

PARTICIPATORY EVALUATION OF PARTICIPATORY RESEARCH

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Abstract

The paper discusses 1) the changing role of evaluation in research and development programs, 2) the emerging participatory approach in program evaluation, 2) and the challenges and issues in evaluating participatory research. To illustrate key concepts and practices, the paper presents several cases based on Asian experiences in agricultural research and development.

Traditionally, research and development programs look upon evaluation as a means to ensure their accountability and transparency. Evaluation is often used to assess whether a program has accomplished its objectives, managed resources efficiently, and is open to public scrutiny. Most evaluation efforts are designed to serve the needs of project proponents, implementors and donors. They are usually done by external experts who supposedly take a detached, impartial assessment of programs.

In recent years, however, a more participatory approach has emerged in program evaluation. There is now greater recognition of the significant contribution of program beneficiaries and other stakeholders to the evaluation process, besides considering them as among the key potential users of evaluation results. Moreover, a participatory approach supports the emerging role of evaluation in program learning and innovation.

Participatory evaluation is distinguished from the conventional approach in five key ways: why is evaluation being done, how evaluation is done, who evaluates, what is being evaluated, and for whom evaluation is being done. It is often practiced in various ways, such as: self-assessment, stakeholder evaluation, internal evaluation and joint evaluation.

Participatory evaluation is particularly relevant for programs engaged in participatory research. A major challenge facing these programs is to be participatory not only in planning and implementation of activities, but also in their evaluation. However, participatory evaluation of participatory research raises conceptual, methodological and other related issues. Among these are: shared understanding of participatory evaluation by program stakeholders, cost-effectiveness of the approach, capacity development for participatory evaluation, influence of socio-cultural context, policy support, and institutionalization and scaling up.

Research and development programs are planned, funded and implemented because they are assumed to achieve positive change in people and their environment. We who are involved in planning these programs thus ask: Where are we now? Where do we want to go? And how do we get there? In fact, program proposals are supposed to be evaluated and approved in terms of how clearly they provide answers to these fundamental questions.

Yet it is not enough that programs work toward these goals of change. We must also be able to know whether this change actually occurs and that it is the result of program efforts. Thus some other questions come to our minds: How do we know that we get there? How do we know that we get there because of what we do? Faced with these additional questions, we begin to realize the significant role of evaluation in our programs. Because while programs seek to produce change, it is evaluation that allows us to track this change and to attribute it to the research and development intervention that we introduce.

This paper takes evaluation as the practice and process whereby a program undergoes systematic assessment of its performance and outcomes, to allow for making informed judgments and to guide its subsequent directions and actions. Evaluation is used here to include both the monitoring and evaluative dimensions of programs.

Much of what I will share in this paper comes from my own experience as a young professional struggling with evaluation issues in the field of agricultural research and development. In the past few years, I have been involved with an Asian-wide program that supports and promotes participatory research – the Users' Perspectives With Agricultural Research and Development (UPWARD). A key challenge facing the program is to explore value-adding opportunities for involving end-users of technology in doing agricultural research, and also in its evaluation.

I. Changing Role of Evaluation in Research and Development Programs

Program evaluation has a long tradition in the research and development world. Over the last 30 years, program evaluation as a professional activity has grown substantially and spread around the world (Horton, 1997). Its early history can be traced to the desire of governments and donor organizations to assess returns on their investments, coupled by mounting pressure for accountability and transparency from the general public (e.g. in relation to social programs in the USA during the 1960s, Shadish et al., 1991). Evaluation thus became popular as an instrument for determining whether programs have attained their targets, made use of resources efficiently, and can withstand critical examination from the outside.

Patton (1997) describes program evaluation as the systematic collection of information about activities, characteristics and outcomes of programs to make judgments about the program, improve program effectiveness, and/or inform decisions about future programming. The conventional approach to program evaluation has been to hire a team of highly trained professionals who are supposed to take a detached, impartial and experts' view of the program's accomplishments -- or sometimes the lack of them. In practice, however, evaluation often takes place towards or at the end of a program cycle, when evidence of effects and impacts are needed to justify earlier investments or to seek continuing support. Thus, it does not come as a surprise that evaluation has been mainly designed to cater to the information needs of those who make decisions about the program's future -- superiors back at headquarters, policymakers in central governments, as well as officials from donor organizations.

In the agricultural research sector, evaluation was first popularly used as a tool to determine whether developed technology reached its end-users, the farmers, and whether it was adopted by them. Evaluation results provided researchers with feedback to improve strategies for ensuring increased adoption. They also guided program management decisions such as funding and staffing. Evaluation activities generally took the form of ex-post surveys, based on predetermined criteria and indicators, and viewed farmers only as subjects and respondents (Table 1).

Table 1. Conventional evaluation approach (Campilan et al., 1999).

<i>Features</i>	<i>Description</i>
Evaluators	People external to or detached from the program
Objectives	Assessment of technology/innovation adoption, effects, impacts
Methods	Mainly formal and structured
Data requirements	Quantitative/objective measures and indicators
Timetable	<i>Ex-post</i> facto, end of project
Clients	Program managers, policymakers, donors

For many years, this externally driven approach has been considered as the only acceptable way of evaluating programs, and has set the professional standards for evaluation practice. However more recently, there have been moves to re-examine this dominant evaluation approach, spurred by changing perspectives on agricultural research and development in general (Box 1).

Firstly, the following limitations of the conventional approach have become apparent:

1. As a snapshot of the program, it is not able to fully consider the dynamics of program implementation.
2. Its results often have limited utility since they are intended to serve the needs of a limited set of users.
3. Given its predetermined and highly structured approach, it lacks the flexibility to adapt to changing field situations.
4. Setting up a special, short-term evaluation system, i.e. external review team, can be too expensive for programs with limited resources.
5. It relies heavily on external expertise and does not consciously promote institutionalization of and capacity development for evaluation.

