

**Problem Structuring Methods for Development:  
A Conceptual Clarification, with an Application to  
Participative Health Services Planning in Mexico**

*Murielle Bendeck Asfura*

**Department of Operational Research  
London School of Economics and Political Science**

**Thesis submitted to the University of London  
for the degree of Doctor of Philosophy**

**2001**

UMI Number: U615445

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.

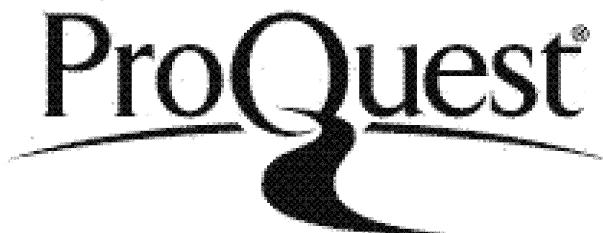


UMI U615445

Published by ProQuest LLC 2014. Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against unauthorized copying under Title 17, United States Code.



ProQuest LLC  
789 East Eisenhower Parkway  
P.O. Box 1346  
Ann Arbor, MI 48106-1346

## Abstract

Participatory development planning methods (PDPMs) have been developed within the 'people-centred' approach to development. Independently, problem structuring methods (PSMs) have been developed within operational research (OR). Both families of methods claim to assist empowerment and participation. Nevertheless, these concepts are used in ill-defined or even contradictory ways.

The aim of this research is to explore to what extent claims made that PSMs can assist in development in the Third World are justified. The hypothesis developed and adopted during this research is that the analytic assistance provided by PSMs can be expected to contribute to a process of empowerment of the disadvantaged principally through improving participants' understanding of their problematic situation, and through providing structure to this understanding. PSMs generate this effect through improving the quality of dialogue between participants. Other more indirect expected effects are also identified. In combination, these effects should tend to impact positively on commitments to a course of action, and on longer term increases in self-power.

In order to articulate this hypothesis it has been necessary to conduct some conceptual clarification to achieve a clear meaning for the terms "power", "self-power", "participation", "empowerment", and "spaces for dialogue". Using this as a base, a conceptual model of empowerment as a process has been developed, which identifies the factors, pre-requisites and processes involved in disadvantaged social actors' ability to maintain or augment their self-power. This model provides the bases for identifying the possible effects of PSMs, and for evaluating their effectiveness.

To explore both our hypothesis and the adequacy of the conceptual model, a case study of the application of one PSM – the Strategic Choice Approach (SCA) – in a grassroots situation was carried out. This involved engagement in and observation of ongoing developmental activity of the Community Health Committee in a small town in Mexico.

Reasonably clear and positive effects from the application of SCA were found in several model elements, consistent with the hypothesis. The effects in other elements were more ambiguous. Overall the results of the case study are encouraging; however, as they result from the application of a particular PSM, extrapolation to more general conclusions about the potential of PSMs to empower disadvantaged social actors should be made with caution.

The case experience also was generally supportive of the conceptual model of empowerment, in that observed activities and processes could be interpreted unproblematically within the model's framework. The model offers a vehicle for further research aimed at confirming and enriching its structure.

