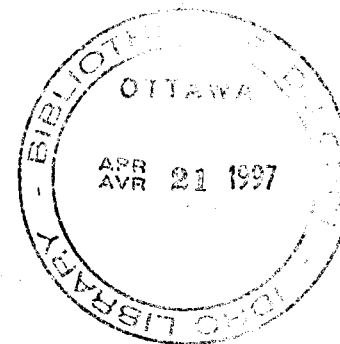


**Do you know the python ?
Moving forward on the participatory research methodology
development path ¹**

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Introduction

In this paper I will reflect on the development of participatory research methodology through a brief analysis of the International Development Research Centre's (IDRC) intellectual and financial support to participatory-oriented research projects. IDRC is a so-called crown corporation, a donor-agency funded by the Canadian government, but with an independent, international board of governors. Last year the Centre celebrated its 25th anniversary; funding of participatory research projects dates back to the middle of the 1980s.

In the first part of the article I will give an overview of the evolution of the Centre's policy and programming concerning participatory research methodology highlighting a few issues of particular interest. In the second part I will present some of the lessons learned about the use and impact of this methodology combining my own ideas and experiences, reflections made by IDRC colleagues (published in a number of papers and reports), and critical thoughts provided by a number of outsiders (consultants to the Centre). To illustrate some of the points that I am making here, a few currently IDRC funded projects will be presented in summary form.

Empowerment through knowledge

"Empowerment through knowledge" in developing countries by developing countries researchers (in the South by the South), is in a few words what the International Development Research Centre is all about. Through financial and technical support to applied, development-oriented research projects, the aims of the Centre are to provide the means to people to learn how to:

- 1) study their own situation, problems, constraints and potential;
- 2) gather and analyse relevant data concerning the above;
- 3) propose actions and execute plans and projects that will solve identified problems

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and improve the livelihoods of the people, efficiently and effectively;

- 4) assess the outcomes of the research and intervention process, and to learn from these outcomes for the benefit of future projects and programs.

These objectives are very much in line with the general goals of participatory research which emerged, to put it simply, to make science respond more directly to the ideas and needs of people most affected by underdevelopment. It is important to state here that this does not only mean the development of (better) technologies (agricultural or other), a position that some seem to defend (eg Bentley, 1994: 142). Apart from new and improved technologies and increased capacity to do research, more functional forms of organizations or institutions, and better policies are also seen as responses to the problems of underdevelopment. In other words, participatory research is seen as process to better understand the complexities of social life and as such to provide a sounder base for action.

At the heart of this approach is a collective effort by professional researchers and non-professional researchers to; 1) set research priorities and identify key problems and issues; 2) to analyse the causes that underlie these problems and issues, and; 3) to take actions to find both short term and long terms solutions for the identified problems. It is expected that such an approach will have a positive impact on both effectivity: an increased use and acceptability of research results, and efficiency: making better use of resources/reduce costs of project execution and delivery of results. The above summarizes the reasons why the International Development Research Centre, as a donor-agency and partner in research, is interested in participatory research.

Project example # 1: the Consortium for the Sustainable Development of the Andean Ecoregion (CONDESAN)

In 1992, researchers from the International Potato Centre (CIP) in Lima, Peru in cooperation with partners from national institutions in the Andean region and assisted by IDRC program staff created CONDESAN: the Consortium for the Sustainable Development of the Andean Ecoregion. CONDESAN aims to create a *community* of natural and social scientists, policy-makers, development specialists, NGO staff and farmers willing to improve the livelihoods of the rural poor and tackle the growing threat to the natural resource base of the Andean region (Rueda, Zandstra and Li Pun, 1994: 48-49; CONDESAN, 1996, 2).

Evolving from disciplinary and commodity-oriented approaches as well as farming systems research, the Consortium seeks to combine technical, institutional and policy research at several levels (farm, municipality, watershed, ecoregion) using democratic procedures, decentralized management and participatory research and development approaches. The consortium model is expected to generate synergies among partners and to achieve goals that institutions on their own would not be able to accomplish. Cooperation instead of competition is seen as a means to solve problems and make more efficient use of human and financial resources.