Secondly, the shift in thinking towards participatory evaluation has been prompted by (IDS, 1998):

1. The surge of interest in participatory appraisal and planning, a set of new approaches which stresses the importance of taking local people's perspectives into account.
2. Pressure for greater accountability, especially at a time of scarce resources.
3. The shift within organizations, particularly in the private sector, towards reflecting more on their own experiences, and learning from them.
4. Moves toward capacitating and empowering communities to take charge of processes that affect their lives.

Box 1. Conventional evaluation: questions for reflection.

1. Are outsiders the best judge of program performance?
2. Can evaluation results benefit groups other than those which fund and administer programs?
3. What are the other potential uses of evaluation beyond ensuring program accountability and transparency?
4. Are there relevant aspects of the program that evaluation should focus on, besides determining end-of-project outcomes?
5. How can these other program dimensions be measured and what methods are available for doing this?

II. Emerging Participatory Approach to Evaluation

Participation has become a buzzword in agricultural research and development. Programs now highlight the ways in which they involve local people in planning and implementation of activities. Oftentimes though, a program's participatory character excludes the aspect of evaluation, since this continues to be seen as the exclusive domain of outsiders who are considered to have the expertise and authority to make an objective examination of a program.

Nevertheless, more and more people now espouse a newer form of evaluation that builds on the principles of participatory research and development. These include (IDS, 1998):

1. Participation, which means opening up the design of the process to include those most directly affected, and agreeing to analyze data together.
2. Its inclusiveness requires negotiation to reach agreement about what will be monitored or evaluated, how and when data will be collected and analyzed, what the data actually means, and how findings will be shared, and action taken.
3. This leads to learning which becomes the basis for subsequent improvement and corrective action
4. Since the number, role and skills of stakeholders, the external environment, and other factors change over time, flexibility is essential.

Participatory evaluation recognizes that by involving those which contribute to or are affected by the program (e.g. local people, collaborating organizations, program field staff):

1. Evaluation achieves a more well-rounded perspective of the program.
2. Evaluation derives support from a broader base of knowledge, expertise and resources.
3. Evaluation gains wider ownership and sharing of responsibility.
4. Validity of evaluation is enhanced through the multiple sources being tapped.
5. Evaluation is more inclusive since it seeks to accommodate the diverse interests of those involved.
6. Evaluation becomes ethically sound since it involves those who are most directly affected by its outcomes.

For example, a vegetable homegardens project in the Philippines (Boncodin and Prain, 1997) showed how participatory evaluation can fit in the overall project evaluation scheme. Several participatory evaluation activities were undertaken, as complement to conventional evaluation, in assessing how and to what extent has the project achieved its goals of promoting agro-biodiversity and household food security through homegardens (Table 2).

Table 2. Combination of conventional and participatory approaches in the Philippines vegetable homegardens project (adapted from Boncodin and Prain, 1997).

<i>Evaluation Approaches/Activities</i>	<i>Purpose/Focus</i>
A. Conventional evaluation	
1. Technical baseline survey on insect population dynamics	Entomological and ecological study to assess insect population dynamics
2. Technical monitoring on homegarden biodiversity	Identification of crop species and assessment of mixes of crop species in homegardens
3. Nutritional impact study	Assessment of food consumption patterns and nutritional status of households
4. External project review	Terminal project evaluation
B. Participatory evaluation	
1. Participatory needs assessment	Needs assessment and problem diagnosis related to homegardens
2. Participatory documentation of local knowledge	Documentation of ethno-botanical knowledge on homegarden crops and their management
3. Participatory monitoring/garden mapping	Multi-season monitoring of crops grown in homegardens
4. Participatory technology evaluation	Participatory field trials to evaluate introduced crop species and management practices
5. Self-assessment workshop	Formative mid-project evaluation by project stakeholders
6. Community validation workshop	Analysis and validation of monitoring and evaluation results

Participatory evaluation, however, is not meant to be a complete substitute for conventional evaluation. It seeks to enhance the overall effectiveness of evaluation by capitalizing on the core strengths of the conventional approach while introducing new value-adding dimensions. They are not to be compared as discreet domains but are to be viewed as interrelated approaches that differ in emphasis (Table 3).

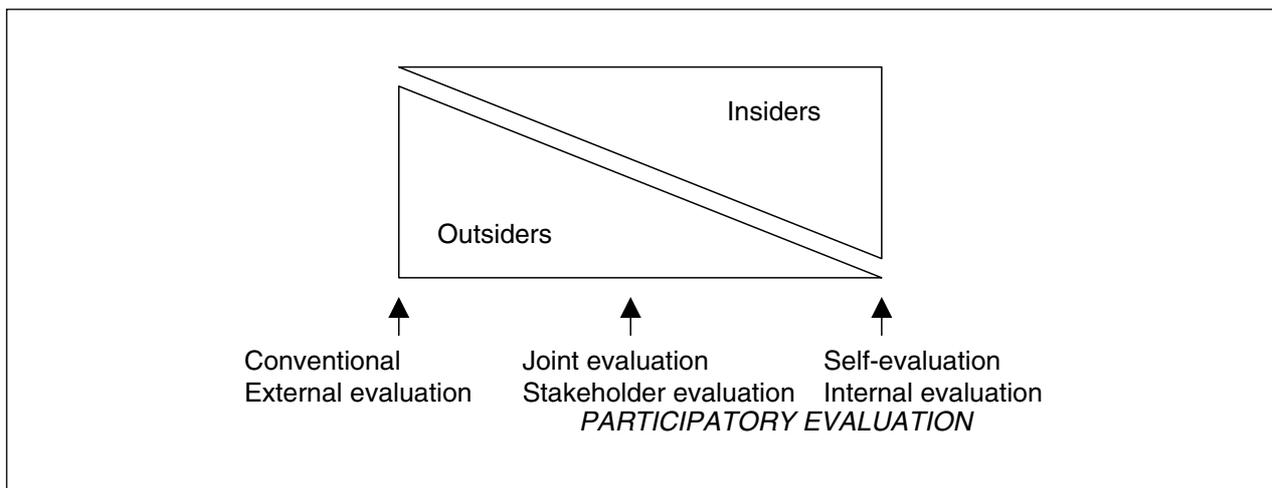
Table 3. Comparison of conventional and participatory evaluation.