# Table of Contents

<b>Chapter 1 Introduction.....</b>	<b>14</b>
<b>Chapter 2 Conceptual Framework Part I: Power and self-power..</b>	<b>19</b>
<b>2.1 Power.....</b>	<b>21</b>
<b>2.1.1 <i>The relational view of power</i> .....</b>	<b>22</b>
<b>2.1.2 <i>Resources for power</i>.....</b>	<b>27</b>
<b>2.2 Self-power .....</b>	<b>32</b>
<b>2.2.1 <i>Sen on capabilities and Doyal and Gough's human needs</i>.....</b>	<b>33</b>
<b>2.2.2 <i>The concept of self-power</i> .....</b>	<b>39</b>
<b>Chapter 3 Conceptual Framework Part II: Empowerment, participation, and spaces for dialogue.....</b>	<b>47</b>
<b>3.1 Empowerment .....</b>	<b>48</b>
<b>3.2 Participation .....</b>	<b>53</b>
<b>3.2.1 <i>Types of participation for the process of empowerment</i> .....</b>	<b>55</b>
<b>3.2.2 <i>When participation takes place</i>.....</b>	<b>58</b>
<b>3.3 Spaces for dialogue.....</b>	<b>59</b>
<b>3.3.1 <i>The concept of dialogue</i> .....</b>	<b>60</b>
<b>3.3.2 <i>The concept of spaces for dialogue</i>.....</b>	<b>66</b>
<b>Chapter 4 A conceptual model of the empowerment process .....</b>	<b>71</b>
<b>4.1 Overview of the conceptual model for empowerment .....</b>	<b>72</b>
<b>4.2 A conceptual model of the empowerment process .....</b>	<b>75</b>
<b>4.3 The role of analytical tools in the conversion process.....</b>	<b>88</b>
<b>Chapter 5 Problem Structuring Methods and Participatory Development Planning Methods.....</b>	<b>94</b>
<b>5.1 Third World decision-making and development planning .....</b>	<b>95</b>
<b>5.1.1 <i>Characteristics of Third World decision-making.....</i></b>	<b>96</b>
<b>5.1.2 <i>Development planning in the Third World .....</i></b>	<b>102</b>
<b>5.2 Participatory Rural Appraisal (PRA): its characteristics and technology .....</b>	<b>105</b>
<b>5.2.1 <i>Characteristics of PRA.....</i></b>	<b>107</b>
<b>5.2.2 <i>PRA technology.....</i></b>	<b>110</b>

5.3 The characteristics of Problem Structuring Methods (PSMs).....	116
5.4 Comparison between PSMs and PRA.....	125
5.5 Acceptance of PSMs as an innovation.....	127
<b>Chapter 6 Designing the case study.....</b>	<b>137</b>
6.1 Healthcare arrangements in the Mexican NHS and the scope for community participation .....	139
6.2 Initial research design.....	146
6.3 Reorienting the case study: the use of an action research approach.....	149
6.3.1 <i>An action research approach</i> .....	149
6.3.2 <i>Implications of the shift to AR for the research</i> .....	151
6.3.3 <i>Potential principal and direct effects from the use of PSMs in the AR process</i> .....	153
<b>Chapter 7 Participatory health services planning in Alpuyeca (Mexico) .....</b>	<b>156</b>
7.1 Describing the community selected for the research and its health committee .....	157
7.1.1 <i>Community selection criteria</i> .....	160
7.1.2 <i>About the community of Alpuyeca and its health committee</i> .....	162
7.1.3 <i>The dental clinic project of Alpuyeca's CHC</i> .....	168
7.1.4 <i>Periods of the intervention/Chronology of the project</i> .....	171
7.2 Selecting and using the methodology .....	174
7.2.1 <i>Alpuyeca's CHC: an alternative OR client?</i> .....	175
7.2.2 <i>Alpuyeca's CHC problem situation and the appropriateness of PSMs</i> ..	178
7.2.3 <i>Choosing the Strategic Choice Approach (SCA)</i> .....	184
7.2.4 <i>The period of analytic work with the CHC: How the Strategic Choice Approach was used</i> .....	190
7.3 Interpretation of the project experience .....	197
7.3.1 <i>Evaluation of the Alpuyeca project by SCA users</i> .....	197
7.3.2 <i>Evaluation by the researcher</i> .....	200
7.3.3 <i>Implications for wider use of PSMs in Third World community groups</i> 205	
<b>Chapter 8 Conclusions.....</b>	<b>208</b>
8.1 Summary of research process .....	208
8.2 Key findings .....	211
8.3 Suggestions for future work .....	217
8.4 A final reflection.....	218

Appendix A: Changing tendencies of development approaches - towards participatory development .....	220
Appendix B: Participatory Development Planning Methods .....	226
Appendix C: Principles of Participatory Rural Appraisal .....	230
Appendix D: The Strategic Choice Approach .....	233
Appendix E: List of Interviewees .....	236
Appendix F: Guide Questions for Semi-structured Interviews .....	238
Appendix G: Focus Group Questionnaire.....	239
Appendix H: Photographs from the Alpuyeca experience .....	240
Appendix I: My experience in Alpuyeca .....	244
Bibliography .....	247

