

OUTPUT 3: TOOLS AND METHODOLOGY

3.1 Organizational development and change: Diagnosis on Organizational Culture/Diversity at CIAT

By: Fabiola Amariles, Gustavo Peralta and Nancy Johnson

3.1.1 Objective

To conduct a diagnosis of CIAT's organizational culture to better understand how staff diversity and other cultural issues are affecting CIAT's organizational life and its performance, in order to design strategic interventions for organizational change that build on CIAT's strengths and overcome limitations by identifying areas in need of change.

3.1.2 Background and justification

Organizational culture refers to the underlying beliefs, values, and assumptions held by members of an organization, and the practices and behaviors that exemplify and reinforce them. Some aspects of organizational culture, such as individual behavior and group norms, are very visible. Other aspects of culture are harder to observe, since they represent the invisible assumptions, values, and core beliefs.

The messages that come from an organization's culture are closely linked to the organization's strategy and management practices, and have a great impact on the people who work there. For this reason, it is important to understand those aspects of the organization's culture that may have an influence on its performance¹.

The framework for undertaking a diagnosis on organizational culture at CIAT was based on four situations:

- 1) In August 2002, CIAT embarked in a participative structural adjustment process by which several internal working groups were appointed by the Director General to present proposals on specific themes, one of them being "to establish a culture of prudent and responsible use of resources that is consistent with CIAT's mission"². The working group in charge of this theme identified the need to perform a diagnosis on CIAT's organizational culture in order to set the basis to develop some interventions and design a cultural change plan to drive the institution to higher levels of performance while building a culture of efficiency and prudent use of resources.
- 2) On the other hand, given the significant changes that are taking place in the external environment in which CIAT works, there is a continuous pressure to address

¹ Denison, Daniel R., 2000, Sample Materials, www.denisonculture.com

² Memorandum dated 23 August 2002 from the Director General to the participants in the working groups for CIAT structural adjustment.

performance issues at the international research centers and to review management and institutional approaches as “organizational models that used to be effective at the time of the Green Revolution are no longer adequate in today’s more complex environment”³. It is necessary to create performance assessment systems that respond to demands of accountability and relevance, and one of the key aspects to be known before starting such performance assessment systems is the knowledge of the organizational culture to derive strategic actions from the results of it.

- 3) For the same reasons explained in point 2) above, the institutions need to work with diversity of staff to strengthen the organizational effectiveness and efficiency and to advance in social justice, interacting more effectively with an increasingly diverse range of stakeholders. It is necessary to create work environments that enable people of diverse backgrounds to perform at their highest levels, contribute fully to the organization, and feel professionally satisfied.⁴ The diagnostic of organizational culture gives important feedback to suggest areas in need of change to reach this goal.
- 4) It is the desire of the Director General that new, additional ways for assessing impact of research be established at CIAT. One of these ways is the institutional analysis to be made within the organization to seek feedback and monitor employee satisfaction and its link to organizational performance. With certain cultural patterns to be followed, the institution may build the “CIAT citizen” that is required to advance towards the fulfillment of the mission and vision of the center in an environment of austerity, modernism and entrepreneurial attitude.

Within this framework, with the strong support from the Director General and with funds provided by the Gender & Diversity Program of the CGIAR, CIAT contracted a diagnostic study on its organizational culture with emphasis on diversity issues, with the aim to evaluate the situation of the institution, its potentialities and possible ways for development and change.

The study was designed and implemented by a Colombian consultant firm, Talento Humano, with the support and collaboration of a small team from the Impact Assessment Unit, the Human Resources Manager and some members of the CIAT Diversity Committee.

3.1.3 Methodology

Through extensive conversations with CIAT’s Director General and members of the Management Team, the Gender and Diversity Committee as well as several groups of staff at different levels, the following **macro-variables** were agreed to be analyzed:
Strategic System: Knowledge and practice of the organization’s vision, mission, principles, values and beliefs.

³ Foreword to the ISNAR publication: An Organizational Performance assessment system for Agricultural Research Organizations: Concepts, methods, and Procedures. W. Peterson, G. Gijsbers and M. Wilks, 2003.

⁴ Working with Diversity. A Framework for Action. D. Merrill-Sands, E. Holvino and J. Cumming, 1998.

research support	24
- International staff	9
- Scientific Park	5
- EATs (Associations of Workers)	21
- Outposted staff	13
Total participants	115

As of October 2003, date of the present report, the information gathered through the application of the tool is being analyzed; the diverse focus groups will be convened again to give them feedback about their responses and to validate the findings of the first interviews. It is expected that the groups discuss the implications and propose ideas to address the issues raised by them.

