8 IMPROVING INTERACTIONS

In the previous sections, based on an analysis of the strengths and weaknesses of the four substantive research and capacity-building areas that the Program has worked on since its implementation in 1997, the Review Panel suggested areas for improvement. In this subsection, we focus on interactions between the Program and its partners in the CGIAR, between the program and its Convening Center, between the PRGA Program and its Advisory Board, and between the Program and the outside world via its communications.

8.1 With the CGIAR Centers

The level of participation of the 14 CGIAR Centers (not including the Convening Center) in the PRGA is highly variable. Even among the three co-sponsors (CIMMYT, ICARDA and IRRI) the level of participation in the SWI is uneven, ranging from strong to weak. This is disappointing, given that one of the key objectives during Phase II was to institutional gender-sensitive participatory research into the national and international research systems (Saad 2003:39).

The PRGA has conducted surveys that tried to document the level of investment in participatory research areas in the CGIAR. The quality of these survey data has deteriorated over time. Nonetheless, these inventories show that areas where participatory research is used or is of potential use are economically important amounting to tens of millions of dollars equivalent to 10-20 percent of the total annual expenditure of the CGIAR. Across the CGIAR the incidence of variation is large as the relative size of the participatory research components range from 0 to about 40 percent of annual expenditure. Not surprisingly, anecdotal evidence on participation in the PRGA suggests that Centers with a higher expenditure on participatory research areas are more likely to be active in the PRGA than those Centers that invest relatively more in areas where participatory research and gender analysis are perceived to be of limited utility. Two of the most active centers in the Program are ICARDA and CIP, and they have invested heavily in the PRGA's thematic areas of interest.

It is clear that a systemwide program needs to have systemwide participation, but the expected level of that participation depends on multiple factors, especially on the level of shared circumstances across the CGIAR centers. For example, at one extreme, the systemwide program on genetic resources which is reputed to be very successful, is predisposed to attaining high levels of cooperation because scientists responsible for the conservation and utilization of genetic resources in the Centers confront the same issues in a shared work experience. The PRGA is not at the other end of the cooperation spectrum, but it is clearly in a different environment than the systemwide program on genetic resources.

The systemwide initiative on Collective Action of Property Rights (CAPRi) is composed mostly of social scientists, from a disciplinary perspective. CAPRi has successfully attracted cooperation through a larger, somewhat longer duration, and substantially more selective grant program than the one implemented in Phase I of the PRGA (CAPRi Review 2003). Without its commitment to and central focus on a grants program, incentives for cooperation with CAPRi would have been substantially diminished. In its interviews with PRGA staff and Advisory Board members, the Review Panel was told that the Program had not renewed their grants program because the best researchers receive most of the money, therefore creating inequity. This response conveys the impression that the PRGA is unwilling to accept a tradeoff between less equity and inclusiveness in exchange for greater participation among the CGIAR Centers in

the Program. We return to the issue of a grants program in the recommendation section of this report.

Concerns over a lack of wider CGIAR Center participation in the PRGA are founded on two short-term exigencies. In the near term, a contact or liaison scientist needs to be appointed in several of the Centers especially those where cooperation has been lacking. However, it is increasingly difficult to identify liaison scientists because with 17 systemwide and eco-regional programs and several Challenge Programs, the demand for cooperation easily exceeds the supply (and interest) of scientists especially in smaller centers. Moreover, unrestricted funding is increasingly scarce and scientists have to find resources to cover part or all of their own salaries. An observation that captured the attention of the participants at the Entebbe Meeting was one Center's response to the liaison question that stipulated a payment of US$ 20-30,000 annually to execute the appointment of an official contact person to the Program. Although this reply generated smiles at the Meeting, it reflects the reality of the current status quo that leads to non-cooperation.

Enhancing the overall awareness of what the CGIAR Centers are doing in participatory research and gender analysis is another urgent need. Lack of awareness reinforces the belief that not much is happening. PRGA staff would like to update their knowledge in this area, but have not found a cost-effective way to do so. (We expect that there is more going on than what is believed, as much of the work related to PR and GA is not well documented. For example, Thiele et al. (2001), in their study of the use of participatory research at CIP, found that a perception of inactivity in a Center was not borne out by reality once a thorough effort was made to document PRGA-related work).

To their credit, the scientists of the PRGA have tried to keep abreast of developments in the CGIAR. However, a comprehensive Program survey that attempted to document the state of play of participatory research and gender analysis in the centers did not result in a definitive picture of the level of activity and its dynamics over time (Becker 2005).

Perceived lack of cooperation is not an issue that will be solved quickly, but several small positive steps can be taken. First, success in program implementation should itself engender more cooperation. If participatory plant breeding fulfills its promise, the demand for cooperation should increase throughout the CGIAR. Secondly, the idea (expressed at the Meeting) for Center visits by the Coordinator and Board Chairperson could help substantially in identifying demands for cooperation. Thirdly, the idea to target staff involved in impact assessment as contact points is also a good one because increasingly social scientists in the Centers are engaged in impact assessment.

8.2 With the Convening Center

Interaction with the Convening Center (CIAT) is another area of concern. CIAT imparted stability to the Program in Phase I, but recent uncertainties and readjustments in response to financial stress have affected Program performance. The disposition of 'carry-over' and core funds by selected PRGA donors are two areas of creative tension in the financial management of the Program that seem to require greater transparency and communication. The Panel did not visit CIAT, and we did not interview the Center's research and financial management. Therefore, we do not know the details of this situation, but we flag this as an area of concern to which CIAT management could speak to when they respond formally to our report.

A more enduring concern is the apparent lack of interaction in interdisciplinary research between the PRGA scientists on the one hand and the scientists of the Convening Center on the other. As we discussed in the achievements section, longer term interaction among impact assessment economists has benefited both the PRGA and CIAT in maximizing the use of scarce resources. Other than the Phase I coordinator's participation in and support for the Phase II Program, we did not see other examples of sustained interaction in interdisciplinary research particularly among biological and physical scientists of the Convening Center and social scientists in the PRGA.

Over the life of the PRGA program, CIAT has had a dynamic mandate with the formal addition of the HarvestPlus Program, the Tropical Soil Biology and Fertility (TSBF), and the Rural Innovation Institute. The PRGA with an emphasis on PPB would seem to have a lot to offer for the HarvestPlus Program and vice versa. When the Review Panel enquired why more interdisciplinary research had not taken place between the PRGA scientists and biological scientists in the Convening Center, one response was that too much interdisciplinary research with CIAT's scientists would compromise the standing of the Program both within and outside the CGIAR. In that spirit, the preferred position (at the Entebbe Meeting) for the PRGA Program in CIAT's new organizational structure was in a location away from the two broad research programs but in close proximity to the Director General.