## List of Tables

Table 2.1	Three views of power within the relational perspective .....	26
Table 2.2	Proposed classification of power giving resources .....	30
Table 2.3	Subset of self-power giving resources: from the perspective of the poor .....	45
Table 3.1	Types of dialogue more likely to be found in participatory planning.....	62
Table 4.1	Description of the elements that operate in a model of one of the processes by which self-power is generated .....	79
Table 5.1	Attributes of PRA.....	106
Table 5.2	The more major PSMs and their aims.....	120
Table 5.3	Attributes of PSMs.....	125
Table 5.4	Comparison of attributes: PSMs and PRA.....	126
Table 6.1	Principal and direct effects from the PSM intervention.....	154
Table 7.1	Reasons for choosing SCA .....	187
Table 7.2	Extract of the options analysis .....	195
Table 8.1	Problem situations of Third World community groups in which PSMs can have an impact .....	216

## List of Figures

Figure 3.1 Ladder of citizen empowerment .....	57
Figure 4.1 Overview diagram of the conceptual model of an empowerment process .....	73
Figure 4.2 Conceptual model for increasing self-power: diagram of elements and relationships .....	76
Figure 4.3 Conceptual model with more formalised conversion process .....	90
Figure 4.4 Conceptual model: Potential principal and direct effects of PSMs .....	93
Figure 5.1 Overview diagram of the analytic contribution to empowerment .....	97
Figure 5.2 Dissemination of PSM: its potential adopters and the communication channels employed.....	132
Figure 6.1 Structure of the Mexican National Health System.....	141
Figure 6.2 Levels of responsibility in health management within the SSA .....	144
Figure 7.1 Structure of the Mexican Federation and case study selection .....	158
Figure 7.2 Spatial arrangements within the health centre of Alpuyeca.....	169
Figure 7.3 Decision graph from the first workshop session.....	193
Figure 7.4 Principal and direct effects on model elements from the analytic contribution to empowerment .....	202

## Map

Map 7.1 State of Morelos –health jurisdiction and potential communities.....	159
--	-----

*To Papi, Mami, Deborah, Yvette, Ernesto and Guillermo  
for their unconditional support and love*

*To Jimmy, Allan, Debbie, Gabbie, Emily and Guillermo A.  
who unknowingly have taught me  
the importance of enjoying  
the small things in life*

*“...Every human being, no matter how ‘ignorant’ or submerged in the ‘culture of silence’ he may be, is capable of looking critically at his world in a dialogical encounter with others. Provided with the proper tools for such an encounter, he can gradually perceive his personal and social reality as well as the contradictions in it, become conscious of his own perception of that reality, and deal critically with it.”*

**Richard Shauell**  
**(Foreword to Freire’s Pedagogy of the oppressed, 1972, p.16)**

## Acknowledgements

I would like to express my gratitude to the institutions in Mexico who provided assistance to undertake this research. My greatest appreciation to the National Institute of Public Health (INSP), where I began my career in public health, for their unlimited support. I am also thankful to the Mexican Health Foundation (FUNSALUD) for funding the period of the fieldwork. I am grateful to interviewees, colleagues and administrative staff from the INSP, the staff from the Ministry of Health of the State of Morelos, the Health Jurisdiction of Cuernavaca, the local government of Xochitepec, and the local health clinic of Alpuyeca for their undivided co-operation.

The community of Alpuyeca, and in particular the members of its Community Health Council, deserve special acknowledgement. Their enthusiasm and willingness to learn and to share their livelihood with me was significant for the development of the fieldwork. I am extremely thankful to them. They gave me much more than I could manage to ‘teach’ them.

I am also grateful to the academic and administrative staff of the Operational Research department at the LSE for their continuous support. Special thanks to Brenda Mowlam, Caroline Rudd and Diana Bolton.

To my families (Honduran, Mexican, U.S. and Spanish) and my friends (nearby and far away), who have remained “al pie del cañón” throughout the years – thank you for being there. In different ways you have accompanied and motivated me through this otherwise lonely process.

Completing this thesis has certainly been an arduous and sometimes painful process. It undoubtedly would have not been possible without the invaluable guidance and patience of my supervisor, Professor Jonathan Rosenhead, to whom I am infinitely grateful.

