

ANNEX 1
CIAT 6th EPMR (2007) Panel membership

EDUARDO VENEZIAN (Chile) – Panel Chair

Position: Dean, Faculty of Agricultural Forestry and Veterinary Sciences, University Mayor, Santiago, Chile

Expertise: Agricultural economics; education and research management

Education: Post-Doctoral in Economics (1969-70), University of Chicago, USA; M.Sc. (1959) and Ph.D. (1962), Agricultural Economics both from Iowa State University, Ames, USA; 1952-56: Ing. Agr., Catholic University of Chile

Experience: 1988-98 Dean, Faculty of Agriculture and Forestry, Catholic University of Chile; 1986-88 Chief, Research Development Center, Research and Technology Development Division, FAO, Rome; 1977-85 Professor and Head of the Agric. Economics Department and Director of the Research Division, Catholic University of Chile; 1972-77 Agric. Advisor and 1974-77 Foundation Representative, The Ford Foundation, Brazil; 1966-72 Part-time Professor, Agric. Economics Center, Postgraduate College, Chapingo, Mexico; 1969-1970 Post-Doctoral in Economics University of Chicago, USA; 1965-72 Agric. Economics Advisor for Mexico, Central America and the Caribbean Region, Ford Foundation, Mexico, D.F; 1962-65 Economist and Asst. Chief, Agric. Economics Unit, Organization of American States, Washington, D.C; 1959-62 Research Assistant and Associate, Iowa State University. Member of numerous committees and review missions. Member of Boards of several Foundations and Business. Membership of various professional associations. Several honours and distinctions. Extensive travel throughout the world since 1951 in professional, academic and private activities. Member of the 2nd EPMR of IFPRI (1990). Chair of the 4th EPMR of IITA (1995).

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PEDRO ARRAES (Brazil) - Genetics and Biotechnology

Position: Embrapa Labex-USA coordinator since 04/2004

Expertise: Agronomy, Plant Breeding and Genetics

Education: 1987 PhD Plant Genetics and Plant Breeding; 1985 Plant Genetics and Plant Breeding MA both from University of Wisconsin, Madison USA. 1979 BS Agronomy from University Federal Rural do Rio de Janeiro City: Rio de Janeiro, Brazil .

Experience: Currently Embrapa Labex-USA coordinator since 04/2004. Previous experience: Embrapa Labex-USA coordinator; 2001-2003: Member of the Agribusiness Committee representing the Ministry of Agriculture of Brazil; 1997- 2004: General Director of the Embrapa National Rice and Beans Research Center; 1989- 95: Director of Research of the National Rice and Beans Research Center; 2000-03: Manager of the Program Productivity of Cereals, General Government Plan (PPA); 1996-97 President of Embrapa Committee of Intellectual property Rights.

Contact: EMBRAPA Rice and Beans. Rodovia Go-462 Km 12 Zona Rural. Caixa Posta 179. Santo Antonio de Goias, GO. Brazil 75375000. Tel: (62) 35332115. Email: arraes@cnpaf.embrapa.br, arraes13@yahoo.com

GETACHEW ENGIDA (Ethiopia/UK) - Financial management

Position: June 2004 to date: Deputy Assistant DG for Administration & Comptroller, (D-2) United Nations Educational, Scientific and Cultural Organization (UNESCO), Paris.

Expertise: Audit, Finance & Management

Education: BA Econ (Honours), Economics / Agricultural Economics University of Manchester, England (July 1981). MBA International Banking & Finance City University Business

School, London (April 1993). Fellow of the Institute of Chartered Accountants in England & Wales (Chartered Accountant).

Experience: January 2003 to June 2004: Director, Finance, Human Resources & Administration International Livestock Research Institute. July 1999 to December 2002: Chief Financial Officer International Livestock Research Institute. March 1995 to June 1999: Assistant Controller, Accounting P- 5 International Fund for Agricultural Development Rome, (IFAD) Italy. Working knowledge of French

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LIZ FIELD (USA) - Governance and Management

Position: Consultant (since 2000)

Expertise: Governance, management, and organizational development

Education: MBA, Yale University School of Management (1986); BA, Amherst College (1981)

Experience: Interim Executive Director, Portland Community College Foundation (2007); Consultant to non-profit, philanthropic, and government agencies (2000 to present); The World Bank, Corporate [the Board's] Secretariat, Operations Officer, 1995-1999; CGIAR Secretariat, Management Specialist and participant in several CGIAR external reviews, 1989-1995; International Institute for Tropical Agriculture (IITA), Management Systems Analyst, 1986-1989. Currently – Board member, Wallace Medical Concern, and Vision Council Chair, United Way of the Columbia-Willamette.

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GRAEME HAMMER (Australia) - NRM/Agronomy

Position: Professor in Crop Science, School of Land, Crop and Food Sciences, The University of Queensland, Brisbane, Australia Co-leader of Agricultural Production Systems Research Unit (APSRU), a joint venture of CSIRO, Qld Govt and UQ (<http://www.apsru.gov.au/>)

Expertise: Physiology, modelling and improvement of cereal crops and associated farming systems. Research team leadership and management.

Education: PhD 1987 Kansas State Univ. - crop physiology & modeling; MSc 1983 Univ. of Melbourne, forest growth & modeling; BA 1978 Univ. of Queensland - mathematics & statistics. BScFor Hons 1973 Univ. of Melbourne.

Experience: 1990-2003 Senior Research Scientist, Principal Research Scientist, Queensland Dept Primary Industries and QDPI Co-Leader of APSRU, Toowoomba; 1977-90 Research Scientist & Senior Research Scientist, QDPI, Brisbane; 1976-77 Lecturer (Plant Ecology), Queensland Institute of Technology, Brisbane; 1973-76 Forestry Officer, Northern Territory Forest Service, Darwin. Member of the scientific advisory Board Graduate School of Theoretical Production Ecology, Wageningen Agricultural University, The Netherlands. Member of the scientific advisory Board to International Research Institute for Climate Prediction (Columbia University, New York).

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GREG TRAXLER (USA) - Socioeconomics and Policy

Position: Professor. Dept. of Agricultural Economics and Rural Sociology, Auburn University.

Education: Ph.D. Iowa State University. Dept of Economics. Major field of Agricultural Production and Finance; Minor in Statistics. 1990; M.S. Univ of Minnesota. Dept of Agricultural and Applied Economics. 1987; B.B.A. Univ of Portland, Oregon. College of Business Administration. 1977.

Experience: 2000-present.; Assistant & Associate professor. Dept. of Agricultural Economics and Rural Sociology, Auburn University. 1990-2000; Research Assistant/Instructor. Center for

Agricultural and Rural Development (CARD), Iowa State University. September 1985 - June 1988; Research Assistant. Dept. of Agricultural and Applied Economics, University of Minnesota. June 1984 - August 1985. CIMMYT 1996-2003 Affiliate Scientist. Economics Program; July-Aug, 1993 & June-Aug, 1996 Visiting Scientist. Econ Program; 1988-1990 Pre-doctoral Research Fellow. Economics Program.

Contact: Dept. of Agricultural Economics and Rural Sociology, 208A Comer Hall. Auburn University, AL 36849-5406. USA. Tel: +334 844 5619 Fax: +334 844 5639. Email: traxlgj@auburn.edu

Name: RUBEN ECHEVERRIA - *Panel Secretary*

Contact: CGIAR Science Council Secretariat. c/o FAO, Viale delle Terme di Caracalla. 00153 Rome, Italy. Tel. +39 06 570 54757; Fax +39 06 570 53298. Email: ruben.echeverria@fao.org

ANNEX 2
Terms of Reference for External Program and Management Reviews (EPMR) of CGIAR
Centers (as endorsed by the CGIAR in 1997)
&
CGIAR Science Council: Strategic Issues for the 6th EPMR of CIAT (October 2006)

Background

Context

The Consultative Group on International Agricultural Research (CGIAR) is an informal association of over 50 members that supports a network of 16 international research Center in agriculture, forestry and fisheries. The CGIAR aims, through its support to the Center, to contribute to promoting sustainable agriculture for food security in developing countries. Because the Center constitute the core of the CGIAR, the effectiveness of each Center is crucial to the continued success of the CGIAR (as a System).

Each Center is an autonomous institution operating within the mandate assigned to it by the CGIAR, and is governed by a legally constituted Board that has full fiduciary responsibility for managing the Center. To ensure accountability in an essentially decentralized system, each Center is expected to be responsive to the CGIAR, which provides financial support for its work.

The CGIAR has established a tradition of External Program and Management Reviews (EPMRs) to provide a mechanism of transparency and accountability to the Members and other stakeholders of the CGIAR System. EPMRs are the joint responsibility of SC and the CGIAR Secretariat, and are conducted for each Center approximately every five years. As each Center is autonomous, EPMRs provide a measure of central oversight and serve as an essential component of the CGIAR's accountability system.

Integrated System of Reviews of Each Center

Besides the EPMRs, Center Commissioned External Reviews (CCERs) are undertaken at each Center. These CCERs are commissioned by the Center Boards to periodically assess the quality and effectiveness of particular aspects of a Center's work. The terms of reference (ToRs) for each CCER are determined by the Center, based on broad principles endorsed by the CGIAR at ICW95 (ref. document entitled *Improving the Quality and Consistency of CGIAR's External Center Reviews*, dated October 24, 1995).

EPMRs complement the CCERs by providing a CGIAR-commissioned and comprehensive external assessment of the Center's program and management, especially its future directions and the quality and relevance of its research. The ToRs for the EPMRs (which update the "standard ToRs" endorsed by the CGIAR at MTM95) are provided below. Guidelines for undertaking the reviews are issued separately.

CGIAR Terms of Reference for EPMR

Objectives and Scope

EPMRs seek to inform CGIAR members that their investment is sound, or recommend measures to make it so. Members of the CGIAR and other stakeholders can be informed whether the Center is doing its work effectively and efficiently. EPMRs are both retrospective and prospective; and help ensure the Center' excellence, relevance and continued viability, and the CGIAR System's coherence. Each review is expected to be strategic in orientation and as comprehensive as the situation warrants.

The broad objectives of EPMRs are to: a) provide CGIAR members with an independent and rigorous assessment of the institutional health and contribution of a Center they are supporting; and b) to provide the Center and its collaborators with assessment information that complements or validates their own evaluation efforts, including the CCERs.

The EPMR Panel is specifically charged to assess the following:

- a) The Center's mission, strategy and priorities in the context of the CGIAR's priorities and strategies;
- b) The quality and relevance of the science undertaken, including the effectiveness and potential impact of the Center's completed and ongoing research;
- c) The effectiveness and efficiency of management, including the mechanisms and processes for ensuring quality; and
- d) The accomplishments and impact of the Center's research and related activities.

The topics expected to be covered by the EPMRs are listed below.

Topics to be Covered

A Mission, Strategy and Priorities

- The continuing appropriateness of the Center's mission in light of important changes in the Center and its external environment since the previous external review.
- The policies, strategies, and priorities of the Center, their coherence with the CGIAR's goals (of poverty alleviation, natural resources management, and sustainable food security), and relevance to beneficiaries, especially rural women.
- The appropriateness of the roles of relevant partners in the formulation and implementation of the Center's strategy and priorities, considering alternative sources of supply and the benefits of partnerships with others.

B Quality and Relevance

- The quality and relevance of the science practised at the Center.
- The effectiveness of the Center's processes for planning, priority setting, quality management (e.g., CCERs, peer reviews and other quality and relevance assurance mechanisms), and impact assessment.