The Review Panel questions the wisdom of this view. A separate organizational scenario with independence may be appropriate for other systemwide and eco-regional programs, but it runs the risk of making the PRGA Program vulnerable in times of financial crisis. Without a scientific constituency in the Convening Center, broad-based support for the Program will not be forthcoming. Moreover, interdisciplinary research should be a key component of participatory research in the CGIAR. A greater experience in interdisciplinary research should translate into more productive participatory research and gender analysis. The low intensity of interdisciplinary research between the PRGA and CIAT scientists is partly attributable to the posting of some PRGA scientists distant from CIAT Headquarters and Regional locations in Phase II. Flexibility in posting may allow the Program to recruit more qualified scientific staff, but not being able to interact on a day-to-day and face-to-face basis diminishes the incentives for interdisciplinary research in the Convening Center.

A third concern pertains to the perceived under-utilization of the PRGA Advisory Board by the Convening Center. The AB fully realizes that it is an advisory board, but a more consultative interaction between CIAT (including both Center management and its Governing Board) and the PRGA AB would enhance the effectiveness of CIAT decision making on issues that concern PRGA. Consultation is not needed on micro-management, but on major items such as staffing decisions. The participation of a designated member of the Governing Board in the most recent PRGA Advisory Board's meeting is an important step towards greater consultation.

8.3 With the Advisory Board

As discussed in the Achievements section, the interactions between the Program's staff and its Advisory Board are mostly positive and intellectually stimulating. Nonetheless, the workings of the AB could be improved in two major areas. First, the AB has only recently initiated a rotation policy (2004) and the duration of terms is three years, renewable up to a maximum of six years. Some Board members have served since the inauguration of the Program and although they have made important contributions, it would be in the interest of the PRGA to ensure that new

AB members are introduced on a regular basis, thus bringing in fresh ideas and professional contacts. One way of doing this might be to disallow long-term members who are currently coming to the end of their first formal three-year term (in 2007), to serve a second three-year term. Secondly, the Program does not appear to involve AB members in resource mobilization. It could be argued that this was not necessary in the past as the PRGA has been adequately financed, but given the current precarious financial situation, it is clear that more attention must be given to resource mobilization. However, as pointed out by one AB member, most Board members are engaged in raising money for their own programs therefore they are unlikely to be willing or able to devote much time and attention to undertaking this activity on behalf of the PRGA. This issue should be taken into consideration when new Board members are selected.

8.4 With Donors

As noted, the PRGA came into being at least partly as a result of donor lobbying for a CGIAR systemwide response to growing interest in the use of participatory methods and gender analysis in agricultural research. Because of the congruence of the interests of the Program and those of many donors in the mid-1990s, the PRGA had relatively little problem in attracting external funding for its work. As seen in Table 2, it was particularly successful in finding support for its work on gender and natural resource management. Until 2002, all grant applications made by the PRGA were successful but since that time, three major applications (for a total of US$ 3,880,401) have been rejected. The Panel does not draw strong conclusions from this, but it is clear that the funding situation for PRGA is changing. This could be due to the fact that donor interests have moved away from participatory research and gender analysis, or it could be due to a perceived lack of impact of the program. Increasingly, donors are looking for concrete results and they are less likely to provide support for work that is vaguely defined or exploratory.

The Panel conducted telephone interviews with representatives of two donor agencies and received a generally positive perspective on PRGA. There was particular praise for the PRGA's work in participatory plant breeding. Nonetheless, a few issues were raised. These are listed here.

- Donors question the extent to which PRGA has been able to influence thinking in the CGIAR system, including the Science Council;
- The work of the Program has not been sufficiently consolidated into a visible body of outputs;
- In the gender area, the Program should be more closely linked with CGIAR G&D program.
- PRGA's good work is little known;
- The Program is slow to relate to new ideas and approaches and the overall mandate and approach has not changed significantly during its 10 year history.

8.5 With the outside world

The PRGA uses several ways to communicate to the public. The PRGA website (http://www.prgaprogram.org/modules.php?op=modload&name=DownloadsPlus&file=index&req=viewdownload&cid=39&orderby=titleD) is probably its most important source of public information. It gives brief information about some current activities, provides a link to many PRGA and other publications, and presents a good overview of work done during Phase I (1997-2002). The site is innovative and provides a number of tools for researchers and others with an interest in participatory research and gender analysis. The world clock and calendar are useful

tools. There is also a community workspace. However, the site is not completely up-to-date (for example it still lists staff members who left the Program more than a year ago), and it does not present a complete list of PRGA publications (See Table 4). For example the Program has published numerous reports and working papers on gender which do not appear on the website and are not reflected in the table. Moreover, the site does not provide a comprehensive overview of current activities.

Most of the research publications are lengthy and written in scientific language. This is appropriate for the scientists who comprise part of the intended audience, but it excludes many potential readers outside this small circle. For example, one Board Member said that although she found the studies interesting she did not have time to read them. Therefore, the Program may want to consider releasing shorter research briefs that would summarize some of the main findings of their more extensive work.

Several of the research publications, particularly the state-of-the-art reviews, are of a high quality, but a citation assessment using data from Thomson's Web of Science that tracks citations in about 8500 journals suggests that the impact of the PRGA program on the academic literature is modest. For the 122 publications in the current list, the average rate of citation is equivalent to about 1.0 mentions per scientific year invested in the program. None of the publications has been cited widely where 'widely' is conservatively defined as 10 or more citations. Citation analysis is characterized by many caveats and perhaps scientists in a systemwide, multidisciplinary program should be held to a different standard than those involved in more traditional CGIAR programs, but it is clear that a citation rate of 1.0 per scientific year is very low.

The problem of a very low citation rate is easily diagnosed but not easily rectified. First, it is important to note that citation rates in social sciences are significantly lower than in biological sciences. Citation rates for book chapters, conference proceedings, edited books, and grey literature also are significantly lower than for journal articles and books. The PRGA staff has focused more the former and less on the latter. Unless and until scientists employed by the PRGA target their work more towards journals, the citation rate for the Program as a whole is unlikely to improve. Again, as was the case of our critique of the perceived lack of interdisciplinary research with scientists in the Convening Center, we are not calling for a major shift of emphasis. We are only asking for the establishment of a minimal, mutually agreed upon standard.

