Working Document

CGIAR Systemwide Program On

Participatory Research And Gender Analysis

No. 7

Guide to Impact Assessment of Participatory Research and Gender Analysis

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PRGA

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FUTURE HARVEST

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Introduction

This document is a PowerPoint presentation that was given at the Impact Assessment Workshop organized at the 3rd International Seminar on Participatory Research and Gender Analysis on 6-9 November 2000, in Nairobi Kenya. The theme of the seminar "Uniting Science and Participation in Research" focused on understanding different options for the organization and management of science and participation in participatory, client-driven research processes. Many of the concepts presented here are outlined in a book chapter by Lilja and Ashby (2001).

The two sessions of the Impact Assessment workshop were well attended and in total over 60 conference participants attended the 4-hour workshop. The workshop topics covered included: identifying stakeholders and their impact objectives, prioritizing objectives, developing specific hypotheses relating to the type of participation used (according to PRGA typology), and designing a rigorous methodology for testing them. Each topic included worksheets that participants filled out concerning their own projects.

The focus of the workshop was on assessing the impact of the participatory methodology rather than the impact of the project. The participants had a relatively easy time identifying their stakeholders and stakeholder objectives, however when it came to developing hypotheses about how user participation and gender analysis affected the project, many struggled. Choosing a counterfactual and control and recognizing the implications for extrapolation of bias in the selection of participants were not concepts that they felt comfortable with. In the workshops evaluations, feedback was almost universally positive, however these topics received the lowest ratings in terms of perceived usefulness.

We hope that you will find this document useful, and we look forward to improving the materials based on your suggestions.

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November 2001

Impact Assessment of PRGA

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CIAT/PRGA Program

LEARNING OBJECTIVE

- to understand the basic concepts of impact assessment of PRGA
- to be able to plan own impact assessment work

WORKSHOP STRUCTURE

- Introduce 6 key concepts
- Practice using planning tools
- Open and interactive format

STATE-OF-THE-ART

- High diversity of expected PRGA impacts
- Lack of discrimination between "process" ,"technology" and "cost" outcomes
- Impact of the innovation vs. impact of an approach not defined
- Lack of explicit cause-effect relationship

IMPACT ASSESSMENT FRAMEWORK

- Impact assessment vs. monitoring and evaluation
- Impact assessment of an approach vs. a project
- Standard IA concepts +PRGA applications

KEY CONCEPTS

1 Who are the stakeholders in the impact assessment and what are their impact interests?

2 What are the most important impacts to be measured?

3 How does the project scope (stages of innovation) and approach influence the impact?

KEY CONCEPTS cont.

4 What are the cause-effect relationships hypothesized to lead to impact?

5 How do we differentiate between the effect of the project and the approach (choice of control)

6 How do we measure the impacts?

CONCEPT 1:
Who are the stakeholders?

- Project participants
- Researchers, development workers
- Evaluators of the project
- Donors
- Users of the results

What are their impact expectations?

- Different sets of expected impacts
- Different priority order

- What about consistency with project goals?