One important participatory technique used by CONDESAN partners is the *mesa de concertación*, a kind of round table that brings together municipal authorities, NGO staff, university personnel and farmers -all seen as stakeholders in the sustainable management of the natural

resource base- to openly discuss problems, analyse conflicting or diverging interests at the local level and find agreements or solutions (which is the meaning of the Spanish verb *concertar*). The *mesas* serve both as a space and as a process to join forces and develop new initiatives with the use of locally available resources and, if required, outside expertise. In Ecuador, there also exists a *mesa* at the national level to convene CONDESAN partners and jointly plan consortium activities. External evaluators of CONDESAN who recently completed a review of the Consortium (May-June 1996), were very enthusiastic about this innovative participatory technique used in Ecuador and Peru in terms of effectivity and as a new tool for the democratization process in Latin America (Mateo, Brown and Weber, 1996: 17-18).

Review of IDRC projects: moving forward

IDRC has reviewed and documented, either internally or through consultants, its support to participatory research oriented projects in 1987, 1988, 1989 and 1995. The publication of these reports in itself could be seen as a sign of the times: an increased interest in and reflection on the usefulness and limitations of participatory research methods by Centre staff. From these reviews we can learn the following.

Within IDRC, support for participatory research originated in the Social Science Division. Staff in this Division saw participatory research as bringing ethnography one step further: incorporating local people actively into the research process itself. A similar change took place among colleagues in the Agriculture, Food and Nutrition Sciences Division. Here, staff aimed to bring farming systems research one step forward by looking at the interrelatedness of the physical, biotic and socio-cultural aspects of rural life. They also wished to explore ways to blend farmers' and scientists' knowledge recognizing that farmers do experiment, with crop varieties, planting and harvesting techniques, and tools (see also Bentley, 1994: 141). In addition, staff acknowledged that scientists' knowledge and experiences are limited (IDRC Working Group, 1988: 8). This move toward more participatory research has gone hand in hand with more emphasis on interdisciplinary projects (Thompson, 1994: 6-9; Kapila and Moher, 1995). This evolution is reflected by the creation in 1995 of one single Programs Branch that is replacing the former disciplinary-based research divisions of the Centre.

These changes were motivated by the reflections of IDRC program staff on Centre supported projects and also by changes taking place at a political and economic macro-level, e.g. the emerging and growing critique of the Green revolution and its negative impact on the environment. There was a growing awareness that technology-oriented projects with agendas set by researchers and experiments carried out on-station, were not having the expected impact (see for a general discussion, Chambers, 1993: 62-63).

In the Health Sciences Division, it turned out to be more difficult to support participatory research projects which was explained by IDRC staff by pointing out that: 1) those who possess the power of healing in the health sector do not so easily give up their control, 2) medicine is seen by most people as full of mysteries and thus difficult to "tackle," and 3) it takes people a while to contribute a new meaning to health, i.e. to see health beyond diseases, services and facilities (Grisdale: 1989: 18).

In terms of classifying the types of participatory projects that IDRC has funded and continues

to fund, most projects make use of a "mobilized participation" methodology, in which a strong role is played by non-local, professionally trained researchers.

Second: the opening page of the 1988 report describes participatory research as "a mode of research which is attracting growing attention from agencies of development assistance but which remains exploratory in many scientific domains." (IDRC Working Group, 1988: 1). This trend has continued and what we now see is that participatory research is gaining ground in other institutions, including the World Bank and the Canadian International Development Agency (CIDA/ACDI). This is encouraging and hopefully will allow for interaction and exchange of experiences with IDRC funded projects.

Third: The same 1995 report also concludes that "while participatory research has [now] become more wide-spread, considerable confusion abounds concerning terminology, types of participatory research, theoretical underpinnings, and operational practice." (Found, 1995: 70) The problem of confusion about concepts and operationalization was also identified in an earlier IDRC report (Grisdale, 1989: 12). Both the 1989 and 1995 reports have recommended the need to classify the types of participation being used or aimed for in projects, but given that it seems that in a 6 years period not much improvement has been made, this seems to be a difficult issue to handle.

