

## Participatory Research in the CGIAR

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### Abstract

Nowadays that participatory approaches to research are receiving a revived interest, it is useful to take a closer look at the state of the art of participatory research in the CGIAR. The paper provides a historical overview over participatory research activities in the CGIAR and over the state of the art of the discussion about participatory research within the CGIAR. It pinpoints problems and deficiencies in the CGIAR regarding participatory research and offers suggestions as to how participatory approaches can better be integrated in the system in order to exploit their potential more effectively.

*Keywords: participatory research, CGIAR, institutionalization*

### 1 Historical overview over participatory research activities in the CG

Participatory research is not new to the CGIAR. Its history dates back to the 80s when first attempts were made to come into closer contact with farmers. The limitations of a pure commodity orientation were seen quite early by some and led to the development of farming systems research approaches. Although this brought researchers into closer contact with farmers, the question, whether farmers had an active enough participation soon came up and led to experimentation with more farmer participation and to the development of first approaches to do research with farmers (Chamber & Ghildyal 1985, Chambers & Jiggins 1986, Chambers et al. 1989, Chambers 1992). Examples were the work of Mike Collinson at CIMMYT, David Norman at IITA, Christine Okali, Ellen Taylor-Powell and others at ILCA, Clive Lightfoot at IRRI and ICLARM, Michel Pimbert at ICRISAT, Sam Fujisaka at IRRI, as well as CIAT's participatory plant breeding program which was started in the 80s (Lightfoot 1985, Fujisaka 1989a&b, Braun 2000). Most widely known was probably the Farmer-back-to-Farmer model that was developed at CIP. Some of these approaches were well known in several arenas, although, in the CGIAR,

they were restricted to a few pockets. The mainstream of biological scientists within CGIAR remained highly skeptical and untouched (Thiele et al. 2000).

During the next phase, centers took different directions regarding these initial attempts. In very few centers like CIAT, work progressed and advances were made, which finally led to some kind of institutionalization, for example with an increased number of scientists who are knowledgeable in participatory research and the establishment of the core-funded system-wide program for participatory research and gender analysis (CIAT et al. 1996). However, most of the early attempts did not arrive at a meaningful institutionalization. The lack of clear coordination mechanisms and the marginalization of social scientists led to the fragmentation into a number of largely independent localized initiatives, especially at those commodity centers, where farming systems research had been strong and came to its limits during the nineties (Thiele et al. 2000). An important factor for the difficulties of participatory approaches to research and development was World Bank's agricultural policy at that time. The infamous training and visit system for extension (T&V) which is firmly based on the technology transfer approach had been developed and was spread all over the world until recently, creating a very difficult environment for more integrated approaches to innovation development with user involvement. In the CGIAR, the drive to go back to strategic research during the beginning of the 90s seemed to mean the end for many of these dispersed participatory activities within the system. (Fujisaka 1992 & 1994, Thiele et al. 2000)

In recent years there is a revived interest for participatory research approaches, now for quite different reasons. International agricultural research is in a crisis, with serious doubts about the scale and the nature of its impact emerging. Criticism was mostly related to lacking impact in eliminating rural poverty, which, among other reasons, led to a stagnation of funding. Donors started to demand more visible impact and more farmer integration into research in order to produce more relevant results. A contributing factor to the changed donor behavior were experiences

with public administration reforms toward more accountability and client orientation in a number of donor countries. Centers reacted differently to these demands, but in general this has led to a renewed interest in participatory research approaches within the CG.

Today, activities are situated at different levels, ranging from the system-wide initiative on participatory research and gender analysis, to small and largely unknown projects at different centers. However, every center feels compelled not to ignore the donor demand for more farmer participation and the publication of participatory activities is well over-represented in centers' public-relation brochures as compared to its relative importance in actual CG-research. The pressure to change from outside as the main driving force certainly bears the danger of external overselling.

Until recently, most participatory research activities in the CG were at the level of applied and adaptive research or even technology transfer. Examples are:

- on-farm varietal selection, identification of farmers' preferences
- involvement of farmers in testing of IPM technologies
- tree nursery management and dissemination
- seed multiplication with farmers
- validation of tillage and soil conservation practices.

Quite a number of these down-stream applications of participatory research can of course be understood as strategic in the sense that they developed and validated methodologies that found wider application within and outside the CG-system. However, they were and are often not perceived as that. An interesting example is CIP's involvement in the development of integrated crop management (ICM) for sweetpotato, as a direct result of farmer-researcher interactions about rice-IPM in areas where farmers rotate rice with sweetpotato (Braun et al. 2000, Braun et al. 1995, Braun and van de Fliert 1997, Van de Fliert et al. 1996).