TOOL 1: Stakeholders and their impact expectations

- List project goals
- List all stakeholders
- List their impact expectations

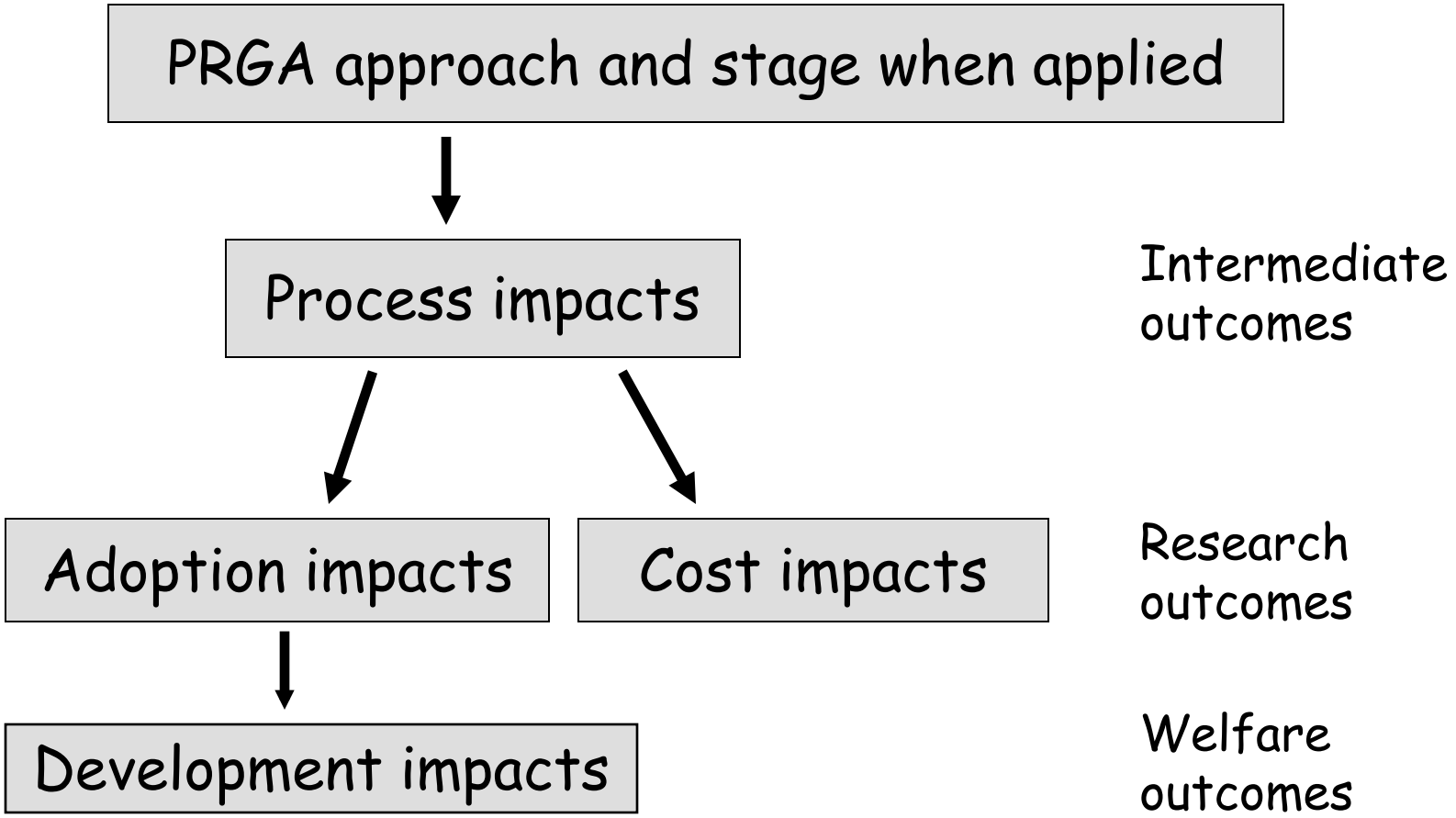
Stakeholders and their impact interests

Project goals	SH 1: Donor	SH 2: Women farmers
Increase production	Is PRGA a better way for researchers to learn about farmers priorities than conventional research?	Did the PRGA project increase farmers' income
Empower women	What are the economic benefits of the impact of participation to adoption?	Did participation bring women more power, skills and influence?