A further analysis will evaluate “how things are” versus “how they should be” in order to propose two or three formal interventions for organizational development and change to be developed in 2004. These interventions will be designed to improve the work effectiveness of individuals, groups, and the organization as a whole.

3.2 *Ex Post* Methods to Measure Natural Resource Management Research Impacts

By: Sam Fujisaka & Douglas White

3.2.1 Objectives

The objectives of this paper are to identify methods and approaches for *ex post* impact analysis (IA) of natural resource management (NRM) research used within the CGIAR, and to provide an overview of Center *ex post* IA research activities. Based on our review of progress made in NRM research and associated IA, the paper also takes the position that IA cannot be limited either to economic analysis of more readily measurable variables or to process monitoring. The paper concludes with recommendations associated with a way forward.

Investments in NRM research in the CGIAR have increased substantially over the past decade. Both NRM programs within traditionally commodity-oriented Centers and the newer Centers oriented towards resource and environmental issues have been favored (Anderson and Dalrymple 1999, Barrett 2002, Kelley and Gregersen, forthcoming). CG NRM research has not only expanded, but has also made an irregular transition from work at the plot and farm levels to wider scales, and in so doing, from work to increase the private benefits of selected farmers to work with multiple stakeholders with differing objectives, both public and private. The need to strengthen this latter “Integrated Natural Resource Management” (INRM) research was recognized by the third CGIAR external review (CGIAR/TAC 1998). Researchers have modified IA methods as the research domain has grown. IA expanded from a largely economic focus to include considerations related to poverty, social and human capital, human health, “well-being”, and the environment. While the “*ex post*” nature of IA of NRM crop productivity enhancement innovations is relatively straightforward, much of INRM research is seen as a long-term research and development cycle in which today’s *ex post* IA becomes the basis of process changes and next-step *ex ante* IA. Participatory monitoring and assessment provides contemporaneous information to adjust the research and development interventions.

This paper: 1. categorizes four overlapping types of NRM research and associated IA methods within the CG, 2. provides examples *ex post* IA of the different categories of NRM/INRM research, 3. summarizes each Center’s description of their methods and approaches, 4. considers the implications of IA methods in terms of questions or issues addressed, and 5. suggests “a way forward”. The examples of NRM/INRM IA emanate from a large body of research identified by the authors, helpful colleagues throughout the CG system and from the web pages of the different Centers. The cases represent what eventually fit into the four identified categories of NRM/INRM research.

3.2.2 Methodology

Each of the Centers described their IA methods and approaches in the Impact assessment Workshop organized by SPIA and TAC. The following summarizes each Center’s description of their respective *ex post* IA of NRM/INRM research. Some of these statements may be out of date given the rapid progress of INRM. Each center was asked

to provide an update of their *ex post* NRM/INRM IA methods for this paper. Responses to this request are found in the appendices and referred to in the appropriate following center-by-center coverage.

3.2.3 Conclusions

IA of NRM/INRM will remain more process oriented than IA of germplasm related innovations. *Ex ante* IA and on-going monitoring and evaluation constitute key tools in research prioritization and in appropriately modifying the unfolding research and development learning process. Participation by and negotiation among different stakeholders, the consideration of impacts at different scales and time frames has been found to be essential elements of INRM research. As stated in a variety of ways, not only economic, but environmental, social, and institutional impacts must be considered in any holistic IA.

Ex post IA of NRM/INRM needs to additionally examine adoption rates, patterns and reasons; economic analysis of more direct, tangible innovations; and impacts on social, natural, and human assets. Different indicators will need to be identified and measured for the different stakeholders and impacts.

OUTPUT 4: TRAINING & CONFERENCES AND DATA BASES

4.1 Scientific Training, Conferences and Visitors Units

By: Alfredo Caldas

4.1.1 Objective

To strengthen the attitudes, abilities, capacities and competencies of our partners in the areas of agricultural research and development through individual and group training events to contribute to the development and implementation of highly relevant agricultural research and development programs in Latin America, the Caribbean, Asia and Africa.

4.1.2 Strategy/Methodology

Training at CIAT is impact oriented and it is open to all professionals working in agricultural research and development institutions/organizations. Group and individualized training activities at CIAT take place in all of our research projects and units.