## List of Abbreviations

<b>AR</b>	Action Research
<b>CHC</b>	Community Health Council
<b>COR</b>	Community Operational Research
<b>HGA</b>	Hypergame Analysis
<b>INSP</b>	National Institute of Public Health ( <i>Instituto Nacional de Salud Pública</i> , Cuernavaca, Morelos, Mexico)
<b>ISS</b>	Ideal Speech Situation
<b>ITK</b>	Indigenous Technical Knowledge
<b>NGOs</b>	Non-Governmental Organisations
<b>NHS</b>	Mexican National Health System
<b>OR</b>	Operational Research
<b>ORS</b>	British Operational Research Society
<b>PANDA</b>	Participatory Appraisal of Needs and the Development of Action
<b>PDPMs</b>	Participatory Development Planning Methods
<b>PRA</b>	Participatory Rural Appraisal
<b>PSMs</b>	Problem Structuring Methods
<b>RA</b>	Robustness Analysis
<b>RPK</b>	Rural People's Knowledge
<b>RRA</b>	Rapid Rural Appraisal
<b>SCA</b>	Strategic Choice Approach
<b>SHS</b>	Mexican State Health Systems
<b>SODA</b>	Strategic Options and Decisions Analysis
<b>SSA</b>	Mexican Ministry of Health ( <i>Secretaría de Salud</i> )
<b>SSM</b>	Soft Systems Methodology

## Glossary

*Capabilities* – what the person *can* achieve (or ‘can do or be’) with the commodities s/he has.

*Community* – a collectivity of individuals who despite any differences regarding wealth, sex, class, knowledge and power, share common interests and needs.

*Conversion process* – any process by which resources and enablers are transformed into functionings.

*Empowered* – having more resources for self-power than before.

*Empowerment* – the state of being empowered.

*Empowerment process* – any mechanism by which increases in self-power giving resources of the disadvantaged are produced.

*Enablers* – the assets which are provided on an individual basis or a communal basis across society; they act as ‘facilitators’ or as catalysts which aid resources to become ‘activated’.

*Functionings* – the achievements of a person; what the person succeeds in ‘doing’ or ‘being’ with the commodities at his/her command.

*Negative freedom* – the absence of constraints imposed by others.

*Participation* – a means of contributing to the effectiveness of the empowerment process.

*Positive freedom* – the positive ability to choose.

*Power* – the ability of a social actor, A, to induce other social actors to behave in a way which achieves A’s preferred outcomes.

*Power\** – both the power and self-power of social actors.

*Resources* – the assets which permit or constrain social actors’ capabilities.

*Self-power* – the capacity of social actors to maintain or develop effective control over self-power giving resources and decisions which affect them.

*Self-power giving resources* – the assets which provide social actors with self-power.

*Social actor* – an individual or collectivity (e.g. groups, communities, non-governmental organisations, government agencies, states) seeking to generate changes in the society which they are part of.

*Spaces for dialogue* – both spatial and temporal opportunities which social actors have to express themselves and be heard.

# Chapter 1

## *Introduction*

The development problems of the Third World are not new, and although progress has been made, these problems remain unresolved. The majority of the population of the Third World (or developing) countries has yet to satisfy its 'basic needs' - securing access to food and shelter, and to services such as health and sanitation (Stewart, 1985; Hettne, 1990; Friedmann, 1992; Schuurman, 1993; Phillips and Verhasselt, 1994).

One of the possible explanations of this 'phenomenon' (continuing lack of satisfaction of basic needs), and probably the most accepted one, is that this majority lack resources, which leaves them in a position of relative (not to say extreme) disadvantage compared to the rest of the world's population. This explanation, however, is one that could be described as: 'the snake that bites its tail'. In other words, the poor (the intended beneficiaries of the development process) are poor because they cannot satisfy their basic needs due to lack of resources, and they lack resources to fulfil their basic needs because they are poor.

An alternative, and more substantiated, explanation is that for many years the emphasis of development initiatives was purely on economic growth and industrialisation (see Seers, 1979; Simmons, 1988; and Todaro, 1994).<sup>1</sup> The focus of this approach was on improving measures such as gross national product or per capita income, thereby ignoring social aspects such as the distribution of resources, and access to opportunities (e.g. jobs) and services (e.g. health, education) (Kitching, 1989; Phillips and Verhasselt, 1994). The subsequent incorporation of social aspects into the objectives of development sought to alleviate the effects produced by the economic growth focus (e.g. continuing poverty, fluctuating (un)employment rates, unequal distribution of income and other development problems).

---

<sup>1</sup>See Appendix A, for an historical overview of various development theories.

As a result of this change in focus, recent decades have witnessed a shift to a more people-centred - or participatory - approach to development (Nelson and Wright, 1995; Rahman, 1995). The underlying principle of this approach is that people themselves (especially poor and disadvantaged groups) should become actively involved in the decisions and activities oriented towards improving their life conditions and those of the societies in which they live.