C Effectiveness and Efficiency of Management

- The performance of the Center's Board in governing the Center, the effectiveness of leadership throughout the Center, and the suitability of the organization's culture to its mission.
- The adequacy of the Center's organizational structure and the mechanisms in place to manage, coordinate and ensure the excellence of the research programs and related activities.
- The adequacy of resources (financial, human, physical and information) available and the effectiveness and efficiency of their management.
- The effectiveness of the Center's relationships with relevant research partners and other stakeholders of the CGIAR System.

D Accomplishments and Impact

- Recent achievements of the Center in research and other areas.

- The effectiveness of the Center's programs in terms of their impact and contribution to the achievement of the mission and goals of the CGIAR.

CGIAR Science Council: Strategic Issues for the 6th EPMR of CIAT

1. The SC suggests that the Panel gives the highest priority to addressing the issue of Center direction and focus, broadening of its funding base and structure the Board, management and staff in a way that maximizes and rewards funding the mission.
2. A major recommendation of the last EPMR was to ensure that CIAT maintained adequate support for its regional and global research on commodities. To what extent has CIAT maintained the right balance between its commodity and NRM research? And its global and regional focus.
3. A large component of CIAT's portfolio is made up of small and discrete activities which may lead to inefficiencies in the deployment of resources. In response to SC criticism of having a large number of apparently unrelated projects, it appears that CIAT, rather than completing and/or eliminating these projects, has merely subsumed them under one program. The SC encourages the EPMR to assess how CIAT could rationalise, concentrating on fewer, well-selected areas of strategic international research with high potential benefit to the poor in the tropics.
4. Are CIAT's activities in agroenterprise development contributing to IPG in this area? Is CIAT's current and proposed research agenda consistent with CIAT's comparative advantage?
5. Is CIAT's proposed expansion of research on tropical fruits well focused to deliver IPGs? Does it draw adequately on experience elsewhere in this new area of research? What areas of CIAT's commodity research will be forgone to embrace new research in tropical crops? How were such tradeoffs decided?
6. As a result of a recent major funding shortfall there are some substantial resource shifts among projects but the criteria for these reallocations is not clear. The Center states that research on genetic improvement will "not be fundamentally changed". However, changes in project funding projections for 2007 do not quite support such a statement. Some projects have greatly increased funding projected for 2007 from MTP06-08 (beans, tropical fruits, rural agroenterprise development, and participatory research); others have major reductions (rice, cassava).
7. Is the work of the TSBF integrated into other projects such as the communities and watershed project? Does CIAT have the right balance in NRM research—between biophysical and social, between the landscape/watershed and the management of the resources at the "crop based system" level, between understanding driving processes (IPG) and local activities?
8. What are the working relations between CIAT and other centers with similar crop focus? Specifically what's the relationship with the cassava research of IITA and the tropical pasture research of ILRI?

ANNEX 3
Itinerary and People Contacted by the 6th EPMR Panel

Itinerary

From May 18 through May 25 of 2007 the Panel worked at CIAT-Cali Headquarters for the initial phase of the EPMR. Throughout the week Outposted Scientists, Principal Staff Scientists and Management gave presentations on their mission, vision, goals, organization, strategic plans and other themes. The Panel also met with individual Staff members to discuss project activities, operational functions and support services at CIAT. The Panel Chair and the Governance and Finance Members attended CIAT's Board of Trustees meetings at CIAT headquarters May 21-25. The Panel also met with the association of International Staff, National Staff, the Workers' Union and the association of CIAT Secretaries.

In June, subgroups of the Panel visited CIAT's Regional Staff and Collaborators in Central America, Africa and Asia. During their visit to **Central America**, in Tegucigalpa-Honduras the group participated at a workshop in Quesungual, interacted with the MIS Consortium and ARDINet Partners (including Mexico and the United States). Meetings were organized with: Honduras CIAT Staff, DICTA and UNA Olancho, CIPRES and Soghum producers, Totogalpa partnerships CIRAD-CIAT-CIPRES, Agrosalud project partners (NGOs producers and Somoto – seed production and distribution), INTA Regional Las Segovias, Funica, Posaf partners and CRS Nicaragua and CIAT Staff. Field visits were organized to see INTA irrigated rice research station (including rain fed rice germplasm development) and the livestock farmer group El Tule (Condega).

During the visit to CIAT activities in **Africa**, meetings were organized in Nairobi with TSBF/CIAT scientists, ICRAF, and partners. TSBF activities at Maseno area were visited as well as bean research activities in Kakamega. The team visited, Kawanda and Namulonge, Lilongue where they saw activities of ERI, PABRA and TSBF.

The visit to Asia included Vietnam (Hoa Binh Providence) to see the SDC-funded Smallholder Agroenterprise Development in the uplands (SADU), linking farms to market in various value chains and market extension, and other CIAT activities, such as IFAD –funded PRDU project, IFAD-funded SLP Village Livestock Project, Government Partners (VAAS, IPSARD, NIAHG, MARD), Donors (SDC and IFAD), Partner Projects (ETSP, Oxfgam-Hong Kong). The team went to Laos (Luang Prabang) where they saw CIAT's activities connected to SADU (paper mulberry) LAPP (legumes for pigs), Cassava and Capacity Building (forages and livestock) in Pak Ou and Xieng Ngeun Districts. They had final discussions in Vientiane.

The Panel reassembled at CIAT Headquarters on July 3 of 2007 for the Main Phase of the review. During this period Panel members had short individual meetings with CIAT Staff.

On July 9, the Panel Chair and the Panel Secretary had a series of meetings in Bogotá with Colombian organizations (**CORPOICA**, CENIPALMA, MIDAS, and Ministry of Agriculture) and with several Colombian international agricultural research experts with knowledge about CIAT and the CGIAR.

On July 18th, the Panel Chair presented to all CIAT staff present at Headquarters a summary of the main conclusions, recommendations and suggestions included in the Report.

People Contacted

Tin Maung Aye	CIAT - Asia
German Arias	CIAT - Legal Advisor
Jaqueline Ashby	No longer CIAT employee - Director of Rural Innovation
Andre Bationo	CIAT - TSBF / AfNet Coordinator
Stephen Beebe	CIAT - Bean breeder and Project Manager
Emilia Boncondin	Board Member Designate
Robin Buruchara	CIAT - Regional Research Leader Africa
Hernan Ceballos	CIAT - Cassava Breeder / Project Coordinator
Rowland Chirwa	CIAT-PABRA, Malawi, Africa
John Connell	CIAT - Asia
Fernando Correa	CIAT - Rice Improvement Project Manager
Jesus Cuellar	CIAT - Administrative Director
Luz Stella Daza	CIAT - Internal Audit
Daniel Deboucq	CIAT - Genetic Resources Unit
Shaun Ferris	CIAT - Project Manager - Agro-enterprise
Louise Fortmann	Professor of Natural Resource Sociology
James Garcia	CIAT - Statistic Consultant
Ivan Gomez	CIAT - President Union Leadership
Sibel Gonzalez	CIAT - Head Institutional Protection Unit
Carolina Gonzalez	CIAT - Research Assistant
Alonso Gonzalez	CIAT - Tropical Fruits Project
Ken Giller	Chair of the Programm Committee, Professor, Plant Production Systems
Edith Hesse	CIAT - Head of the Inforcap Unit
Carlos Jara	CIAT - President Associates Assistants
Andrew Jarvis	CIAT - Senior Scientist - Spatial Analyst
Segenet Kelemu	CIAT - Project Manager
Roger Laing	CIAT - Leader, People and Agroecosystems RDC
Kathryn	CIAT - Head Project Office
Rod Lefroy	CIAT- Regional Research Leader Asia
Zaida Lentini	CIAT - Genetisist, Senior Research Scientist
Mark Lundy	CIAT- Agroenterprise Development Specialist
Carlos Meneses	CIAT - Chief Information Office
John Miles	CIAT - Genetist
David Miron	President, TDM Consultants
Angela Molina	CIAT - President Secretaries Associates
Julian Montoya	CIAT - Administrative Assistant Miami Office
Cesar Moreno	CIAT - Financial Controller
Sonat Natee	ICRAF
Thomas Oberthur	CIAT - Project Manager
Ablassé Ouedraogo	Board Member Designate - Conseiller du Président pur l'Afrique
Douglas Pachico	CIAT- Deputy Director General,
Helena Pachon	CIAT - Human Nutritionist
Jorge Peña	CIAT - Buget Office
Gustavo Peralta	CIAT - Human Resources Manager
Michael Peters	CIAT - Tropical Forage Germplasm Specialist
Ounkeo Phathamavong	CIAT - Asia
Phonspaseuth Phensgsavanh	CIAT - Asia

Roberto Porro	CIAT - Senior Scientist and Executive Secretary – Amazon Initiative Consortium
Rafael Posada	No longer CIAT employee
Mario Rengifo	CIAT - Financial Project Manager
Maria José Sampaio	Researcher, Special Advisor for Policy Affairs
Nteranya Sanginga	CIAT - TSBF - Tropical Soil Biology and Fertility Institute
Luis Roberto Sanint	CIAT- Deputy Director
Yves Savidan	Chairman of the Board of Trustees
Axel Schmidt	CIAT - Regional Research LAC
Mary Scholes	Vice-Chair - Professor, Dept of Animal, Plant & Environmental Sciences
Werner Stur	CIAT - Asia
Joseph Tohme	CIAT - Research leader of the Agrobiodiversity RDC
Jorge Uribe	CIAT - Head of Procurement and Maintenance Units
Gavin Varney	CIAT - Asia
Gloria Vasquez	CIAT - Head Food and Housing Unit
Arturo Vega	Appointed in September 2005 – Executive Director (CORPOICA)
Joachim Voss	CIAT - Director General
Tiago Wandschneider	CIAT - Vietnam
Claudio Wernli	Executive Director - Millennium Science Initiative
Douglas White	CIAT - Economist - Senior Research Fellow
Gonzalo Zorrilla	CIAT - FLAR Executive Director
Álvaro Uribe	Sub-director de Innovación y Desarrollo Territorial – CORPOICA
Carlos Fernando Ortiz	Director in charge of CORPOICA
Juan Lucas Restrepo	Sub-director MIDAS Project
Lose Ignacio Sanz	Executive Director of CENIPLAMA
Juan David Ortega	General Secretariat of Ministry of Agriculture
Fernando Arbelaez	Vice minister of Ministry of Agriculture
Roger Kirkby	CIAT - Leader of PA, Uganda
Reuben Otsyula	Breeder KARI-Kakamega, Kenya
Gideon Rachier	Agronomist, Director KARI-Kakamega
Paul Kimani	Regional breeder ECABREN, Uganda
Pascal Sanginga	CIAT-Kawanda, Social Scientist
Rachel Muthoni	CIAT-PABRA, PM&E
Martha Nyagaya	CIAT-PABRA, Nutritionist
Sarah Nassozi	CIAT-PABRA, Research Assistant
Claire Mukankusi	PHD Student, University of Natal, Research Assistant
Stephen Bua	CIAT-PABRA, MSc Student, Makerere University, Research Assistant
Allan Male	CIAT-PABRA, Research Assistant
Suleiman Sebuliba	Kawanda
Francoise Murorunkwere	MSc Student, University of Rwanda
Pheonah Nabukalu	CIAT-PABRA, MSc Student, Makerere University
Virginia Gichuru	CIAT-PABRA, MSc Student, Makerere University
Pheonah Nabukalu	CIAT-PABRA, MSc Student, Makerere University
Moses Onim	Breeder and Managing Director Coordinator bean, Lagrotech seed Company
Setegn Gebeyehu	Program Coordinator Bean, EIAR
Michael Ugen	Program NARO, Namulonge

