have identified another report produced by UNCTAD on this subject.



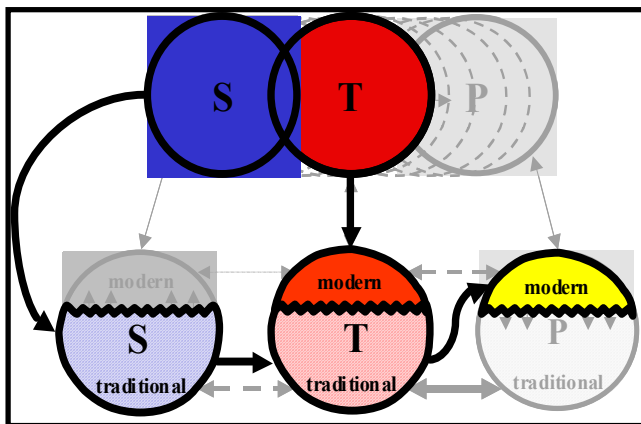
## B2

Cooperation programs to create technology and production clusters

**Type:** Medium focused programs

### Examples:

This category (to which I referred briefly above) comprises those programs aimed at creating clusters of activities in developing countries, usually under the leadership of a relatively large foreign firm. The literature on clusters in the mining industry, for example, has grown tremendously in the last decade, and a number of programs have already been evaluated.



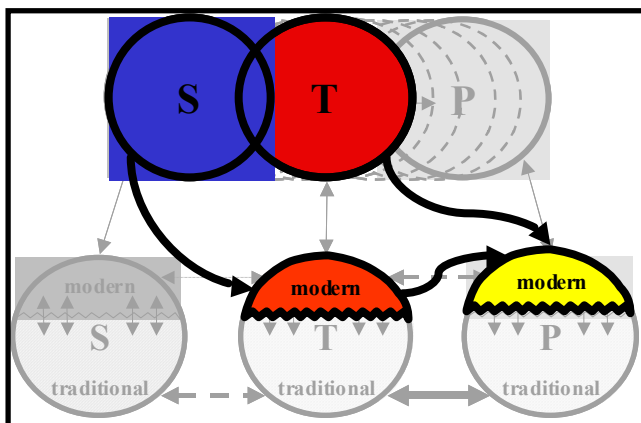
## C1

Cooperation programs to incorporate traditional science and technology into the productive sector

**Type:** Comprehensive programs

### **Examples:**

These programs go beyond the cataloguing and identification of traditional technologies and knowledge, and deliberately seek to improve marketing, product design and characteristics to make products elaborated with traditional technologies more attractive and competitive in world markets. A number of natural resource programs financed, for example, by IDRC fall into this category. As most of the productive activities in developing countries use traditional technologies and knowledge, the importance of this category should not be underestimated.



## C2

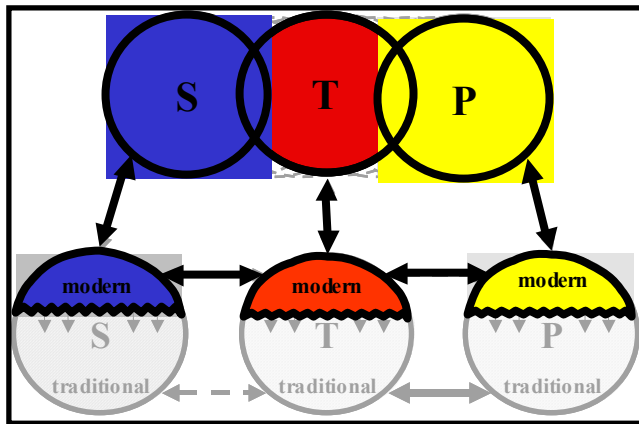
Science and technological cooperation programs to improve production

**Type:** Comprehensive programs

### **Examples:**

These programs integrate scientific research and technological development in the North with technological and productive development in the South. The idea is that, for example, a consortium of universities in developed countries work together with technical assistance agencies, universities and firms and other productive and service organizations in the South.

Two examples that come to mind are agricultural research, where a consortium of universities in the US mid-West supported for a time several universities and the government agencies engaged in technical extension services to farmers in Latin America. The other example is from the field of health, where the US Center for Disease Control in Atlanta provides research and technical assistance services to universities, hospitals and health agencies in developing countries. Another example would be the production of vaccines for diseases in developing countries, where the technical capacity to produce the vaccines is transferred to the recipient countries (witness the recent debates on HIV/AIDS vaccines and the stance of the Brazilian and Indian governments). Occasionally, these programs could involve private firms in the North (pharmaceutical companies).