9 RECOMMENDATIONS

In this concluding chapter, we list the recommendations that are derived from our discussion in Chapters 2-8. The recommendations, which after 1 and 2 are not listed in order of importance, are accompanied by a justification that sums up discussion in the previous chapters.

Recommendation 1. The PRGA's past performance and its present and future relevance to the Science Council's priorities for the CGIAR warrant its continuation.

The achievements that we described in Chapter 3 are impressive particularly in participatory plant breeding, gender mainstreaming in NARS, and impact assessment. The work in participatory plant breeding is of sufficient importance to the CGIAR and its partners that work in this area by itself warrants maintained funding to the PRGA for a prospective Phase III from 2008-2112.

Participatory plant breeding is heavily endowed with an international public goods character, and the CGIAR has been a major player in its creation and development. Participatory plant breeding, defined in its strongest sense where farmers are involved in the early stages of selection and where information from farmers figures prominently in the choice of parents for crossing, is a relatively new conceptual approach to plant breeding. A meeting funded by IDRC in 1995 was instrumental in catalyzing interest in this area and setting the stage for an operational program. This in turn was shaped by a plant breeding working group at a September 1996 meeting in CIAT which contributed to the original proposal for the establishment of the PRGA systemwide initiative in December 1996.

As discussed in Chapter 4, in a short time span of ten years, results in participatory plant breeding have substantially exceeded expectations. Three plant breeding programs have contributed to the development of PPB. They account for the majority of publications on participatory plant breeding in an expanding peer-reviewed literature and for the majority of emerging success stories in the field. Two of these plant breeding programs are located in the CGIAR, and the third is headed by a plant breeder with extensive working experience in two CG Centers. All three have had close interactions with the PRGA, and one is the coordinator of the plant breeding working group.

Recommendation 2. The PRGA should stay the course and maintain its investment in participatory plant breeding.

After ten years of increasing activity, the prospects are bright for participatory plant breeding to make a positive contribution to varietal change in marginal environments. The next five years are critical to the development of PPB and will define the size of that contribution.

In the next five years, prospective practitioners of PPB should have a better appreciation of what works when, where, and why as experience accumulates to allow researchers to approximate an ideal of efficient participatory plant breeding. The experience of sustained PPB in Sub-Saharan Africa (SSA) is slowly expanding from a very small base. More concerted efforts are needed to replicate and adapt global experience to SSA if the poverty-alleviation potential of PPB is to be attained. In both research and advocacy, the PRGA still has a large role to play.

Recommendation 3. The PRGA should strategically reconsider its role and program in Participatory Natural Resource Management.

Because of budgetary and staffing considerations, output in research and capacity building on participatory natural resource management has declined markedly in Phase II (2003-2007) compared to Phase I (1997-2002). For all intents and purposes, the Program is now inactive in this area. Options for redefinition of work in NRM are presented in Chapter 5. We discourage the existing arrangement that combines the NRM working group coordinator's position with leadership in gender analysis. Parallel with the coordination of the plant breeding working group, coordination in the NRM working group should be based on affiliation with an active NRM research presence in the CGIAR. Finally, inactivity in this mandated area would be regrettable, but preferable to trying to cover all the bases of the programmatic mandate with the existing staff and resources. Additional funding needs to be procured to mobilize a critical mass for focused work on participatory natural resource management.

Recommendation 4. The PRGA should accelerate its efforts to introduce gender analysis into the wider GCIAR system.

The Program has never had a fully dedicated gender specialist with a strong background in agricultural research. The Program should appoint such a person to lead its research work on gender analysis during Phase III. Substantively, the Program should reach out to established researchers in the CGIAR system by hosting a project development meeting that would focus on the design of several linked projects that would test and fine tune some of the gender methodologies and typologies that were developed by the Program in Phases I and II.

Work on gender mainstreaming should be continued but with an additional focus on gender mainstreaming within CGIAR institutions. To achieve this end, the Program should develop close, mutually-supportive links with the G&D Program.

The PRGA should also institute a gender audit for research proposals both at the stage of review and at the stage of impact assessment. As noted, some of the work that has been supported by the Program has not included even basic disaggregation of farmers by sex. Furthermore, the Program should also encourage both IARCS and NARES to hire more non-economist social scientists with a background in agriculture who are willing and able to work with biological scientists.

Recommendation 5. The PRGA should renew its search for the funding of a competitive grants' initiative to elicit greater cooperation from its partners particularly those in the CGIAR.

The level of participation across the CGIAR in the PRGA is highly variable. Even among the four co-sponsors the level of participation in the systemwide initiative is uneven ranging from weak to strong. The need for greater CGIAR participation in the Program is an area for improvement that is widely perceived by PRGA staff and Advisory Board Members. The perceived problem of participation relates to a lack of knowledge of what is going on in PR and GA in the rest of the CGIAR outside the centers that participate actively in the Program. This problem is addressed in Chapter 8 of the report. The PRGA can do several small things to enhance participation but, in the present budgetary setting of the CGIAR, participation is

unlikely to increase significantly unless more monetary support is provided for collaborative research. The Program operated what appeared to be a successful grants program in 1999-2001 when collaboration with CGIAR Centers peaked.

Recommendation 6. The Convening Center should take steps to promote greater interaction with the PRGA in the areas of financial management, the PRGA Advisory Board, and interdisciplinary research especially with biological scientists.

During Phase I of the Program, the panel received the impression that CIAT very actively supported the Program probably to the point of significant subsidization. In Phase II, the interactions do not appear to be as smooth and positive as in Phase I. Part of this perceived difference is attributed to fluctuations in the financial health of the Convening Center and to the fact that two core PRGA staff members, including the coordinator, are not posted at Headquarters. The PRGA has developed a strong Advisory Board that should be more involved in contributing information to and interacting with the Convening Center on important issues such as the writing of job descriptions and the selection of candidates for scientific staff positions in the PRGA to ensure programmatic continuity in accordance with stakeholder priorities. In general, the Advisory Board is an institutional resource that could be more effectively used by the Convening Center and vice-versa. Lastly, and perhaps most importantly, the level of interdisciplinary research between Convening Center biological and physical scientists on the one hand and PRGA staff on the other is significantly less than we expected. A minimal level of interdisciplinary research would help ensure a scientific constituency for the PRGA in the Convening Center and would also make for a stronger PRGA program.