Isaac Mugaga	Research Assistant, Coordinator, Bean, NARO, Namulonge
Mbikayi Nkoko	Program INERA
Denis Kyetere	General Director NARO
Seyfu Ketema	Executive Secretary, ASARECA
Mackson Banda	Director DARS – Malawi
Wilkson Makumba	DARS – Malawi
Eric Mazuma	DARS – Malawi
Hilda Kabuli	DARS – Malawi
Kenneth Chaula	DAETS – Malawi
Linda Mphande	DAETS – Malawi
Amos Banda – PM Kasungu ADD	DAETS – Malawi
Grace Malindi	DAETS – Malawi
Kennedy Kanenga	ZARI – Zambia
Catherine Madata	ARI-Uyole, Tanzania
Susan Kaaria	CIAT – ERI, Uganda
Jemimah Njuki	CIAT – ERI, Zimbabwe
JeanClaude Rubyogo	CIAT – PABRA, Malawi
Shamie Zingore	CIAT – TSBF, Malawi
Mariam Mapila	CIAT – ERI, Malawi
Lizzie Kalolokesya	CIAT – ERI, Malawi
Ruth Magareta	CIAT – ERI, Malawi
Tennyson Magombo	CIAT – ERI, Malawi
R Okalebo	Soil Scientist, Moi University, Kenya
D Mugendi	Soil Scientist, Kenyatta University, Kenya
A Esilaba	Soil Scientist, Kenya Agricultural Research Institute (KARI), Kenya
N Mungai	Soil Scientist, Egerton University, Kenya
J Ndufa	Agroforestry Specialist, Kenya Forestry Research Institute (KEFRI), Kenya
J Huising	TSBF-CIAT, Coordinator Belowground Biodiversity (BGBD) network, Kenya
J Chianu	CIAT-TSBF, Economist, Nairobi, Kenya
P Okoth	CIAT-TSBF, Information manager BGBD project, GIS specialist, Nairobi, Kenya
O Ohiokpehai	CIAT-TSBF, Nutritionist, Nairobi, Kenya
P Pypers	CIAT – TSBF, Soil Scientist, Nairobi, Kenya
J Jefwa	CIAT-TSBF, Soil Microbiologist, Nairobi, Kenya
D Lesueur	CIAT-TSBF, Soil Microbiologist, Nairobi, Kenya +CIRAD
K Roing	CIAT-TSBF, Soil Scientist, Nairobi + SLU (Sweden)
R Meyo	CIAT-TSBF, Administrator, Maseno, Kenya
J Mukalama	CIAT-TSBF, Research Assistant, Maseno, Kenya
L Nyambega	CIAT-TSBF, Research Assistant, Maseno, Kenya
J Kihara	CIAT-TSBF, PhD student, Nairobi, Kenya
R Buruchara	CIAT Africa Coordinator, CIAT, Kampala, Uganda
M Musambi	Ministry of Agriculture, Mumias District, Kenya
Helen Nyamai	Ministry of Agriculture, Butere District, Kenya
NGO's Africa	Various representatives of farmer groups and NGOs.
B Vanlauwe	CIAT-TSBF, Soil Fertility Specialist
Luis Arango	Consultant
Henry Shands	

Ronnie Coffman	
Anthony Cavalieri	
Jennifer Nelson	
Carmen De Vicente	
Farmers Somoto	Beans/Agrosalud, Nicaragua
Farmers Totogalpa	Sorghum, Nicaragua
Farmers El Tule	Forages, Nicaragua
Aracelly Castro	PhD candidate, UNAL, Honduras
Oscar Ferreira	MSc candidate, UNAL, Honduras
Javier Gamez	Local government Candelaria, Ex Mayor, Honduras
Juan Carlos Rosas	Bean breeder, Zamorano, Honduras
Amando Lopez	Teacher, ITC-Guarita, Honduras
Cesar Alvarado	Director Tatascan Journal, ESNACIFOR, Honduras
Carlos Zelaya	Admin Director, FAO, Honduras
Luis Alvarez	Technical Director, FAO, Honduras
Elisabeth Huber-Sanwald	Soil specialist-degradation, IPICYT, Mexico
Steve Fonte	Candidato PhD UNAL, University of Davis, California, USA
Irma Sequiera	Part. Plant breeding Sorghum, CIPRES, Nicaragua
Silvio Aguirre	Part. Plant breeding Sorghum, CIPRES, Nicaragua
Oscar Poveda	Field technician SAQ, INTA, Nicaragua
Jellin Pavon	PhD candidate, soils, INTA, Nicaragua
Jose Alberto Paredes	Field coordinator SAQ Nicaragua, INTA, Nicaragua
Octavio Menocal	National Research director, INTA, Nicaragua
Raul Laguna	Field technician PESA-Agrosalud, INTA, Nicaragua
Armando Herandez	Office director Somoto, INTA, Nicaragua
Fatima Rodriguez	In vitro cultivation specialist, INTA, Nicaragua
Rene Jarquin	Director Zone las Segovias, INTA, Nicaragua
Lesbia Rizo	Economist, INTA, Nicaragua
Lazaro Narvaez	Rice breeder, INTA, Nicaragua
Martin	Forage specialist, INTA, Nicaragua
Alexander Mena Benavides	Forage specialist, INTA, Nicaragua
Julio Molina	Beans/Agrosalud, INTA, Nicaragua
Juan Alberto Molina	Agroenterprise Development, CRS, Nicaragua
Santos Palma	Agroenterprise Development, CRS, Nicaragua
Jorge Castellon	Agrosalud, CRS, Nicaragua
Felix Miranda	Agrosalud, CARITAS, Nicaragua
Alexis Herrera	Agrosalud, CARITAS, Nicaragua
Alejandro Arevalo	Agrosalud, FIDER, Nicaragua
Danilo Rivera	Agrosalud, IMPRHU, Nicaragua
Glenda Bonilla	University Professor, UNA, Nicaragua
Matilde Somarriba	University Professor, UNA, Nicaragua
Jairo Morales	University Professor, UNA, Nicaragua
Bismark Mendoza	University Professor, UNA, Nicaragua
Ursina Galbusera	MSc candidate, Swiss College of Agriculture,
Switzerland	
Geo Galbusera	MSc candidate, Swiss College of Agriculture,
Switzerland	
Edgar Amezquita	CIAT, Colombia, Consultor TSBF
Idupulapati Rao	CIAT, Colombia, Consultor TSBF, Plant physiologist
Mariela Rivera	CIAT, Colombia, PhD candidate SAQ

Filander Rodriguez	CIAT, Honduras, Administration Assit.
Vilia Escobar	CIAT, Honduras, Administrator
Marco Trejo	CIAT, Honduras, Consultor TSBF
Miguel Ayarza	CIAT, Honduras, Consultor TSBF
Edwin Garcia	CIAT, Honduras,
Peter Lentres	CIAT, Honduras, Economist/Geographer/Forages
Juan Carlos Mercado	CIAT, Nicaragua, Administration Assit.
Patricia Carillo	CIAT, Nicaragua, Nutriionist Agrosalud
Rein van der Hoek	CIAT, Nicaragua, Forage Agronomist
Zildghean Chow	CIAT, Nicaragua, Agronomist Rice/Sorghum
Maria Eugenia Baltodano	CIAT, Nicaragua, Economist
Roger Urbina	CIAT, Nicaragua, Seed specialist Agrosalud

ANNEX 4
List of Documents Reviewed by the 6th CIAT EPMR Panel

Readings

1. Science Council of the CGIAR Strategic Issues for the 6th EPMR of CIAT
2. Terms of Reference and Guidelines for External Program And Management Reviews of CGIAR Centers
 - CIAT Management Team meetings 05
 - CIAT Management Team meetings 06
 - CIAT Management Team meetings 07
 - EPMR Guidelines 2006_final
 - EPMR Terms of Reference
3. Most recent External Program & Management Review of the Center
 - 2. CIAT 5th EPMR 2000
4. Summary of actions taken in response to the last EPMR
Summary Recommendations of Fifth EPMR and CIAT Responses Vs MARCH 30 2007
5. CGIAR Research Priorities 2005 – 2015
 - CGIAR Research Priorities 2005-2015
6. The latest Board Approved Strategic Plan of the Center
 - Summary Strategic Plan 2001-2010
 - Strategic Plan 2001-2010
7. Medium-Term Plan of the Center for the Period of the Review
 - CIAT MTP 2001 - 2003
 - CIAT MTP 2002 – 2004
 - CIAT MTP 2003 - 2005
 - CIAT MTP 2004 - 2006
 - CIAT MTP 2005 - 2007
 - CIAT MTP 2006 - 2008
 - CIAT MTP 2007 – 2009
 - CIAT MTP 2008 - 2010
8. SC Commentaries of the Center’s Medium Term Plans
 - CIAT MTPs_SC Commentaries 2006-2001
9. Center-Commissioned External Review Reports plus Center Responses
 - CCER Agrobiodiversity 2006
 - CCER Agrobiodiversity and Agroecosystems Response Summary Apr24
 - CCER Agrobiodiversity Response
 - CCER Agroecosystems 2006
 - CCER Agroecosystems Response
 - CCER Governance Management and Finance 2006 Response
 - CCER Governance Management and Finance 2006
 - CCER Response Summary Apr24 (2)
 - CCER Rural Innovation Institute 2006
 - CCER Rural Innovation Response
 - CCER Spatial Analysis 2003
 - CCER Spatial analysis at CIAT_Center response
10. Donor-Commissioned External Review Reports
 - BP2 – PMP Final 5 Sept 05
 - IP1 – PABRA Response to Jeep Recommendations Jan
 - IP1 – THE PAN-AFRICA BEAN RESEARCH ALLIANCE (P
 - IP5 – ekomment-ciat-forage-response-final
 - IP5 - ekomment-final-ciat-forage

- IP5 – Final Draft Report Mid Term Evaluation of the C
 - IP5 – Mid Term Evaluation of Enhancing Beef Product
 - PE2 – Mid –term eval BGBD
 - SB1 – Interim GPG Rehabilitation Project Phase I-Gen
 - SB1 – Interim GPG Rehabilitation Project Phase I-Gen
 - SB1 – Report on an Audit of the Genebank Rehabilitat
 - SW3 - PRGA external review 2000
11. List of achievements outputs publications peer review and other, research breakthroughs as recognized by peers, germplasm
 - List of achievements – Outputs by program
 - List of Non-Thomson peer review publications 2006
 - List of peer review publications with NARS 2006
 - List of Thomson peer review publications 2006
 12. A paper by Center management and Board (1)
 - VisionStrategy for EPMR
 13. The current organization chart, with brief description of the Center’s internal management structure, including the composition and terms of reference of each major committee (3)
 - CIAT Committees 2006
 - CIAT Committees ToRs 2006
 - CIAT06 Business Plan-BOT11
 - Organigram product lines for EPMR 07
 14. Other Recent EPMR Reports of CGIAR Centers
 15. Most recent CGIAR stripe studies involving the Center (to all or relevant Panel members)
 16. Most recent Annual Report of the Center and comparable research reports of the Programs if available
 - CIAT 2006 Project Reports
 - Ciat annual Report 2005-2006
 17. The latest Annual Funding Request.
 - CIAT MTP 2007 - 2009
 - CIAT tables MTP 2007-2009 TABLE 7 ANNUAL FUNDING REQUEST
 18. List of Professional staff with short CVs including standard set of information as instructed the SC Secretariat (Publica)
 - CIAT Staff LIST
 - List of professional staff short CVs
 19. List of reports of major planning conferences, internal reviews, expert meeting, which have had a major influence on t
 - List of reports of major conference
 20. List of agreements for cooperative activities with other Centers and institutions
 - List of Agreements
 21. List of ongoing and recently completed contracted projects
 - Ongoing and Recently completed contracted projects
 22. SWEP - Systemwide Farmer Participatory Research and Gender Analysis (PRGA)
 - CIAT BOT meeting brief ed1
 - External Review Summary d4
 - PRGA External Review Report
 - SC commentary on PRGA external evaluation