Training at CIAT takes place through the following activities:

- Specialized courses
- In-service training (Individual Specialization)
- MS theses research
- Ph.D. theses research
- Undergraduate theses

4.1.3 Activities during 2003

A total of 778 professionals and 23 undergraduate students were trained at CIAT headquarters, Asia and Africa. Of the total number 400 were from Latin American, 204 from Asia, 157 from Africa and 17 from developed countries.

The distribution by training category is as follows:

Type of training	Number of trainees
Specialized courses	586
Individual Specialization	120
Ph.D. Theses	28
MS Theses	21
Undergraduate Theses	23

Details of the number of trainees by training category and region are given in Table 1.

Group events. During this period a total of 21 specialized courses were held at CIAT headquarters, Asia and Africa in areas of Seed Production, Crop Production, Land Use, Molecular Techniques, Integrated Pest and Disease Management, Design and Development of Projects, Development of Rural Agroenterprises, Tropical Forages, Marketing and Farmer Participatory research.

Five of the above events were international, while the remainder were held at national level.

For the rest of the year 2003, CIAT will conduct two international courses on Soil Biodiversity and Participatory Methodologies and other two national courses on Soils and Integrated Management for Rice Production in Colombia.

Participation of countries. Colombia has the largest number of trainees followed by China, Vietnam, Uganda, Thailand, Haiti, Tanzania and Nicaragua.

The Ministry of Agriculture of Colombia financed five national specialized courses in the areas of Land Use (2), Rice (1), Integrated Pest and Disease Management of Pest (1) and Tropical Forages (1).

As in previous years NARS continued making significant financial contributions to cover the direct costs of their participants for training at CIAT.

Demand for training. Training in the areas of Land Use, Rural Agroenterprises, Rice, Tropical Forages, Cassava, Biotechnology and Soils are of high priority for NARS.

Women accounted for 35% of the total number of professionals trained at CIAT.

New developments. In memory of Chusa Guines and Veronica Mera the Gines-Mera Memorial Fellowship Fund for Postgraduate Studies in Biodiversity started this year for the purpose of allowing young professionals to conduct Master and Doctoral studies in the area of agrobiodiversity and its conservation.

This year seven young professionals from Colombia (6) and Peru (1) were awarded full scholarships to conduct Master degrees programs in Colombia, Germany and Peru in areas of agrobiodiversity.

Transfer of Technology. The cassava Project conducted eight short-term courses in Colombia to allow farmers and extensionists to gain abilities and knowledge in specific areas such as production, utilization, disease control, agronomic practices, seed production and use of new cassava varieties, under an agreement with the Ministry of Agriculture and Rural Development of Colombia.

Development of young researches. COLCIENCIAS from Colombia continued supporting CIAT's training program on "Development of Young Researchers". During 2003 COLCIENCIAS financed four professionals, for a period of one year.

The development of young researchers from Colombia continues to be of high importance to CIAT through the program of Undergraduate Theses Research. This year a total of 23 students initiated their undergraduate thesis research at CIAT.

4.1.4 Goals for 2004

- Enhance long-term training at CIAT, by increasing the number of doctoral and master theses research within the research projects and units.
- Development and implementation of two international courses in the areas of genetic resources and integrated pest management, to be held at CIAT headquarters during 2004.
- Active participation in the development and implementation of the Distance Education Learning Program led by the Head of the Information and Documentation Unit. The first course on “ex-situ conservation and management of genetic banks” will be launched during the first semester of 2004.
- Evaluate the results of the survey on CIAT’s Training Impact for the period 1992 to 2002. Nearly 200 professionals trained at CIAT will participate in this evaluation study. A report of the evaluation study will be ready by early 2004.

4.1.5 Conferences

Bringing people to conferences is an important mechanism that links CIAT with partners, donors and members of the international and local communities. Usually our conferences deal with strategic and operational research planning, networking, exchange of scientific information, discussion of research issues, linkage with farmers and others.

During this reporting period, the Conference Unit supported 15 major international events: Cassava (5), Biotechnology (2), Tropical Forages (2), Rural Innovation (2), Land Use (1), PRGA (1) and Rice (2).

432 professionals from Latin America, Europe, Asia and Africa participated in these events.

4.1.6 Visitors

The Visitors office attended 1724 visitors at CIAT headquarters during this reporting period.

Colombia accounted for 95% of the visitors followed by Ecuador, Nigeria, Nicaragua, USA, Brazil, Italy and Germany.

90% of the visitors from Colombia were students from national universities.