Project example # 2: Sustainable hillside agriculture in Colombia

The Hillside Program, coordinated by the International Centre for Tropical Agriculture (CIAT) in Cali, Colombia, is an ambitious research and development endeavour aimed to improve the livelihood of poor hillside farmers in Latin America together with the sustainability of the natural resource base. This is realized by developing sustainable land use and decision support systems through community based, participatory research and development in a number of different research sites in Colombia, Honduras and Nicaragua (CIAT: 1993, 1995). The Program is innovative because it moves beyond "traditional" crops research on the one hand and farming systems research on the other. Its multi-stakeholder approach and focus on community organization give the program a clear action-oriented dimension (Ashby *et al.*, 1995).

The Program is carried out in a number of watersheds, along a continuum from more intensively exploited and longer-established settlement areas such as the Ovejas River in Colombia to a more recently deforested and newly settled hillside "frontier" such as the La Ceiba region on the Atlantic Coast of Honduras (Humphries, 1995). Two participatory research techniques used by the Hillside team are of special interest: the so-called CIAL-s or Local Agricultural Research Committees (see Ashby *et al.*, 1995) and the creation of the CIPASLA or Consortium for Sustainable Agriculture in Hillside. The Program is identifying stakeholders within the watershed and bringing them together, through the CIPASLA consortium, to discuss and develop a common agenda for the sustainable management of the natural resource base taking into account both intra-watershed and supra-watershed interests. CIPASLA is a unique inter-institutional alliance or consortium of 14 government and non-government organizations that promotes sustainable hillside agriculture. This is done through a planning by objectives process leading to a strategic plan, regular coordination of activities and the execution of a coherent set of projects (Munk Ravnborg, 1995: 121-130).

The idea to establish CIPASLA first emerged at the end of 1992 when researchers, NGO-workers and government officials all working in the northern part of the Cauca department came

together for two days at CIAT to explore the feasibility to better coordinate their interventions in the area of natural resource management and community research and development. CIPASLA currently has financed 13 projects among others focussed on reforestation with multiple use trees, organic fertilizers, biological disease control methods, the establishment of rural agro-industries, and documentation of local values and culture concerning natural resources.

Developing on a parallel line with CONDESAN's *mesas redondas*, the key-word here is *concertación* which means respecting each other and reaching agreements/consensus without losing one's own identity and comparative advantages. CIPASLA members strongly believe that through the sharing of ideas and resources they can move forward. "Concertación" also means that local communities match contributions made by institutions and by CIPASLA, financially, through labour or otherwise. Giving away resources and services for free is no longer common practice. Magnolia Hurtado, the dynamic technical coordinator of CIPASLA, describes the building of trust and solidarity as a process of forging a new common CIPASLA-identity (personal communication, October 1995). She acknowledges that this is not an easy task for each of the participating organizations (NGO's, government agencies, CIAT). Conflicting or opposing agendas still exist, duplication of efforts still occurs and in general, organizations still operate in a supply driven way. At the community level farmers participating in projects funded by CIPASLA experience similar problems. As Don Célimo from Pescador, one of the outstanding farmer-experimenters explains: "People are still very much enrolled in their own shell. Moving forward is not so much a question of money but of mentality." (personal communication, October 1995)

Strengthening community ties means dealing with the problem of representation. An intent is made to classify stakeholders in terms of their relative poverty and to analyze how these poverty profiles relate to the degree of participation in decision-making processes (e.g. within the CIAL-s or the watershed users association known as FEBESURCA). So far, critical monitoring of the organizational process has shown that there are clear differences in participation. For example, the farmers from the upper and middle altitude zones in the watershed tend to dominate the agenda setting of FEBESURCA at the expense of the lower level farmers. Gender differences also are apparent. Women are clearly under-represented which points out the need to look at how the new organizational structures such as FEBESURCA and the CIAL-s put pressure on available skills, time and other resources of women and men in different ways. We may assume that existing inequalities in resources and power influence the ways in which FEBESURCA and the CIAL-s are being organized and the kind of activities that they carry out.