There are, however, a number of examples for participatory research activities that were framed with explicit strategic goals like methodology development, e.g:

- the systemwide initiative on participatory research and gender analysis,
- ICRISAT's millet breeding program,
- CIAT's development of the CIAL approach<sup>1</sup> and its bean and cassava breeding program
- IIMI's participatory approaches to irrigation management and others.

## **2 The state of the art of discussions about farmer participation in the centers**

Opinions regarding the value of participatory research and farmer participation for the CG cover a considerable spectrum. The one end is held by scientists who do not consider participatory approaches to research to be proper science at all. To them farmer participation means the end of good research. Some see participatory research as a better way of technology transfer, which is not the task of CG. There is probably quite some consensus nowadays about the usefulness of participatory research for adaptive and applied research. Some argue, however, that this should also not be done by CG, but rather by NARS, extension and NGOs. A last view has taken root during recent years: farmer participation should not only be used for adaptive and applied research, but should be seen as strategic at all levels and stages of research processes.

Senior management has rather diverse levels of understanding, but at the level of the technical advisory committee (TAC), director general and board of trustee chairs, it tends to view participatory research as a donor fad and a misallocation of money. There are, however, exceptions who see participation as critical, especially for research in marginal areas.

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<sup>1</sup> CIAL is the abbreviation for "comité de investigación agrícola local" (local agricultural research committees), community-owned and -managed research services staffed by volunteer farmer-researchers with links to formal research and extension services. For a description and analysis of CIALs see Braun et al. 2000, Ashby et al. 2000, Ashby 1987, Humphries et al. 2000.

This situation seems to be changing slowly. The new vision and strategy paper, which was adopted at the CGIAR Mid-Term-Meeting in May 2000, emphasizes a sharper focus of work on poverty reduction and on targeting those areas and groups with a high incidence of poverty. It also emphasizes the need to make use of participatory approaches on different levels, like priority setting, research planning and for NRM research (TAC 2000). Another indicator for the changing attitude is the systemwide review of plant breeding that included participatory plant breeding systematically as a component.

Probably the most important improvement is that today the issue of farmer participation in research can be discussed more seriously with most scientists.

### **3 Difficulties in the CGIAR with participatory research**

The problems of the CG with participatory research are located at different levels. One of the underlying reasons is the CG's narrow conception of agricultural research as natural sciences, partly due to the widely held view that good science is natural science. For agricultural research in the CG, social sciences are at best assigned a supportive function. Especially basic research and partly also strategic research is conceived only as biological research. Sociological reflections on the foundations of science, and more specific on the foundations of agricultural science have never been on the CG's agenda and the CG has always avoided epistemological questions about the theoretical assumptions underlying its understanding of knowledge and how scientists can come to grips with other forms of knowledge<sup>2</sup>. The CG has therefore until now hardly been able to conceptualize innovation development in rural areas with a more holistic perspective where different sciences are integrated on the different levels. This problem is as old as the CG itself, surfacing now again with the renewed interest in participatory approaches to research. If farmer participation is not to be understood and used only as field methods, its theoretical underpinnings from social sciences will have to be

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<sup>2</sup> Epistemology is the theory of cognition and knowledge.

underpinnings from social sciences will have to be elaborated and a clear theoretical and conceptual framework will have to be elaborated.

Another core issue is the low degree of institutionalization of participatory research in the system. This has implications for the strategic orientation regarding participatory approaches, for the number of scientists and managers with experience in participatory research, for the level of understanding of its potentials, for the attitude toward participatory research, for frame conditions like the reward system, and for the possibilities to exchange experiences and networking.

The low level of commitment of senior management to actively support participatory approaches is one of the reasons for its weak institutionalization in the system. However, the problems raised in the following seem to be in a dialectic relationship with institutionalization: they are reasons for the low level of institutionalization and are in turn results of it.

### **Orientation**

- agricultural research is natural science and follows a natural sciences logic, with a few ingredients from social science. Epistemological questions are not dealt with.
- the CG has been focusing on data production and product results, not on process results.
- accordingly, the reward system in the CG is still very much based on the production of data instead of impact and process results. Researchers have very little incentive to do participatory research with the risk of becoming marginalized.

### **Understanding**

- participatory research is often seen as a threat to classic research paradigms and not so much as complementary.
- there is some diversity regarding the understanding of demand driven, client-oriented or participatory research approaches in senior management. Its strategic dimension is not well understood by all.

- the potential of participatory approaches, if at all, is seen only in adaptive and applied research which is not seen as the task of the CG.
- commodity orientation of centers, which is still prevailing, hinders a more holistic and systemic cooperation with farmers, which is especially difficult when farmer participation should move up-stream.