Table 1. Professionals trained by CIAT according to type of training. (14 October 2002 to 30 September 2003)

Type of training	Number of participants
Latin America & Caribbean	
Specialized Courses	236
Specialization	103
MS Theses	20
Ph.D. Theses	18
Undergraduate Theses	23
Subtotal L.A. & Caribbean	400
Africa	
Specialized Courses	153
Ph.D. Theses	4
Subtotal Africa	157
Asia	
Specialized Courses	197
Specialization	6
Ph.D. Theses	1
Subtotal Asia	204
Developed Countries	
Specialization	11
MS Theses	1
Ph.D. Theses	5
Subtotal Developed Countries	17
Grand Total	778

4.2 Web Pages & Data Bases

By: James A. García

4.2.1 Objective

To obtain, compile and make available through databases, information systems and web pages, key data that serve to support evaluation studies (ex-ante or ex-post) on research and agricultural and livestock development.

4.2.2 Methodology

- Implementation and development of information systems for each database implemented in order to facilitate their use and user interactions
- Maintenance and updating of the stored data, which consists in adding new data to the different series
- Ongoing revision and updating of the contents of the web page on impact, making available the documents or information generated by the studies done by the project.

4.2.3 Progress and Results

At present databases developed for Latin America, Asia, Africa and, above all, Colombia are now functioning. In general these databases cover a large set of variables for each of the following areas: production, commerce, supply, population, prices, use of machinery, land use, fertilizer use, and macroeconomic and consumer indicators.

The databases can be consulted by any interested user through Internet, simply going to our web page, where information related to the impact evaluation project and results obtained by many of the studies carried out are also available.

The information system of the web page records that during the period from 28 Sept. 2002 to 27 Sept. 2003, the web site was visited on 3479 occasions, generating an average of 4830 monthly consultations on the different pages. Figure 1 shows the pattern of visits over time. It can be seen that there was a growing trend in the number of visits recorded since its creation, which indicates that its contents have been and continue to be of interest to the international community interested in the topic.

With respect to the origin of the visits, Figure 2 highlights that 33.0% correspond to visits from South American countries, 18.0% from the USA and Canada, and 12.1% from European countries. The visits made from Asian, African and Australian countries represent 8.1%, showing significant growth with respect to the year before, primarily for Asia and Africa, which increased their participation from 3.2 and 0.7% to 4.9 and 2.1%, respectively. The greatest growth occurred in the consultations originating in South American countries, given that the year before they represented only 15.0%. This increase is due primarily to the activity generated from countries such as Colombia, Peru and Argentina.

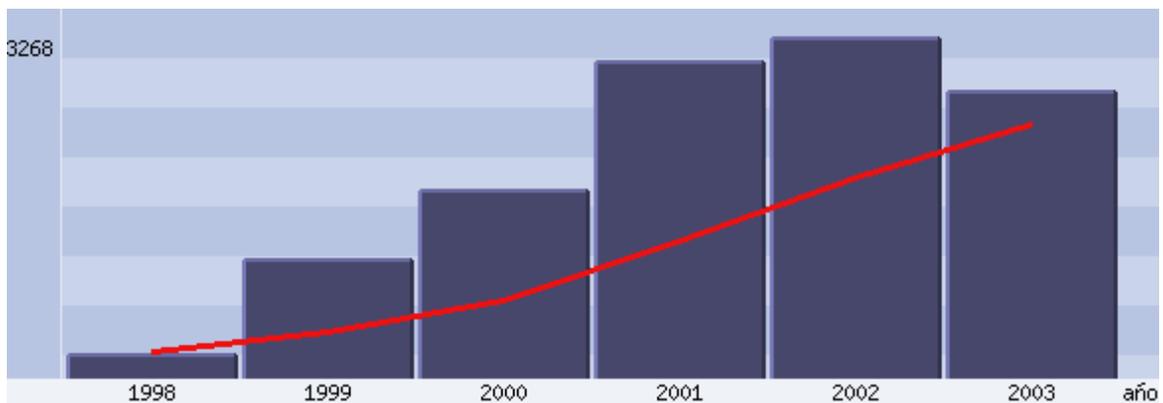


Figure 1. Viewing of web page by year since 20 Oct. 1998.