<i>Features</i>	<i>Emphasis</i>	
	<i>Conventional Evaluation</i>	<i>Participatory Evaluation</i>
Why evaluate?	Accountability, transparency	Program learning
Who evaluates?	External groups	Mainly internal groups
How to evaluate?	Predetermined, structured, quantitative methods	Adaptive, semi-structured, qualitative and quantitative methods
What to evaluate?	Externally defined criteria, focusing mainly on program outcomes	Criteria discussed and negotiated, focusing on program processes and outcomes
For whom evaluation is being done?	Program management, donors, policy groups	Stakeholder groups

Evaluation generally seeks to assess program efficiency, effectiveness, relevance and causality. In the conventional approach, these are examined for the purpose of achieving accountability and transparency to outsiders. In participatory evaluation, however, these are part of an internal learning mode by the different groups involved and/or affected by a program. By engaging in joint inquiry, they are able to draw lessons from the program experience to: 1) directly guide their decisions and actions, and 2) to contribute to the general body of research and development knowledge.

Being an internally driven process, participatory evaluation is initiated and led by program insiders -- local people, project staff, collaborating groups, other stakeholders ? thus it is also often called self-evaluation. When done by insiders together with external groups, it takes the form of a joint or stakeholder evaluation. These two set-ups of participatory evaluation contrast with the conventional externally-driven evaluation, which is initiated from the outside and exclusively conducted by those having no direct involvement or interest in the program. If insiders have any role at all, it is in serving as respondents and informants (Figure 1).

Figure 1. Program insiders as primary participants in participatory evaluation.



Since its evaluation focus is predetermined, the conventional approach relies mainly on standardized, highly structured methods and tools that seek quantitative data about the program's outcomes. On the other hand, participatory evaluation recognizes diverse and changing program situations while seeking to build consensus among the different parties involved. Its methods tend to be more adaptive, semi-structured and incorporates qualitative measures into the whole evaluation exercise. Beyond the classic questionnaire, participatory evaluation makes use of a variety of methods and tools from participatory rural appraisal to ethnographic techniques -- that are more interactive, exploratory and flexible.

Conventional evaluation methods are somehow dictated by the type of data to be collected. Indicators for evaluation are identified and determined a priori by the external evaluators. They seek to measure the more tangible and easily quantifiable outcomes of a program. A participatory approach meanwhile allows for indicators and measures to be jointly developed by the participants. It also places as much emphasis on program processes as it does on outcomes.

Finally, results of participatory evaluation are aimed at a wider range of users, and not only for external clients like donors, central offices and policy-making bodies. Participatory evaluation sees its findings as of value and use to program insiders themselves. Its ultimate test of effectiveness is when the evaluation outputs make a direct contribution to the decisions and actions of those directly participating in, as well as benefiting from and affected by, a program.

III. Evaluating Participatory Research: Why the Need for a Participatory Approach?

Participatory research is a term that is used very loosely to describe different levels and types of local involvement in and control over the research process. It includes such methodologies as participatory rural appraisal, participatory action research and farmer participatory research (McAllister and Vernooy, 1999).

Interest in participatory approaches by research and development programs however has led to a diversity of perspectives, practices and methods. There is a lot of confusion as to what qualifies as participatory research since programs differ in terms of whom they consider as key participants, what roles are assigned to local people, which type of research activity is being carried out, and at which stage of the research process that participation is brought in. It is noteworthy though that there have been several attempts to develop typologies of participatory research (e.g. Biggs, 1989; Pretty, 1994).

Given the varying interpretations of participatory research, any evaluation effort hinges on how clearly a program has articulated its participatory approach. The greatest disaster in evaluation is when the evaluators do not have a common understanding of what they are seeking to evaluate. In the UPWARD program, we have drawn from our field experiences as we sought to identify the core elements (Table 4) of what we consider as our participatory research approach. These elements have served as a useful checklist of indicators when evaluating how the different research activities have effectively operationalized the participatory approach that we claim to use. More interestingly, through our field experiences we have engaged in an iterative process of action and reflection -- allowing us to continuously re-evaluate our concept of participatory research (Basilio, 2000).

Table 4. Elements of UPWARD's participatory approach as continuously refined through internal program evaluation.

<i>UPWARD 1996</i>	<i>UPWARD 2000</i>
1. Sensitivity to users' perspectives	1. User-responsive perspectives
2. Focus on the household	2. Field-based activities
3. Food systems framework	3. Household focus
4. Integration of scientific and local knowledge	4. Livelihood systems orientation
5. Interdisciplinary mode	5. Integration of scientific and local knowledge
6. Multi-agency teamwork	6. Interdisciplinary mode
7. Problem-based agenda	7. Multi-agency teamwork
8. Secondary crop orientation	8. Problem-based agenda
	9. Impact-driven objectives

n seeking to define participatory research at a more operational level, we have realized that as a subject of evaluation, it is incongruent with the assumptions and methods of conventional evaluation (Table 5). Our emerging hypothesis is that participatory research demands participatory evaluation.

Table 5. Reasons for incongruity between conventional evaluation and participatory research.