For the people-centred approach to development to be effective, three fundamental changes or transformations to improve the position of relative disadvantage and powerlessness of the poor need to take place. The first is the transformation of social and political structures to provide the spaces and channels so that people can voice their opinions, needs and concerns, as well as participate in the decision-making processes related to them.

This restructuring leads to the second change, an increased awareness, by the intended beneficiaries of development, of the resources which they need in order to take action to improve their situation. And third, since development planning is “a process concerned with guiding social change” (Sagasti, 1988, p. 431), the methods which it uses ought to be appropriate for the new participatory orientation of this process.

Numerous innovative participatory development planning methods (PDPMs) have been proposed or put into practice to guide social change with the active involvement of the beneficiaries. Of these methods Participatory Rural Appraisal – PRA (Chambers, 1992, 1994a) will be given particular emphasis in Chapter 5. This is because this approach has been the most widely applied in the Third World, and in such diverse areas as agriculture, health, natural resources management, and food security.

In parallel, but so far with almost no interaction, a variety of ‘problem structuring methods’ (PSMs) (also to be discussed in Chapter 5) have been developed within the discipline of operational research (OR). These new methods, sometimes known as ‘soft’ OR, are also participatory, and interactive. PSMs have as their purpose to assist decision-makers and organisations gain a better understanding of their problems. This is achieved through the exploration of different perspectives, and

facilitating dialogue and negotiation, with a view to generating consensus on problem structure and, usually, on initial commitments (Rosenhead, 1989a; 1992; 1996).

Writers (for example, Bornstein and Rosenhead, 1990; Thunhurst, 1992, 1996; Rosenhead, 1993, 1996; White, 1994) have suggested that soft OR can be useful in grassroots, community-based planning,<sup>2</sup> both in Third World situations and in community OR (COR).<sup>3</sup> These authors make a plausible case that soft OR could be useful in COR in the Third World.

Nevertheless, arguments that soft OR can be useful in such a context have been rather loosely phrased. It is not clear what it is supposed that PSMs would achieve. The implication, sometimes explicit, is that the cognitive assistance provided by PSMs helps generate more balanced dialogue and that these methods contribute to something called empowerment (Rosenhead, 1989a; White, 1994).

As can be seen, PSMs share some characteristics with PDPMs. Both families of methods involve the active participation of and aim for empowerment of the intended beneficiaries of development. There is therefore a *prima facie* case for investigating the possibility that PSMs may have a role in participatory development planning.

In order to do this, the nature of Third World community organisations needs to be explored so that the problems they are faced with can be clarified. This is necessary because understanding the characteristics of these organisations (e.g. catalyst for formation, purpose, size, funding, available resources, structure, available time of members, analytical skills of members, degree of autonomy for decision-making), will help 'shed some light' on the adaptability and usefulness for them of the analytic support provided by PSMs (Rosenhead, 1993).

These organisations can be faced with internal and/or external problems, to which issues of complexity, uncertainty and conflict may be associated (Rosenhead, 1989a; 1993). This characterisation of problems should inform the selection of a PSM, or combinations of them, that are most suitable (Jackson and Keys, 1984;

---

<sup>2</sup>See Navarro, 1984; Robertson, 1993; Burns et al, 1994, for different interpretations of 'community'.

<sup>3</sup>For details of community OR, see Jones and Eden, 1981; Jackson, 1987; Parry and Mingers, 1991; Ritchie et al, 1994; Wong and Mingers, 1994.

Jackson, 1988; Mingers and Brocklesby, 1997; Mingers and Gill, 1997). Although there is no generally accepted PSM selection scheme, for the purposes of this research their suitability needs to be evaluated in relation to the objectives of participatory development. This means that the evaluation of PSMs needs to be based on dimensions specific to participation and empowerment.

Our broad hypothesis is that PSMs do have a role in empowering poor and disadvantaged social actors. It can be expressed in terms of three components:

- the cognitive/analytical assistance provided by PSMs will improve these social actors' understanding of their action-relevant context;
- this improved understanding will lead to more effective participation in the planning of local development;
- and the effective participation of poor and disadvantaged social actors will in turn lead to them having more control over their lives.