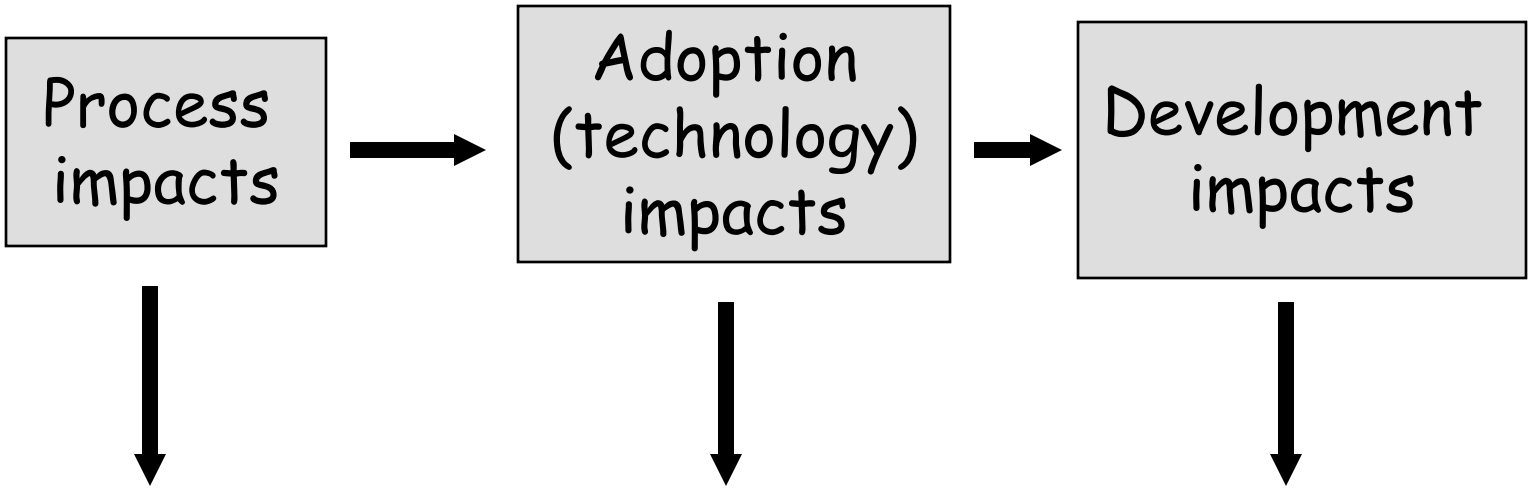
CONCEPT 2: What are the most important impacts?

- What to measure?
- How much time and resources do we have?
- Who is the assessment for?

Causal Chain



Types of benefits



- Feedback to research
- Social and human capital

- Economic benefits from adoption (production changes)
- Farmer acceptance

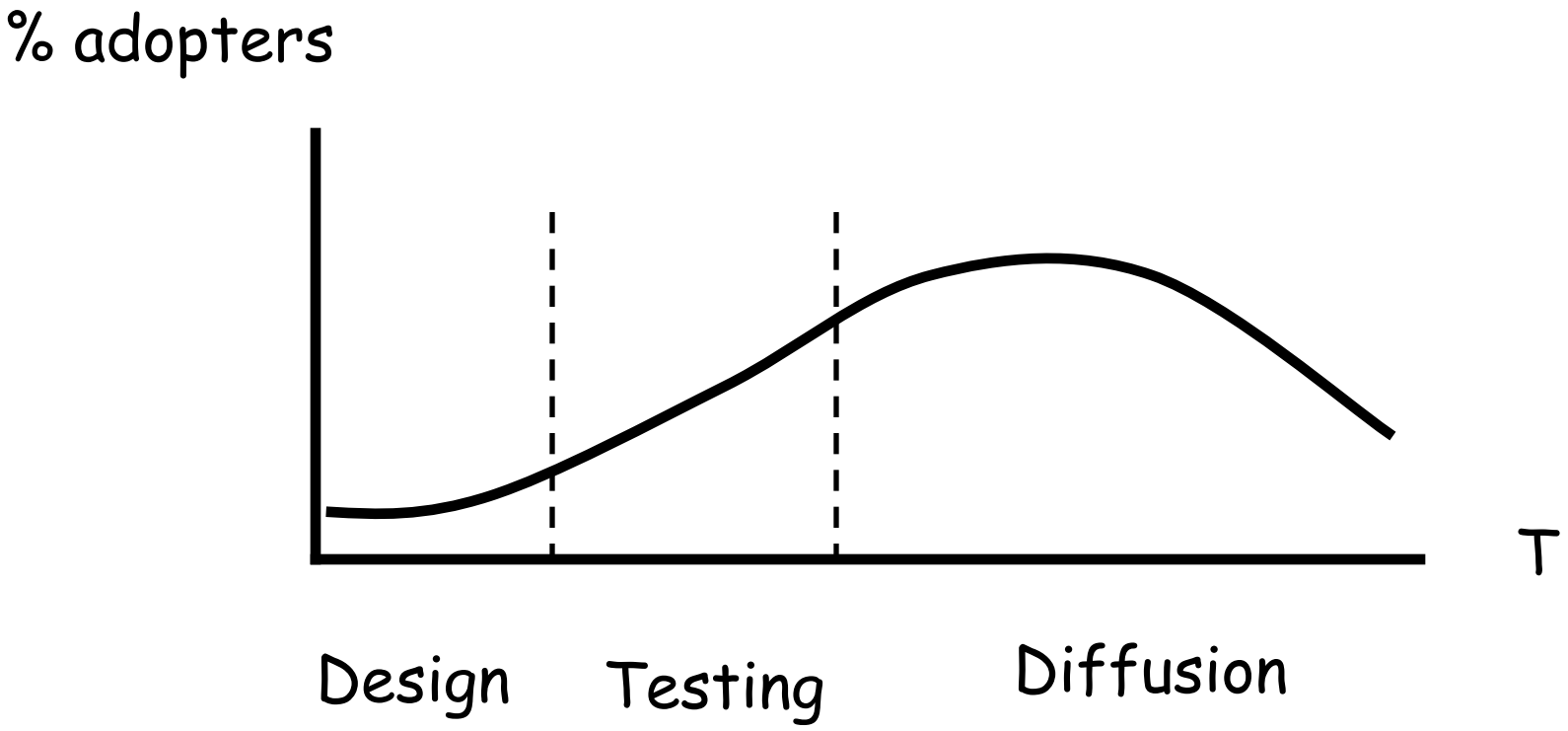
- Distribution of benefits (equity)