Governance and Management

1. Most recent CGIAR financial guidelines and manuals
 - Financial Guidelines Series no. 4 Guidelines for preparing the 2007-2009 MTPs and 2007 Financing Plans

- Financial Guidelines Series no. 1 Financial Management
 - Financial Guidelines Series no. 2 CGIAR Accounting Policies and Reporting Practices Manual
 - Financial Guidelines Series no. 3 Audit Policies
 - Financial Guidelines Series no. 5 CGIAR Indirect Cost Allocation Guidelines
 - Financial Guidelines Series no. 6 Procurement of Goods Works and Services
 - SC and CGIAR Secretariat Cover Memo on 2007-2009 MTPs
2. Reference Guides for CGIAR International Agricultural Research Centers and their Boards of Trustees
 - CGIAR Guide for BOT_Board Self-Assessment
 - CGIAR Guide for BOT-Building Effective Board Committees
 - CGIAR Guide for BOT_choosing a Director General
 - CGIAR Guide for BOT_Creating a wellbalanced Board
 - CGIAR Guide for BOT_Evaluating the Director General
 - CGIAR Guide for BOT_Role of the Board Chair
 - CGIAR Guide for BOT_Role responsib and accountabil
 3. Charters and other basic documents establishing the Center along with subsequent amendments
 - By – Laws
 - HostCountry Agreement
 - IBRD - UNDP Agreement
 4. Table showing composition of the Board over the last five years, along with an indication of the term of office for current
 - EPMR Table on Board Composition
 5. Board handbook of rules of procedure
 - Board Policies Procedures Manual Number 8 December 2006
 6. Table showing allowances, benefits and salary ranges for each category of staff
 7. Table showing personal data on professional staff by Program including job title-incumbent's location-IRS NSR LSR status
 - Table showing personnel data
 8. Table Summarizing turnover of staff over the last five years by staff category
 - Turnover
 - Turnover2000-2007
 9. List of international vacancies and how long positions have been vacant
 - Vacancies
 10. Set of minutes covering Board and Board Committee meeting since the last External Review (and reports of Board committees t
 - BOT 47 - 2001
 - BOT 48 - 2002
 - BOT 49 – 2003
 - BOT 50 – 2004
 - BOT 51 – 2005
 - BOT 52 - 2005
 - BOT 53 - 2006
 - BOT 54 - 2006
 - BOT 55 - 2007
 11. Staff manual or a description of current personnel procedures for international an locally recruited staff
 - Link to staff policy Manual
 12. Local compensation survey used by the Center
 - CGIAR compensation phase3 report 2005 11

- Compens.1
 - Compens.2
 - Explanatory note
 - Final Report
13. Reports of external auditors, including management letters, and financial officer's reports to the Board since the last Exte
- CIAT-1120 Presentación Comité Nov06-V3 Ingles 2006
 - CIAT-Resumen ejecutivo-Comité-final-Mayo-05-T-2005
 - KPGM – Informe dic 2001-r
 - KPGM – Informe mayo 2001-r
 - KPMG – Informe Mayo 2003-r
 - kpmg presentación may 2002
 - Kpmg2 May 2004
 - Presentación kpmg 2003 dec
 - presentación kpmg dic 2002
 - presentation audit committee 2005
 - presentation audit committee 2006
 - presentation audit committee-deloitte December 2004
14. Most recent internal audit reports
- CIAT GPG1 Project Report (Final) 2006
 - FW Audit of Processing of Candidate Evaluations
 - I-19-06 Laos Report General June 2006
 - I-20-06 TSBF informe de viaje junio 2006
 - I-21-06 Revision usuarios SGH 2006
 - I-22-06 Revisión perfiles As 400 – sep 06
 - I-23-06 Revisión usuarios OF – sep06
 - I-24-06 Revisión Conc Bancarias-2006 Sept
 - I-25-06 Report on an Audit of the HarvestPlus Challenge Program – CIAT Component
 - I-26-06 IPGRI Draft Report Aug 2006
 - I-28-06 Risk Management – reunion CRMC 4 ago 06
 - I-29-06 risk management status report to the Board oct. 2006
 - I-31-06 Seguimiento a recomendaciones de Auditoria externa 2005
 - I-31-06 Seguimiento recomendaciones AE -activos fijos 2005
 - I-32-06 Observaciones lote 64
 - I-33-06 Uganda seguim puntos visita July 06
 - I-34-06 Revision de los sistemas de pagos electrónicos
 - I-36-06 Inventario físico Almacén
 - Propuesta reducción 06
 - Provisiones 2006
 - Revisión inventario Activos Fijos-2006

Surveys conducted by the 6th EPMP

1. CIAT Staff Survey

- CIAT EPMP Staff Survey English
- CIAT EPMP Staff Survey Spanish
- Link Survey - Link Encuesta
- Results of the Staff Survey
- Staff Survey Commentaries

2. CIAT Stakeholders Survey

- English CIAT 6th External Program and Management Review Stakeholder survey

- Español CIAT 6ta Revisión Externa y Programas de Administración Encuesta a Stakeholder
- Stakeholders Survey Open Questions
- Results of the Stakeholders Survey

CIAT Reports to 6th EPMR Panel

1. Presentations

- Board Presentations
 - Climate Change by Andy Jarvis
 - High Value Crops Fand V by Alonso Gonzalez
 - Integration in Africa by Robin Buruchara
 - Pachico
 - PPPs by Luis Roberto Sanint
 - Presentation-Dr Tohme
 - PRGA to PC by Janice Jiggins
 - Reg Integration by RL
 - TSBF-CIAT Report by NS
- May CIAT Administrative Presentations
 - Administrative Director - Jesus Cuellar
 - Food And Housing Gloria Vasquez
 - Human Resources Gustavo Peralta
 - Institutional Protection Sibel Gonzalez
 - Legal Office German Arias
 - Maintenance And Procurement Jorge Uribe
 - Miami Office Julian Montoya
- May Presentations to EPMR
 - Amazon Initiative. Porro
 - Bean Improvement. Beebe
 - Cassava Improvement. Ceballos
 - Central America. Schmidt
 - CIAT in Context. Evolution and Innovation. SC Issues 1 and 3 and 6. Voss
 - Financial Overview. Sanint
 - Genetic Resources. Debouck
 - Opportunities for Research on High Value Commodities. SC Issues 4 and 5. Oberthur EPMR_07-05
 - Opportunities for Research on High Value Commodities. SC Issues 4 and 5. Kirkby
 - Regional Research Strategy. partnership in Latin America. Sanint
 - Regional Strategy Asia. Lefroy
 - Regional Strategy. Africa. Buruchara
 - Research Program. Recent Development and Further Directions. Pachico
 - Rice in Latin America. SC Issue 8. Correa
 - Sharing the Benefits of Agrobiodiversity. Tohme
 - Tropical Forages. SC Issue 8. Peters
 - Tropical Soils Biology Fertility in Africa. SC Issue 7. Sanginga

2. Documents

- CIAT 06 Business Plan-BOT11
- CIAT DG REPORT TO BOT11
- CIAT strategic vision jan 30- 07 final draft
- TEAM REPORT 4
- Agreements

- Acta de conformacion del FLAR 1995
- Acuerdo CIAT-FLAR nov 04
- Clayuca
- FLAR
- Heads of agreement FLAR 1995
- Jircas
- Papalotla
- Reglamento FLAR 1995
- CIAT Annual Report 2005-2006
 - CIAT annual report 2005 - 2006 text only
 - CIAT anual report 2005 - 2006
- Funacion Instituto de Innovacion Rural
 - Acta De Constitucion Iir Version Final
 - Estatutos Fundación Iir Version Final
 - IIR - Convenio de sede FINAL
 - Reunión Aclaratoria Sobre FIIR y sus implicaciones
 - The Rural Innovation Institute
- Impact Studies
 - 13_pres_farhney
 - 3A and 3B PM Indicators for 2005 and 2006
 - Asia-- Contribution to IP-5 Annual Report (2006)
 - Assessing the Impact of IPDM-Draft- W Kenya
 - CIAT 2005 Impact Submission (3A3B)
 - CIAT 2006 Impact Submission (3A3B)
 - CIAT Impacts 2005
 - CIAT-WB Indicators 2006
 - CIAT-WB Indicators 2006 IA 6 (2)
 - Honduras LBS adoption
 - Impact Study 1
 - Impact Study 2
 - Presentación ALPA
 - Regional Impact Highlight - Dissemination and Adoption of Improved Bean Varieties - Lessons for PABRAs Wider Impact Strategy
 - The Impact Of Improved Bean Production Technologies In Rwanda
 - The Impact Of Improved Bush Bean Varieties And Management Technologies In Uganda
- Human Resources
 - CIAT Performance Indicators Publications 2004-2005-2006
 - CIAT Staff Turnover
 - Disciplinary Breakdown Table 9.2
 - HR office - salary and benefits analysis vs market
 - IRS - December 2006
 - IRS -Termination-Resignation 2005 – 2007
 - NRS Resignation 2005-2007abr
 - Table 9.1 CIAT Staffing 2000-2006
 - Professionals trained at HQ 2002-2006
 - Turnover1999-2007 No.31 -NRS
- MTP's
 - CIAT tables MTP 2008-2010 PL
 - MTP 2008-2010 CIAT June 15 2007
 - MTP Output target 2006-2008 2007-2009 y 2008-2010

- SC coments in brief CIAT MTP 2007 - 2009
 - Table 5 MTP
 - TSBF
 - CIAT TSBF Achievements 2002-2005
 - CIAT TSBF Strategy 2005-2010
 - Excerpt TSBF-SAC Revised TORS
 - SAC-07 Report - final
 - TSBF agreement
-

For a comprehensive list of all CIAT publications during the period covered by this EPMR (2000-2007) see: <http://www.ciat.cgiar.org/biblioteca/index.htm>

Some citations link to full texts, whenever the library has obtained the authorization by publishers or authors, or because they are open access. All items listed including those published prior to 2006, are accessible via http://ciat.catalog.cgiar.org/ciat_catalog.htm

ANNEX 5
Center Response to 5th EPMR and 6th EPMR Panel Commentary

Recommendation 1

*Because of the global responsibility assumed by CIAT for its germplasm collections held in trust, and the urgent need to upgrade the genebank and its operation, the Panel **recommends** that CIAT give urgent priority to obtaining necessary funds to comply fully with the Systemwide Genetic Resources Program on upgrading CGIAR genebanks; that a timetable of 5 years be set to complete the upgrade effort; and that Board and Management examine needs - staffing, special equipment, etc. - to ensure that upgrading is carried out successfully.*

Center Response

CIAT agrees with the need to accelerate the upgrading of the germplasm collections it holds. A timetable for the upgrading of the genebank and the in-trust collections was presented to CIAT BOT and Senior Management as early as 1996. CIAT provided capital funds to upgrade GRU facilities (such as the seed viability and the in-vitro laboratories, a drying room, and an additional cold store). CIAT houses an average size germplasm collection and allocates the second highest amount of unrestricted resources among the 11 genebanks held in the CGIAR. Within this very high allocation of unrestricted resources, CIAT will update the 1996 up-grading plan to comply with the EPMR recommendation. This plan will contain three elements: First, greatly increase the number of accessions renewed and stored yearly. Secondly, since 1998, as part of the systemwide activities of SGRP (and following the recommendations of the 1995 and 1998 reviews), CIAT has participated actively in the preparation of the Upgrading Plan for the 10 genebanks of the CGIAR. The final version of this plan was submitted to TAC in Mar'00 for its endorsement and funding. And thirdly, CIAT will also prioritize additional fund raising activities to support the upgrading plan.