### C3

Comprehensive programs to establish endogenous science and technology capacities

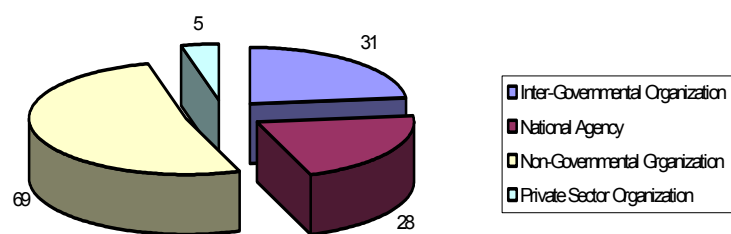
**Type:** Comprehensive programs

**Examples:**

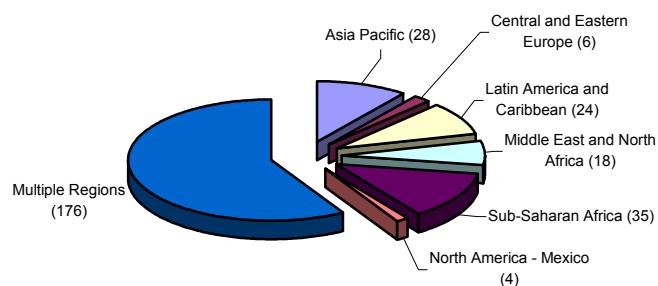
These examples are quite rare as yet. The idea is that external support involves all aspects of the S, T and P spectrum both in the north and south. Perhaps some of the IDRC programs come closest to this, as come the programs related to research of international health consortia. For example, IAVI (the International Alliance on Vaccines and Immunization) would come close to this model, even though it does not seek directly o build scientific research capabilities in developing countries.



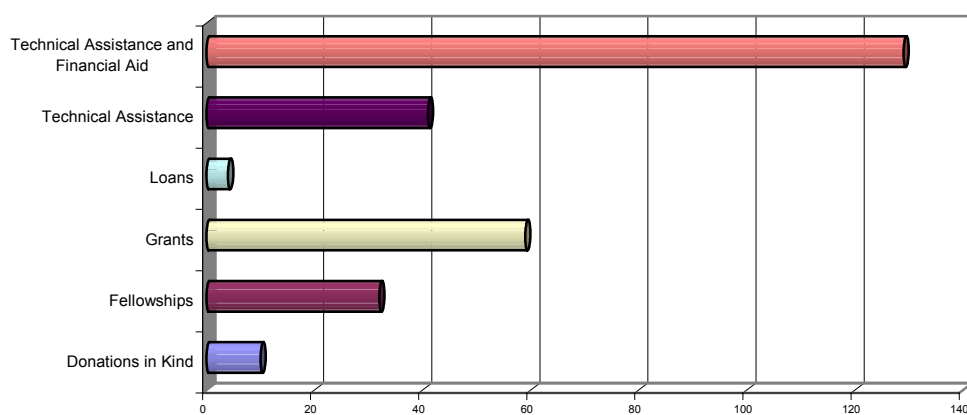
## Annex II: Inventory Results



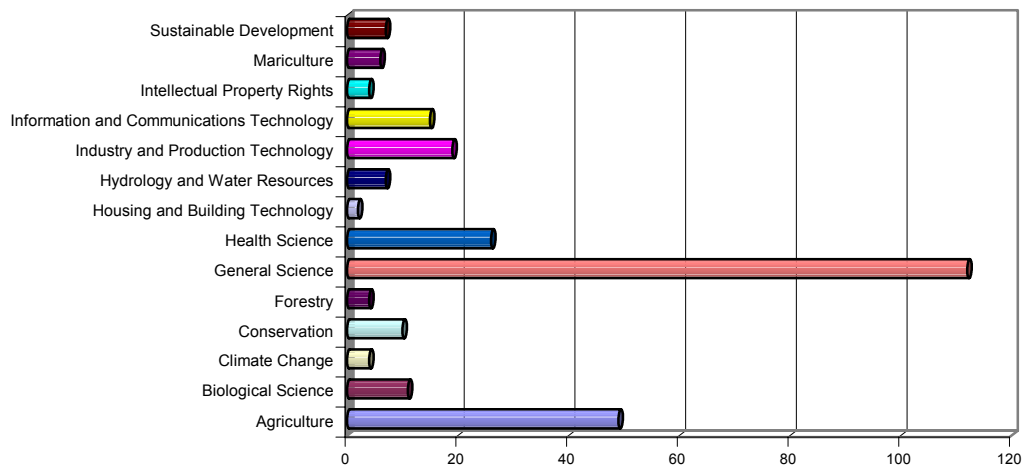
**Chart #1 Donor Agencies by Organization Structure– Total 133**



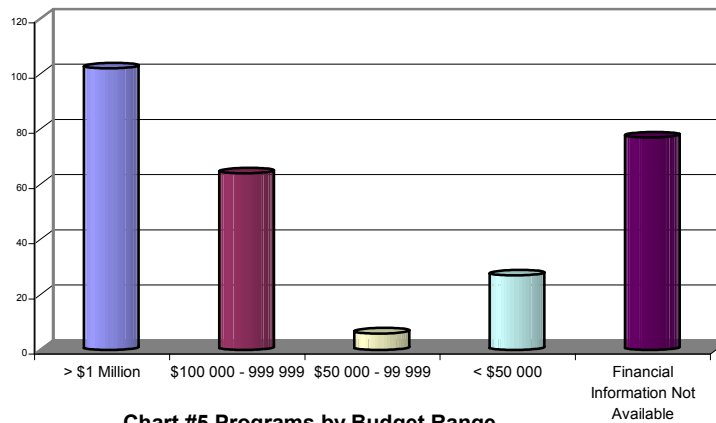
**Chart #2 Distribution of Programs by Region - Total 276**