PPB process impacts

(intermediary outcomes)

- effects on formal breeding process (feedback to research)
- effects on farmer breeding/seed processes (technical/social)
- effects on how local people are organized to manage crop development
- effects on breeding organization
- effects on seed supply organization

Adoption curve



PPB Adoption impacts

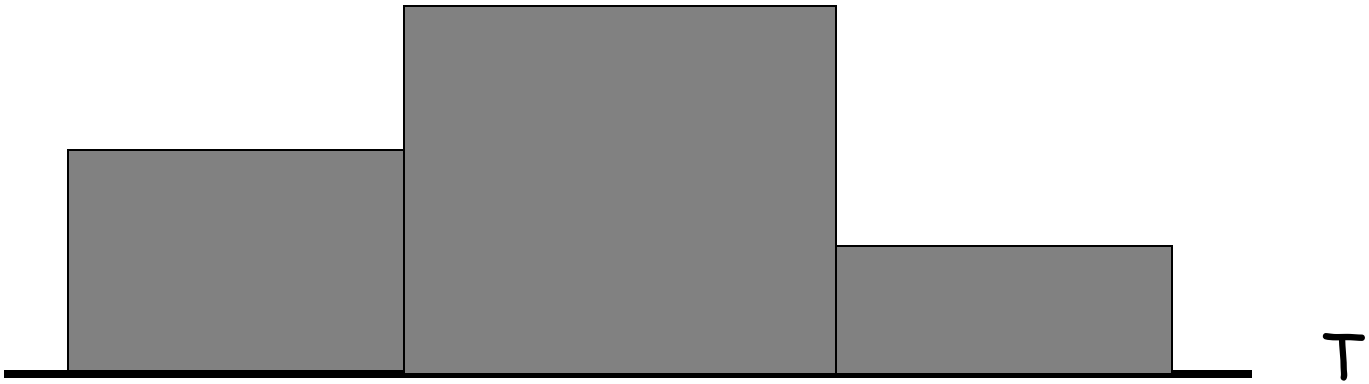
(research outcomes)

- farmer acceptance
- farmer production
- farmer-held diversity

Cost impacts

- Project costs
  - total costs at each stage
  - types of cost items
  - length of the research process
- Participant costs
  - opportunity cost of their time
  - other resources used

Cost structure



TOOL 2:
Decide the impacts to be measured

- List which impacts you plan to measure (use your list from Tool 1)
- Separate process, adoption (technology), welfare and cost impacts

Impacts to be measured

Process impacts		Adoption impacts	Welfare impacts	Cost impacts	
Feedback to technology generation	Social and human capital impact			Research institute	Participant
Researchers learn about farmers priorities	Farmers learn principles of scientific experimentation	Change in adoption rates because technologies meet farmers criteria	Change in income of poor rural women because higher adoption rate among the women	Cost savings of PRGA	PRGA increases research costs incurred to farmers

CONCEPT 3:
How does project scope and approach influence impact?