Recommendation 7. The PRGA should continue to invest in impact assessment with greater emphasis on quantifying the benefits of PPB to different groups in society.

Impact assessment has been one of the strengths of the PRGA Program. Arguably, the PRGA has engaged in as much activity in this area as other systemwide or ecoregional programs. In the next five years, documentation of emerging success stories and also learning from 'dry holes' will be critical to the fulfilling of the promise of participatory plant breeding. The Program has already developed a good model for impact assessment and that model needs to be applied to varied PPB applications. The Program should make greater use of on-farm experimental data in impact assessment. The Program has carried out sufficient work on the costs of the participatory research and on the benefits of PR to human capital in experimentation and to social capital in engendering group action from PR. In the emerging success stories, work is needed not only to quantify the rate of return and the size of the benefits to investments in PPB, but also to describe the benefits of PPB-induced technological change to different groups in society from gender and poverty perspectives especially in heterogeneous marginal production environments.

Recommendation 8. We endorse recent PRGA efforts to publish more in peer-reviewed journals, to solicit more graduate student participation in the program, and to allocate more time to research.

We found in Chapter 8 that the volume of research-related writing was acceptable, but a citation analysis suggested that the impact on the academic community in the form of peer-reviewed literature was below a minimal standard.

Recommendation 9. We encourage the PRGA to publish good practice manuals for biological and social scientists in specialized areas of the programmatic expertise in PR and GA.

Many manuals on the conduct of participatory research exist, and PRGA-related research is found in several of these general treatments. But there are also several niche areas where the PRGA could make a contribution to enhancing this form of capacity building. For example, in participatory varietal selection an array of techniques can be employed, ranging from hedonic price indices to simple methods of yellow cards with smiling and frowning faces complemented by one-page questionnaires to evaluate perceptions of traits and preferences. All of these have strengths, weaknesses, and context. We were surprised at the lack of activity in this area when PRGA scientists and Advisory Board members frequently stated that quality was one of the biggest problems in applications of PR and GA.

Recommendation 10. Management of the Program should become less hands-on and more strategic.

The Review Panel noted that the Program Coordinator has a very busy travel schedule and seems to spend considerable time involved personally in the implementation of PRGA activities. Because of these demands he may have less time for other strategic management tasks, i.e., developing a long term vision for the Program, making the Program more visible within the CGIAR system, and consolidation of research results from the Program.

The Program Coordinator should focus on developing broad program goals, monitoring progress on a regular basis and invest time in giving the PRGA visibility in the CGIAR system both through publications and personal visits and scientific presentations. The Advisory Board should have regular turnover, and it should be actively involved with fund raising for the Program.

Recommendation 11. The Program should design an effective communications strategy, ensuring that key research findings are published in short policy briefs, written in easily accessible language and made widely available to the donor community, NGOs and others. Effort should also be made to update the website on a regular basis.

Several informants told the Review Panel that the PRGA publications were aimed primarily at scientists and were not easily digested by others with an interest in the subject matter. In an effort to give the Program greater visibility among existing and potential partners, it would be advantageous to publish a series of short one or two page research briefs. These could be sent to donors, NGOs and educational institutions.

The website is well-designed and offers several attractive features, but only a small number of the PRGA publications have been downloaded onto the site and several items on the site are out of date (e.g., the staff list). Since the website is by far the most important source of public information about PRGA, it is important that it be given regular attention.

Table 1. Workshops Organized by PRGA 1996 -2005

Location	Subject	Participants
Colombia, September 9–14, 1996.	First international seminar on participatory research and gender analysis for technology development: New frontiers in participatory research and gender analysis.	50
Ecuador, September 6–9, 1998	Second international seminar: Assessing the impact of participatory research and gender analysis.	100
Ecuador, August 31 - September 3, 1999.	Technical and institutional aspects of participatory plant breeding from the perspective of informal sector: An integrated analysis of themes, results and actual experiences.	75
England, September 1–3, 1999	Participatory research for natural-resource management: Continuing to learn together.	28
Nepal, May 1–5, 2000.	International symposium: An exchange of experiences from South and Southeast Asia.	100
Kenya, November 6–11, 2000.	Third International Seminar: Uniting science and participation in research.	200
Côte d'Ivoire, May 7-10, 2001.	Africa-wide symposium on Participatory plant breeding and participatory plant genetic resource enhancement.	69
Zimbabwe, October 15–20, 2001.	Workshop on exploring linkages between participatory research and computer-based simulation modeling to increase crop productivity at the smallholder level.	50
Colombia, October 29 to November 1, 2001.	Workshop on farmer breeding skill enhancement. Complementing farmers' genetic knowledge.	13
Colombia 13-17 November 2001	Workshop on benefits of rural women's participation in Natural Resource Management.	18
Germany, April 22–23, 2002.	Stakeholder meeting 2002: Participatory monitoring and evaluation.	30
Italy, September 30 - October 4, 2002	Workshop on the quality of science in participatory plant breeding.	34
Colombia, June 30 to July 1, 2003	Stakeholder Meeting: From Assessment to Learning and Change.	40
Mexico, October 19-21, 2005	Impact Assessment Workshop.	30

Table 2: PRGA Program Submitted Proposals: 1997-2006

	Year	Program and Proposal Title	Donor	Amount US$
CROSS CUTTING THEMES				
1	1997	Systemwide Initiative on Participatory Research and Gender Analysis for Technology Development and Institutional Innovation	TAC	990,000
2	1998-2000	Systemwide Initiative on Participatory Research and Gender Analysis for Technology Development and Institutional Innovation	New Zealand Ministry of Foreign Affairs	450,000
3	2006-2010	National Agricultural Innovation Systems that Work for the Poor. Building on the Bolivian Experience.	DFID	1,536,794 (€1,185,648)
TOTAL (US$)				**2,976,794**
GENDER				
4	1997-2000	Improving Technology Development through Gender Analysis (Global I)	IDRC	190,000
5	1998	Developing a framework for concurrent assessment of the differential impact of new technologies on men and women smallholders.	ACIAR	149,995
6	2001-2003	Improving Technology Development through Gender Analysis (Global II).	IDRC	191,917
7	2003-2005	Building Capacity in Social/Gender Analysis in the Eastern Himalayas.	IDRC	177,170
8	2003-2005	Building Capacity for Gender Analysis and Gender Mainstreaming in the Eastern, Southern and Central African Region	CIDA	992,000
9	2005-2008	Institutionalizing Social Analysis and Gender Analysis for poverty alleviation in Agricultural research and development in the Eastern Himalayas	IDRC	162,400
TOTAL (US$)				**1,863,482**
PARTICIPATORY PLANT BREEDING				
10	1999	Participatory Plant Breeding and Property Rights	IDRC	45,700
11	2001	Participatory plant breeding and participatory plant genetic resource enhancement an Africa-wide exchange of experiences	Rockefeller Foundation	60,000
12	2001	Moving towards the institutionalization of Participatory Plant Breeding in mainstreaming research (with a focus on the CGIAR)	IDRC	75,000
TOTAL (US$)				**180,700**
NATURAL RESOURCE MANAGEMENT				
13	1998-2001	Assessing the benefits of rural women participation in natural resource management research and capacity building.	BMZ	1,313,000
14	1999-2001	Institutionalizing the Use of Participatory Approaches and Gender Analysis in Research on Natural Resource	Ford Foundation	1,199,000