### **Staffing**

- there are not enough senior researchers with experience in participatory research at centers. Most researchers working with participatory approaches are young, on soft money and don't have enough incentives or possibilities to stay. Problems with continuity and quality are the consequence.
- the number of experienced practitioners of participatory approaches in general is low.
- practitioners of participatory research have often been outposted, thereby hindering exchange and better integration.
- social scientists are still a very marginal group in CG-centers. In this small group, most social scientists are economists, leaving a large blank on other pressing social sciences issues.
- a major drawback for a wider implementation of participatory research approaches is that traditional economists are often either highly skeptical of PR or if not skeptical then without experience in participatory research.

### **Capacity building and exchange**

- Experts for participatory approaches and methods who are hired for that function (advise and help in research planning on how to integrate farmers in projects and programs) are lacking at most centers.
- there are too few opportunities to learn, either in workshops, training courses, or in practical application.
- there have been too few possibilities to exchange and network for practitioners, mainly because there were too few practitioners. Today this situation is changing with the medium of e-mail and since the system-wide program has started to tackle such problems.

- similarly, there has been very little institutionalized collaboration and networking between the different centers. This has also slowly been changing since system-wide programs are working.

## **4 Strategies regarding participatory research**

### **4.1 Overall strategy in the CG regarding participatory research**

When looking at the history of participatory research in the CG, it seems that management's strategy for a long time was to marginalize participatory efforts within the system. It is only recently that donor pressure for more impact in poverty reduction and for more farmer participation is mounting, that participatory research activities are being used for advertisement and public relations. Today it seems that a stage is reached where more room for participatory research is given. However, a clear strategy of management regarding participatory research is not visible, not to mention effects on the CG's structure and organization as well as its procedures for research planning. The untenability of the situation is also clear to senior management: TAC's<sup>3</sup> strategy paper adopted at the MTM in Dresden focuses work more explicitly on poverty reduction and on areas with high incidence of poverty and speaks of the usefulness of participatory research approaches. How much of it is only for the paper and how much will actually be pushed through remains to be seen. The paper had gone through a first metamorphosis after the discussions at the special CGIAR Consultative Council meeting in April in Rome: some of the suggestions about more participation, focus on less favorable environments and NRM are in danger of getting lost in a sea of words. The paper indicates that these changes would also imply organizational changes, but does not make any suggestions as to what and how. They will probably point in the direction of departing slowly from commodity mandates towards eco-regional mandates for centers, which would mean a major re-organization at centers' level. (TAC 2000)

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<sup>3</sup> Technical Advisory Committee of the CGIAR

The strategy paper also stresses the need to invest in what is called “modern science”. This is elaborated on the one hand as: “functional genomics; new, powerful and increasingly affordable computing, information and communication technologies; remote sensing and spatial modelling” and on the other hand as “better understanding of human dynamics, social capital, and social organisation leading to participatory approaches to research and development and community management of common resources, i.e. forests, water, rangelands; and concepts of integrated natural resources management (INRM) permitting a more consistent System-wide approach to soil and water management research and to work on management of coastal environments”. (TAC 2000)

Whether this means heavy investment into “high-tech”, including bio-tech and some marginal down-stream applications of participatory research, or, an integration of participatory research approaches with traditional and new “high-tech” approaches, remains to be seen. In general, the strategy paper offers a useful specification of the vision and goal, but is very vague about strategies, probably for strategic reasons. The discussion about strategic and organizational changes has only recently been opened by TAC through an open e-mail consultation in July and August.

#### **4.2 Applied and proposed strategies of participatory initiatives in the CGIAR**

Practitioners of participatory research in the CG have much clearer ideas of what needs to happen within the system. They see an urgent need to better institutionalize participatory approaches within the system, which would require core commitment and more continuity. Participatory research should not be left to young scientists with short assignments, but should be firmly supported by management. More senior researchers are needed, who are knowledgeable or become knowledgeable on farmer participation in order to spearhead the insertion of PR approaches into the main CG research programs.

A second issue of institutionalization is the need for more inter-center, system-wide networking and exchange. Such an investment would enable

the CG to better draw on its own experiences and to facilitate organizational learning. Related to that, it is hoped that lobbying, networking and publishing about participatory research can bring isolated and scattered effort in the CG to higher visibility.

Another lever for change is seen in donor pressure for more farmer participation. It is important, however, that donor commitment to the issue has a long-term perspective with multi-year funding, if changes are to be substantial.

Quite some effort is put into attempts to produce hard data that should prove the impact of participatory research approaches and their superiority for certain areas, like for example:

- faster adoption of innovations
- development of fewer white elephant technologies
- a better reach to the poor
- more sustained farmer innovation
- other research efficiencies like lower cost for adaptive research

An important issue is the question of down-stream or up-stream participation. It is seen as crucial to reverse the trend of applying and seeing participatory research mainly within applied and adaptive applications. It is argued that the CG's comparative advantage lies in the application of participatory research to strategic and pre-adaptive research, such as:

- research methodology development, e.g. participatory research methodologies for use by NARS, NGOs, GROs, POs<sup>4</sup> and others and approaches to participatory research in common property management of natural resources
- pre-breeding
- plant breeding with segregating lines and early breeding populations  
biotechnology
- IPM component designs

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<sup>4</sup> National Agricultural Research System, Non-Government Organizations, Grass Roots Organizations, Producer Organizations

- Geographic information systems (GIS)
- system modeling of resource flows
- decision support tools for soil management and land use planning
- domestication of wild germplasm, including trees

## **5 How to strengthen CG's capacity for participatory research**

A number of proposals have been dealt with implicitly and explicitly in parts 3 and 4.2 of the paper. In this section, I would like to highlight only the most important ones and the ones where I hold a differing point of view.

