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Types of Participatory Research Based on Locus of Decision Making

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TYPES OF PARTICIPATORY RESEARCH BASED ON LOCUS OF DECISION MAKING

Focus on who decides, who participates and when?

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INTRODUCTION

The purpose of this tool is to help you define the type of participatory research and gender analysis you have been using in the past, are currently using, or plan to use in your project and its impact.

This tool is designed to help you begin to analyze the direct impacts of who makes decisions and who participates in the innovation process. For this reason it focuses exclusively on the contribution of the farmers and scientists in the decision-making process and inclusion or exclusion of gender analysis. There are functions other than decision-making in participatory processes but we are not including these other functions in this tool yet.

Who participates in various stages in the innovation process leads to different process outcomes and impacts. We define **gender analysis** as a particular case of stakeholder analysis where the chief discriminating variable for defining the stakeholder group of interest is gender.

We define the **type of participatory research** on the basis of **who makes the decision** in the innovation process: farmers, scientists, or both together, and furthermore whether the decision is made with organized communication with each other or not.

We define innovation as a process in which the problems are identified, solutions are found and tested and as a result the target group adopts a technology or other type of innovation.

By organized communication we mean a well-defined methodology for carrying out a procedure (informal surveys, transect walk, etc. as well as formal surveys). Organized communication is not an ad-hoc opportunistic event. We also differentiate between *one-way communication* which is always scientist initiated and where farmers respond to scientists inquiries, or *two-way communication* which may be scientist initiated or farmer initiated, and scientists make sure that farmers understand their opinions and ideas or proposals and objectives, and vice versa.

Please note that we are using a generic term “farmers” to describe any target group, and the term “scientists” to mean outside agencies, extension system or formal research agency.

Also, please note that we are not including the “scale” of participatory research and gender analysis in this discussion. For the purposes of this tool, size of research organization, size of unit where basic decisions are made about the innovation process, or geographical coverage of the participatory research and gender analysis are all different concepts.

Each type of participatory research and gender analysis can be applied in any size of the organization, or any decision-making unit, or any extent of geographical coverage for the purposes of this tool. In other words, if you are using “Type C” participatory research it does not mean that you must be working in a village size decision-making unit or that the extent of the geographical coverage of the participatory research is few farmers. According to the definitions used in these tools, types of participation and gender analysis are scale independent. This implies that each type of participatory research and gender analysis can be scaled up.

STAGES OF INNOVATION

Technology innovation is a process in which the problems are identified, solutions are found and tested and as a result the target group adopts a technology or other type of innovation. The innovation process can be divided into three stages: design, testing and diffusion. Each stage can be further divided into several steps (see checklist 1)

In the **design** stage (steps 1-7), problems or opportunities for research are identified and prioritized, and potential solutions to priority problems are determined. The result of the decisions made at this stage is an array of potential solutions. These solutions can be any of the following: a completely new solution is invented and needs to be tested; a new application of an existing solution is identified as having potential but needs to be tested; or an existing solution can be used but needs to be promoted.

The **testing** stage (steps 8-12) is stage at which potential solutions chosen for testing are evaluated. Decisions are made about who does the testing, and where and how it is done. The outcome of this stage is recommendations about the innovation or technology to intended users for mass distribution.

The **diffusion** stage (steps 9-16) involves building the awareness of recommended solutions among future users. It involves decisions about when, to whom and in what way to build awareness, supply new inputs and teach new skills to future users. The outcome of decisions made in this stage is full or partial adoption (or adaptation), or no adoption. The diffusion stage can be further divided into three sub-stages: experimentation, take-off, and equilibrium. In experimentation stage, farmers are

experimenting with the innovation under their own conditions. In the take-off stage, the use of innovation is spreading among the project participants and beyond the participants. At equilibrium there is a widespread use of innovation among the target population.

The stages of innovation process is not necessarily a linear process in which projects begin from research and end at adoption, but rather any project can begin at any stage and can also move into either direction. Each one of these stages can be further divided into several steps or activities, for example the testing stage may begin with the determining who decides what the target group is for evaluation of the potential innovations or technology options. Next step may be decision on whether to do testing on-farm, or on-station or both, and so forth.

TOOL 1: TYPES OF PARTICIPATORY RESEARCH BASED ON LOCUS OF DECISION-MAKING

We have defined five different types of participatory research depending on who makes the decision. A different type of participation is possible at each of these three stages (and in their 16 steps). In parenthesis, we have included the name of each type of participation to show how they correlate to commonly used typology in the literature (see for example Biggs, 1989; Okali, Sumberg and Farrington,1994).

Type A (on-farm research): Scientists make the decision alone without organized communication with farmers.

Type B (consultative): scientists make the decision alone but with organized communication with farmers. Scientists know about farmers' opinions, preferences and priorities through organized one-way communication with farmers. Scientists may or may not let this information affect their decision. The decision is not made with farmers nor is it delegated to farmers.