		Management to Improve Rural Livelihoods		
15	2000	Integrated Nutrient management for building the assets of poor rural women	Ford Foundation	400,000
16	2001	Linking Logics II: A joint venture between PRGA, ICRISAT and CIMMYT to further explore linkages between Farmer Participatory Research Approaches and Computer Based Simulation Modeling to increase crop productivity at the smallholder level	Ford Foundation	66,650
17	2001	International Workshop on Integrated management for Sustainable Agriculture, Forestry and Fisheries.	IDRC	30,864
18	2001	International Workshop on Integrated management for Sustainable Agriculture, Forestry and Fisheries.	Italian Ministry of Agriculture	10,000
19	2004	Improving Water Productivity of Cereals and Food Legumes in the Atbara River Basin of Eritrea	CGIAR Water and Food Challenge Program	150,000
TOTAL (US$)				**3,169,514**
IMPACT ASSESSMENT				
20	2002	Social Research Conference	GTZ	8,650
21	2002	Social Research Conference	Rockefeller Foundation	15,000
22	2003	Impact of Participatory Natural Resource Management Research in Cassava-Based Cropping Systems in Vietnam and Thailand	SPIA	30,000
23	2002	Social Research Conference	DFID	9,500
24	2005	Analysis of Participatory Research Projects in the International Maize and Wheat Improvement Center (CIMMYT)	USAID	30,000
TOTAL (US$)				**93,150**
REJECTED PROPOSALS				
25	2002-2005	Learning and Change-Oriented Impact Assessment	GTZ	1,705,505 (€1,316,000)
26	2003-2005	Ensuring benefits for those who need them most: Building strong institutions for managing inclusive multi-stakeholder processes for watershed development	CGIAR Water and Food Challenge Program	900,000
27	n.d.	Strengthening Rural Innovation Ecologies: Research on how Social Networks Influence Agricultural Innovation	BMZ	1,274,896 (€983,500)

Table 3. Some important examples of application of PPB

Crop	Country	Intervention
CGIAR INSTITUTE – LED PROGRAM		
Rice		
West Africa (16 NARS)		PVS
Barley	Algeria	PPB
	Egypt	PPB
	Eritrea	PPB
	Iran	PPB
	Jordan	PPB
	Morocco	PPB
	Syria	PPB
	Tunisia	PPB
	Yemen	PPB
Beans	Congo	PVS
	Colombia	PPB
	Eritrea	PVS
	Ethiopia	PVS
	Kenya	PVS
	Malawi	PVS
	Rwanda	PVS
	Tanzania	PVS
Cassava	Brazil	PPB
Chickpea	Eritrea	PPB
	Jordan	PPB
	Syria	PPB
Lentil	Eritrea	PPB
	Syria	PPB
	Yemen	PPB
Maize	Mexico	*
Pearlmillet	Nepal	PPB
	India	PVS
	Namibia	PVS
Potato	Bolivia	PPB
	Ecuador	PVS
	Peru	PVS
Rice (Rainfed)	India	PPB/PVS
	Nepal	PPB/PVS
	Sierra Leone	PVS
Sorghum	Mali	PPB
Bread wheat	Bangladesh	PPB/PVS
	Eritrea	PPB
	India	PPB
Bread wheat (cont.)		
	Iran	PPB
	Jordan	PPB
	Nepal	PPB/PVS
	Syria	PPB
Durum wheat	Algeria	PPB
	Jordan	PPB
	Syria	PPB
NARS/Others-led programs**		
Bean	Ethiopia	PVS
	Malawi	PVS
	Tanzania	PVS
Cassava	Brazil	PPB
Chickpea	India	PVS
Cotton	Mali	PPB
Cowpea	Ghana	PVS
Maize	Brazil	PPB
	India	PPB/PVS
	Kenya	PVS
Mungbean	Nepal	PVS
Rice (Irrigated)	India	PVS
	Nepal	PPB/PVS
Rice (Rainfed)	Bangladesh	PVS
	Benin	PVS
	Ghana	PVS
	India	PPB/PVS
	Nepal	PPB/PVS
Sweet Potato	Ghana	PVS
	Kenya	PVS
Sorghum	India	PVS
	Malawi	PVS
	Ethiopia	PVS
Bread wheat	India	PVS
	Nepal	PVS

* Participatory landrace selection for on-farm conservation

** These include programs led CAZS-NR at the University of Wales, Bangor, UK and other non-CG institutes

Table 4. Summary of PRGA Publications Listed on the Program website (February 2007)

	General	PPB	NRM	Gender and Stakeholder Analysis	Impact Assessment
Proceedings	1	28	5		1
Reports	12	2	11	2	1
Stakeholder Consultations	13				
Working Documents	5	7	4	3	12
Books		1	3		1
Monographs		4			1
Presentations		10			9
Small Grant Reports		19			2
Book Chapters					3

ACKNOWLEDGEMENTS

This review of the systemwide program on Participatory Research and Gender Analysis formally started with the panel's coming together at an Advisory Board meeting in mid-October in Entebbe, Uganda. We thank members of the Board and the PRGA scientists who gave unstintingly of their time to respond to our every query. We were especially grateful to be able to talk to Janice Jiggins, Jacqueline Ashby, Gordon Prain, and Barun Gurung. Janice, who is the Chair of the Advisory Board, shared her thoughts on the working style, scientific commitment, and future scenarios of the PRGA. Jackie played an important role in bringing the PRGA into existence and somehow found time to be the Phase I coordinator. She provided a keen institutional memory on the genesis and 'early days' of the PRGA together with ideas on what would work and what wouldn't. Gordon was the Chair of the Internally Commissioned External Review of the PRGA in 2000 and is presently a CGIAR Center presence on the Advisory Board. Barun is the Phase II coordinator and brought us up to date on his thinking on present and future research and advocacy in the PRGA. Barun also accompanied us on our field visits to Kenya and Uganda. We are grateful to the NARS scientists from ASARECA who made presentations and interacted with us on their work on gender mainstreaming.