**Chart #3 Programs by Funding Mechanism**



**Chart #4 Programs by Sector**



**Chart #5 Programs by Budget Range**

## Annex III: Program Listing – International S&T Cooperation Programs

Program Name	Region	Donor Agency
Capacity Strengthening Programme Grants	Developing Countries & LDCs	Special Programme for Research and Training in Tropical Diseases
International Hydrological Programme (IHP)	IHP Member States	United Nations Educational, Scientific and Cultural Organization
Scholarships abroad		Coordenação de aperfeiçoamento de pessoal de nível superior
UNISPAR Africa Programme	Africa	United Nations Educational, Scientific and Cultural Organization
Abdou-Salam Ouédraogo Fellowship	Africa	International Plant Genetic Resources Institute
Acacia	Sub-Saharan Africa	International Development Research Centre
AFCLIST Nodes	Africa	African Forum for Children's Literacy in Science and Technology
Africa Program		American Association for the Advancement of Science
Agricultural Information and Documentation Service for Development Cooperation	Developing Countries	Swiss Agency for Development and Cooperation
Agroenterprises Project	Central America, South America	International Centre for Tropical Agriculture/Centro Internacional de Agricultura Tropical
Agro-Industries	Developing Countries	United Nations Industrial Development Organization
Agropolis	Developing Countries	International Development Research Centre
Alliance for Health Policy and Systems Research (AHPSR)	Worldwide	World Health Organization
Animal Health Programme (AHP)	Developing Countries	Department for International Development
Apoyo a Proyectos de Investigacion	Country Specific	Consejo Nacional de Ciencia y Tecnología
Appropriate Hydrological Network Improvement Project (AHNIP) (Cambodia, Laos, Thailand and Vietnam)	Country Specific	Australian Agency for International Development
Aquaculture and Fish Genetics Research Programme (AFGRP)	Developing Countries	Department for International Development
Arab Fund Fellowships Program	North Africa and Middle East	Arab Fund for Economic and Social Development
Assessments of Impacts and Adaptations to Climate Change in Multiple Regions and Sectors (AIACC)	Developing Countries	United Nations Environment Programme
Barley Germplasm Improvement for Increased Productivity and Yield Stability	West Asia, North Africa, Central Asia, Latin Ameri	International Center for Agricultural Research in the Dry Areas
BASIN Knowledgebase	Developing Countries	Building Advisory Service and Information Network

<b>Program Name</b>	<b>Region</b>	<b>Donor Agency</b>
Beca-Credito Nacional y al Extranjero Beginning of Career for Young Scientists	Country Specific	Consejo Nacional de Ciencia y Tecnología Fundacion Andes
Biodiversidad de Aysén, Manejo Sustentable de las Áreas Silvestres Protegidas de la Región de Aysén	Country Specific	European Commission
Biofortified Crops for Improved Human Nutrition		Consultative Group on International Agricultural Research
Biological Diversity and Genetic Resources (BDGR)	Worldwide	Commonwealth Science Council
Bougainville Cocoa & Copra Drier Rehabilitation Project (Papua New Guinea)	Country Specific	Australian Agency for International Development
Bridging Research and Development in Soil Fertility Management	Africa	Overseas Development Group
Building Capacity and Fostering Networks	Country Specific	Ashoka Trust for Research in Ecology and the Environment
Building Capacity to Respond to Cross-Sector Demands	Developing Countries	International Service for National Agricultural Research
Call For Proposals 2002	Asia	Asia-Pacific Network for Global Change Research
Canada Southeast Asia Regional HIV/AIDS Program (CSEARHAP)	Asia	Canadian International Development Agency
Capability strengthening grant for malaria research in Africa (MIM/TDR grant)	Africa	Task Force on Malaria Research Capability Strengthening in Africa
Capacity Building		CAB International (formerly Commonwealth Agricultural Bureaux)
Capacity Building	Sub-Saharan Africa	African Medical and Research Foundation
Capacity Building for Agriculture and Rural Development (CARD) -Vietnam	Country Specific	Australian Agency for International Development
Capacity Building for Delivering Science and Technology	Developing Countries	Committee on Science and Technology in Developing Countries
Capacity Building Programme	Worldwide	UNEP World Conservation Monitoring Centre
Capacity Building Services to Local and International NGOs	Asia	World Education
Capacity Development: Long-duration training courses for post-graduate academics and professionals	Worldwide	United Nations University
Capacity Development: Master's, Ph.D. and Post-doctoral programmes	Worldwide	United Nations University
Capacity Development: Short-duration training courses and workshops	Worldwide	United Nations University
Capacity Development: Support for Networking among Scholars from Developing Countries	Worldwide	United Nations University