<i>Conventional evaluation</i>	<i>Participatory research</i>
Dominated by external perspective	Recognizes external and internal perspectives
Emphasizes controlled, experimental conditions	Occurs in a natural, social setting
Uses standardized methods for uniform application	Responds to location-specific requirements
Assumes linear, causal relationships between outsiders and insiders	Produces collective outcomes by program participants
Focuses on program effects, impacts	Values both means and ends of research
Views innovation as being externally introduced	Acknowledges the multiple sources of innovation
Takes innovation as a finished product to be transferred	Considers innovation as a continuous learning process
Looks at adoption as the key criterion for assessing technological change	Looks at technology adoption, adaptation, integration and rejection
Equates technology with innovation	Views technology as only a component of innovation

This is exemplified by an integrated disease management (IDM) project in Nepal which aimed to deal with a serious potato bacterial wilt problem (Ghimere and Dhital, 1998). To eliminate the soil- and seed-borne pathogen, researchers recommended an integrated strategy consisting of: three-year crop rotation, volunteer uprooting, clean seed production and use, and village-level quarantine. But as researchers realized, implementing these technological measures required full community cooperation. For the IDM to work, local people must agree to and comply with the three-year ban on potato cultivation. A local committee was thus formed and tasked to oversee implementation, to enforce sanctions and provide incentives, and to create local awareness and support for the project.

A number of socio-cultural, economic and political issues emerged. For instance, prohibiting the cultivation of potato over three years was initially met with resistance because of its implications on household food security and livelihood. Quarantine measures to control spread of pathogen were incompatible with traditional rituals over seed potato as a cultural symbol. The project was also constrained by weak government policies for infrastructure development (e.g. cold storage facilities) and appropriate extension services (e.g. improving IDM competencies of agricultural technicians)

A terminal evaluation of the project concluded that use of clean seed and crop rotation were found to be the two most crucial technical measures for effective bacterial wilt management. In implementing these technologies at the field level, however, the project concluded that the key determinant to project success was the community's participation as a unit of action and management. In the end, IDM implementation succeeded in one pilot village while it failed in the second one. The difference being that community participation occurred in the former but not in the latter (Table 6).

Table 6. Features of the Nepal integrated disease management project and implications for evaluation.

<i>Project Features</i>	<i>Implications for Evaluation</i>
Scientists recommended that a three-year ban on potato cultivation was the best way to eliminate the soil-borne pathogen. The farming community initially resisted the innovation because of its implications on food security needs and local traditions.	In evaluating technological options, it is necessary to balance external (scientific) with internal (practical) perspectives.
Total ban on potato cultivation was a prerequisite to evaluate the effectiveness of the disease control strategy. However, some farmers chose not to participate in the project by continuing to plant potato on infected land.	A field-level evaluation does not have full control over experimental conditions, especially when it conflicts with farmers' needs and priorities.
When replicated in the Philippines, the approach did not work as effectively as in Nepal given differences in pathological, agro-ecological and socio-cultural conditions.	Evaluating the effectiveness of the community mobilization approach has to take the country-specific context in which it is applied.
Researchers, through the project, introduced the key innovation to address the disease problem. However, the consequent improvement in the disease situation was also contributed by the community's own efforts, participation by local groups and the support of government agencies.	Project success was the collective effort of several groups directly and indirectly involved with the project.
While disease control was the ultimate project goal, the approach also strengthened community values of cooperation and collective action.	Evaluation has to look not only at project outcomes (e.g. reduced disease incidence) but also at how the approach has affected the community's social, political and cultural processes.
During the three-year ban on potato cultivation, the project introduced non- <i>solanaceous</i> crops that could be grown instead. Farmers tried the different crops and evolved their own cropping systems based on a combination of crops they preferred	Project evaluation cannot be based on a single package of technologies introduced. Instead, it has to examine local processes of adaptation, selection and testing.
To implement the disease management technologies, community cooperation and social sanctions were critical.	Evaluating project success implies examining not only technological but also social innovations.

Participatory research equally values the perspectives of different program stakeholders. External knowledge or expertise is not assumed to be necessarily superior or objective. Thus in its evaluation, the assessment made by program outsiders and insiders are equally given importance.

Participatory research occurs in a natural, social setting. This contrasts with controlled conditions and factors generally associated with scientific research. Experimental designs (i.e. with and without, before and after) often used in conventional evaluation are therefore not always feasible since it is difficult to isolate effects of a program.

Participatory research is situation specific. It responds to different problems by different groups in different locations. Thus there is high variability in terms of the nature of innovation introduced by a program. A standardized set of evaluation methods, instruments and measures cannot be uniformly applied to the entire program.

Participatory research results from the joint effort of different individuals and groups. Linear, causal relationship between a researcher and a farmer is not automatically assumed. In evaluation, program outcomes need to be seen as the result of collective action.

Participatory research considers the nature of the participatory process as an important dimension of a program. It looks at how participation makes a significant contribution to research outcomes. Evaluation has to focus not only on the products of a program but also on the means to achieve them.

Participatory research considers innovation as a continuous learning process. Any introduced technology, for instance, is expected to be further modified and improved upon by end-users. In evaluation, the unit of analysis may not be a finished product, only as work in progress.

In participatory research, innovation is not always introduced by experts from the outside. Solutions to problems can come from local knowledge and resources; under certain conditions, they may even prove to be more effective. In evaluation, it is important to examine and compare the multiple sources of innovation in a program.

Participatory research does not look at technology adoption as the basic measure of program effectiveness. In evaluation, rate of adoption is not the only indicator for program success in introducing technology. Technology adaptation, integration and rejection are likewise considered as rational and strategic responses of local people to an introduced innovation.

Participatory research does not limit innovation to technological improvements in the biophysical environment. Besides technologies, it also seeks to enhance local decision-making, to strengthen social organization, and to facilitate community mobilization. Evaluation has to focus not only on technology but also on other innovations that are human and social in nature.