During the Entebbe meeting, we spent a lot of time talking with Salvatore Ceccarelli who patiently explained in exacting detail the nuances of participatory plant breeding. After many hours, we thought that we had exhausted the topic, but Salvatore informed us that he was disappointed that we did not ask one last question: "What would I do in participatory plant breeding if a donor gave me US$ 100,000?"

We also thank Elizabeth Sengdewala of ASARECA who also accompanied us on the field visits, Jane Ngugi who hosted our visit at KARI in Kenya, and Leonidas Dusengemundu who arranged our visit at ISAR in Rwanda. We thank all the scientists at KARI and ISAR for taking the time to interact with us. We hope that the farmers we visited find climbing beans and orange-fleshed sweetpotatoes as interesting and as relevant to their lives as the scientists with whom they were working felt they would be.

The visit to East Africa was complemented by discussions with key people who could provide insight on the panel's terms of reference in its review of the PRGA. We thank them for sharing their perceptions and ideas with us.

Claudia Ximena Garcia responded in a timely manner to all of our requests for data and information on the PRGA. Nina Lilja, the impact economist in the PRGA, helped coordinate those requests. Thank you Claudia and Nina for being so responsible and so organized!

Lastly, we are grateful for Sirkka Immonen from the Science Council for coordinating and providing guidance on this review. Sirkka also shaped the desk study on impact assessment of participatory research that was carried out by James Stevenson. We thank James for the skillful execution of that challenging task, and for allowing to include it in this report.

Annex 1
BIODATA OF THE REVIEW TEAM

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Education: Ph.D.: Economic Development, International Trade, and Consumption Economics, Stanford University (1980); M.A, Stanford University (1977). M.S: and Resource Economics Department, University of Florida (1975); B.S.: International Agriculture, Cornell University (1970)
Experience: Present position since 2002. Head of the Social Sciences Department, CIP (1991-2002); Institutionally responsible for leading research on impact assessment; Responsible for interdisciplinary research, largely among plant breeders and social scientists; Visiting Scientist on Study Leave at the International Food Policy Research Institute (1998-99); Principal economist, ICRISAT, (1985-91); Visiting fellow on sabbatical at the Economics Department, Research School for Pacific Studies (RSPS), Australia National University (1985); Visiting fellow on sabbatical at the Department of Agricultural Economics, Cornell University (1984-85); Principal economist, ICRISAT and the Agricultural Development Council Associate for India (1980-84), involved in Village Level Studies and in strengthening social science research capacity; Agricultural economist and advisor (as visiting Assistant Professor to Food and Research Economics Department, University of Florida) to the Agricultural Economics Department at the National Agricultural Research Program in El Salvador (1977-79). Agricultural economist on a USAID Contract in Washington, D.C. (1972-73); Agricultural economist, Peace Corps, in INCORA, Colombia (1970-72). Reviewer of USAID's Soil Management CRSP (since 1997); Author of over 100 publications on small-holder systems, NRM economics, economics of different cropping systems; adoption, and also farmer participation and perceptions. About 300 citations in the ISI Web of Science.

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Experience: Current position since 2002; 2001: Fellow, Founders' College, and Visiting Professor, Division of Social Sciences, York University, Toronto; 2001: Senior Research Advisor, Evaluation, IDRC, 1992 – 2001: Regional Director, Eastern and Southern Africa, International Development Research Center, Nairobi (1997-2001: Executive Director, Essential Health Interventions Project leading the CAD$20 million health research and intervention project based in Tanzania; 1995-97: Coordinating Regional Director for Africa and the Middle East); Led interdisciplinary team of R&D specialists in economics, agronomy, ICT, natural

sciences and social policy; organized IDRC input into the 1994 Desertification Convention; and a series of Pan-African initiatives in environment, social reconstruction, water management; 1987–92: Coordinator, Gender and Development Unit, IDRC. Duties included a research network on women and environment across anglophone and francophone African countries; and research projects on women and agricultural production, education, technology, and social participation in Africa, Asia, Latin America, the Caribbean, and Canada (1990-91 on sabbatical leave: Visiting Senior Research Fellow, Department of Research and Specialist Services, Ministry of Lands, Agriculture and Rural Resettlement, Harare, Zimbabwe); 1982–87: Program Officer/Senior PO, Science, Technology and Energy Policy, Social Sciences Division, IDRC. Duties related to the East and West African Technology Policy Studies Networks for 25 African countries; 1981–82: Research Fellow, Center for Developing Area Studies, McGill University, Montreal; Previous work expertise related to publishing and editing. Awards include the Distinguished Alumni Award, Faculty of Educational Studies, State University of New York at Buffalo (1992). Consultancies to FAO, UNIFEM, CGIAR, IDRC and WHO. Relevant memberships: World Bank Advisory Group on Social Development; ILO Expert Group on Information Technology and Youth Employment; Task Force on Gender and Tropical Diseases, Special Program for Research and Training in Tropical Diseases, WHO (1994-97); U.N. Expert Group on Gender, Science and Technology; Board of Directors, EarthCare Africa (1993-97); Member, Review Panel for Extension of International Staff Contracts, ICRAF (2000). Reviewer of Water and Food CP research proposals. Author in over 90 publications on gender, health and information, including 5 books, 18 book chapters and 16 refereed articles. Languages: English, German, French.

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Punjab Agricultural University, DIRR
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Expertise: Current post since July 2005; Director, NBPGR, New Delhi, 2000-2005; Asst. Director General, ICAR, New Delhi, 1998-2000; Scientist, CIMMYT, Mexico, 1993-94; PAU, Ludhiana: Assoc Director (Seeds), 1995-98; Sr. Maize Breeder, 1988-95; Maize Breeder, 1979-87; Asstt. Maize Breeder, 1974-79; Awarded: IARI-ICAR Gold Medal, 1974; ICAR Rafi Ahmed Kidwai Memorial Prize, 1986-87; Punjab State Council for Science and Technology Appreciation Certificate, 1990-93; Indian Society of Genetics and Plant Breeding Joginder Singh Memorial Prize, 1997-98. Fellow: Indian National Science Academy; National Academy of Science since 1999; in Executive Council 2003-2005; Punjab Academy of Sciences.