6th EPMR comment - Satisfactory progress, ongoing

Progress was made during the phase 1 of the CGIAR Genebank Upgrading (2003-2006) against three major indicators: i) regeneration against seed aging, ii) long-term conservation at CIAT, and iii) security back-ups at CIMMYT (for the seed collections of beans and forages) and CIP (for the cassava collection). As indicated last May (echoing the reviews of November 2005 and October 2006), the effort should be continued during Phase 2 (2007-2009).

Recommendation 2

*Because CIAT holds in trust the largest global collection of cassava among its total collections of over 50,000 accessions; because the storage and management of this vegetatively propagated crop is costly due to high labor inputs, and because storage in tissue culture, even with slow-growth methods, poses some risks to the genetic stability and safety of the germplasm, the Panel **recommends** that CIAT direct major effort to develop a reliable cryopreservation method to cut costs and to guarantee the long-term safety of these collections.*

Center Response

CIAT agrees that cryopreservation is an economic alternative, and once operational permits secure germplasm storage, including safety duplications. The Projects SB-01 (GRU) and SB-02 have invested in cryoconservation research in liquid nitrogen (LN) of cassava shoot tips for the long-term conservation of the cassava collections. Protocols are currently working for about 45% of the clones of a sub-set of the core collection. Thus, in the short term, the introduction of about 45% of the cassava collection into LN storage is feasible with the consequent benefits regarding

safety and savings in maintenance cost. Because cryoconservation methods are also of interest to IITA, INIBAP, and CIP, CIAT has presented a project to SGRP in order to have a systemwide research project for the cryoconservation of vegetatively propagated crops. SGRP has so far only approved funds for meetings, one in Tsukuba (October 1998) and another one in Leuven (May 2000). A concept note was submitted for joint research in 2000 to the University of Leuven. Cryoconservation research is also included in the Upgrading Plan. Fundraising efforts for research on cryopreservation continue, but have been without success so far. While this takes place, as an intermediate safety measure, CIAT is considering duplicating the entire collection in vitro (under slow growth conditions) as a “black box” in another location.

6th EPMR Comment – Satisfactory progress

Recommendation 3

Because biotechnology research at CIAT generates a new class of genetic resources; e.g. clones, sequences, probes, transgenic organisms, and associated information; because these new genetic resources are as valuable as “traditional” genetic resources; and because they will become increasingly more important for research and technology development, the Panel recommends that CIAT adopts the broader concept of agrobiodiversity to include the new class of genetic resources, and develop appropriate policies and protocols to manage their conservation, exchange and use.

Center Response

The broader concept of agrobiodiversity in CIAT is managed mainly in Project SB-02. It manages the “new class” of genetic resources, such as probes, gene constructs, plasmids and DNA clones. SB-2 has initiated a database for these materials, including proprietary restrictions on their use. The goal is to implement a system for assembling, characterization and storage, including facilities and procedures. CIAT has developed a policy for the handling of and experimentation with transgenic organisms. Specific clauses will be added to CIAT’s IPR Policy to expedite the management of these resources. Implications for the in-trust germplasm collection need to be examined. Moreover, relevant outcomes of the Center’s IP Audit (in progress) will be useful in this regard. In addition, efforts are underway in the genomics area, especially to generate cassava EST’s involved in starch biosynthesis/quality, in collaboration with the Montpellier Genomics Platform, and in developing cassava lines with high levels of carotene.

6th EPMR Comment - Completed

Recommendation 4

Because agrobiodiversity conservation, enhancement and use is central to the mission and international research responsibilities of the CGIAR and CIAT; and because the emergence of the private sector as a major technology provider within the new global regimes of intellectual property and biosafety has profound and pervasive implications on the generation of international public goods, the Panel recommends that CIAT, within the framework of the CGIAR, develop at the earliest possible time a comprehensive policy, operational strategy and capacity to manage its research and development efforts on agrobiodiversity to ensure maximum access to and freedom-to-operate in the use of genetic resources, biotechnology applications and information, and the safe deployment and use of products derived from them.

Center Response

The approval by the BOT of the CIAT policy on IPR in December 1998 is one step in that direction. Access to genetic resources and elite materials is regulated through Protocols 1 and 2, respectively, of that policy. The ongoing IPR audit will assist CIAT to build a framework on the

improvements of its current IPR policy, to develop internal mechanisms for facilitating effective access to other IPs, and to develop procedures aimed at exercising and benefiting from its own IPs; all the way from employment policies through laboratory protocols. In addition, CIAT will seek the collaboration of the Central Advisory Service housed in ISNAR for across-center issues, as well as the assistance of law firms, which have offered valuable services free of charge.

6th EPMR Comment – Incomplete

Inadequate CIAT capacity to deal with complicate IPR issues. Inconsistencies observed in compliance with IPR obligations

Recommendation 5

Because of the strategic importance of CIAT's mandate commodities to the wellbeing of the world's poor; because CIAT is a major if not the only nucleus of international research on these commodities; and because research and development on commodity improvement requires consistent, long-term and adequate efforts, the Panel recommends that the Center Board and Management commit, secure and provide sustained and adequate support to the Center's global and regional commodity research responsibilities.

Center Response

CIAT remains fully committed to its traditional commodities; beans, cassava, rice and tropical forages. The ever scarcer unrestricted resources will be optimally allocated to the CIAT research areas, taking into account possibilities of raising complementary restricted funding.

6th EPMR Comment – Completed

Given current CGIAR (unrestricted vs. restricted funding) and CIAT funding situation

Recommendation 6

Because of advances in technology that allow the modification of the nutritional characteristics of staple food crops, such as the production of vitamin A precursors in rice, and because improved human nutrition would be a major contribution to the welfare of poor consumers in LAC; the Panel recommends that CIAT monitor closely the advances in this technology as well as the surrounding intellectual property issues, and take all appropriate steps to utilize these technologies in appropriate germplasm improvement programs

Center Response

CIAT has been in contact with the authors and institutions of new technological developments in the area of crop product quality (human nutrition and health). CIAT has requested 'golden rice' and iron-rich rice lines for testing in LAC conditions. But no significant research expenditures will be made unless the property issues have been made clear so that this new technology can be applied without legal disputes.

6th EPMR Comment – Ongoing Activity

CIAT has significantly increased its activity in deploying biofortified crops using special project funds (AgroSalud, Harvest Plus Challenge Program).

Recommendation 7

Because of the vulnerability of the highly successful African Bean Project to changes in donor funding and the impression of African NARS partners that CIAT has no long term commitment to the continent, the Panel recommends that CIAT assure the project of long term sustained funding to safeguard continuity and the ability to expand into promising areas such as forages.

Center Response

Unrestricted resources to CIAT have declined every year since 1989. Despite these continuing reductions, CIAT has created for 2000 and onwards one senior scientist position in Africa out of unrestricted resources (to become the Africa-wide coordinator, as was done also for Asia). Three other positions have been added through System-wide Programs funded by CGIAR member contributions. Additional positions, and research on forages, will have to be realized through prioritized restricted fund raising efforts.

6th EPMR Comment – Partially implemented

Extremely small level of core funds allocated to the African Program, but unclear precisely how much core is allocated to Africa. Some evidence of implementing Forage research in Africa in partnership with ILRI.

Recommendation 8

Because the approach of CIAT's Natural Resource Management research at the farm, community, watershed, and ecoregion levels, is not always clear, the Panel recommends that CIAT develop a rigorous overall research approach with greater integration among projects, define their specific objectives (including the role of reference sites and related activities) more clearly, and establish a clear framework of their hierarchical and functional relations and responsibilities.

Center Response

CIAT plans to pursue vigorously greater integration among projects through the development of the new strategic plan. CIAT will continue to focus on producing strategic research outputs of global relevance based on the integration of improved germplasm, IPM, crop-livestock systems, decision support systems and improved land management. CIAT will organize a high-level expert consultation (or "think tank") for this purpose as part of the planning process to further develop its integrated research strategy, specific objectives and the role of comparative analysis across reference sites.

6th EPMR Comment - Not completed

Comprehensive strategy is not demonstrated despite numerous changes in organization. CIAT has re-organized into Research for Development Challenges, and CIAT's strategy for natural resource management research is now expressed through the strategy of the People and Agroecosystems RDC (P&A RDC) and the associated Tropical Soil Biology Fertility Institute (TSBF), which have the broad role of addressing agroecosystem management challenges. While this reorganization clusters many of the relevant skills, and was partly intended to achieve improved integration, an overall research approach with greater integration is really only evident in CIAT's regional operations in Asia, Africa (including at TSBF), and Central America where on the ground projects cluster the disciplinary mix required from across the organization. These projects tend to focus on livelihood improvement of the rural poor, with resource sustainability improvement as a desirable, but secondary, component. Hence, the clear strategy and framework requested remains elusive.

Recommendation 9

Because the Hillside Project work developed in Colombia has not yet lived up to its promise in Central America, the Panel recommends that CIAT develop a rigorous and coherent research plan for the Hillside Project including clear and consistent definitions.

Center Response

CIAT recognizes that there have been challenges in integrating agronomy research in Central America with headquarters decision-support research in the past. A new project manager and

coordinator in Central America were put in place to improve this integration. CIAT management has complete confidence in the Project manager and the Central America coordinator who in the space of one year, and in the face of the Mitch hurricane after-effects have already begun to make significant progress. Clear research plans have been developed and are being implemented effectively. CIAT will continue to monitor progress on this research plan.

6th EPMR Comment – Action taken, no longer relevant

Hillside work terminated for a lack of consistent results. As part of its re-organization and management of funding shortfalls, CIAT has phased out this project and the staff members formerly involved have left the Center. Field research carried out under this project has been largely discontinued. Nevertheless, as part of its participation in the Water & Food Challenge Program, CIAT remains engaged in some of the themes of research related to this project.

Recommendation 10

Because the integration of research on germplasm, natural resources and social science lies at the heart of CIAT's strategy and because CIAT has had a lengthy experience in bringing about such integration, the Panel recommends that CIAT document its experience by assessing the impact of its past integration efforts on its target areas and populations.

Center Response

CIAT agrees with the Panel on the importance of documenting the impact of past integration efforts on its target areas. A major inter-project effort has been launched to assess impact in the ecoregional reference sites where genetic and natural resource research has been integrated.

6th EPMR Comment – Not completed

No evidence of systematic impact analysis. No core capacity to do impact analysis.

Recommendation 11

Because CIAT has had extensive and varied experiences with different forms of research partnerships (e.g., networks, consortia, joint ventures, collaborative projects), the Panel recommends that CIAT carry out an analytical review of this experience to derive lessons for itself and other CGIAR institutions

Center Response

CIAT agrees with this recommendation. In December, 1998 CIAT's BOT approved a policy on "Institutional Cooperation". It set the overall objectives, principles and mechanisms to establish partnerships. This policy provides the conceptual framework for the proposed analytical review. CIAT will invite a reduced number of key partners to participate in the review exercise. This review is planned for the first semester of 2001.

6th EPMR Comment – Partially implemented

Panel has seen no evidence of analytical review of research partnerships however several studies analyzing partnership experiences were carried out with IFPRI.

Recommendation 12

Because integration of research efforts is a cross-cutting issue for the Center, the Panel recommends that CIAT include in its next strategic planning exercise an in-depth examination of the composition of its project portfolio and the mechanisms used to foster intra-project and inter-project integration.

Center Response

CIAT agrees with this recommendation. The development of the new Strategic Plan is taking into account the arrival of the new DG and the outcome of several reviews, including the EPMR and

the system review of the CGIAR strategy and vision. These outcomes will form an important input into the Strategic Plan.