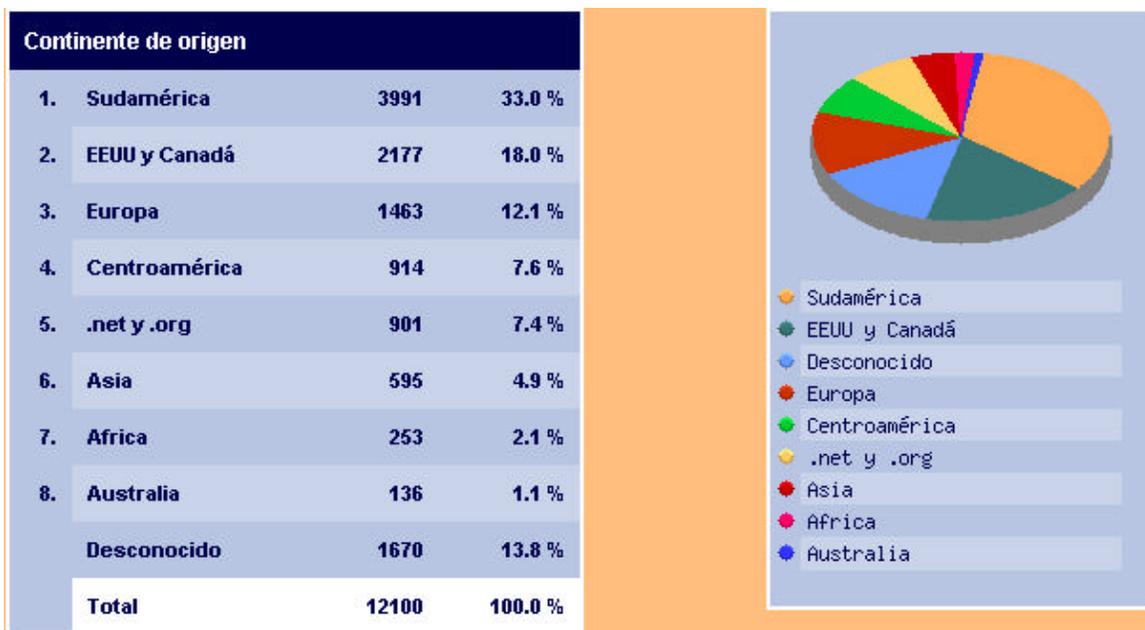


Figure 2. Origin of visits to the web page by continent.

At the country level (Figure 3), Colombia and the USA are the countries with the greatest number of consultations generated (20.2 and 13.4%, respectively).

A total of 116 countries (21 more than the year before) from the different continents have had users who have visited our web page. The new countries recorded this past year are mostly from the Asian continent, and a number of them belong to the former Soviet Union.

País de procedencia			
1.	Colombia	2441	20.2 %
2.	Estados Unidos	1621	13.4 %
3.	Organización sin fines de lucro	767	6.3 %
4.	México	543	4.5 %
5.	Perú	410	3.4 %
6.	Reino Unido	305	2.5 %
7.	Venezuela	260	2.1 %
8.	Argentina	257	2.1 %
9.	España	238	2.0 %
10.	Alemania	232	1.9 %
	Desconocido	1670	13.8 %
	El resto	3356	27.7 %
	Total	12100	100.0 %

Figure 3. Visits to the web page by country of origin.

4.3 Information system for the MADR-CIAT Agreement

By: Libardo Rivas and James A García

4.3.1 Objective

The Agreement for Technical and Scientific Cooperation 071 of 1998, put forward by the Colombian Government, through the Ministry of Agriculture and Development Rural (MADR), and CIAT, for stimulating agricultural and livestock development in the Orinoco River Basin of Colombia, through the generation of new scientific knowledge, production technologies and methodologies for planning and the sustainable use of natural resources, reached its fifth year of operations in 2003.

During this period the Agreement has produced a significant volume of technical and economic information of great interest for a vast audience, not only in the Colombian Plains but also in the rest of the country.

Aware of the need for the results generated by this strategic alliance to be consolidated and integrated to form an information system that is readily accessible by any interested party, the task was undertaken to compile the scientific information generated by this and earlier Agreements, starting in 1994. The purpose is to make available both the information generated and the technical and scientific results obtained to researchers, planners, students and the interested public.