Annex 2
TERMS OF REFERENCE
EXTERNAL REVIEW OF THE SYSTEMWIDE PROGRAM on PARTICIPATORY RESEARCH and GENDER ANALYSIS (PRGA)

1. The specific Terms of Reference for the review of the PRGA Program are:

- Assess the clarity, relevance and appropriateness of the mission and goals of the PRGA Program regarding the CGIAR's goals and mandate.
- Assess the mechanisms in place for setting the priorities for reaching PRGA Program's goals, the relevance of the priority themes and the strategies to reach the overall goals of the CGIAR and its partners.
- Assess the efficiency and effectiveness of the PRGA Program in implementing its research and research related agenda, specifically, with respect to:
    - increasing awareness and consideration of participatory research and gender analysis methods in the relevant areas of research;
    - developing specific participatory research methodologies for broad application;
    - developing guidelines for gender analysis for broad application;
    - enhancing research organizations' ability to choose from a tool-kit of participatory plant breeding and varietal selection methods and approaches;
    - identifying policy instruments that enhance involvement of users as partners in PRGA in all stages of applied and adaptive research.
- Assess the balance between research and advocacy activities in the Program's agenda.
- Assess the extent to which the Program has contributed to mainstreaming participatory research on one hand and gender analysis on the other hand in the CGIAR and among its partner institutions and the reasons for success or lack of it (focusing on the relevant areas of research included in the PRGA agenda).
- Assess the derived demand for the approaches based on the change in investment and effort in PR and GA research over the life of the Program at the Centers.
- Evaluate the relevance, quality and achievements of PRGA research and related activities in the following areas:
    - methodologies and conceptual frameworks;
    - publications and other dissemination pathways;
    - capacity strengthening; and
    - institutional learning.

This evaluation should be based on clear criteria for each as developed by the study Panel, and should also examine the processes in place for monitoring milestones and enhancing the quality of outputs and outcomes.

- Assess the methodologies and frameworks for impact assessment in PRGA for both PR and GA. The evaluation should also examine the processes in place for monitoring and enhancing the impacts. The study should employ innovative indicators of impact (direct and indirect) suitable to the full range of impact pathways.
- Assess the effectiveness and the efficiency of the PRGA Program's governance, decision-making, organization, accountability, resource mobilization and allocation, and mode of operation, including internal communication between participating institutions, identification of constraints in implementing the Program and lessons learnt by both the CGIAR and its partner institutions.
- Evaluate the effectiveness of CIAT's convening role, including the relation between the Program and CIAT's own research agenda, taking into account the synergies generated and the transaction costs incurred.

- Assess the need and continuing relevance of the PRGA Program and, depending on the assessment, make recommendations as to its future objectives and role, its organization, and funding; or alternatively an exit/devolution strategy.

2. The task for the IA study by the Panel includes:

- Review the literature on IA of PR that has been produced by the Program and its partners and others.
- Assess the extent to which impacts from using PR approaches have been rigorously evaluated by the PRGA Program and its partners. On the basis of documented evidence of impact, the Panel should draw conclusions to the extent possible on the effectiveness of the various PR approaches used to date. It should also include a survey of the relevant CGIAR Centers and PRGA Program partners of their assessment of the effectiveness of PR approaches.
- Specify methodological issues to be taken into consideration in assessing the impact of PR research.

Annex 3
PERSONS INTERVIEWED BY THE PANEL

Advisory Board Members and PRGA Staff

Ashby, Jacqueline.	RII Director, CIAT
Aw-Hassan, Aden.	Dry Land Resources Coordinator, ICARDA
Biggs, Stephen	University of East Anglia, Norwich, U.K.
Ceccarelli, Salvatore	PRGA Program Mainstreaming Advisor, ICARDA
Gurung, Barun	PRGA Coordinator
Jiggins, Janice	University of Wageningen, the Netherlands
Kapiri, Monica	Kampala, Uganda
Lilja, Nina	PRGA Program
Lubbock, Annina	IFAD, Rome
Prain, Gordan	CIP, Lima, Peru

Researchers, Partners

Chiche, Yeshe	EIAR, Ethiopia
Dusengemundu, Leonidas	ISAR, Rwanda
Ngugi, Jane	KARI, Kenya
Kabanyoro, Ruth	NARO, Uganda
Mergabe, J.	Director, ISAR, Rwanda
Mirkisna, E	Director-General, KARI, Kenya
Mukakamanzi, Domitille	Farmer, Rwanda
Mureithi, Joseph	Deputy-Director, KARI, Kenya
Mvurnabandi, John	Farmer, Rwanda
Nyongesa, Dave	KARI, Kenya
Nkurikiyumwami, Charles	Director, HRD, ISAR, Rwanda
Sengdewala,, Elizabeth	Facilitator, ECAPAPA/ASARECA
Turyamureeba, Gard	NARO, Uganda

Telephone and/or E-mail Interviews

Feldstein, Hilary	Gender Consultant, U.S.A.
Germaine, Anne	Senior Policy Analyst, CIDA
Haines, Charles	Senior Policy Analyst, CIDA
MacGillivray, Iian	Principal Advisor, Agriculture, CIDA
Paris, Thelma	Gender Specialist, IRRI
Vernooy, Ronnie	Senior Program Specialist, IDRC
Vicki Wilde	Gender and Diversity Program, ICRAF

Annex 4
PROCEEDINGS, MONOGRAPHS, AND OTHER PUBLICATIONS

Proceedings

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Annex 5
22 HYPOTHESES REGARDING THE INCREMENTAL IMPACT OF PARTICIPATORY ELEMENTS IN A RESEARCH PROJECT[2]

Technology impacts
Design stage:
(H1) The proportion of the targeted beneficiary group that could potentially be reached by the project increases because the priority topic chosen for research is more relevant to the needs and priorities of targeted farmers.
Testing stage:
(H2) The number of potential adopters within the target group increases because the specific technology1 selected for recommendation is more appropriate given farmers' criteria and constraints.
Diffusion stage:
(H3) The probability increases that potential adopters for whom the technology is appropriate will be aware of it, and that adopters will be willing and able to adopt and recommend it to others.

