

Participatory approach for improvements in Spate Irrigation Systems

GIULIO CASTELLI
MSc candidate
University of Florence

Wageningen
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Introduction

- The modernization process on Spate Irrigation systems in Raya Valley (Tigray Region – Ethiopia) began in 2001.
- Experience showed that most improvement projects relies upon an engineering approach, without an effective involvement of farmers who have practised spate irrigation for generations.
- The limited number of successful interventions can be justified with the poor consideration of farmers' experience. (Kidane, 2009)

Objective of the study

to develop effective improvements in Spate Irrigation Systems through participatory approach.

RESEARCH QUESTIONS:

How can the participatory approach be developed for being effective in Spate Irrigation System?

- *Is the participatory approach really appropriate for improvement in Spate Systems?*
- *Which are the major problems in a Spate System?*
- *What kind of solutions can be effectively adopted?*

Perspective – Diagnostic Analysis and Problem Solving

Diagnostic analysis: “appraisal and analysis of existing irrigation systems with the objective to identify problems and to define the causes or constraints, underlying these problems”. (Falciyai, 1996:7)

Problem solving: identification and formulation of possible and feasible solutions

Methodology (1)

Participatory Rural Appraisal – P.R.A.

Appraisal – The finding out of information about problems, needs, and potential in a village. It is the first stage in any project.

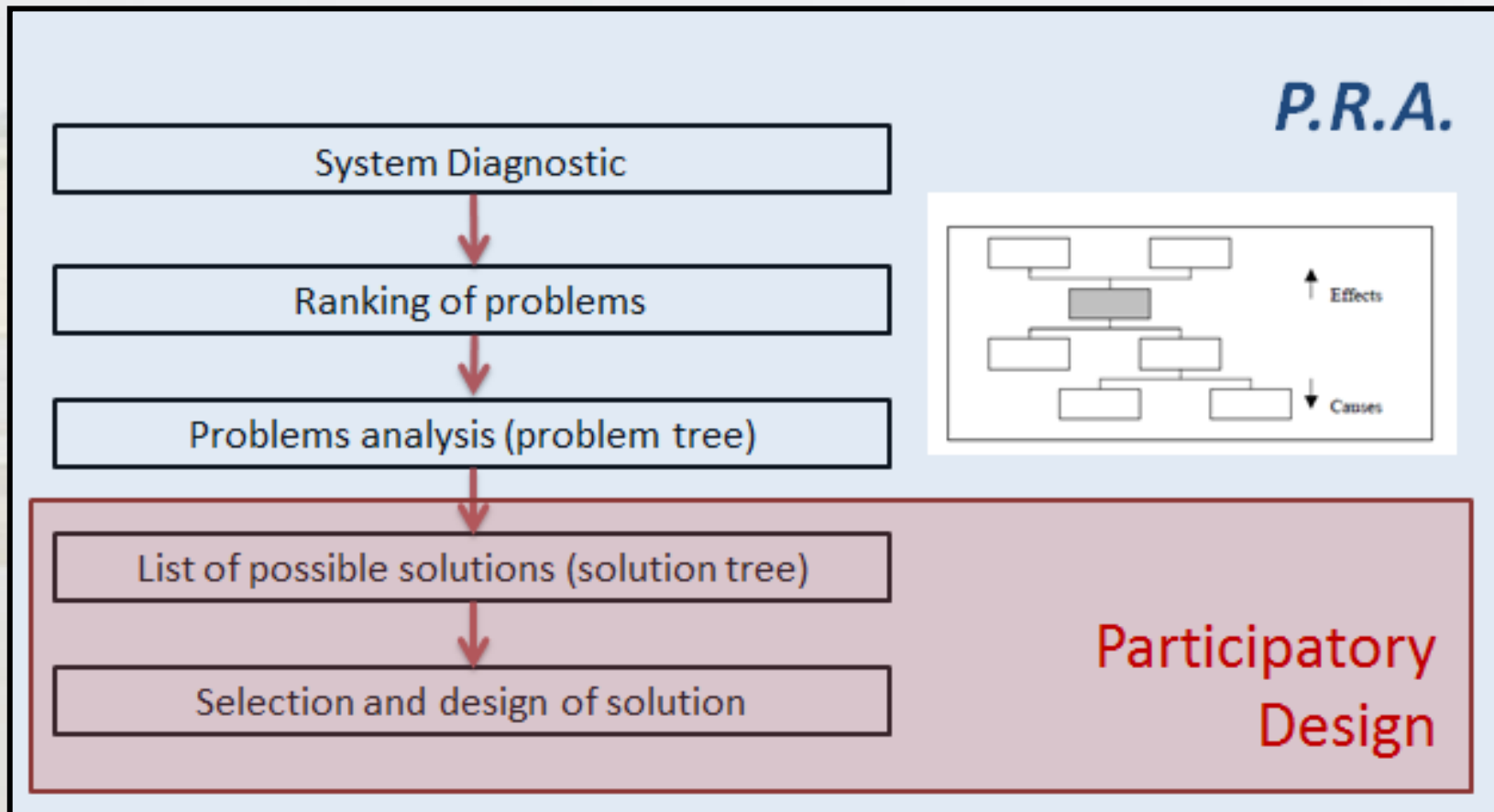
Participatory – Means that people are involved in the process – a “bottom-up” approach that requires good communication skills and attitude of project staff.

Rural – The techniques can be used in any situation, urban or rural, with both literate and illiterate people

(Cavestro, 2003:3)

- Participatory Design – defined as research methodology (Spinuzzi, 2005)

Methodology (2)



A critical point of view

Criticism on participatory approach (de Campos Guimarães, 2009):

- PRA is not a stand-alone set of techniques for the appraisal of a rural system, neither in contrast with classical knowledge → ***need of secondary data and engineering approach***
- Power inequalities within the community may be reproduced, *Myth of the community* → ***careful analysis of the social structure***
- Bureaucratization of participation
- Simplification of models of individuals' behaviour and their relationship with social structure (*Recursive relation between Structure and Agency*)

“Marco Polo describes a bridge, stone by stone.

*'But which is the stone that supports the bridge?'
Kublai Khan asks.*

*'The bridge is not supported by one stone or another,'
Marco answers, 'but by the line of the arch that they
form.'*

*Kublai Khan remains silent, reflecting. Then he adds:
'Why do you speak to me of the stones? It is only the
arch that matters to me.'*

Polo answers: 'Without stones there is no arch.'”

— Italo Calvino, *Invisible Cities*

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Thank you