<b>Program Name</b>	<b>Region</b>	<b>Donor Agency</b>
Chemical Research and Environmental Needs (CREN)	Commonwealth Countries	Commonwealth Science Council
Children's Participation in Integrated Production and Pest Management (IPPM)	Asia	World Education
Climate Variability and its Impacts in the Mexican, Central American and Caribbean Regions	Latin America and Caribbean	Inter-American Institute for Global Change Research
Collaborative Research Initiative Grants	Eastern Europe	The Wellcome Trust
Collaborative Research Programme (CRP)	Developing Countries	International Centre for Genetic Engineering and Biotechnology
Collaborative Research Support Programs (CRSPs) - Bean/Cowpea	Developing Countries	United States Agency for International Development
Collaborative Research Support Programs (CRSPs) - Global Livestock	Developing Countries	United States Agency for International Development
Collaborative Research Support Programs (CRSPs) - Integrated Pest Management	Developing Countries	United States Agency for International Development
Collaborative Research Support Programs (CRSPs) - International Sorghum and Millet	Developing Countries	United States Agency for International Development
Collaborative Research Support Programs (CRSPs) - Peanut	Developing Countries	United States Agency for International Development
Collaborative Research Support Programs (CRSPs) - Pond Dynamics	Developing Countries	United States Agency for International Development
Collaborative Research Support Programs (CRSPs) - Soil Management	Developing Countries	United States Agency for International Development
Collaborative Research Support Programs (CRSPs) - Sustainable Agriculture & Natural Resource Management (SANREM)	Developing Countries	United States Agency for International Development
Collaborative Research Support Programs (CRSPs) -Broadening Access and Strengthening Input Market Systems (BASIS)	Developing Countries	United States Agency for International Development
Collection, Documentation and Validation of Indigenous Technical Knowledge	Country Specific	Indian Council of Agricultural Research
Community Based Mangrove Management (Cambodia) Phase 2	Country Specific	International Development Research Centre
Community Based Natural Resource Management Initiative-Resource Management Policy Ratanakiri (Cambodia) - Phase III	Developing Countries	International Development Research Centre
Community Projects	Latin America and Caribbean	Corporacion Andina de Fomento
Competitive Grants Scheme		Association for Strengthening Agricultural Research in Eastern and Central Africa
Co-operation with Scientists in Middle and Eastern European Countries and Countries of the Former Soviet Union		Deutsche Forschungsgemeinschaft
Crop Post-Harvest Programme (CPHP)	Developing Countries	Department for International Development
Crop Protection Programme (CPP)	Developing Countries	Department for International Development

<b>Program Name</b>	<b>Region</b>	<b>Donor Agency</b>
CSIR/TWAS Fellowship for Postdoctoral Research	Developing Countries & LDCs	Third World Academy of Sciences
CSIR/TWAS Fellowship for Postgraduate Studies	Developing Countries & LDCs	Third World Academy of Sciences
DAAD In-Country and (African) Third-Country Scholarships	Africa	International Centre of Insect Physiology and Ecology
Dam Safety Management and Risk Assessment	Asia	Canadian International Development Agency
Danish Environmental Assistance to Eastern Europe (Dancee)		Danish Environmental Protection Agency
Development Consultancy Services for Technology and Sustainable Livelihoods	Developing Countries	Intermediate Technology Development Group
Development Grant Facility (DGF)		World Bank
Development of a Collaborative Research Network for the Study of Regional Climate Variability and Changes	Country Specific	Inter-American Institute for Global Change Research
Dispatch of Technical Cooperation Experts	Developing Countries	Japan International Cooperation Agency
Ecohealth Initiative Soils, Food and Healthy Communities: Monitoring Change in Northern Malawi	Africa	Programme for Appropriate Technology in Health Canada
Education Research Programme	Worldwide	Department for International Development
Education System Development Program Support project in Mauritania		The African Development Bank
Education: Building the Framework for a Better Future	Country Specific	Ashoka Trust for Research in Ecology and the Environment
Educational programmes, MPhil & PhD	Africa	Nile Basin Research Programme
Egypt-Finland Agricultural Research Project - Phase III	Country Specific	MTT Agrifood Research Finland
El Fondo de Fomento al Desarrollo Científico y Tecnológico (FONDEF)	Country Specific	Comision Nacional de Investigacion Cientifica y Technologica
ENERGIA International Network on Gender and Sustainable Energy	Worldwide	ETC International
Engineering Knowledge and Research Programme	Developing Countries	Department for International Development
Enhancement and Improvement of Educational management		Fundacion Andes
Entra 21	Latin America and Caribbean	International Youth Foundation
Entrepreneurial Partnerships to Support Agricultural Research	Developing Countries	International Service for National Agricultural Research
Equipment donations ETC Crystal	Developing Countries Worldwide	Alexander von Humboldt Foundation ETC International

<b>Program Name</b>	<b>Region</b>	<b>Donor Agency</b>
Extrabudgetary Programme on the Safety of Nuclear Installations in South East Asia, Pacific and Far East Countries	Asia	International Atomic Energy Agency
Farmer Field Schools in Nepal	Asia	World Education
Field Research Grants		Tinker Foundation Incorporated
Fisheries Management Science Programme (FMSP)	Developing Countries	Department for International Development
Fondo de Desarrollo Tecnológico (FODETEC)	Country Specific	Consejo Nacional para Investigaciones Cientificas y Tecnologicas de Costa Rica
Fondo de Incentivos de la Ley N°7169 & Fondos Concursables	Country Specific	Consejo Nacional para Investigaciones Cientificas y Tecnologicas de Costa Rica
Fondo de Investigacion y Desarrollo para la Modernizacion Tecnologica (FIDETEC)	Country Specific	Consejo Nacional de Ciencia y Tecnologia
Fondo Nacional de Desarrollo Científico y Tecnológico (FONDECYT)	Country Specific	Comision Nacional de Investigacion Cientifica y Technologica
Food Security	Developing Countries & LDCs	Rockefeller Foundation
Forestry information and documentation service for development cooperation (INFOREST)	Country Specific	Intercooperation Foundation
Forestry Research Programme (FRP)	Developing Countries & LDCs	Department for International Development
FRIEND Flow Regimes From International Experimental and Network Data	Developing Countries	United Nations Educational, Scientific and Cultural Organization
GATE Information Service GDN Awards and Medals	Developing Countries Worldwide	German Appropriate Technology Exchange Global Development Network
Genetic Enhancement and Breeding Project	Developing Countries	International Center for Living Aquatic Resources Management
Georg Forster Fellowships	Developing Countries	Alexander von Humboldt Foundation
Global Capacity-Building and Institutional Support	Worldwide	International Plant Genetic Resources Institute
Global Environment Monitoring System (GEMS) / Water		United Nations Environment Programme
Grant Aid	Developing Countries	Japan International Cooperation Agency
Grants for Scientific Meetings in Developing Countries	Developing Countries	Third World Academy of Sciences
Grants to Institutions in the South for Joint Research Projects	Developing Countries & LDCs	Third World Network of Scientific Organizations
Group Training Programs Health InterNetwork (HIN)	Africa Worldwide	International Livestock Research Institute World Health Organization