A crucial issue is the re-conceptualization of agricultural research. The system should depart from its understanding of agricultural research as natural sciences carried out in a natural sciences mode and develop an epistemological basis for its research that integrates natural sciences and social sciences perspectives. Such a theoretical foundation is viewed as instrumental to tackling poverty problems in marginalized areas by providing a basis to seriously integrate the different disciplines that are linked to rural development and to develop stable structures for an in-depth dialogue with farmers.

The debate about up-stream or down-stream research is quite interesting. Certainly farmer participation should not be viewed as a down-stream activity for applied and adaptive research only and it is of vital importance that farmer participation is inserted into strategic research and priority setting. However, experience shows that farmer participation and farmers' priorities can not adequately be dealt with through surveys, short visits or short participatory exercises. A real dialogue that enables better mutual understanding requires time, effort, appropriate communication methods, a change of attitudes and behavior from lecturing and information extraction toward joint learning and researching, as well as some visible improvements for the farmers involved, which can only be assured in longer-term interactions that have an impact at farmers' level. It is here, that research and development are inseparably linked. Therefore it is crucial to

develop approaches to tightly integrate down-stream and up-stream applications of farmer participation for research.

The sharper focus on poverty reduction and on marginal areas with high incidences of poverty as is proposed in the TAC strategy paper is pointing into the right direction, as well as the shift from commodity orientation toward an eco-regional approach, which is imperative if farmers' reality is to be the basis for research. However, I would like to stress the importance of social and cultural factors for adapted innovation development and propose to frame the new approach as eco-socio-regional. This could provide a viable basis for the development of adapted concepts and methods.

The structural, organizational and procedural innovations required to implement such a shift are not to be underestimated and some of them are quite obvious. I would like to point to an issue that is often undervalued and neglected. Research organizations need to be able to react on problems identified during interactions with farmers and other stakeholders which would require much more flexibility than procedures for priority setting, research planning and implementation currently allow. This is not only a question for the CGIAR, but also for donors and their funding, monitoring and evaluation rules and regulations.

I have some doubts about the usefulness of trying to prove the superiority of participatory approaches for certain areas with hard data. I believe that this is largely a waste of time and effort that will lead nowhere. Institutionalization could be served better by

- documenting examples of participatory research in such a way that others can learn from it,
- designing participatory research projects with a focus on developing adaptable methodologies and providing learning opportunities for those involved, as well as for outsiders in all phases of the project.

There is a need for the creation of a new support function that would assist other researchers in planning and implementation of research projects in terms of how farmers can constructively be integrated during the differ-

ent phases. This person would not necessarily have to be a social scientist, he or she would have to be knowledgeable about participatory research approaches and about agricultural research in order to be able to provide such an advisory function. This function could also include training and on-the-job backstopping.

Apart from such a backstopping function, the balance between social scientists and natural scientists in centers needs to be considerably shifted, if farmer participatory research is to be up-scaled seriously. There has been progress in that respect in some centers, but certainly not enough on a general level.

The higher importance given to exchange and networking is crucial. Much more effort needs to be made in this area in order to better exploit the knowledge within and outside the system and to promote organizational learning. This is a challenge that senior management should tackle with more emphasis. Exchange, networking and an advisory function are means of capacity building, however, in general a stronger emphasis should be put on capacity building in critical areas.

A difficult issue is the reward system of the CG as well as criteria for staff selection. There is little incentive for researchers to do participatory research. This is certainly not only a problem of the CG, but of scientific institutions in general. However, it seems that the CG is not at the forefront concerning a redefinition of what is considered to be successful research and a successful researcher.

A related issue that also creates difficulties for better co-operation, is the very hierarchical structure of CG-centers. It appears to be quite anachronistic and needs a serious revision, especially if partnerships and farmer participation should play a greater role in the future. This concerns both the number of hierarchical steps in the organization, as well as their sometimes quite visible translation into working relations and social relations. Partner organizations with modern structures may find it difficult to co-operate with many CG-centers in their current structure.

The current discussion about the future role of the CGIAR, its vision, strategies and structure certainly offers a great potential to initiate some of the long needed changes and to lay the foundations for a more fruitful utilization of different participatory initiatives within and outside the CG.

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