6th EPMR Comment – Ongoing

New strategic plan produced in 2001 CIAT has reorganized a few times since 2000, most recently in 2007. Intra-project integration is effective. Integration across RDCs, and between regions and headquarters continues to be an issue. Scientists' time is closely tied to project funding, and this makes such collaboration difficult. CIAT lacks mechanisms for cross-project/RDC integration. The move to a product focus as suggested in the CCER on Agrobiodiversity was intended to foster integration in research planning and implementation whereby the different skills sets needed in the research development cycle to go from idea to final product in the hands of the user are all deployed in combination around products. However, a clear research strategy on this integration is lacking and many of the products identified are only components needed in a broad-based integrated approach to achieving outcomes.

Recommendation 13

Because the present information systems do not provide the project leaders with relevant, timely and accurate financial information, the Panel recommends that CIAT elevate the priority assigned to the redesign of its financial information systems, processes and procedures.

Center Response

CIAT was aware of this need. Because of the high estimated costs for a complete overhaul of the financial management system, CIAT decided to first focus on being year-2000 compatible. CIAT will now incrementally introduce improved hardware and software to address crucial bottlenecks. Following the EPMR and the Financial Review CIAT will develop a multi-year plan to continue upgrading individual outdated software. It will do so in close collaboration with the CGIAR Secretariat which is conducting a financial software review of the CGIAR system to ensure compatibility with the Secretariat and among centers.

6th EPMR Comment – In progress

Significant progress has been made in the implementation of this important recommendation, although not at priority speed. While CIAT acquired a financial information system based on Oracle e-business suites, it did not adopt a strategic investment approach or dedicate sufficient funds at the outset for implementation. It has taken over six years to complete implementation, and there are still modules to go live and roll out to out posted offices. Connectivity continues to be problematic in certain regional offices.

Recommendation 14

Because all successful research endeavours at the Center, such as participatory management research, are characterised by the maintenance of core competencies and institutional memory, the Panel recommends that CIAT ensure that its research strategy for NRM be explicitly cumulative in nature.

Center Response

CIAT agrees that research strategy must be both cumulative and innovative so that research builds on institutional memory, incorporates new advances in knowledge, responds to the needs of different stakeholders, and adjusts to comparative advantage as partners' capabilities change. CIAT will maintain and adjust core competencies needed to achieve research progress by deploying research competencies across as well as within projects, as required for CIAT's integrated approach to germplasm and natural resource management research. CIAT will ensure systematization of institutional memory by allocating additional resources to complete and

maintain the center-wide Data Warehouse for all strategic databases, ensuring full documentation and an IPR protection over the next five years.

6th EPMR Comment – Not implemented

Strategy for NRM remains a major issue in research management in CIAT.

Recommendation 15

Because CIAT has used effectively the products and processes of its participatory germplasm improvement research as an effective entry point to gain the confidence of farmers and facilitate the more complex but equally essential NRM research, as exemplified by the African Bean Program, and because technology and social process are recognized as potentially effective entry points into communities, the Panel recommends that CIAT further develops its "entry point" model to help identify optimal entry points for its NRM research projects.

Center Response

Further development of CIAT's "entry point" model will be undertaken in close consultation with NARS, by CIAT research projects involving crop choice, varietal selection, pest and disease management, soil management, production systems, land use and decision-support. The choice of optimal entry points for this applied research requires careful analysis of tradeoffs between alternative commodities, alternative land use options such as agrosilvopastoral versus pure grazing systems for example, and between production and conservation uses of land, soil, water or bio-diversity. The priorities of different stakeholders about what is optimal will often conflict, and will vary at farm, community, national and regional scales of analysis. Therefore, CIAT has identified one of the optimal entry points for its strategic research as the development of decision-support tools for NARS. This strategic research will continue to assist NARS to identify entry points among applied research options including crop choice, varietal selection, pest and disease management, soil management, production systems, and land use.

6th EPMR Comment – Ongoing

Strategy for NRM remains a major issue in research management in CIAT. However, CIAT works in close collaboration with NARS and a wide range of partners including advanced research institutes, civil society organizations, and farmer organizations from the onset of research activities. The strategic research outputs include improved germplasm, soil-crop-pest management strategies; integrated decision support tools; and capacity building methodologies all of which serve as entry points to CIAT's to farm level improvement. The use of this "entry point" approach is clearly evident in the integrated regional projects, and is leading towards opportunities to engage on natural resource management issues.

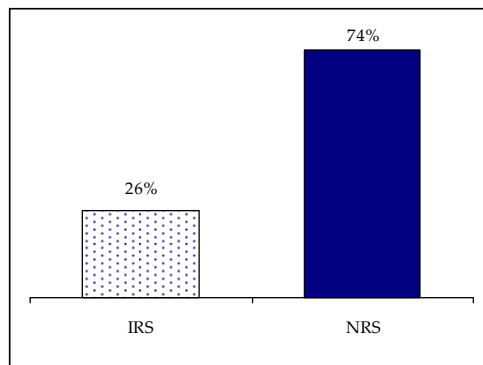
ANNEX 6
Results of the Staff Survey

CIAT's staff were asked to respond the survey on 8 questions by choosing one of five options:

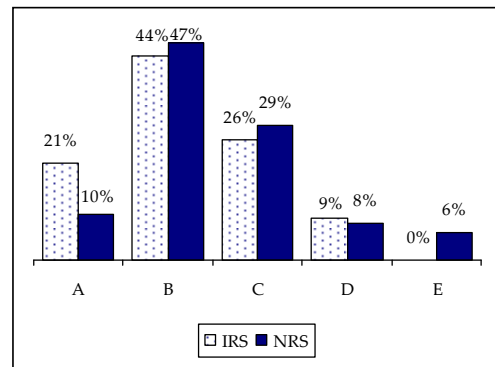
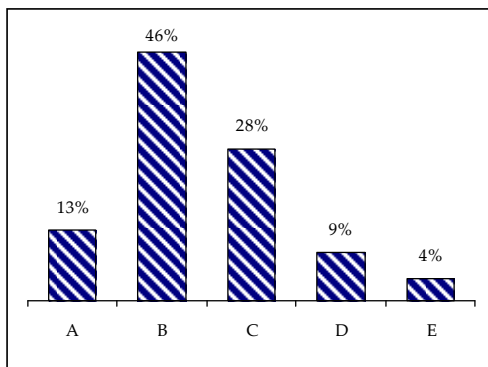
- | | |
|-------------------|----------------------|
| A. Strongly agree | D. Strongly Disagree |
| B. Agree | E. Don't know |
| C. Disagree | |

The portion of different responses to each question is shown in the graphs. The number of respondents is given in brackets.

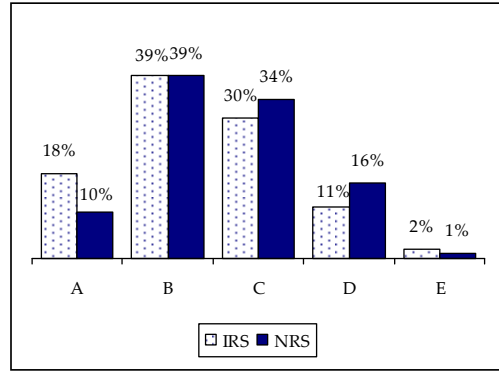
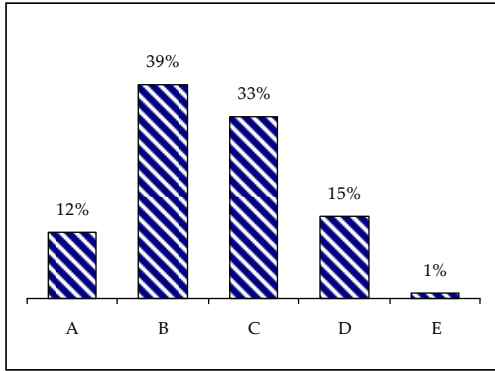
IRS [43] / NRS [123]



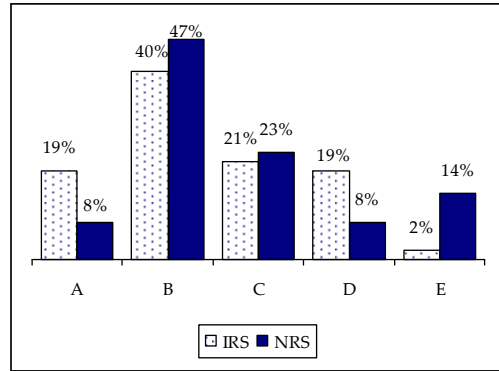
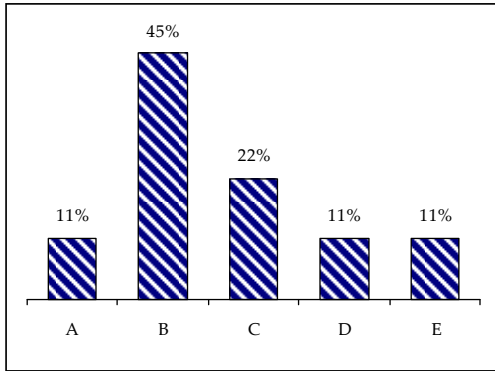
1. CIAT's work environment is conducive to:
 - (a) Innovative research [161; IRS-43, NRS-118]



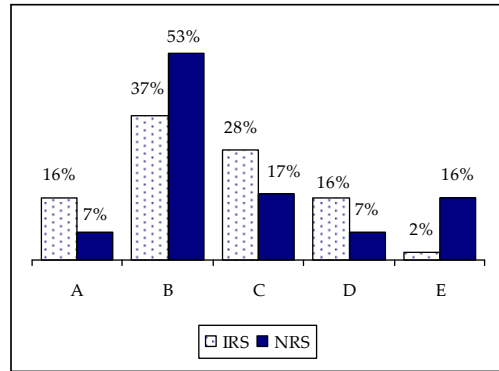
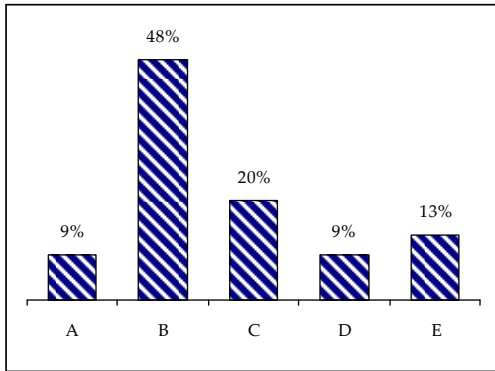
1. CIAT's work environment is conducive to:
 (b) Teamwork [163; IRS-44, NRS-119]



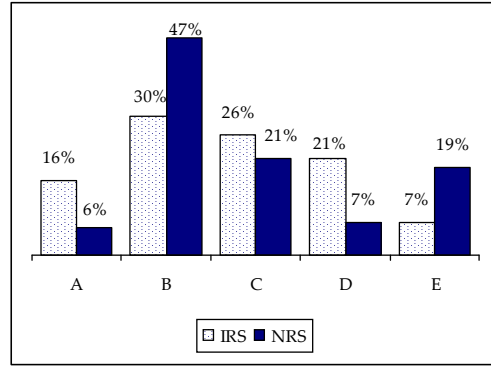
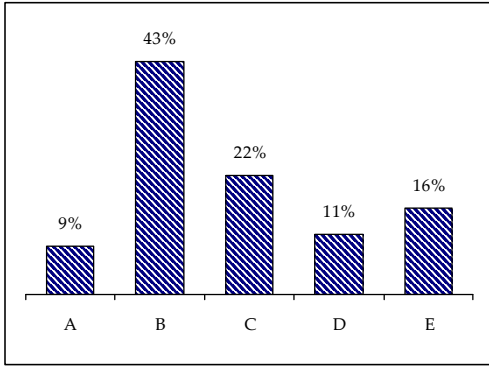
2. I believe that CIAT's reorganization of research will enhance
 (a). Overall research focus [161; IRS-43, NRS-118]