To express this hypothesis more precisely, some clarification of concepts is first required. In Chapters 2 and 3, several key concepts which emerge in the literature of both participatory development and PSMs are discussed. The concepts of *power*, *empowerment*, *participation*, and *spaces for dialogue* are defined in an operational way. In particular *self-power* (seen as a capacity for autonomy) is distinguished from *power* (which carries the potential for control of others), and is defined in terms of resources available to the individual or group.

Based on this conceptual development, a model is built in Chapter 4 relating these concepts to the processes by which social actors' self-power may be maintained or augmented. The model builds on the work of Sen on capabilities, and Doyal and Gough's basic human need for autonomy. The elements of the model consist of: *resources* (e.g. social, technical, personal, and material/economic); *enablers* (e.g. network of relationships, freedom of association, social/political framework of rights and institutions; informal channels of communication); *conversion processes* (transformations by which resources and enablers are transformed into functionings); and *functionings* (achievements of social actors).

In Chapter 5, two analyses are carried out. First, the characteristics of the Third World decision-making and development planning environment are reviewed. This is done with a view to identify the extent to which the contextual requirements for which PSMs are designed correspond to the contextual characteristics of developing countries. Second, the attributes of PSMs and PRA are discussed in preparation for a comparative analysis between the two families of methods. This analysis seeks to examine critically the claims which have been made for a possible role for PSMs in development planning. Three main issues are addressed: the relative strengths and weaknesses of PSMs and PRA; compatibility between the two families of methods; and scope for the independent use of PSMs or their joint use with PRA.

In Chapters 6 and 7, a case study in the area of participative health services planning in Mexico is described. This case study is a vehicle both for exploring the adequacy of the conceptual model developed in Chapter 4, and also to investigate in practice the hypothesis that PSMs can assist in improving the situation of disadvantaged groups via the identified processes.

The concluding Chapter 8 discusses lessons for PSMs and local development planning, and identifies areas for future research.

## Chapter 2

### *Conceptual Framework Part I: Power and self-power*

As may be recalled from Chapter 1, the purpose of the research reported in this thesis is to identify and evaluate the possible role of PSMs in assisting the involvement of community organisations in Third World development planning. There are a number of key issues which need to be understood to formulate our research strategy appropriately and unambiguously. Principally, there is a need to have clarity on the key concepts which emerge, explicitly or implicitly, in the literature of both participatory development and PSMs (see Chapter 5). These concepts are power, self-power, empowerment, participation, and spaces for dialogue. These five concepts are interconnected and interdependent; therefore, it is to an extent arbitrary which one is discussed first.

*Power* is a significant aspect of the relationship between social actors<sup>4</sup> who participate in the development planning process. It is relevant in the sense that either social actors do not have the power to achieve their full aspirations, or the exercise of other social actors' power prevents them from doing so. Another relevant aspect of power in the context of participatory development concerns the ability of poor and disadvantaged groups to achieve increases in the degree of control they have over decisions and resources affecting their local development. This ability will be referred to as *self-power*.

To achieve shifts in the balance between the power social actors have over others and the self-power of the power subjects, a participatory approach to development is needed. It will be argued that one of the ways to achieve these shifts – to the advantage of the power subjects – is through a process of *empowerment*. An

---

<sup>4</sup>It is simplest to think of social actors as individual people but of course they can be aggregates (e.g. groups, communities, non-governmental organisations, government agencies, states). Any reference made to social actors throughout the thesis is applicable to any of these categories, unless otherwise stated.

empowerment process is defined as any mechanism through which an increase in self-power of the less self-powerful can be achieved.

Increases in self-power which benefit less self-powerful social actors are likely to be achieved (it will be shown) through their involvement in the planning and decision-making process regarding issues that affect their lives. *Participation* is the means through which the less self-powerful may engage in the process of empowerment.

The concern of this thesis is with exploring the potential for analytic assistance or intervention to promote empowerment. Analytic intervention, if well posed, may assist dialogue and argumentation. Therefore the type of participation of special interest for the research involves dialogue and argumentation. For this to take place there need to be appropriate fora, and both spatial and temporal opportunities. This is what is meant by another of the key concepts - *spaces for dialogue*. In elaborating this idea, there will be the need to clarify the concepts not only of 'spaces' and 'dialogue' but also of 'argumentation'. The discussion of these concepts will be based to some extent on Habermas's work on the Ideal Speech Situation (ISS).

These five concepts are discussed in more detail in this chapter and the one that follows. Here, the concepts of power and self-power are treated, while empowerment, participation and spaces for dialogue are discussed in Chapter 3.