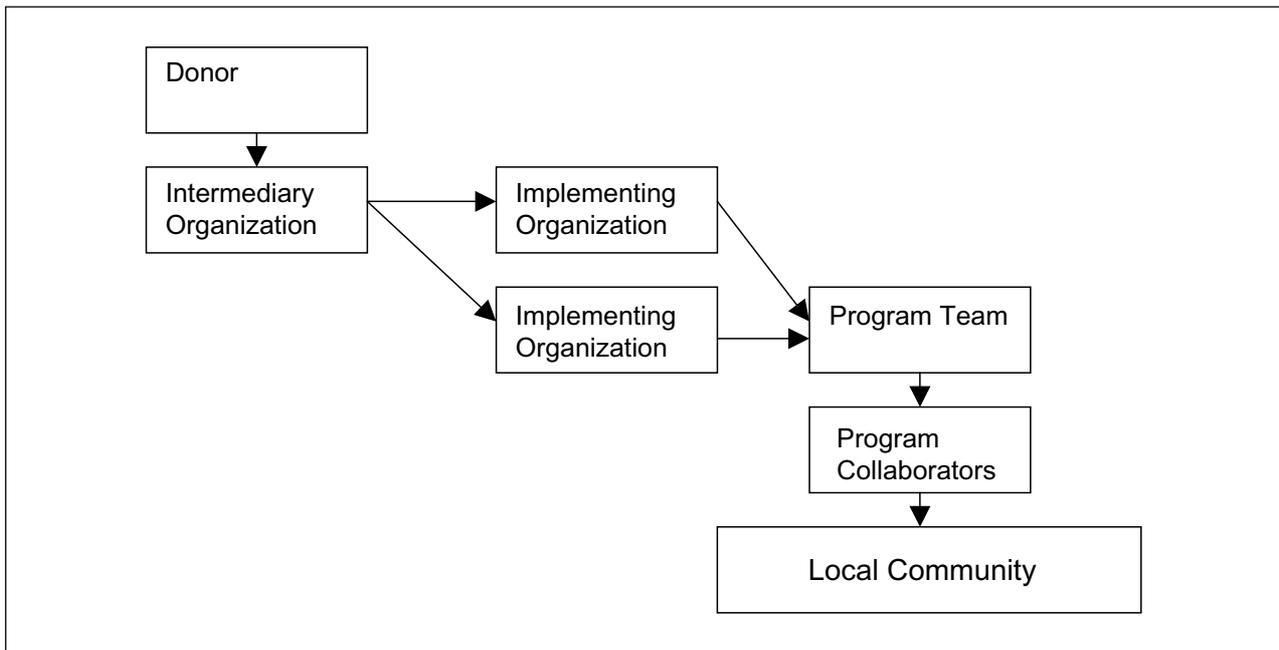
IV. PLANNING PARTICIPATORY EVALUATION OF A PARTICIPATORY RESEARCH PROGRAM

Among the most important considerations in planning participatory evaluation of a participatory research program are: 1) mapping the program set-up to identify the relevant stakeholders and determine the level of evaluation, 2) developing a framework for defining the scope of program evaluation, and 3) examining the role of capacity development in the overall program approach.

Programs in general represent the collective efforts to achieve a shared goal by several groups and organizations. They usually include: a) donor/s supporting the program, b) intermediary organization providing facilitative services, c) implementing organizations responsible for carrying out the program, d) program team composed of the actual staff involved in field implementation, e) program collaborators who are they key local people directly involved, and f) the rest of the local community in general (Figure 3).

In evaluating a program, a preliminary step is to map these groups and organizations in terms of their links and levels. This helps achieve a common understanding of who are the key program stakeholders and what their inter-relationships are. It also guides evaluation design by determining which of them will be subjected to the assessment process. For example, a program evaluation may only focus on the project team and collaborators, or it may also seek to analyze the role of donor and intermediary organizations.

Figure 3. Mapping a typical program set-up.



Usually, program evaluation takes primary interest and thus focus on what happens at the level of the local community. However, in a participatory agricultural research program, there are five major components than an evaluation may choose to focus on, namely changes in the: 1) farm, 2) farmer, 3) farming household, 4) other farmers, and the 5) participatory researchers (Figure 4). In planning program evaluation, it is essential to clearly define its scope by deciding the scope of an evaluation, and their corresponding dimensions, to include (Table 7).

For example, a field-level impact evaluation (Asmunati, 1999; Van de Fliert, 1999) was conducted in the Indonesia project on farmer field schools (FFS) for sweetpotato integrated crop management (ICM). The project sought to improve sweetpotato ICM through the development of FFS as a participatory training approach. The project evaluation focused on field-level impact and thus assessed changes relating to the farm, farmer, farming household and other farmers (Table 8). During the analysis of the evaluation results, it was realized that the evaluation framework did not include an assessment of impact on researchers themselves. Thus, it was suggested that a follow-up evaluation has to be done in order to evaluate changes in the capacity and work performance of researchers and their respective organizations.

Figure 4. Evaluation components of a participatory research program.