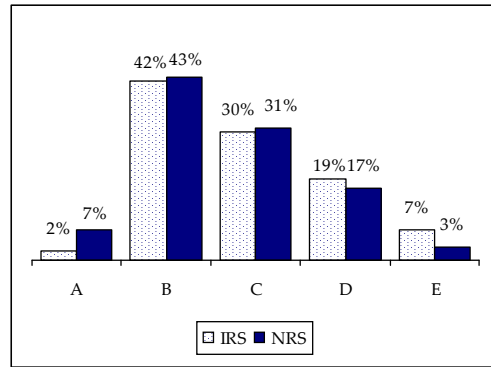
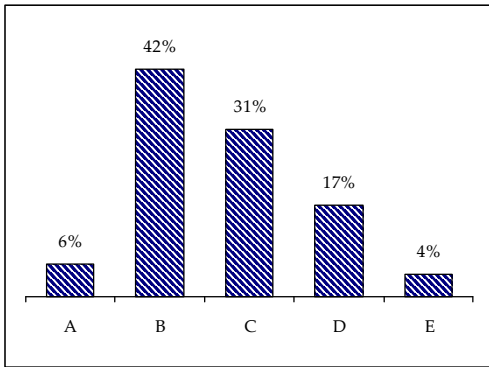
2. I believe that CIAT's reorganization of research will enhance
 (b) Research integration [159; IRS-43, NRS-116]



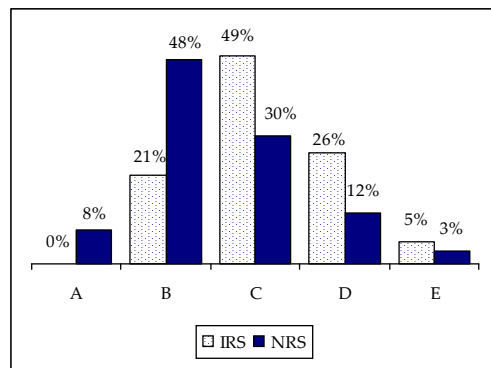
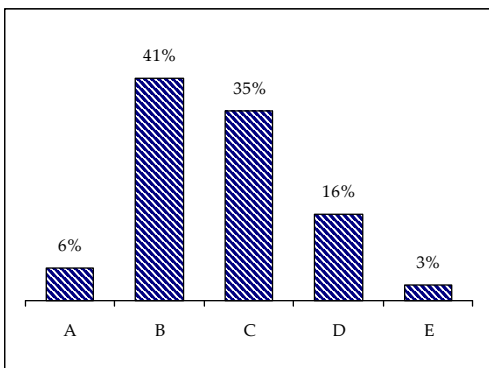
2. I believe that CIAT's reorganization of research will enhance
(c) Research Management [159; IRS-43, NRS-116]



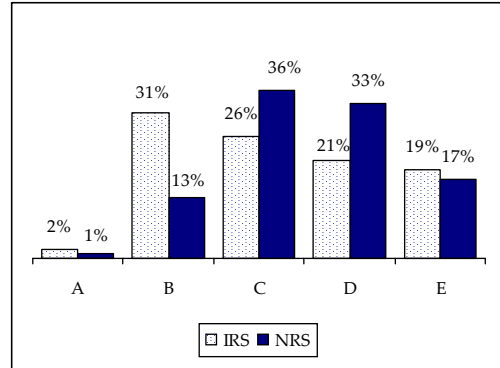
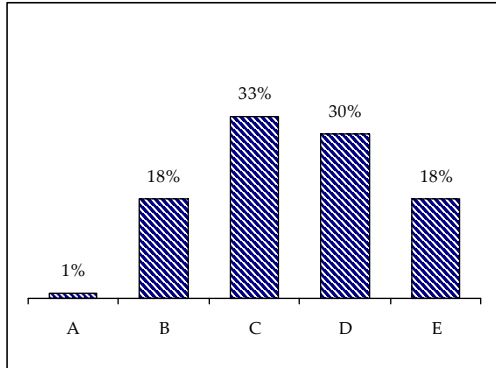
3. CIAT has effective
(a) Administrative services (purchase, food/housing, security, maintenance, ect.) [163; IRS-43, NRS-120]



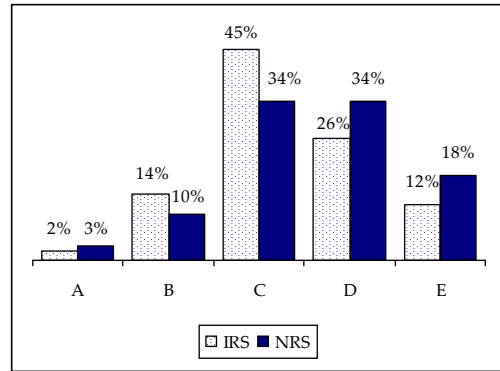
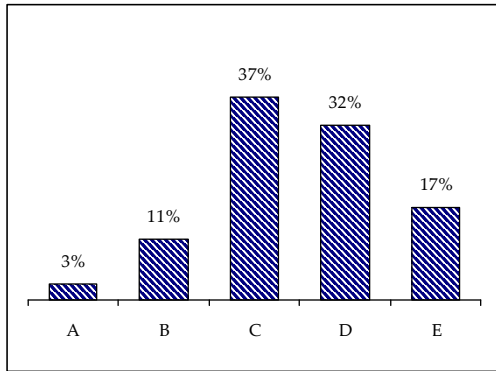
3. CIAT has effective
(b) Management systems and controls [158; IRS-43, NRS-115]



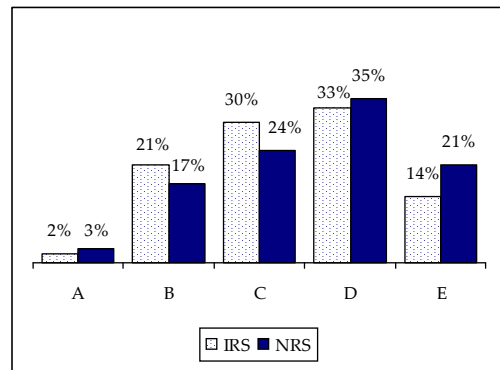
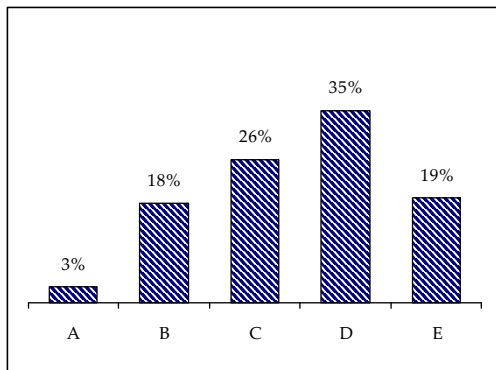
4. Decisions concerning staff downsizing in recent years were
 (a) Fair [157; IRS-42, NRS-115]



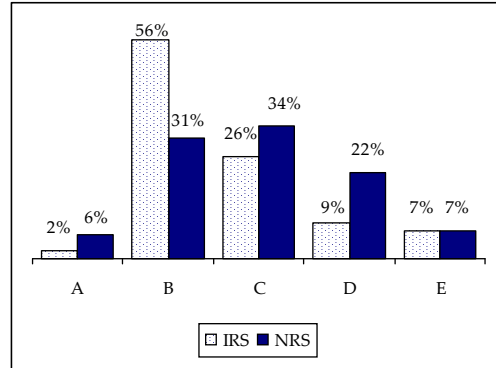
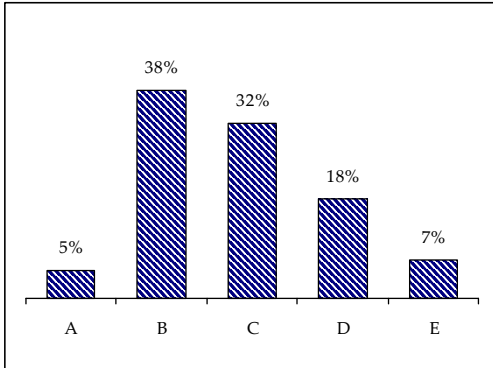
4. Decisions concerning staff downsizing in recent years were
 (b) Transparent [157; IRS-42, NRS-115]



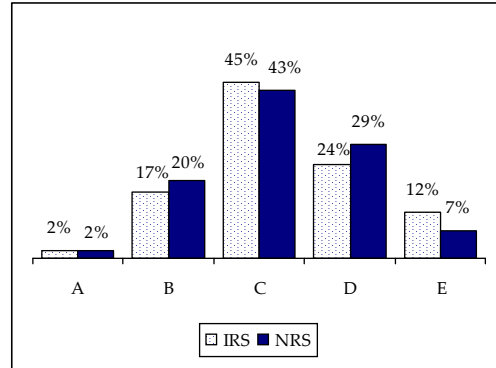
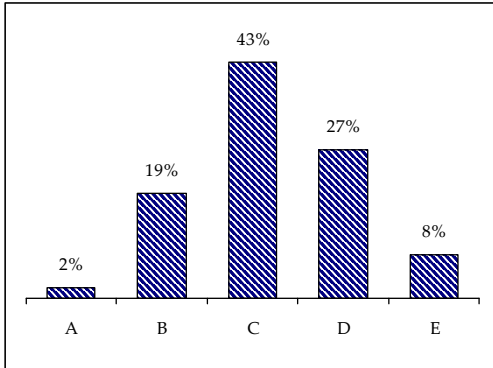
4. Decisions concerning staff downsizing in recent years were
 (c) Strategically oriented [159; IRS-43, NRS-116]



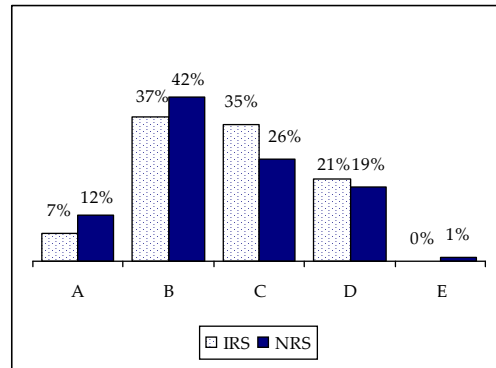
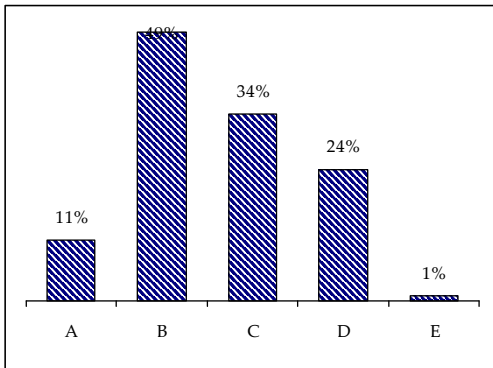
5. Staff performance appraisal at CIAT is
 (a) Systematically and fairly carried out [159; IRS-43, NRS-116]