4.3.2 Methodology

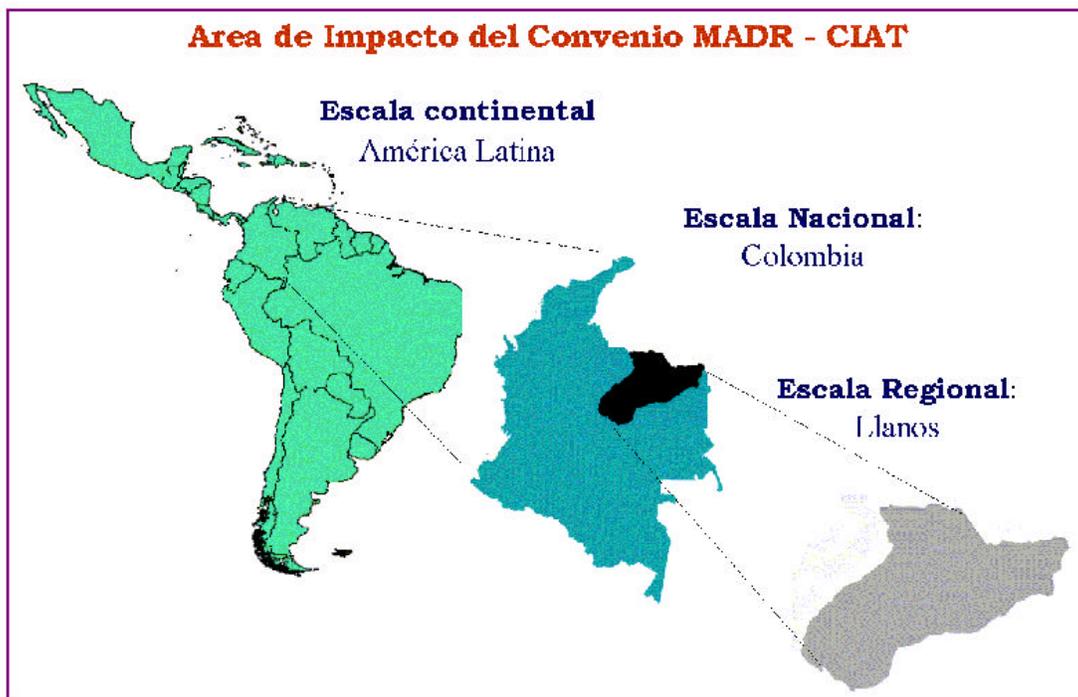
A process was developed for compiling, selecting and organizing the documents considered to be the most pertinent, to facilitate their access and consultation through the utilization of html pages.

Progress and Results: A user-friendly information system that facilitate both navigation and moving among the different pages, as well as the structured viewing of the different contents is now available (Figure 1).

On the left side of each page, there are a menu and submenus that let the user move quickly to the topic in which he/she is interested. The topics in the system are diverse, going from the initial legal documentation that supports the agreement to the results obtained to the documentation of the results obtained. The latter are found in files that contain internal working documents, published articles, presentations, posters, etc.

The dissemination of this system will be done in magnetic form (CD) as it is an economic way to disseminate the results and the work developed by the Agreement, thereby contributing to increasing their potential for impact.

Figure 1. First page of the information system for the CIAT-MADR Agreement.



Continuar

4.3.3 Conferences and seminars

Rivas R. Libardo, 2003. *Una alianza exitosa: Convenio MADR-CIAT. Impacto Económico y Resultados 1994-2002*. CIAT, Proyecto de Evaluación de Impacto, Seminario Interno, Cali, Colombia. May.

Rivas R. Libardo, 2003. Priorización y toma de decisiones de inversión en procesos de investigación y desarrollo. Trabajo presentado en el Taller: *Metodologías para la identificación y priorización de demandas para innovación tecnológica en Bolivia*. Ministerio de Asuntos Indígenas, Campesinos y Agropecuarios (MACIA) y Centro Internacional de Agricultura Tropical (CIAT), Cochabamba, Bolivia, Oct. 8-9.

DONORS LIST

- BMZ (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung)
- Gates Foundation
- Instituto Colombiano para el Avance de la Ciencia - COLCIENCIAS
- International Development Research Center - IDRC
- Ministerio de Agricultura y Desarrollo Rural de Colombia - MADR
- Nippon Foundation
- PROCITROPICOS - IICA
- Rockefeller Foundation
- Standing Panel on Impact Assessment (SPIA) - WB
- System Wide Livestock Program (SLP)