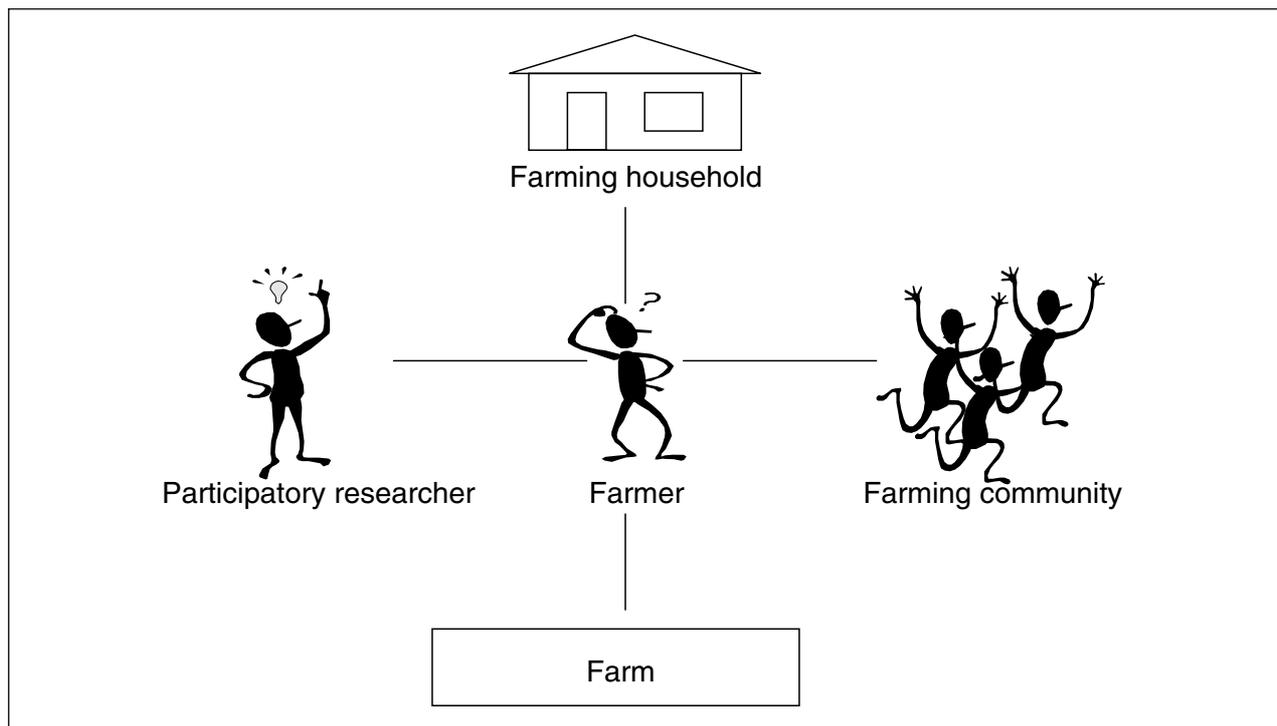


Table 7. Framework for focusing evaluation of participatory research.

<i>Evaluation Components</i>	<i>Examples of Evaluation Dimensions</i>	<i>Examples of Evaluation Indicators</i>
Farm	Technology performance	Crop yield, pest and disease incidence
	Natural resource conditions	Soil, water and air quality
	Farm productivity	Farm input, output and profit
Farmer	Learning	Methods for learning and experimentation
	Capacity for farming	Knowledge, attitude and skills
	Farming performance	Farm decision making and practices
Farm Household	Economic status	Income
	Food and nutrition status	Food supply, nutritional status
	Social status	Roles of household members
Farming community	Approach for diffusing innovation	Diffusion methods used and farmers reached
	Capacity for farming	Knowledge, attitude and skills
	Farming performance	Farm decision making and practice
Participatory researchers	Capacity for participatory research	Knowledge, attitude, skills
	Application of participatory approach	Participatory research methods and tools
	Quality of participation	Types and degrees of participation by farmers

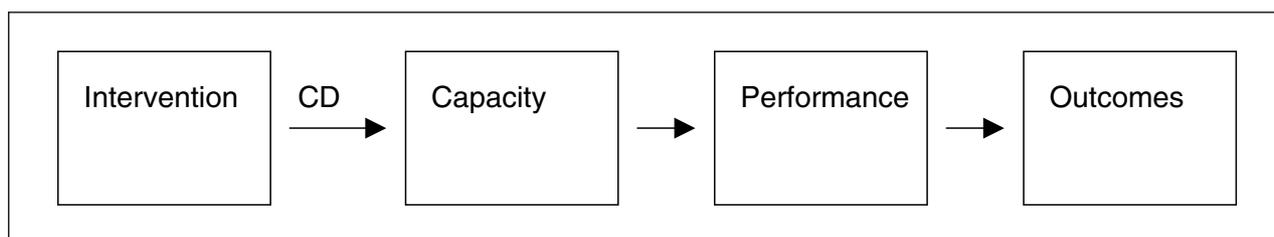
Table 8. Evaluation framework for the Indonesia FFS sweetpotato ICM project (Asmunati, 1999).

<i>Evaluation Components</i>	<i>Dimensions/Indicators</i>
Farm	Increases crop yield, reduces cultivation cost, increases net returns from crop production, healthier ecosystems with decreased pesticide load and more balanced ratio between natural enemies and pests
Farmer	Observes crop regularly, analyzes the ecosystem, possesses adequate knowledge about crop cultivation, takes informed decisions, experiments to adjust ICM guidelines according to farm conditions, implements ICM practices adequately and timely
Farming Household	Increases household income, improves quality of sweetpotato utilization for food and feed, enhances overall environmental/human/animal health
Other Farmers	Improves performance of farmer trainers in planning and conducting FFS, increasing farmers' sources of information on sweetpotato ICM, enhancing types of ICM knowledge learned by farmers, implementing ICM in farmers' field

Capacity development is an integral part of participatory agricultural research; the research process also seeks to develop capacity of researchers and farmers in systematic inquiry and action. In fact, programs in general do have an implicit capacity development agenda, yet often this is not adequately considered in program evaluation.

A common weakness in evaluation design is treating capacity development as an intermediate black box, instead of as a key determinant of program outcomes. When planning a program evaluation, it is useful to think in terms of a four-step process that begins with: 1) introducing an intervention to develop capacity (e.g. training), 2) leading to strengthening in individual or organization capacity, 3) which is expected to subsequently lead to improvement in work performance, and 4) ultimately to the achievement of research and development outcomes (Figure 5).