Social and human capital impacts (among beneficiaries)
Design stage:
(H4) Collaborative: Farmers/communities improve their ability to interact with outsiders, to articulate and evaluate their opinions and priorities, and to negotiate joint solutions with other stakeholders who may have different opinions.
(H5) Collegial: Farmers/communities improve their ability to interact with outsiders, particularly their ability to attract the interest and support of researchers for farmers' problems and priorities.
Testing stage:
(H6) Collaborative: Farmers/communities enhance their own testing and evaluation skills with an increased knowledge of scientific methods of experimentation and evaluation, and improve their ability to negotiate joint recommendations with other stakeholders who may have different opinions.
(H7) Collegial: Farmers/communities enhance their own testing and evaluation skills with an increased knowledge of scientific methods of experimentation and evaluation, and improve their ability to convince researchers of the validity and relevance of farmers' results.
Diffusion stage:
(H8) Collaborative/collegial: Farmers/communities learn what is involved in mass diffusion of technology, particularly the complexity of adoption decisions and the importance of complementary inputs such as seed, credit, or information.

A final hypothesis relates to the fact that, in many cases, participatory projects involve farmers working together with other farmers as well as with researchers.
(H9) The increased communication among farmers may result in better information and in information sharing among farmers and within the broader community, strengthening community social capital.

Feedback to formal research impacts
Design stage:
(H10) Consultative: Researchers learn about farmers' priorities and solutions.

[2] Source: Johnson et al. (2001b)

(H11) Collaborative: Researchers understand farmer priorities and solutions— including any new shared priorities or solutions that farmers and researchers identify as a result of working together—and incorporate them into their work.
(H12) Collegial: Researchers learn about farmers' priority problems and solutions by observing their decisions about problems, solutions, and innovations.
Testing stage:
(H13) Consultative: Researchers learn farmer criteria for evaluating technologies.
(H14) Collaborative: Researchers understand farmer criteria and methods for testing and evaluation of technology—including any new shared criteria or methods that farmers and researchers identify as a result of working together.
(H15) Collegial: Researchers learn about farmers' testing and evaluation methods and criteria by observing their actions.
Diffusion stage:
(H16) Consultative: Researchers learn about the factors that affect farmers' adoption decisions and what these imply for the diffusion process.
(H17) Collaborative: Researchers learn about farmer-to-farmer diffusion practices and about what kinds of information and skills both farmers and extension workers need to support this spontaneous diffusion.
(H18) Collegial: Researchers may learn about spontaneous farmer-to-farmer diffusion through observation of farmer activities.

Finally, a general hypothesis that would apply at all stages is that:
(H19) Researchers begin to understand that working with farmers may require new types of skills such as facilitation and conflict resolution that were not as important when research was carried out entirely on-station**.**
This would be expected to increase as participation moves from functional to empowering.

Cost of research impacts
(H20) Moving from conventional to consultative or collaborative forms of participation generally increases formal research organizations' costs at the particular stage where it is incorporated; however, it may reduce cost at subsequent stages.
(H21) Collegial research reduces research costs to formal research organizations at the stage where it is implemented because costs are transferred to farmers.
(H22) Participation without compensation increases farmers' costs unless it relies exclusively on those farmers (often a small and unrepresentative group) who already experiment on their own with new technologies and practice.

Annex 6

RELEVANT QUESTIONS ABOUT ASSESSING THE IMPACT OF USER PARTICIPATION IN NATURAL RESOURCE MANAGEMENT RESEARCH[3]

Did participation and gender differentiation change product objectives or priorities with respect to technology development and transfer for NRM?

What difference did participation make to the cost or impact of the research?

Did participation and gender differentiation or new organizational strategies affect the number of beneficiaries, the type of beneficiaries adopting new technology, or the speed at which they adopted?

Was local experimentation with new practices strengthened?

Did capacity building improve local skills, problem-solving ability, and ability to initiate and sustain participation without external facilitators?

Was there feedback to NARS or IARC research that changed their research priorities or practices beyond the scope of the specific project?

[3] Source: Johnson et al. (2001b)

Annex 7
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(Weltzien et al, 2003 has an inventory of 40 PPB cases in the formal sector institutions in the developing countries.)

Annex 8
ACRONYMS

AB	Advisory Board of the PRGA
ACIAR	Australian Center for Agricultural Research
ACORDE	Asociación Costarricense para Organizaciones de Desarrollo
AROs	Advanced Research Organizations
ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
BMZ	German Federal Ministry for Economic Cooperation and Development
CAPRi	Collective Action for Property Rights
CAZS-NR	Center for Arid Zone Studies – Natural Resources
CBD	Convention on Biodiversity
CGIAR	Consultative Group for International Agricultural Research
CIAL	Comité de Investigacíon Agricola Local
CIAT	International Center for Tropical Agriculture
CIDA	Canadian International Development Agency
CIMMYT	Centro Internacional de Mejoramiento de Maiz y Trigo
CIP	International Potato Center
DFID	Deparment for International Development, U.K.
GA	Gender Analysis
GTZ	German Agency for Technical Cooperation
G&D	Gender and Diversity Program of the CGIAR System
IARCs	International Agricultural Research Centers
ICARDA	International Center for Agricultural Research in the Dry Areas
ICRAF	International Center for Research in Agroforestry
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IDRC	International Development Research Center
IPM	Integrated pest management
IPR	Intellectual Property Rights
IRRI	International Rice Research Institute
ISAR	Institut des Sciences Agronomiques du Rwanda
ISNAR	Institute for Service to National Agricultural Research
KARI	Kenya Agricultural Research Institute
NARS	National Agricultural Research Systems
NERICA	New Rice in Africa
NGOs	Non-governmental organizations
NRM	Natural Resource Management
PPB	Participatory plant breeding
PNRM	Participatory Natural Resource Management
PRGA	Participatory Research and Gender Analysis
PVS	Participatory Varietal Selection
SSA	Sub-Saharan Africa
SPIA	Standing Panel on Impact Assessment (Science Council)
Stripe	Inter-center thematic reviews commissioned by the SC to evaluate specific priority themes which cut across more than one center
SWI	Systemwide Initiative
TAC	Technical Advisory Committee
TSBF	Tropical Soil Biology and Fertility
UN	United Nations
USAID	United States Agency for International Development
WARDA	West African Rice Development Association
WN	World Neighbors
WTO/TRIPS	World Trade Organization/ Trade-Related Aspects of Intellectual Property Rights

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