COLLABORATING INSTITUTIONS

- Biofortification Challenge Program
- California Polytechnic State University, San Luis Obispo.
- Centro de Estudios Ganaderos y Agrícolas (CEGA) Bogotá.
- CG Centers (CIP, CIMMYT, ICRAF, IITA, ISNAR, ILRI)
- CGIAR Systemwide Program for Collective Action and Property Rights (CAPRI).
- CGIAR Systemwide Program for Participatory Research and Gender Analysis (PRGA).
- Colombian Universities:
 - Nacional, Bogotá
 - Llanos, Villavicencio
 - San Martín, Barranquilla
 - Caldas, Manizales
- CORPOICA - Colombia
- Corporación Colombiana Internacional (CCI), Bogotá.
- ECABREN (East and Central African Bean Research Network), SABREN (Southern Africa bean Research Network).
- EMBRAPA -Brazil
- For the SIUPA (Strategic Initiative for Urban and Peri-urban Agriculture) Project: International Potato Center (CIP), International Institute for Tropical Agriculture (IITA), IPGRI, Makerere University, National Agricultural Research Organization-Uganda (NARO), Environmental Alert (NGO), Plan International (NGO), Kampala City Council.
- INIA -Chile
- INIA-Peru
- International Development Center - IDRC
- ISNAR
- Kenyan Agricultural Research Institute (KARI)-Kakamega
- Michigan State University, East Lansing, MI, USA
- Ministerio de Agricultura y Desarrollo Rural -MADR, Colombia
- PROCIANDINO-IICA
- Rockefeller Foundation

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PUBLICATIONS AND PRESENTATIONS

Refereed Journal Articles

1. Johnson, Lilja and Ashby, 2003, Measuring the Impact of User Participation in Agricultural and Natural Resource Management Research, *Agricultural Systems* Volume 78, Issue 2, November 2003 , Pages 287-306
2. Johnson and Knox, 2002, Participatory Natural resource management in Watersheds: concepts, issues and challenges for research, *Annals of Arid Zone*, 40(3) 1-20.
3. Holmann F., L. Rivas, J. Carulla, B. Rivera, L. A., Giraldo, S. Guzmán, M. Martínez, A. Medina and A. Farrow, Evolution of Milk Production Systems in Tropical Latin America and interrelationship with Markets: An Analysis of the Colombian Case, 2003, in: *Livestock Research for Rural Development* (15) 9 2003.
<http://utafoundation.org/lrrd159/holm159.htm>

Book Chapters

1. Menter, H., Kaaria, S.; Johnson, N.; Ashby, J. 2004. Scaling up. *In*: Pachico, D. (ed.). *Scaling up and out: Achieving widespread impact through agricultural research*. Centro Internacional de Agricultura Tropical (CIAT), Cali, Colombia. (In Press).
2. Lilja, Ashby and Johnson Scaling up and out the impact of agricultural research with farmer participatory research. *In*: Pachico, D. (ed.). *Scaling up and out: Achieving widespread impact through agricultural research*. Centro Internacional de Agricultura Tropical (CIAT), Cali, Colombia. (In Press).
3. Johnson and Klass, 2003, The Impact of Crop Improvement of Rural Poverty: An Analysis of Bean Varieties Resistant to Bean Golden Mosaic Virus in Honduras Chapter 14 in Mathur and Pachico, *Agricultural research and Poverty reduction: some issues and evidence*, CIAT Economics and Impact Series #2 pp 241-258.

Other Publications

1. Rivas R. Libardo, 2003. Monitoreo y resultados de la investigación y difusión del germoplasma mejorado en el Sitio de Referencia de Puerto López y en los Llanos Orientales y la Amazonia de Colombia. Centro Internacional de Agricultura Tropical, Proyecto de Evaluación de Impacto. Documento No 5, Cali, Colombia, Agosto. 58 pp.
2. Rivas R. Libardo y Carlos Julio Herrera, 2003. Impacto económico potencial en Colombia del uso de variedades transgénicas de yuca, resistentes al barrenador del tallo, *Chilomima clarkei* (Lepidoptera: Pyralidae) CIAT, Proyecto de Evaluación de Impacto y Proyecto de Yuca, Cali, Colombia, Julio. 28 pp.