<b>Program Name</b>	<b>Region</b>	<b>Donor Agency</b>
HELP Hydrology for the Environment, Life and Policy	IHP Member States	United Nations Educational, Scientific and Cultural Organization
HRD Program for Least Developed Countries in the ASEAN Region	Asia	Asia-Oceania Network of Biological Sciences
Human Resource Development for a Scientific and Technological Capability in Insect Science in Africa	Africa	International Centre of Insect Physiology and Ecology
Huygens Programme	Worldwide	Netherlands Organization for International Cooperation in Higher Education
IAP Activities	Worldwide	InterAcademy Panel on International Issues
IBRO and SFN Travel Grants	Developing Countries	International Brain Research Organization
IBRO Centre for Equipment Donation	Developing Countries	International Brain Research Organization
IBRO Programme in Support of Neuroscience Libraries	Africa	International Brain Research Organization
IBRO Research Fellowships	Developing Countries	International Brain Research Organization
IBRO Symposia & Workshop Funding Programme	Developing Countries	International Brain Research Organization
ICRO - UNESCO Training Course	Developing Countries	International Cell Research Organization
IFS and UNU/INRA Joint Grants Programme in Africa	Africa	International Foundation for Science
IFS Research Grant	Developing Countries	International Foundation for Science
INASP South-South Rural Development Network	Least Developed Countries (LDC)	International Network for the Availability of Scientific Publications
INASP-Health	Developing Countries & LDCs	International Network for the Availability of Scientific Publications
Individual Training Programme	Africa	International Livestock Research Institute
Indonesia - Batam Institutional Development Project (Indonesia-Australia Partnership in Skills Development Program (IAPSD))	Country Specific	Australian Agency for International Development
Information and Capacity Building for Aquatic Resources Research in Developing Countries	Developing Countries	International Center for Living Aquatic Resources Management
Inland Integrated Coastal Zone Management	Africa	South African Network for Training and Research on the Environment
Insa-Jrd Tata Fellowship Programme	Developing Countries	Indian National Science Academy
Insect Resistant Maize Seeds (Kenya)	Country Specific	Syngenta Foundation for Sustainable Agriculture
Institutional Grants		Tinker Foundation Incorporated
Integrated Agricultural, Livestock and Forestry Training in the Natural Resources, Training Institute (NRTI) in Bhutan	Country Specific	Swiss Association for International Cooperation (Helvetas)



<b>Program Name</b>	<b>Region</b>	<b>Donor Agency</b>
Integrated Management of Late Blight	Worldwide	International Potato Center/Centro Internacional de la Papa
International Collaborative Research Grants	Developing Countries	The Wellcome Trust
International Joint Research Grant Program	Worldwide	New Energy and Industrial Technology Development Organization
International Research Development Awards	Eastern Europe	The Wellcome Trust
International Senior Research Fellowships - India/South Africa	Africa	The Wellcome Trust
International Senior Research Fellowships (Central and Eastern Europe)	Eastern Europe	The Wellcome Trust
Internet for Development - Connecting African Enterprises to the World through Research and Technology Organisations (RTOs)	Africa	World Association of Industrial and Technological Research Organizations
IOC Grant Programme-Study/Research Grants	Developing Countries	United Nations Educational, Scientific and Cultural Organization
IOC Grant Programme-Travel Grants	Developing Countries	United Nations Educational, Scientific and Cultural Organization
IUFRO's Special Programme for Developing Countries (IUFRO-SPDC)	Developing Countries & LDCs	International Union of Forest Research Organizations
Japan Overseas Cooperation Volunteers (JOVC)	Developing Countries	Japan International Cooperation Agency
JNCASR - COSTED International Fellowship Programme	Developing Countries	Committee on Science and Technology in Developing Countries
JNCASR - DST Programme with the National	North Africa and Middle East	Jawahar Lal Nehru Centre for Advanced
Academy of Sciences, Kazakhstan and Uzbekistan		Scientific Research and Department of Science and Technology
Joint International Isotopes in Hydrology Programme (JIIHP)	IHP Member States	United Nations Educational, Scientific and Cultural Organization
Kyrgyz-Swiss Forestry Support Program (KIRFOR) Kyrgystan	Country Specific	Swiss Agency for Development and Cooperation
Land & resource management in Eritrea	Africa	Syngenta Foundation for Sustainable Agriculture
Laos Economic Acceleration Program for the Silk Sector	Asia	World Education
Latin American Carbon Program (PLAC)	Latin America and Caribbean	Corporacion Andina de Fomento
Learning for Institutional Innovation	Developing Countries	International Service for National Agricultural Research
Least Developed Countries Initiative	Least Developed Countries (LDC)	Cisco Systems
Levi Montalcini Fellowships for African Women In Neuroscience	Africa	International Brain Research Organization
Library Support Programmes	Least Developed Countries (LDC)	International Network for the Availability of Scientific Publications