- Stages of innovation
- Types of PR approach
- Type of GSA approach

Stages of innovation

- Design
- Testing
- Diffusion

Types of PR (based on who decides)

- Contractual (on-farm research)
- Consultative
- Collaborative
- Collegial
- Farmer experimentation

TOOL 3a:
Define your PR approach

- Specify what type of PR approach are you applying at various stages of innovation

Types of GSA

- Diagnostic-oriented
- Design-oriented
- Transfer-oriented

TOOL 3b:
Types of GSA

- Specify what type of GSA approach are you applying at various stages of innovation

CONCEPT 4: Impact hypotheses

- What are the logical, causal links between project activities and desired outcomes and impacts?

TOOL 4: Formulate your impact hypotheses

- Given your PRGA approach as defined in tools 3a and 3b, and impacts to be measured as defined in tool 2 formulate your hypothesis of your <u>expected impacts</u>.

Impact Hypotheses

Type/stage	Hypothesis
Consultative at testing	Process: Researchers learn farmers criteria for selecting among the technologies tested.
	Adoption: Of the technologies tested, the one selected may be most appropriate for farmers and be more widely adopted (by those for whom the type of technology is appropriate)
Collaborative, testing stage	Process: Researchers and farmes develop joint criteria for selecting among the technologies tested
	Adoption: Of the technologies tested, the one selected will be more appropriate for farmers and more widely adopted (by those for whom the type of technology is appropriate)

CONCEPT 5:
The counterfactual:
what would have happened in the absence of the intervention?

- Effect of the project: project vs no project
- Effect of the PRGA approach: compare participatory project vs non-participatory project

Control options

- Random
- Constructed
- Statistical
- Reflexive
- Generic
- Shadow

Issues in choosing controls: selection bias

- Very important in PR because of way sites and participants are often selected.
- researcher selection bias
- self selection bias

TOOL 5:
What is your control?

- Add to your impact assessment plan (tool 4) what is your choice of control

Sample Controls

	Ideal Control	Realistic Control
Process - Research learn criteria	Farmers and researchers priorities before and after in non PR projct on same technology in identical village	Changes in priorities in own project, accompanied by data on participants
Adoption – Change adoption pattern	Adoption curve of non PR projects working on same technology in identical village	Adoption rates of own project compared to non-PR if available, qualitative data on reasons for adopting and factors affecting adoption

CONCEPT 6: How do we measure the impacts?

- Which indicators?
- What data?
- What methods?
- Group or individual interviews?
- Participatory methods?

What about indicators?

- Generic vs. project specific indicators
- Set of indicators

Data issues

- Individual or group
- Survey or interview
- Difficulty in measuring costs:

"a benefit forgone is a cost, and a cost avoided is a benefit"

TOOL 6:
Make your impact assessment plan

- Use your list of expected impacts and controls tools 4 & 5
- Give the indicators used
- List the data needed
- Make a time plan

Impact assessment Plan

Impact	Control	Indicator	Data needed	Method used	Who and when
PROCESS: Research learn farmer selection criteria	Qualitative data on causality	Research knowledge of farmer criteria	Research opinion of criteria before and after project	Interviews, Document use of new criteria in projects, proposals	

REFERENCES

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APPENDICES

TOOL 1:

STAKEHOLDERS AND THEIR IMPACT EXPECTATIONS

Instructions:

- List project goals
- List all stakeholders
- List their impact expectations

Optional:

- You can list impact expectations in priority order or number them later, after you have competed your entire list
- You can also try to list the matching expectations among the stakeholders across the row, and/or in relation to project goals

TOOL1: STAKEHOLDERS AND THEIR IMPACT EXPECTATIONS

PROJECT GOALS:	STAKEHOLDERS' IMPACT EXPECTATIONS			
	SH1:	SH2:	SH3:	SH3:

PROJECT GOALS:	STAKEHOLDERS' IMPACT EXPECTATIONS			
	SH1:	SH2:	SH3:	SH3:

TOOL 2:

DECIDE THE IMPACTS TO BE MEASURED

Instructions:

- List which impacts you plan to measure (use your list from Tool 1)
- Separate process, adoption (technology), welfare and cost impacts

TOOL 2: DECIDE THE IMPACTS TO BE MEASURED

PROCESS IMPACTS		ADOPTION (TECHNOLOGY) IMPACTS	WELFARE IMPACTS	COST IMPACTS	
Feedback to technology generation process	Human and social capital impacts			Research institute's costs	Participant costs

PROCESS IMPACTS		ADOPTION (TECHNOLOGY) IMPACTS	WELFARE IMPACTS	COST IMPACTS	
Feedback to technology generation process	Human and social capital impacts			Research institute's costs	Participant costs

TOOL 3A:

DEFINE YOUR PARTICIPATORY RESEARCH APPROACH

Instructions:

- 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.
- We will then later consider what types impacts you can realistically expect given the type of participatory approached applied and at which stage.

TOOL 3b: DEFINE YOUR PARTICIPATORY RESEARCH APPROACH (based on locus of decision-making)

CODES:
A= on-farm research (scientists alone without organized communication with farmers)
B= consultative (scientists alone with organized communication with farmers)
C= collaborative **(scientists and farmers jointly through organized communication)**
D= collegial (farmers alone with organized communication with scientists)
E= farmer experimentation (farmers alone without organized communication with scientists)

Date: Indicate the date (**month/year**) when the step was completed or if the step is not yet completed but you plan to complete it in the future, please indicate the planned date of completion (month/year). If the step is not included in your project indicate "**N/A**".

	Stage of innovation: who decides?	**A**	**B**	**C**	**D**	**E**	**Date**
DESIGN							
1	Who decides what is the target group or clientele at the research initiation stage? (eg. target groups: women, lowland farmers etc.)						
2	Who decides what are the topics, opportunities or the problems at the diagnosis stage? (e.g. topics: crop to be worked on, type of crop characteristic to be worked on or type of environmental stress)						
3	Who decides what is the most important problem or opportunity, which has been identified for research? (ie. if many problems are identified who decides what is the priority problem.)						
4	Who decides what are the available solutions and relevant information about the problem or opportunity? (ie. for a given problem, for example poor soil conditions, who decides what is the appropriate possible solutions to deal with the problem, eg. new crop type, fertilizer etc.)						
5	Who decides that the available solutions are not adequate and more information needs to be sought or generated to reach a potential solution?(ie. who evaluates and decides about the usefulness of the available solutions to the identified problem? Also decision about if PPB program is necessary)						
6	Who decides what is the relative importance of solutions, which have been identified? (ie. who decides what are the goals of the PPB work – increase production, enhance biodiversity, build farmer skills etc.)						
7	Who decides which solutions are worth testing? (ie.. who decides on the specific breeding goals and strategy, eg. whether to work with variable or stabilized materials etc.)						
TESTING		**A**	**B**	**C**	**D**	**E**	**Date**
8	Who decides what is the collaborative group for testing and evaluating the potential innovations or technology options? (eg. skills, varietal materials, organizational options)						
9	Who decides whether to do the testing on farm or on station or both and with what kinds of designs?						
10	Who decides what aspects of innovation or technology option (including materials) are important to evaluate?						
11	Who decides what is the "yardstick" for measuring what is an acceptable solution or not? (ie. whose criteria is used)						
12	Who decides whether the innovation is recommended to other farmers, or what is recommended to farmers?						
DIFFUSION		**A**	**B**	**C**	**D**	**E**	**Date**
13	Who decides what is the target group or clientele for awareness building, validation and dissemination of tested innovation or technology options?						
14	Who decides when, to whom, and in what way to promote awareness of solutions and publicize information about it?						
15	Who decides when, to whom, and in what way to supply new inputs needed for adoption?						
16	Who decides when, to whom, and in what way to teach new skills needed for adoption?						

TOOL 3b:

DEFINE YOUR GENDER ANALYSIS APPROACH

Instructions:

- Use this checklist to define the type of gender analysis you have been using in the past, are currently using, or plan to use in the future.
- We will then later consider what types of impacts you can realistically expect given the type of participatory approached applied and at which stage.