Fourth: reviewing more recent policy statements of IDRC that reflect new programming directions such as for example, the Theme statements on Food Systems under Stress, and Biodiversity (see box), we can observe a strong emphasis on stakeholder involvement combined with an ecoregional focus. Increasing concerns about the (mis)management of the natural resource base stimulated the development of eco-regional approaches in which problems are addressed at a more aggregated level of analysis, eg a watershed. This approach allows to deal more systematically with the interactions among components of an ecological system and the various productive activities carried out in a defined geographic area (eg farming, fishing, forestry). Stakeholder involvement refers to the active participation of small farmers, large farmers, entrepreneurs, municipal authorities, NGO staff and policy makers who together analyse problems and define

research and development initiatives reconciling conflicting or diverging points of views and interests (Vernooy, 1993; Li Pun and Koala, 1994: 10).

In particular, the active involvement of “non-traditional” stakeholders such as NGO-s, municipal governments, grassroots groups and farmer associations is a new feature of IDRC projects. Currently IDRC is supporting a number of large projects that use an ecoregional approach and that experiment with various forms of stakeholder participation in planning and decision making. We could mention CONDESAN and the Hillside Program described in this article, and the East African Highlands Initiative.

In other words, in methodological terms this approach implies a shift away from methodological individualism (Whatmore, 1994: 36) towards the analysis of geographic interdependencies and of social and political relations and tensions between multiple actors whose ideas, interests and identities constitute the actual practice of farming in a given agro-ecosystem. Relationships that include new and slowly emerging links between government and non-government agencies active in the field of agricultural development (Bebbington and Farrington, 1993: 199-219). It also means looking at farming as part of the wider agro-food chain that includes institutions that structure agricultural production, distribution and consumption.

In the closely related area of agricultural biodiversity, IDRC is supporting projects that aim to develop community conservation and utilization strategies (for example, the Community Biodiversity Development and Conservation Program, see Walter de Boef in this volume) as well as projects that use participatory plant breeding in combination with decentralized selection (see for example, Salvatore Cekarrelli in this volume). Both kind of approaches aim to give the end users a more meaningful voice in the research and development process (Voss, 1996: 6-7).

Food Systems under Stress Theme

The food systems under stress themes focuses on rural, indigenous and other groups vulnerable to food shortages living in critical ecoregions that are mostly marginalized in terms of socio-economic development and ignored in terms of research and development efforts. Research is aimed at breaking the poverty cycle that forces many of the rural poor in these regions to mortgage the longer-term health of their environment and natural resource base to ensure their immediate needs for food. IDRC's approach is to support systems-based, interdisciplinary research in a limited number of ecologically fragile regions around the world, i.e. highlands/hillsides, arid and semi-arid areas and coastal zones. Emphasis will be given to the identification of viable household and community-based strategies and innovative institutional arrangements and policies. In terms of methodology, it builds upon the Centre's leading role in the support of participatory research. (Food Systems under Stress Working Group, 1995: 1-2).

Biodiversity Theme

The world is facing an unprecedented scale and rate of habitat destruction which is creating irreversible loss of biodiversity worldwide but particularly in developing countries. This problem is compounded by the loss of knowledge of biodiversity and its use. IDRC's approach to the conservation and sustainable use of biodiversity is to build on the Centre's strengths in supporting interdisciplinary research and its credibility to work with local groups. The overall objective is to ensure the availability and sustainable use of natural resources by local communities. The focus is on research that will identify the incentives and the institutions that are needed to encourage people to maintain biodiversity (Biodiversity Working Group, 1995: 1).