Figure 5. Capacity development as part of overall program strategy.



While Figure 5 illustrates the key elements of participatory research with emphasis on capacity development, it does not reflect the totality of factors and actors that determine how a program leads to certain desirable outcomes. A program is only one of many possible interventions that seek to develop the capacity of an individual or organization. At the same time its capacity development intervention is often simultaneously targeted at several individuals and organizations.

Meanwhile, any improvement in capacity does not necessarily lead to improvement in performance. Individual and organizational performance is equally affected by motivation and environment. Finally, any research and development outcomes (i.e. effects and impacts) exhibited by the ultimate program beneficiaries have to be seen in light of several actors (e.g. other programs) and factors (e.g. policies) that may have also made a contribution (Figure 6).

Figure 6. Multiple actors and factors in capacity development and implications for program evaluation.

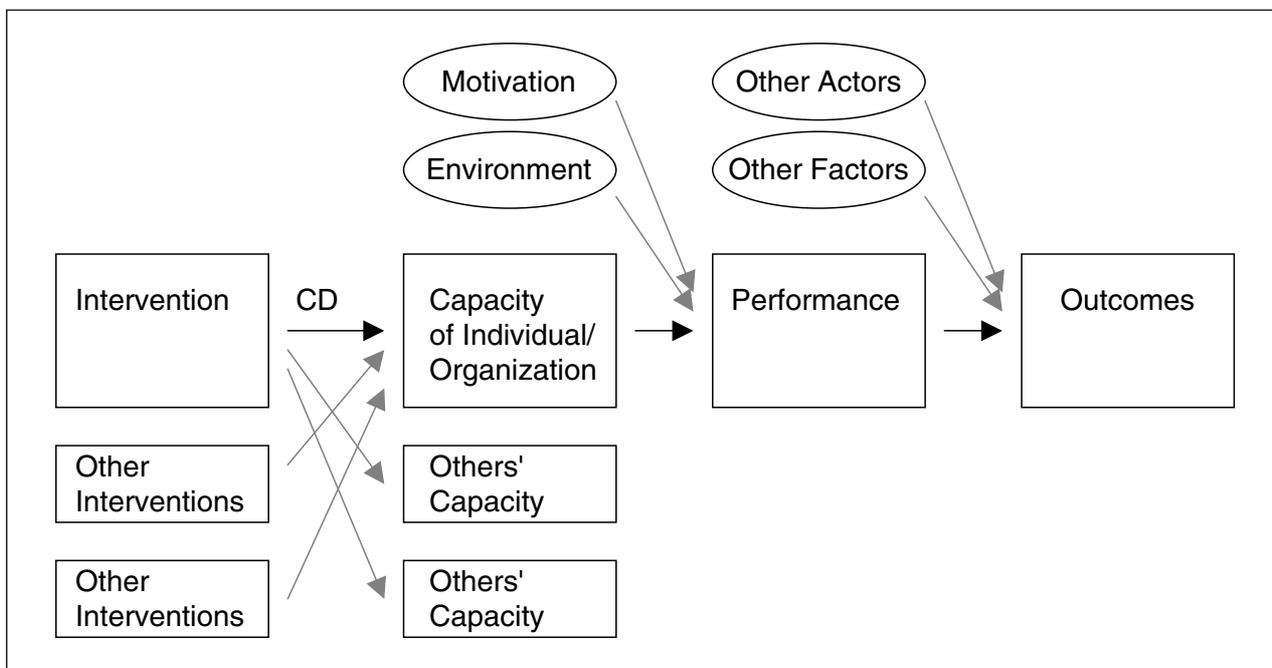


Figure 6 helps remind evaluators to be cautious and open-minded when making conclusions regarding program effects and impacts, as well as causality and contribution. One of the recent trends in program evaluation is to shift from the notion of impact to contribution. Impacts suggest the direct outcome of a uni-linear process. As many evaluators now realize, this is not the case since there are intermediate processes between the time a program is carried out and when desired field-level outcomes are achieved. What may happen is that a program: 1) makes a contribution to the capacity development of individuals and organizations, which in turn 2) makes a contribution to their work performance, and 3) ultimately contributes to desired changes among the intended program beneficiaries.

V. CHALLENGES AND ISSUES

While a participatory approach potentially improves the practice of program evaluation, there are key conceptual, methodological, resource-related and contextual challenges that remain.

Reaching consensus on participatory evaluation. There is a growing interest in participatory evaluation as seen by the increasing number of programs seeking to apply it. However, there is also an emerging clash of perspectives among evaluation practitioners as to what it means and how it should be done. In a regional Asian review (Campilan and Armonia, 1997), at least 12 sub-types of participatory evaluation, with their corresponding sets of terminologies, were identified. Given the multiple meanings associated with evaluation, participation and participatory evaluation, there is a need to monitor the language being used in an atmosphere of open-mindedness and mutual respect. This is essential for participatory evaluators to better communicate and learn from each other.

Quality of participatory evaluation. Establishing a pool of best practices is necessary in order to provide some parameters by which the quality of participatory evaluation can be assessed. However, the standards of quality for participatory evaluation has to reflect its distinct philosophy of knowledge. It operates on the basis of a set of assumptions and principles that is markedly different from that of conventional evaluation. For instance, its emphasis on a widely participatory process is based on the notion that this enhances validity and reliability of results. It also questions prevailing ideas on objectivity as: 1) the most crucial criterion of evaluation quality, and 2) something that can be achieved only by being external and detached.

Impact metaphor. Like a gun shooting at a target, the impact metaphor is commonly used to evaluate agricultural research. This metaphor is not very appropriate for evaluating a collaborative, participatory research program. In evaluating the UPWARD program, Horton and Guzman (1997) concluded that there is no apparent way to attribute specific effects to specific causes. While there may be field-level changes, a program is only one of several forces contributing to them. Therefore these changes are best seen as joint results of the collaboration, and not as impacts of one program alone.