<b>Program Name</b>	<b>Region</b>	<b>Donor Agency</b>
Library/archive support	Africa	Nile Basin Research Programme
Linking Research and Stakeholder Organizations in a Changing Context	Developing Countries	International Service for National Agricultural Research
Livestock Production Programme (LPP)	Developing Countries	Department for International Development
Luis Donaldo Colosio Fellowship	Country Specific	International Institute for Applied Systems Analysis
Major Equipment Awards for Biomedical Research in South Africa	Country Specific	The Wellcome Trust
Management of New Technologies for Agricultural Research	Developing Countries	International Service for National Agricultural Research
Mashare Agricultural Development Institute Project Namibia	Country Specific	Lux-Development S.A.
Millet and Sorghum Improvement (Mali)	Country Specific	Syngenta Foundation for Sustainable Agriculture
Mobility of Scientists from the South	Developing Countries	Committee on Science and Technology in Developing Countries
Natural Resources Systems Programme (NRSP)	Developing Countries	Department for International Development
Netherlands Fellowships Programme	Developing Countries	Foundation for Cooperation of International Education Institutes and Wageningen University
Network building	Africa	Nile Basin Research Programme
Overseas Researcher Fellowship Program	Worldwide	Japan International Science and Technology Exchange Center
Participatory Technology Exchange and Partnership	West Africa	West Africa Rice Development Association
Plant Sciences Programme (PSP)	Developing Countries	Department for International Development
Policies for Institutional Innovation for Agricultural Research	Country Specific	International Service for National Agricultural Research
Policy & Research Programa de Apoio à Pós-Graduação (PROAP)	Developing Countries	Intermediate Technology Development Group Coordenação de aperfeiçoamento de pessoal de nível superior
Post Graduate Training Fellowships	Africa	Third World Organization for Women in Science
Post-Harvest Fisheries Programme (PHFP)	Developing Countries	Department for International Development
Program of Partnerships. Joint Research Projects in the Natural, Engineering and Economic Sciences with Institutes in Africa, Asia and Latin America	Developing Countries	VolkswagenStiftung (Volkswagen Foundation)
Program on Ecology and Human Needs		American Association for the Advancement of Science

<b>Program Name</b>	<b>Region</b>	<b>Donor Agency</b>
Programa @Lis		Organización de Estados Iberoamericanos para la Educación la Ciencia y la Cultura
Programa Becas		Consejo Nacional de Investigaciones Científicas y Técnicas
Programa de Apoio a Núcleos de Excelência (PRONEX)		Conselho Nacional de Desenvolvimento Científico e Tecnológico
Programa de Cooperacion Regional Programa de Fomento à Pós-Graduação (PROF)	Latin America and Caribbean	Academia de Ciencias de America Latina Coordenação de aperfeiçoamento de pessoal de nível superior
Programa de Formación de Jóvenes Investigadores		Instituto Colombiano para el desarrollo de la ciencia y la tecnología
Programa de Innovación y Desarrollo Tecnológico		Instituto Colombiano para el desarrollo de la ciencia y la tecnología
Programa de la Sede de la Academia	Latin America and Caribbean	Canadian International Development Agency
Programa de Modernizacion Tecnologica Programa de Suporte à Pós-Graduação de Instituições de Ensino Superior Particulares	Country Specific	Consejo Nacional de Ciencia y Tecnología Coordenação de aperfeiçoamento de pessoal de nível superior
Programa Institucional de Bolsas de Iniciação Científica - PIBIC		Conselho Nacional de Desenvolvimento Científico e Tecnológico
Programa Temático Multinstitucional em Ciência da Computação (ProTeM)		Conselho Nacional de Desenvolvimento Científico e Tecnológico
Programas de Desarrollo Científico y Tecnológico		Instituto Colombiano para el desarrollo de la ciencia y la tecnología
Programme for Enhancement of Research Capacity in Developing Countries	Developing Countries & LDCs	Danish Agency for Development Assistance
Programme for Service and Maintenance of Scientific Equipment	Developing Countries	International Foundation for Science
Programme for the Enhancement of Research Information (PERI)	Least Developed Countries (LDC)	International Network for the Availability of Scientific Publications
Programmes for Co-operation with Scientists in Developing Countries		Deutsche Forschungsgemeinschaft
Projects	Worldwide	Natural Resources Institute
Project-type Technical Cooperation proyectos IBEROEKA	Developing Countries	Japan International Cooperation Agency Ciencia y Tecnología para el desarrollo
Publishing Support Initiatives	Developing Countries & LDCs	International Network for the Availability of Scientific Publications
Qinling Mountain Area Poverty Alleviation Project	Asia	International Fund for Agricultural Development
Quality and Productivity Program	Developing Countries	United Nations Industrial Development Organization
Re-entry Grants	Developing Countries & LDCs	Special Programme for Research and Training in Tropical Diseases
Regional & International Congresses	Developing Countries	International Brain Research Organization