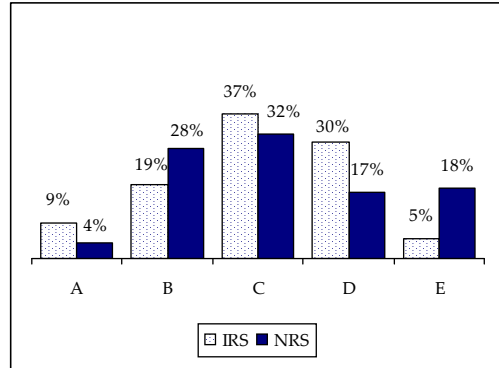
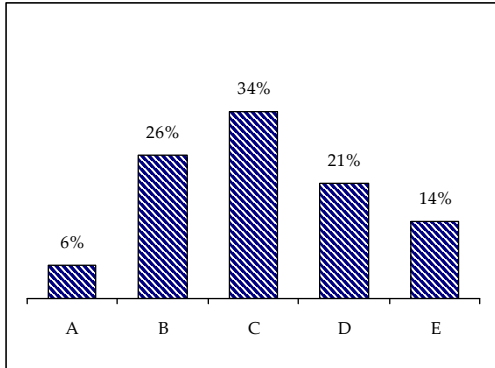
5. Staff performance appraisal at CIAT is
 (b) Linked clearly with rewards [157; IRS-42, NRS-115]



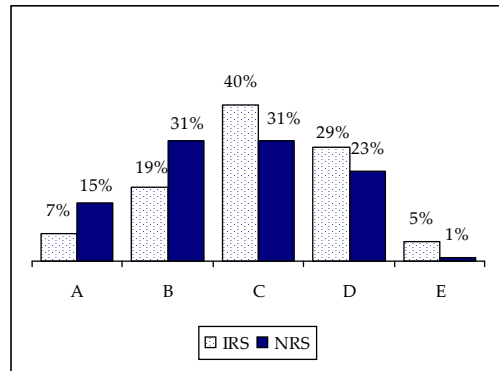
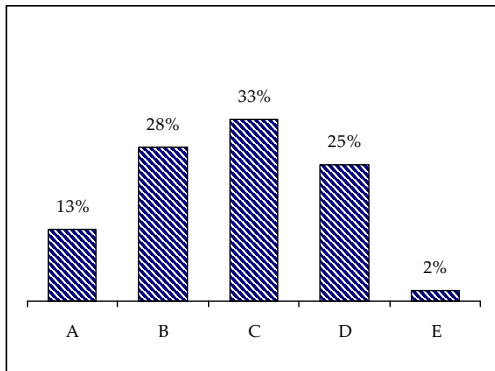
6. CIAT provides good opportunities for professional advancement [161; IRS-43, NRS-118]



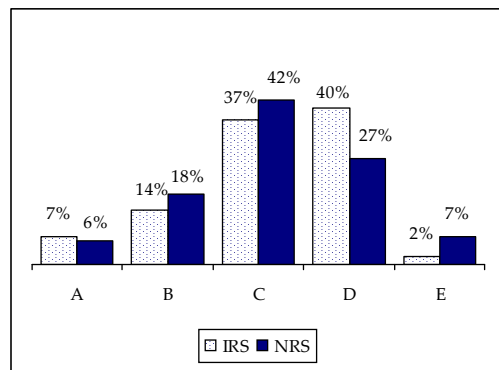
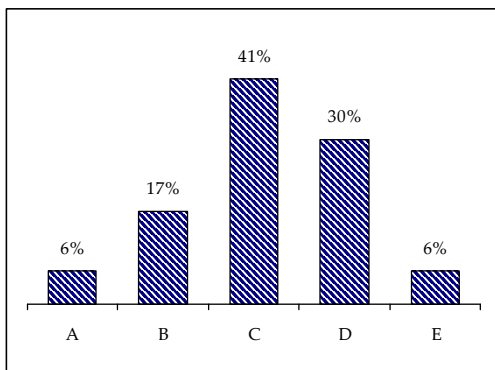
7. Relations between staff and management at CIAT are positive [160; IRS-43, NRS-117]



8. Personally, I have
(a) Good morale as a CIAT employee [159; IRS-42, NRS-117]



8. Personally, I have
(b) Confidence in CIAT leadership (DG&BOT) [162; IRS-43, NRS-119]



ANNEX 7

Board of Trustees Members and Committees Term 2007-2008

Name (Gender)	Country	Committee	Title (Term)	Affiliation (Expertise)
Andres Felipe Arias (M)	Colombia	-	Member (<i>Ex-officio</i>)	Ministry of Agriculture (Economics)
Emilia Boncodin (F)	Philippines	b, c	Member* (2010)	Professor National College of Public Administration, and Governance; University of Philipines (Financial Management/ Fiscal Planning)
Louise Fortmann (F)	U.S.A.	a, b, d, j	Chair Nominating/ Governance Committee** (2010)	Professor of Natural Resources Sociology Rudy Grah Chair in Forestry and Sustainable Development, UC Berkeley (Rural Sociology)
Kenneth Giller (M)	U. Kingdom	a, h	Chair Program Committee (2009)	Professor - Plant Production Systems; Department of Plant Sciences, Wageningen University (Agronomy/Soil Sciences)
David Miron (M)	U.S.A.	a, b, c, e, f, i	CGIAR Nominee, Chair Audit Committee, Chair Risk Management (2008)	President, TDM Consultants (General Management)
Ablassé Ouedraogo (M)	Burkina Faso	b, d	Member* (2010)	Consriller du Président pur l'Afrique, African Development Bank (Economist)
Oscar Rojas (M)	Colombia	a, b, d, g	Member (2010**)	Executive Director Fundación ALVARALICE (Public Health)
Armando Samper (M)	Colombia	-	CIAT Chairman Emeritus	CIAT
Maria José Sampaio (F)	Brazil	b, c, e	Member (2008)	Research, Special Advisor for Policy Affairs Genetics Resources, IP, Biotechnology and GMO Biosafety Research and Development Dept EMBRAPA (Molecular Biochemistry/ Biotechnology)
Yves Savidan (M)	France	a, b, d, f, g, i	Chairman , Chair Executive and Finance Committee** (2010)	Scientific Advisor and International Relations Officer, Life Science, Agropolis (Genetics)
Mary Scholes (F)	South Africa	a, b, c, e, f	Vice Chair (2009)	Professor, Dept of Animal, Plant & Environmental Science; University of The Witwatersrand (Plant Physiology)
Arturo Vega (M)	Colombia	b, d	Member (<i>Ex-officio</i>)	Corporación Colombiana de Investigación Agropecuaria - CORPOICA (Agronomy)
Joachim Voss (M)	Canada	a, g, h	Member (<i>Ex-officio</i>)	Director General CIAT (Anthropology)
Moisés Wasserman (M)	Colombia	b	Member (<i>Ex-officio</i>)	Rector, National University (Biochemistry)

Name (Gender)	Country	Committee	Title (Term)	Affiliation (Expertise)
Claudio Wernli (M)	Chile	b, c, d	Member** (2010)	Executive Director Millennium Science Initiative; Ministerio de Planificación y Cooperación (Agricultural Engineer)

* Appointed to the Board at the close of the May 2007 Board Session

** Ineligible for extension

Committees

- a: Executive / Finance
- b: Program
- c : Audit
- d: Nominating / Governance
- e: Risk management
- f: ExFin Sub-Committee on Compensation
- g: Ad-hoc Sub-Committee on security matters
- h: TSBF-Scientific Advisory Committee
- i: Harvest Plus
- j: PRGA Board

ANNEX 8
Acronyms

ACIAR	Australian Center for International Agricultural Research
AfNet	African Network for Soil Biology and Fertility
AHI	African Highland Initiative
ARI	Advanced research institute
ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
BOT	Board of Trustees (of CIAT)
CA	Central America
CC	Climate change
CCER	Center Commissioned External Review
CENIPALMA	Centro de Investigación en Palma de Aceite, Colombia
CGIAR	Consultative Group on International Agricultural Research
CIAT	Centro de Investigación Agrícola Tropical
CIDA	Canadian International Development Agency
CIFOR	Center for International Forestry Research, Indonesia
CIMMYT	Centro Internacional para Mejoramiento de Maíz y Trigo, Mexico
CIP	Centro Internacional de la Papa, Perú
CIRAD	Center de Coopération Internationale en Recherche Agronomique pour le Développement, France
CONDESAN	Consortio para el Desarrollo Sostenible de la Ecorregión Andina, Peru
CORPOICA	Corporación Colombiana de Investigación Agropecuaria
CRSP	Collaborative Research Support Program
DDG	Deputy Director General
DG	Director General
DFID	Department for International Development, UK
ECABREN	Eastern and Central Africa Bean Research Network
EMBRAPA	Empresa Brasileira de Pesquisa Agropecuária
EPMR	External Program and Management Review
ERI	Enabling Rural Innovation
ETSP	Extension and Training Support Project
FAO	Food and Agriculture Organization of the United Nations
FLAR	Fondo Latinoamericano y del Caribe para Arroz de Riego
GA	Gender analysis
GRU	Genetic Resources Unit (of CIAT)
ICA	Instituto Colombiano Agropecuario
ICRAF	International Center for Research in Agroforestry, Kenya
ICRISAT	International Crops Research Inst. for the Semi-Arid Tropics, India
ICTA	Instituto de Ciencia y Tecnología Agrícola, Guatemala
ICWG—CC	Inter-Center Working Group on Climate Change (of the CGIAR)
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute, USA
IITA	International Institute of Tropical Agriculture, Nigeria
ILRI	International Livestock Research Institute, Kenya
INERA	Institut de l'Environnement et de Recherches Agricoles, Burkina Faso
INTA	Instituto Nicaragüense de Tecnología Agropecuaria
IPM	Integrated pest management
IPR	Intellectual property rights
IRD	Institut de Recherche pour le Développement, France

IRRI	International Rice Research Institute, the Philippines
IRS	Internationally Recruited Staff
ISFM	Integrated soil-fertility management
IWMI	International Water Management Institute, Sri Lanka
JEEP	Joint External Evaluation Panel
JIRCAS	Japan International Research Center for Agricultural Sciences
KARI	Kenya Agricultural Research Institute
LAC	Latin America and the Caribbean
MADR	Ministerio de Agricultura y Desarrollo Rural, Colombia
MARD	Ministry of Agriculture and Rural Development
MAS	Marker-assisted selection
M&E	Monitoring and evaluation
MIDAS	Programa Más Inversión para el Desarrollo Sostenible
MIS	Management and Information Systems Research Group
MTP	Medium-Term Plan (CIAT)
NARO	National Agricultural Research Organization, Uganda
NCAR	National Center for Atmospheric Research, USA
NGOs	Nongovernmental organizations
NRM	Natural resource management
NRS	National Recruited Staff
PABRA	Pan-Africa Bean Research Alliance
PL	Product Line
PM&E	Participatory monitoring and evaluation
PPB	Participatory plant breeding
PRGA	Participatory Research and Gender Analysis
PROFRIJOL	Programa Cooperativo Regional de Frijol para Centro América, México y el Caribe
RDC	Research for Development Challenge
R&D	Research and development
RII	Rural Innovation Institute
SADU	Smallholder Agroenterprise Development in the uplands
SDC	Swiss Agency for Development and Cooperation
SEARCA	Southeast Asia Regional Center for Graduate Study and Research in Agriculture
SLM	Sustainable Land Management
SLU	Sveriges Lantbruksuniversitet (Swedish University of Agricultural Sciences)
SP	Systemwide program (of the CGIAR)
SP-IPM	Systemwide Program on Integrated Pest Management
SP-PRGA	Systemwide Program on Participatory Research and Gender Analysis
TAC	Technical Advisory Committee (of the CGIAR)
UCR	Universidad de Costa Rica
UNA	Universidad Nacional Agraria, Nicaragua
UNDP	United Nations Development Program
UNIVALLE	Universidad del Valle, Colombia
WARDA	West Africa Rice Development Association
ZARI	Zambian Agricultural Research Institute