Politics of evaluation. Resistance to participatory evaluation is often due to its inevitable repercussions on power relations among project stakeholders; it empowers some at the risk of disempowering others. Participatory evaluation opens the arena for negotiating evaluation objectives, criteria, measures and methods. Program managers and supporters may disapprove a participatory approach because of the perceived threat to their power and authority once they share with local people the control over the evaluation process and outcomes. While evaluation is often used to resolve conflicts, it might also create new conflicts.

Willingness to participate. While a participatory approach seems ideal, in many instances local people may choose not to participate in evaluation. This is usually the case when they do not see the results as having direct and practical use for them. Deliberate effort needs to be made to ensure that evaluation brings concrete results and uses to local people. Otherwise, participatory evaluation is just seen by them as an unnecessary burden, besides being considered as a token gesture by researchers in the name of participatory research and development.

Capacity development for participatory evaluation. Unless programs seriously recognize and support the role of evaluation, it will be difficult to professionalize its practice. Evaluation is often treated as an add-on responsibility to the already overburdened program staff. Besides, the people who do evaluation draw from their respective areas of disciplinary specialization, but often without the benefit of any solid preparation and training on evaluation itself. This is even a far greater challenge in the case of participatory evaluation, since it requires combined capacities in evaluation and in participatory approaches.

Costs of evaluation. Evaluation, participatory or otherwise, is a costly process in terms of money, effort and time. Yet the costs of evaluation are usually not factored into program planning and budgeting. Some programs may even look at evaluation as a luxury that could be done away with when faced with resource constraints. Given the limited resources allocated, if any, to program evaluation, it is not surprising that its conduct and outputs fall short of expectations.

Institutionalization and scaling up. The ultimate goal of promoting participatory evaluation is its integration not only in programs but also in the organizations that implement them. This requires investments in staffing, capacity development, budget and policy support. As prerequisites for institutionalizing and scaling up participatory evaluation, however, organizations must: 1) seek the establishment of a general evaluation culture, and 2) foster appreciation of the added value of a participatory approach.

VI. CONCLUSION

Participatory evaluation can only take place within the broader framework of a participatory research program. It is incompatible with linear, top-down research approach because they operate under different sets of assumptions and principles concerning the research process. Conversely, the exclusive use of external evaluation in a participatory research program is a gross contradiction. For the latter to be genuinely participatory, it must seek a participatory approach in all program aspects including its evaluation.

REFERENCES

- Asmunati. 1999. Participatory monitoring and evaluation of the sweetpotato ICM farmer field schools in Indonesia. UPWARD Fieldnotes 6(1): 15-17.
- Basilio, C. 2000. What makes the UPWARD approach participatory? workshop re-examines evidence from the field. UPWARD Fieldnotes 9(1): 6-9.
- Biggs, S.D. 1989. Resource-poor farmer participation in research: a synthesis of experiences from nine NAR systems. OFCOR Comparative Study Paper 3. ISNAR, The Hague, The Netherlands.
- Campilan, D. 1999. Conceptual tools in tracking change: emerging issues and challenges. In: Learning From Change: Issues and Experiences in Participatory Monitoring and Evaluation (M. Estrella et al, eds). Intermediate Technology Publications, London, UK. 192-200.
- Campilan, D. and R. Armonia. 1997. Participatory monitoring and evaluation: the Asian experience. Paper presented at the International Workshop on Participatory Monitoring and Evaluation, Cavite, Philippines, 20-28 November 1997.
- Campilan, D. and G. Prain. 2000. Self-assessment as an approach to evaluating participatory research: an Asian experience. In: Assessing the Impact of Participatory Research and Gender Analysis. (N. Lilja, J. Ashby and L. Sperling, eds) Assessing the Impact of Participatory Research and Gender Analysis. CGIAR SWP-PRGA, Cali, Colombia. 172-182.
- Campilan, D., G. Prain and C. Bagalanan. 1999. Evaluation from the inside: participatory evaluation of agricultural research in the Philippines. Knowledge and Policy 11(4): 114-131.
- Ghimere, S.R. and B.K. Dhital. Community approach to the management of bacterial wilt of potato in the hills of Nepal: a project terminal report. Occasional Paper No. 98/1. LARC, Lumle, Nepal.

Horton, D. Disciplinary roots and branches of evaluation: some lessons from agricultural research. *Knowledge and Policy* 10(4):32-69.

Horton, D. and R. Guzman. 1997. Networking with users: external evaluation of the UPWARD program 1994-97. CIP-UPWARD, Laguna, Philippines.

Institute of Development Studies. 1998. Participatory monitoring and evaluation: learning from change. IDS Policy Briefing issue no. 12. IDS, Sussex, UK.

McAllister, K. and R. Vernooy. 1999. Action and reflection: a guide for monitoring and evaluating participatory research. IDRC, Ottawa, Canada.

Medina, C., G. Prain and J. van de Locht. 1996. Assessing and developing the contribution of homegardening to biodiversity conservation and household nutrition. Research report. CIP-UPWARD, Laguna, Philippines. 24 pp.

Patton, M.Q. 1997. Utilization-focused evaluation: the new century text. Sage Publications, Thousand Oaks.

Pretty, J. 1994. Alternative systems for inquiry. *IDS Bulletin* 25 (2). IDS, Sussex, UK.

Shadish, W.R., T.D. Cook and L.C. Leviton. 1991. Foundations of program evaluation. Sage Publications, Newbury Park.

Van de Fliert, E. 1999. Integrated crop management for sweetpotato: a mellow blend of science and farmer practice. *UPWARD Fieldnotes* 8(1): 1-3.