<b>Program Name</b>	<b>Region</b>	<b>Donor Agency</b>
Regional Networking in Science	Latin America and Caribbean	Committee on Science and Technology in Developing Countries
Regional Networks	Worldwide	Global Change System for Analysis Research and Training
Regional Research Networks		Association for Strengthening Agricultural Research in Eastern and Central Africa
Regional Support Programme		Association for Strengthening Agricultural Research in Eastern and Central Africa
Registro Conacyt de Consultores Tecnologicos (RCCT)	Developing Countries	Consejo Nacional de Ciencia y Tecnologia
Research and Development	Developing Countries & LDCs	International Institute for Infrastructural Hydraulic and Environmental Engineering
Research and development (R&D)-driven capability strengthening grant (RCS-Plus)	Developing Countries & LDCs	Special Programme for Research and Training in Tropical Diseases
Research and Education grants program		Fundacion Antorchas
Research and Education strengthening in Regional Universities		Fundacion Andes
Research Development Awards in Tropical Medicine	Developing Countries	The Wellcome Trust
Research Grants Program	Africa	African Forum for Children's Literacy in Science and Technology
Research Grants Program	Latin America and Caribbean	Pan American Health Organization
Research Key phrase: Competence building on Nile-related issues	Africa	Nile Basin Research Programme
Research network for pearl millet in West and Central Africa / ROCAFREMI	Sub-Saharan Africa	International Crops Research Institute for the Semi-Arid Tropics
Research Training Networks	Developing Countries	Community Research and Development Information Service
Resource Centre on Urban Agriculture and Forestry (RUAF)	Worldwide	ETC International
Root and Tuber Improvement Project	Africa	International Fund for Agricultural Development
RTO Capability Building - Improving Technological Services to the SME Sector	Africa	World Association of Industrial and Technological Research Organizations
Ruedas de Negociacion	Country Specific	Consejo Nacional para Investigaciones Cientificas y Tecnologicas de Costa Rica
Rural Electrification Expansion Project (REEP)	Asia	Canadian International Development Agency
Science and Technology Diplomacy Initiative	Developing Countries	United Nations Conference on Trade and Development
Science and Technology for Development		European Association of Development Research and Training Institutes
Science and Technology Policy Analysis	Worldwide	United Nations Conference on Trade and Development

<b>Program Name</b>	<b>Region</b>	<b>Donor Agency</b>
Science and Technology Programmes	North Africa and Middle East	Committee on Science and Technological Cooperation
Science and Technology Reform Support Project	Latin America and Caribbean	World Bank
Science, Technology and Innovation Policy (STIP) Reviews	Developing Countries	United Nations Conference on Trade and Development
Scientific Exchange Program	Asia	Japan Society for the Promotion of Science
Scientific Program-Vaccine Development Partnerships	Developing Countries	International AIDS Vaccine Initiative
Second Irrigated Agriculture Intensification Project	Country Specific	World Bank
Seminars, conferences (annual/biannual)	Africa	Nile Basin Research Programme
Shifting Cultivation and Health Conditions in Thailand	Asia	International Development Research Centre
Short-term Travel Grants	Developing Countries	The Wellcome Trust
Small-Scale Project Fund (SSPF)	Developing Countries	German Appropriate Technology Exchange
South-North Research Partnerships	Developing Countries	Netherlands Development Assistance Research Council
Spare Parts for Scientific Equipment	Developing Countries	Third World Academy of Sciences
START Fellowships/Visiting Scientist Programmes	Developing Countries	Global Change System for Analysis Research and Training
START Guest Lecturer Programme and Training	Worldwide	Global Change System for Analysis Research and Training
START Young Scientist Award Programme	Developing Countries	Global Change System for Analysis Research and Training
Strengthening Community-based Sustainable Agriculture Programs and Indonesian Nongovernmental Organizations	Asia	World Education
Strengthening of Health Services in North-east Namibia	Country Specific	Lux-Development S.A.
Strengthening of technical education and vocational training in Chad		The African Development Bank
Sub-Program 12.1 Effective Utilization of the Intellectual Property System for Economic, Social and Cultural Development	Developing Countries	World Intellectual Property Organization
Sub-Program 12.2 Special Focus Areas- Least Developed Countries Requirements	Least Developed Countries (LDC)	World Intellectual Property Organization
Sub-Program 12.4 Intellectual Property Office Automation	Developing Countries	World Intellectual Property Organization
Summer Research Fellowships Programme	Developing Countries	Jawahar Lal Nehru Centre for Advanced Scientific Research and Department of Science and Technology

<b>Program Name</b>	<b>Region</b>	<b>Donor Agency</b>
Support for Collaborative Research in South Africa	Sub-Saharan Africa	The Wellcome Trust
Support for the Transition to Competitive Agriculture	Latin America and Caribbean	Inter-American Development Bank
Support to African Research and Capacity Building Institutions		The African Development Bank
Sustainable Agriculture		CAB International (formerly Commonwealth Agricultural Bureaux)
Sustainable Management of Soils and Water on Hills in the Andes/MASAL	Country Specific	Intercooperation Foundation
Sustainable Use of Biodiversity Initiative-Medicinal Plants South American Network - Phase II	Latin America and Caribbean	International Development Research Centre
Swedish Research Links	Middle East and North Africa (MENA)	Swedish International Development Agency
Swiss Strategy for the Promotion of Scientific Research in Developing Countries	Worldwide	Swiss Commission for Research Partnerships with Developing Countries
TDR Research Training Grants.	Developing Countries & LDCs	Special Programme for Research and Training in Tropical Diseases
Technical Assistance	North Africa and Middle East	Arab Fund for Economic and Social Development
Technical Assistance Operations	Asia	Asian Development Bank
Technical Cooperation Program	Developing Countries & LDCs	Food and Agriculture Organization
Technical Information Service	Developing Countries	Intermediate Technology Development Group
Technical Response Service	Developing Countries	Volunteers in Technical Assistance
Technical Schools		Vitae
Technical Training of Overseas Participants	Developing Countries	Japan International Cooperation Agency
Technological and Institutional Change for Rice-based Livelihoods	West Africa	West Africa Rice Development Association
Technological Modernization Program (TMP II)	Latin America and Caribbean	Inter-American Development Bank
Technology Foresight Initiative for Latin America	Latin America and Caribbean	United Nations Industrial Development Organization
Technology Transfer Fund - Canada/El Salvador	Latin America and Caribbean	Canadian International Development Agency
The Artisanal Fisheries Development Project in Sierra Leone		The African Development Bank
The Cisco Networking Academy Program (CNAP)	Worldwide	Cisco Systems
The Eastern and Southern Africa Partnership Programme	Africa	Centre for Development and Environment