TOOL 3b: DEFINE YOUR GENDER ANALYSIS APPROACH

Stage of innovation/Type of gender analysis		1	2	3
DESIGN				
1	Was the client group differentiated by gender at the research initiation stage?	X	X	X
2	Were different topics, opportunities or problems defined for men and women at the diagnosis stage?	X	X	X
3	Was it analyzed whether men's and women's preferences differ about what is the most important or highest priority problem or opportunity for research?		X	X
4	Were different available solutions identified for men and women?		X	X
5	If it was decided that the available solutions were not enough and other solutions needed to be generated, were different solutions sought for men and women?		X	X
6	When deciding the relative importance of solutions to be tested, were the differences between women and men's priorities analyzed?		X	X
7	When deciding which solutions will be tested, were some women's and men's solutions chosen for testing?		X	X
TESTING				
8	Was the client group for evaluating the potential innovations or technology options differentiated by gender?	X	X	X
9	When deciding whether to do the testing on farm or on station or both, were the potential differences in women and men's opinions analyzed?		X	X
10	When deciding what aspects of innovation or technology option are important to evaluate, were preferences in preferences by gender analyzed?		X	X
11	Was it determined if women and men have different yardstick for measuring what is an acceptable solution or not?		X	X
12	Was it considered whether men and women wanted to recommend different solutions to other farmers?		X	X
DIFFUSION				
13	Was the client group for awareness building, validation and dissemination of tested innovation or technology options differentiated by gender?	X		X
14	Were the differences between men and women's preferences considered when deciding when, to whom, and in what way to promote awareness of solutions and publicize information about it?			X
15	Were the differences between men and women's preferences analyzed when deciding when, to whom, and in what way to supply new inputs needed for adoption?			X
16	Were the differences between men's and women's preferences analyzed when deciding when, to whom, and in what way to teach new skills needed for adoption?			X

1=Diagnostic-oriented gender analysis
2=Design-oriented gender analysis
3=Transfer-orinted gender analysis

TOOL 4:
FORMULATE YOUR IMPACT HYPOTHESIS

Instructions:

- What are the cause-effect relationships hypothesized to lead to impact in your project?

TOOL 5:
WHAT IS YOUR CONTROL CASE?

Instructions:

- Add to your impact assessment plan what is your choice of control

TOOL 6:
MAKE YOUR IMPACT ASSESSMENT PLAN

Instructions:

- Give the indicators to be used
- List the data needed
- Make a time plan

TOOLS 4-6

TOOL 4: IMPACT HYPOTHESES		TOOL 5: CONTROL	TOOL 6: IMPACT ASSESSMENT PLAN			
CAUSE = PRGA APPROACH	**EFFECT = IMPACT**	**CONTROL**	**INDICATOR**	**DATA NEEDED**	**METHOD**	**WHO AND WHEN**

Stages:
-Design
-Testing
-Diffusion

Types of PR:
- contractual
- consultative
- collaborative
- collegial
- farmer experim.

Types of GSA:
- diagnostic
- design-oriented
- transfer-oriented

Types of impacts:
- Process impacts:
  +feedback to technology dev.
  + social and human capital
- Adoption (technology) impacts
- Welfare impacts
- Cost impacts
  + research institute's costs
+participant costs

TOOL 4: IMPACT HYPOTHESES		TOOL 5: CONTROL	TOOL 6: IMPACT ASSESSMENT PLAN			
CAUSE = PRGA APPROACH	**EFFECT = IMPACT**	**CONTROL**	**INDICATOR**	**DATA NEEDED**	**METHOD**	**WHO AND WHEN**

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EVALUATION AND FEEDBACK: Impact assessment guide

Please rate the content of the impact assessment guide in terms of its usefulness to you (mark 'x'):

	Not at all useful	Not useful	Somewhat useful	Useful	Very useful
Impact assessment framework					
Tool 1: stakeholders and their impact interests					
Tools 2: impacts to be measured					
Tool 3a: types of participation					
Tool 3b: types of gender analysis					
Tool 4: cause and effect relationship					
Tool 5: choice of control					
Tool 6: impact assessment plan					

Please use the space below for any additional comments you would like to make to the organizers of this impact assessment workshop:

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