Fifth: Although there is a growing awareness at IDRC about the need to fully integrate gender perspectives into programs and projects, in practice progress has been slow. As Waafas Ofosu-Amaah observed in her 1994 external review report on the gender diffusion process within IDRC (1994: 4), most of the projects that program staff consider to be gendered, are actually projects designed especially for women and do not necessarily deal with gender roles, perceptions and conflicts. This is confirmed by a more recent review of the degree of gender sensitivity of projects approved by the Centre in 1995-1996 (Bromley, 1996), although it is fair to point out that there are a number of projects that "appear to accept the importance of both women and men in the development process -from the conceptualization of problems and research projects, through the design, implementation, analysis and post-project evaluation process. Generally they also appear to recognize the various locations, roles and positions held by women and men within communities which provide and direct participation and interaction in the development project (Bromley, 1996: 10-11). Mainstreaming a gender approach within IDRC and in Centre funded projects is still a high priority.

Project example # 3: Food systems under stress in Africa

The Food Systems under Stress in Africa project involves five interdisciplinary research teams from Uganda, Tanzania, Zambia, Botswana and Zimbabwe, and a number of resource persons from Canadian Universities and the School of Oriental and African Studies (SOAS), London, England. The network aims, through a process of participatory research, to involve local groups in food-focused action research at a variety of levels, from the household to the community to the national level (FSUS in Africa proposal, 1993; Pottier, 1995: 254).

The network brings together academic researchers, national policy makers, community workers, extension officers, district-level officers and a cross-section of rural people living in environmentally fragile areas to express and reflect on local perceptions of food stress and to develop activities to turn food insecurity into food security. The methodology used by the network so far consisted of, among others, a series of focus group meetings and plenary sessions on food

stress and household-level food security, seasonal calendars, gender-specific daily activity profiles, problem ranking, wealth ranking, Venn-diagrams, transect walks, and theatre plays.

Experiences from the five countries so far are very diverse, but encouraging. The Ugandan team, working in the semi-arid district of Soroti in the north-eastern zone of the country, obtained during their first participatory workshop a good insight in social differentiation based on unequal access to natural resources and labour, as well as an idea of different gender roles and the changing bargaining powers that women and men employ in getting access to food and money at the household level. The team also found out that at the mentioned workshop the poorest people in the area were absent. As Orone and Pottier reported (1995: 3), selection by the sub-county chief of participants had obviously left the poorest out. A similar problem occurred in Zambia where the so-called *nakalyas* or have-nots/most food insecure (as identified by the local people themselves) were under-represented (Sikana and Simpungwe, 1995: 93).

In Zimbabwe, during a similar participatory workshop, the project team discovered that a group of village chiefs had managed to steer a resource mapping exercise to include only certain villages with the clear expectation that these villages would receive (project) benefits (and others would not). The team was forced to sit down with the chiefs and address the question of "whose needs will be mapped?" (Mararike, Dzingirai and Pottier, 1995: 65) During the same workshop, the team also discovered that the local people were identifying the researchers as very close to the government. As one of the farmers observed, instead of having to go through the long route of kraal head to ward councillor to district authority to ministry of agriculture, "the government was now next door." (ibid: 65)

In Botswana and Tanzania, participatory techniques proved to be very powerful tools in bringing people from different backgrounds together, express their ideas and react to views formulated by others. In Botswana, these interactions also made government officials realize that food insecurity in the Kgalagadi district where the project is carried out, is closely linked to social problems such as alcoholism, divorce and teenage pregnancies (Lebohang, 1995: 123). As I had the chance to observe personally, for most if not all of the officials to become aware of these links was truly an eye-opener.

Lessons learned: key factors in success/failure

The review of past IDRC investments and experiences with participatory research and experiences of and reflections on ongoing projects such as CONDESAN, the Hillsides Program and the Food Systems under Stress in Africa network, allow us to identify a number of factors that appear key to the successes or failures of a participatory methodology. We could group these factors in two categories: factors concerning human resources and the building of partnerships, and factors concerning environmental, socio-economic and political contexts. Without assigning priority, these factors are the following.