Type C (collaborative): The decision is a shared decision between farmers and scientists involving organized communication with each other. Scientists and farmers know about each other's opinions, preferences and priorities through organized two-way communication. The decisions are made jointly, they are not made by scientists' on their own nor farmers alone. No party has a right to revoke the shared decision.

Type D (collegial): The decision is made by farmers collectively in a group process or by individual farmers who are involved in organized communication with scientists. Farmers know about scientists' opinions, preferences, proposals and priorities through organized two-way communication. Farmers may or may not let this information affect their decision. When this type of participatory research is initiated, a scientist may be facilitating the collective or individual decision-making of farmers or may have already built the ability of farmers to make the decision without outsider involvement. Farmers have a right to revoke the decision.

Type E (farmer experimentation): Farmers make the decision individually or in a group without organized communication with scientists.

EXAMPLES OF TYPES OF PARTICPATORY RESEARCH BASED ON LOCUS OF DECISION-MAKING

Below are illustrative examples of each type of participatory research, as they relate to two different steps in the innovation process.

Example of Type A (on-farm):

- The scientist decides that the availability of water is the biggest constraint in increasing maize production (step 3), and
- S/he decides that the solutions to be tested are drought-resistant maize varieties (step 7).

Example of Type B (consultative):

- The scientist hypothesizes that the availability of water is the biggest constraint in increasing maize production.
- After a participatory ranking exercise s/he knows that farmers perceive late maturity of their existing maize varieties as their priority problem in maize production.
- The scientist decides to address both problems in looking for solutions (Step 3).
- During the organized session to discuss the possible solutions, some farmers explain that they have experimented with earlier planting dates, and mulching to conserve soil moisture.
- The scientist decides to include both early maturing varieties and drought-resistant varieties in the trial, and s/he also decides to include some traditional varieties planted at an earlier date (step 7).

Example of Type C (collaborative):

- The scientist hypothesizes that the availability of water is the biggest constraint in increasing maize production.
- After a participatory ranking exercise s/he knows that farmers perceive late maturity of their existing maize varieties as their priority problem in maize production.

- During an organized farmer visit to her/his maize trial scientist shows the farmers how and why drought-resistant varieties survive early season drought and could potentially have higher yields than earlier maturing varieties.
- During the same visit, farmers explain to the scientist that they want to harvest some plots early because they want to benefit from early season high prices and they want to leave the farm after maize harvest to take up seasonal off-farm employment.
- Farmers and the scientists make a joint decision to address both problems (step 3).
- During the organized session to discuss the possible solutions, some farmers explain that they have experimented with earlier planting dates, and mulching to conserve soil moisture. Farmers and scientists propose several alternative solutions, and these solutions are evaluated and ranked. These solutions include: (1) Plant drought resistant varieties but plant at an earlier date; (2) plant at a usual date but plant earlier maturing varieties; (3) make new crosses (try to combine early maturity with drought resistance); (4) use mulching to conserve soil moisture; (5) look at alternatives to maize production.
- As a result of the organized discussion, farmers and scientists decide together to test the solutions 1 and 2 (step 7).