3. Rivas R. Libardo, 2003. Priorización y toma de decisiones de inversión en procesos de investigación y desarrollo. Trabajo presentado en el Taller: *Metodologías para la identificación y Priorización de demandas para innovación tecnológica en Bolivia*. Ministerio de asuntos indígenas, campesinos y agropecuarios (MACIA) y Centro Internacional de Agricultura Tropical (CIAT), Cochabamba, Bolivia, Octubre 8 – 9, 31 pp
4. Holman, F., L. Rivas, J. Carulla, L. Giraldo, S. Guzmán, M. Martínez, B. Rivera. A. Medina, and A. Farrow. 2003. Evolución de los sistemas de producción de leche en el trópico latinoamericano y su interrelación con los mercados: Un análisis del caso Colombiano. International Center for Tropical Agriculture (CIAT) and International Livestock Research Institute (ILRI). Working Document # 193, Cali. (For more information see: <http://www.ciat.cgiar.org/tropileche/start.htm>)
5. Holman, F., L. Rivas, J. Carulla, L. Giraldo, S. Guzmán, M. Martínez, B. Rivera. A. Medina, and A. Farrow. 2003. Evolución de los sistemas de producción de leche en el trópico latinoamericano y su interrelación con los mercados: Un análisis del caso Colombiano. Carta Fedegan, Edición No 78, Enero – Febrero, Bogotá. <http://www.fedegan.org.co/78cadena.html>.
6. Rivas Libardo y James García. 2003. Producción del CD: Sistema de Información del Convenio MADR – CIAT.
7. N Johnson and J Berdegue Property rights, collective action and rural agro enterprise development, IFPRI/CAPRI policy brief, 2020 vision series.
8. Two policy briefs on social capital and agroenterprise development, put out by CCI in Spanish and in English.
9. Land degradation task force conceptual paper.
10. Water challenge program background paper for Theme 2 Upper watersheds.
11. Water challenge program conceptual paper on theme 2 Upper watersheds.

Oral/Poster Presentations at Conferences and Internal Seminars

1. Rivas R. Libardo, 2003. *Una alianza exitosa: Convenio MADR – CIAT. Impacto Económico y Resultados 1994 – 2002*. CIAT, Proyecto de Evaluación de Impacto, Seminario Interno, Cali, Colombia, Mayo.
2. Rivas R. Libardo, 2003. Presentación del trabajo: Priorización y toma de decisiones de inversión en procesos de investigación y desarrollo, en el Taller: *Metodologías para la identificación y Priorización de demandas para innovación tecnológica en Bolivia*. Ministerio de asuntos indígenas, campesinos y agropecuarios (MACIA) y Centro Internacional de Agricultura Tropical (CIAT), Cochabamba, Bolivia, Octubre 8 – 9.

3. Johnson, Suarez and Lundy, 2003, The importance of social capital in rural agroenterprises, Selected paper presentation, IAAE Durban
4. Johnson, Nancy 2003 Assessing the impact of technical and institutional innovations for improving agriculture and natural resource management part of mini symposium on impact assessment organized by USAID at IAAE Durban
5. Johnson, Suarez and Lundy, 2003, The importance of social capital in rural agroenterprises, presented at Wednesday seminar series.
6. Porro, Roberto. "Palms, Pastures and Swidden Fields in the Eastern Amazon: Prospects for Improved Livelihood Systems, and Potential Research Target for the Amazon Consortium" Internal Seminar presented on 16 July 2003.
7. Posada, Rafael. "Hacia un Plan Estratégico del CIAT" Meeting of the Iberoamerican National research Institutions, convened by Spain. Lima, Perú February 2003.
8. Posada, Rafael "La Cooperación Técnica Internacional en el CIAT" Workshop Manejo Sostenible de las Sabanas Tropicales, PROCITROPICOS, Bogotá, Colombia, June 2003.
9. Posada Rafael "Evaluación del Convenio Ministerio de Agricultura – CIAT" Departamento Nacional de Planeación, Bogotá, Colombia, Julio 2003.
10. Posada, Rafael "Hacia una agenda internacional: la modernización del CGIAR" Workshop on Globalization of the Agricultural Markets & Technological Scenarios", IFPRI-IICA, Bogota, Colombia, July 2003.
11. Posada, Rafael "The CGIAR modernization process" FORAGRO Executive Committee, Panama, Panama, September 2003.

CONCEPT NOTES AND PROPOSALS SUBMITTED

1. Colombian Ministry of Agriculture, extension of current agreement, which will end on December 2003. Four years, 2003-2007, US\$ 6 million dollars.
2. Ex post impact of cassava systems in Asia (USD 30,000 to SPIA).
3. Economics of rapid propagation methods for cassava and other crops (USD 100,000 to IFAD).
4. Sustaining collective action across economic and ecological scales (SCALES) to Water and Food Challenge program (USD900,000).
5. Payment for environment services to Water and Food Challenge program (USD2 million).
6. Multiple use water systems for Water and Food challenge program (USD2 million).
7. Impact and policy component of the Biofortification Challenge Program Gates Foundation, 3.5 million).
8. Identification of Sustainable Land Use Policies in the Amazon: Building Analytical Capabilities within the Amazon Initiative Consortium, submitted to the Interamerican Institute for Global Change Research, August 18. 2003.
9. Desenvolvimento de Rede: Consórcio Iniciativa Amazônica, submitted to the Brazilian Ministry of Science and Technology, as an Embrapa project, October 10, 2003.