Our discussion begins with power. Power is taken to refer to social actors' control over others. Self-power, in contrast, concerns the degree of control social actors have over decisions and resources which affect their own lives. The term power\* will be employed to include both power and self-power. All social actors have power\*. However, as will be explained, in the interactions between social actors the interest is on some social actors' self-power in relation to others' power. In Sections 2.1 and 2.2 the concepts of power and self-power are defined in a more rigorous way.

## 2.1 Power

This research is concerned with the ‘bottom-up’, participatory approach to development, particularly in health services planning. In this approach it is held that the people who are expected to benefit from development actions should be able to voice their opinions and needs, be heard, and so influence decisions that affect their lives.

It is commonly held that the ability of social actors to achieve this depends on the types and quantities of resources they have. The combinations of resources which one person has determine his/her power.<sup>5</sup> And the extent to which this person exercises that power, if s/he chooses to do so, is closely related to the way resources are distributed across other people (i.e. other people’s power). In this section, the relationship between resources and power will be explored.

Social actors’ power (or lack of power) affects the extent to which they are able to participate effectively in development planning. Thus one of the implications of a participatory orientation to planning is the need for shifts in the distribution of power between social actors. Clearly, if power is necessary to participate, the more powerful will participate more and will be likely to oppose any changes that reduce their power (Nelson and Wright, 1995; Wrong, 1995). However, the particular concern of this research is to explore the extent to which analytic tools such as PSMs provide an opportunity to the poor and disadvantaged groups to effect changes in their capacity to control their own lives.

The discussion of power in this section is organised in two parts. The first part focuses on developing a secure basis for the concept of power, which, it is argued, should be given a relational interpretation. Inherent in this view is that the power of social actors is determined by their resources. This relationship is further explored in the second part which develops a typology of resources that give social actors power.

---

<sup>5</sup>Lasswell (in Dahl, 1986) considers power (as a base for more power) a resource in itself.

### 2.1.1 The relational view of power

Power is a difficult concept to grasp, and an ‘essentially contested’ one (Lukes, 1974, p.26). Despite the wide acceptance of the importance of power in the social sciences, there are different schools of thought on the concept.

Among the different approaches proposed for the analysis of power are those of Berle (1969); Clegg (1979); Mulder (1982); Boulding (1989); Wrong (1995); and Dowding (1996). Bobbio (1987) provides an account of the different available approaches from a political philosophy perspective. The discussion which follows is largely based on his work.

At the most basic level, Bobbio presents three alternative orientations to power. These are: the substantivist, the subjectivist, and the relational. In the substantivist view, power is a possession and is used in a similar manner to a good. Hobbes’ interpretation, which is the most influential within this view, poses power as the means an individual possesses at a particular moment to obtain a good or benefit for the future (Bobbio, 1987, p. 85). In the subjectivist approach (Locke’s perspective), power is the capacity of the subject (individual) to achieve certain effects; it is a personal attribute. Elitist theories of power fall within this perspective.<sup>6</sup>

In contrast to these two views, in the relational interpretation of power (which according to Bobbio is the most widely accepted in contemporary political discourse), power is understood as a relationship between two social actors. In this relationship one social actor induces another to behave in a way which the latter would not have otherwise chosen. Pluralist<sup>7,8</sup> accounts of power fall within this approach.

---

<sup>6</sup>The elitist theories hold that a ‘ruling elite’ or a small majority rules, and a single elite dominates all policy areas (Hague et al, 1992). A key issue in elitist theory is that the elite is organised and the mass population is not. For a discussion on elitist theories of power, particularly the views of Wright Mills, Pareto, Mosca, Schumpeter and Michels, see Wright Mills, 1957; Bobbio, 1987; Mosca, 1992; Robertson, 1993. Horowitz (1964, Chapter 2) presents a compilation of interesting essays on power by Wright Mills.

<sup>7</sup>In the pluralist view, there are various policy areas or issues (e.g. health, education, transport) in which different groups are interested, but not all groups are interested in influencing all the issues. Thus multiple groups have a say in decisions and different groups are in charge of different areas, so that power is diffused among numerous social actors. “No one group holds total power over others” (Dahl, 1961).