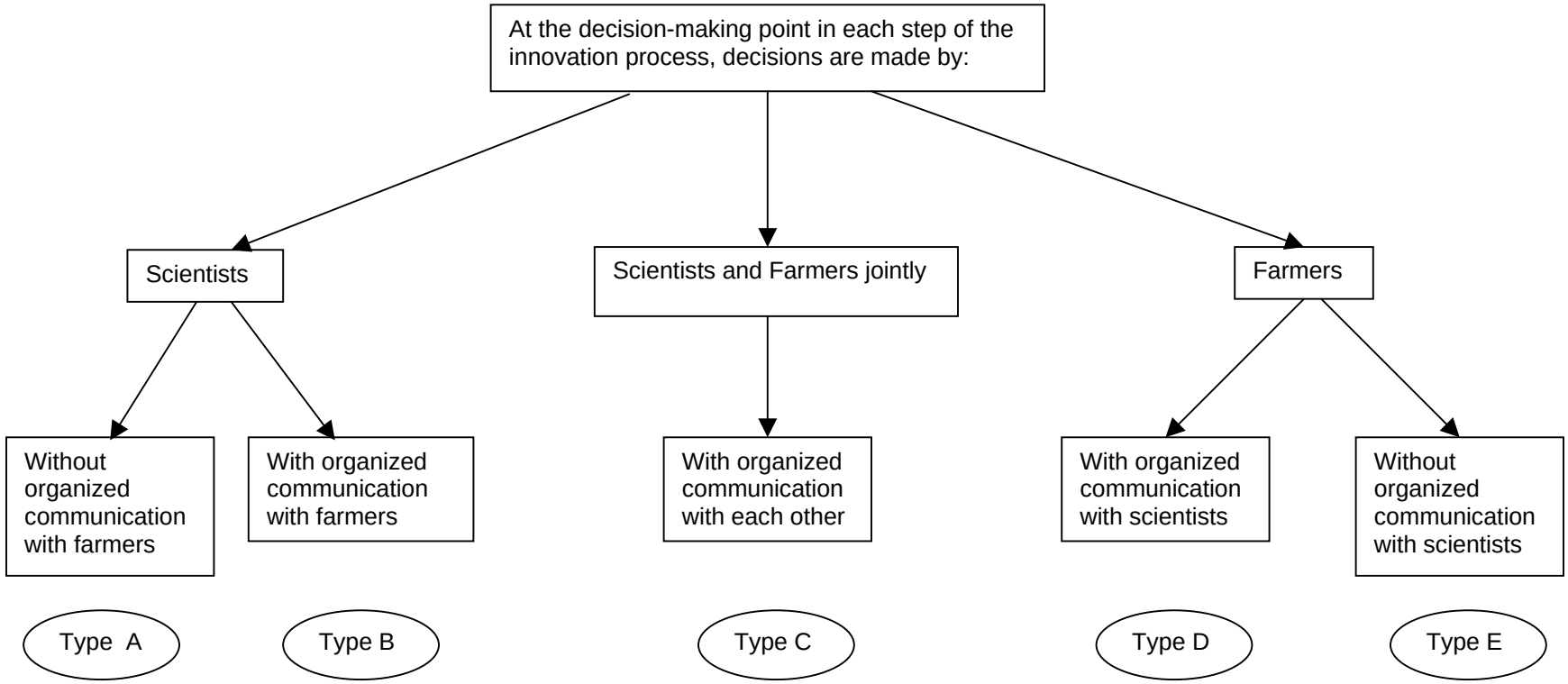
<u>Example of Type D (collegial):</u>

- The scientist hypothesizes that the availability of water is the biggest constraint in increasing maize production.
- After a participatory ranking exercise s/he knows that farmers perceive late maturity of their existing maize varieties as their priority problem in maize production.
- During an organized farmer visit to her/his maize trial scientist shows the farmers how and why drought-resistant varieties survive early season drought and could potentially have higher yields than earlier maturing varieties.
- During the same visit, farmers explain to the scientist that they want to harvest some plots early because they want to benefit from early season high prices and they want to leave the farm after maize harvest to take up seasonal off-farm employment.
- Farmers make a decision to address only the later maturity problem (step 3).
- During the organized session to discuss the possible solutions, some farmers explain that they have experimented with earlier planting dates. Farmers and scientists propose several alternative solutions, and these solutions are evaluated and ranked. These solutions include: (1) plant at a usual date but plant earlier maturing varieties (2) look at alternatives to maize production.
- As a result of the organized discussion, farmers decide to test the solution 1 (step 7).

<u>Example of Type E (farmer experimentation):</u>

- Farmers decide that the late maturity of their existing maize varieties is a problem that they want to try to address (step 3).
- Some of the farmers have experimented with earlier planting dates and decide to set up some of their own experiments by varying the planting date of the existing maize varieties. They also decide to add to their trial some seeds which one of the farmers received from a relative who was working at the agricultural experimentation station (step 7)

Figure 1: Types of Participatory Research Based on Locus of Decision-making



CHECKLIST: ASSESSING THE PARTICIPATORY APPROACHES IN EACH STAGE OF INNVATION BASED ON LOCUS OF DECISION-MAKING

Use this checklist to define the type of participatory approach you have been using in the past, are currently using, or plan to use in the future. Then consider what types of process outcomes and impacts you can realistically expect given the type of participatory approached applied and at which stage.

	Stage of innovation: who decides?	**A**	**B**	**C**	**D**	**E**
DESIGN						
1	What is the target group or clientele at the research initiation stage?					
2	What are the topics, opportunities or the problems at the diagnosis stage?					
3	What is the most important problem or opportunity, which has been identified for research?					
4	What are the available solutions and relevant information about the problem or opportunity?					
5	That the available solutions are not adequate and more information needs to be sought or generated to reach a potential solution?					
6	What is the relative importance of solutions, which have been identified?					
7	Which solutions are worth testing?					
TESTING						
8	What is the target group or clientele for evaluating the potential innovations or technology options?					
9	Whether to do the testing on farm or on station or both?					
10	What aspects of innovation or technology option are important to evaluate?					
11	What is the yardstick for measuring what is an acceptable solution or not?					
12	What is recommended to other farmers?					
DIFFUSION						
13	What is the target group or clientele for awareness building, validation and dissemination of tested innovation or technology options?					
14	When, to whom, and in what way to promote awareness of solutions and publicize information about it?					
15	When, to whom, and in what way to supply new inputs needed for adoption?					
16	When, to whom, and in what way to teach new skills needed for adoption?					

A= on-farm research
B= consultative
C= collaborative
D= collegial
E= farmer experimentation

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