<b>Program Name</b>	<b>Region</b>	<b>Donor Agency</b>
The Fisheries Development Project in Uganda		The African Development Bank
The ITU Development Bureau (BDT)	Developing Countries	International Telecommunication Union
The Joint Financing Programme for Cooperation in Higher Education (MHO)	Developing Countries	Netherlands Organization for International Cooperation in Higher Education
The Latin America and the Caribbean Project		American Association for the Advancement of Science
The Millennium Science Initiative Project for Venezuela	Latin America and Caribbean	World Bank
The Netherlands Foundation for the Advancement of Tropical Research (WOTRO) Phd Fellowships	Developing Countries	International Livestock Research Institute
The Netherlands Periodicals Project (NPP)	Developing Countries	Netherlands Organization for International Cooperation in Higher Education
The Regional Network for Microbiology and Microbial Biotechnology in Southeast Asia	Asia	United Nations Educational, Scientific and Cultural Organization
The Rural Development Institutional Support Project in Guinea-Bissau		The African Development Bank
The Science and Technology for Development Network	Developing Countries	United Nations Conference on Trade and Development
The Transfer of Knowledge Through Expatriate Nationals programme (TOKTEN)	Developing Countries	United Nations Volunteers and United Nations Office for Project Services
TOKTEN Palestinian Programme	Country Specific	United Nations Volunteers and United Nations Office for Project Services
Training and Institution-Building	Developing Countries	Foundation for Cooperation of International Education Institutes and Wageningen University
Training and Supervision of Medical Personnel	Worldwide	Medecins sans Frontieres (Doctors Without Borders)
Training Courses and Capacity-building activities	Developing Countries	United Nations Educational, Scientific and Cultural Organization
Training Fellowships for Scientists from Tropical and Developing Countries	Developing Countries	The Wellcome Trust
Training for African Women in Internet Working Technology	Africa	United Nations Economic Commission for Africa
Training Workshops and Conference Symposia	Asia	Asia-Oceania Network of Biological Sciences
Travel Awards	Developing Countries	The Wellcome Trust
Travel Grants and Fellowship awards.	Developing Countries	Commonwealth Science Council
Travelling Research Fellowships	Worldwide	The Wellcome Trust
Tuition Free Telecommunications Training	Developing Countries	United States Telecommunications Training Institute
TWAS Prizes	Developing Countries	Third World Academy of Sciences

<b>Program Name</b>	<b>Region</b>	<b>Donor Agency</b>
TWAS Prizes for Young Scientists in Developing Countries	Developing Countries	Third World Academy of Sciences
TWAS Research Grants Programme	Developing Countries & LDCs	Third World Academy of Sciences
TWAS/UNESCO Associateship Scheme	Developing Countries	Third World Academy of Sciences
UNESCO/ICSU/TWAS Short-term Fellowship Programme in Basic Sciences	Developing Countries	United Nations Educational, Scientific and Cultural Organization
Unidades de Desarrollo Científico y Tecnológico	Country Specific	Comision Nacional de Investigacion Cientifica y Technologica
UNISPAR University-Industry Cooperation in Science, Engineering and Technology	Worldwide	United Nations Educational, Scientific and Cultural Organization
United Nations Commission on Science and Technology for Development	Developing Countries	United Nations Conference on Trade and Development
Upland Systems Development and Technology Transfer	Sub-Saharan Africa	West Africa Rice Development Association
Vavilov-Frankel Fellowship Fund	Developing Countries	International Plant Genetic Resources Institute
Vertical Shaft Brick Kiln Technology	Developing Countries	Swiss Centre for Development Cooperation in Technology and Management
Visiting scholar-/guest researcher programme	Africa	Nile Basin Research Programme
Visiting Scientist Program	Worldwide	International Society for Plant Molecular Biology
Visiting Scientist Programme Water and Food	Least Developed Countries (LDC)	Third World Academy of Sciences Consultative Group on International Agricultural Research
WHO Strategy for Traditional Medicine for 2002-2005	Worldwide	World Health Organization
WIPO Worldwide Academy- Sub-Program 14.2 Professional Training	Developing Countries	World Intellectual Property Organization
Women's International Science Collaboration Program (WISC)		American Association for the Advancement of Science
Young Scientist Programme	Eastern Europe and CIS	International Association for the Promotion of Cooperation with Scientists