Factors concerning human resources and human resources development:

1. Training of participants in becoming partners in a research and development initiative. Important questions are: who needs to be trained, in what ? As the IDRC 1988 review report observes: "Rather the establishment of partnerships among groups of people (researchers and community members) to carry out novel tasks may often be an assiduous undertaking." (IDRC Working Group, 1988: 20). Related to training, experience has shown that training should be followed up by networking and that there is a need to allow for time for the emergence of partnerships. This requires frequent face-to-face interaction and a medium to long term project time frame.
2. The availability of sufficient time and labour, hence dedication or commitment on the part of all stakeholders involved in the projects is crucial for effective participatory research. This seems disfavoured to grassroots groups, farmer associations and NGO-s who often lack money, time and human resources, although these are the organizations that most likely use participatory research methodology (Grisdale, 1989: 16). This points out to the need to set aside funds and staff to support local level initiatives or accept the involvement of "outsiders."
3. Shared common background of the (professional) researchers themselves: this factor needs further validation, but it has been noted that where such a common academic or professional background exists, the participatory process will be more effective.

Contextual factors:

4. The fit of the project with local cultural circumstances, in terms of values but also institutional presence. If farmers and researchers have different departure points, i.e. relatively well-off versus poor, urban versus rural based, access to outsiders versus isolated, and if these differences are unrecognized or not understood by the researchers, participation is more likely to be a failure. As a result, seemingly sound technologies developed by projects will not be adopted by farmers (Ayling, 1995: 106-107). There is a need for researchers to be on the same wavelength as local people. This implies that researchers need to challenge their own thinking and question their assumptions ("cultural baggage") and material (class) interests. This means that researchers need to situate themselves (Pottier, 1995: 257-258). This is also underlined by other researchers, e.g. Bentley (1994: 144) who points out that social distance between farmers and researchers is a major limitation for effective participatory research.
5. Specificity of definition of who participates and how participation takes place: the more ambiguous participation is defined, the more likely the process will not be effective (IDRC Working Group, 1988: 19).
6. Closely linked to the question of who participates is the degree of heterogeneity that can be found at the local level, and to make things more complicated, at the regional level. Here the question we need to ask ourselves is how effective will stakeholder approaches be ? "References to

‘village people’ and ‘local communities’ may well mask the realities of social heterogeneity which exist among project participants.” (IDRC Working Group, 1988: 21) As the Hillside Program research team has experienced, researchers need to be aware that the participatory research process is part of the construction of these realities; and that in most cases this means that they will become enrolled in “projects” and alliance making efforts of some individuals or groups (Pottier, 1995: 258).

7. Environmental conditions: the Hillside Program, CONDESAN and the Food Systems under Stress in Africa network show that difficult environmental conditions do not seem to be a limiting factor. This seems to be confirmed by other IDRC-funded projects in fragile areas, but more case study analysis and comparison would be needed to strengthen this conclusion.

8. Political context and political implications: both context and outcomes can be favourable or negative.

9. The scale of the project does not seem to be a relevant factor, although this also needs further validation. So far, ambitious programs such as CONDESAN and the Hillside Program seem to have created the space for effective forms of participation. The Food Systems under Stress network demonstrates that participatory approaches also work at a more reduced scale.

Concluding remarks

As both the CONDESAN and the Hillside Program demonstrate, participatory research for sustainable natural resource management is very much about the building and strengthening of local organizations. These organizations are the ways in which local people become empowered and empower themselves to have a greater say in decision-making about the use and long-term management of soil, trees, water and animals. People perceive this clearly as a process of learning by doing which is usually advancing step by step. Planning by objectives which implies taking and giving, and building consensus while keeping one's identity, are key elements of these processes. The challenge is now to consolidate these new organizations and to strengthen their community roots and ties.

To conclude, I would like to reiterate that participatory research is above all about commitment, honesty and reflection. As one of the Zimbabwean farmers in one of the Food Systems under Stress in Africa project workshops questioned us: “Do you know the python ? It comes unexpectedly and shows you its beautiful colours, then it disappears and you may never see it again. Researchers should not be like the python.” (Mararike, Dzingirai and Pottier, 1995: 72) The same could be said for district-level policy makers, extension officers and donor agency representatives.

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