<sup>8</sup>Hall et al (in Walt, 1994) proposed another theory that attempts a compromise between the elitist and pluralist theories of power. This theory, referred to as ‘bounded pluralism’, holds that some issues (those ‘of high politics’) – particularly economic ones – are the concern of an elite. In contrast, service

The distinction between these three views can be explained as follows. The substantialist and subjectivist definitions of power are clearly dispositional in nature. Dispositional refers to the capacity (whether latent or active) of a social actor to produce an act of control. In this sense, in the case of the substantialist view of power an individual may obviously possess the means to attain a future good, or in the subjectivist perspective have the capacity to achieve certain effects, even when this individual is not engaged in employing the means to that end or his/her capacity to achieve those effects (Wrong, 1995).

By contrast in the relational perspective, although the dispositional sense remains important, it focuses specifically on the dynamic interactions between at least two social actors. In these interactions they both employ their capacity to exercise their influence in a particular situation or issue of interest. As will be discussed, not all social actors can exercise their influence in all situations. For the purposes of the research the relational view is of particular interest, as will be explained below.

This research is into the applicability of PSMs in participatory development planning. PSMs are means to assist social actors to communicate and reach agreements with each other. Thus our interest is in being able to understand the dynamics of these interactions between social actors in the development planning process. An interpretation of power which focuses on such relationships is the most appropriate for us to take. Therefore the framework which has been selected here is the relational view of power.

The following discussion of the relational approach is principally based on the work by Lukes (1974). He offers a particularly helpful presentation of this approach in terms of three alternative versions of increasing sophistication.

The main formulations of these three views of power relations are presented below. The discussion begins with the pluralists' one-dimensional view because it contains those aspects common to all three perspectives.

---

delivery issues such as housing, health, education, transport are oriented to a pluralist perspective in which different groups have some participation in the decision-making process.

One of the most famous and concise definitions of power within the relational approach is that of pluralist Robert Dahl (1961, 1986). He defines power as “a relationship between actors, in which one actor induces the others to act in a way which they would not have otherwise acted.”

According to Dahl, power needs to be studied in observable conflict situations where there are different preferences between the social actors. Those social actors whose preferences prevail are those who have power within particular “issue-areas” of the political system.

In Dahl’s view, social actors who are influential in certain issue-areas (e.g. public education, urban renewal, party nominations) are not necessarily influential in others. This is because resources are diffused throughout society. No social actor is absolutely excluded from having some resource with which to exercise some type of influence over an issue-area. However, being able to exercise influence over that issue area does not mean that that same resource will enable the social actor to exercise influence in all issue-areas. (Dahl holds that both influential social actors and resources change over time, and are not concentrated.)<sup>9</sup>

The work of Dahl, referred to by Lukes as the ‘one-dimensional’ view of power, provoked a critique by Bachrach and Baratz, labelled by Lukes the ‘two-dimensional’ view. In this view, to understand power it is not enough to analyse the decisions and the behaviour surrounding the decisions. Bachrach and Baratz argue that power is also exercised “when A devotes his energies to creating or reinforcing social and political values and institutional practices that limit the scope of the political process to public consideration of only those issues which are comparatively innocuous to A” (Lukes, 1974, p.16).

Power thus also operates through what is referred to as ‘non-decision making’. A non-decision is “a decision that results in suppression or thwarting of a latent or manifest challenge to the values or interests of the decision maker” (ibid., p.18), thus controlling potential conflicts. Bachrach and Baratz argue that one should not only

---

<sup>9</sup>These are part of the findings reported in Dahl’s landmark study of New Haven, Connecticut which was published in 1961 under the title “Who Governs? Democracy and Power in an American City”.

study what happens but also what does not happen (inaction). Power is exercised by limiting decisions to “sure issues” through the manipulation of social values and beliefs, and of the institutions and political procedures in such a way as to place those who benefit “in a preferred position to defend and promote their vested interests.” (This is known as the mobilisation of bias). The distribution of power is thus, according to Bachrach and Baratz, more unequal than Dahl’s pluralism held it to be.

Although the pluralists accept the importance of non-decisions, they also claim that non-decisions are impossible to study. Pluralists maintain that the focus of the study of power must be on how specific, readily recognisable key issues are resolved (Wrong, 1995).

Lukes’ third ‘radical view’ of power accepts with certain reservations the approaches taken by the pluralists, and by Bachrach and Baratz. He suggests that power has three dimensions: decision-making, non-decision making and shaping desires – the latter being the manipulation of the wishes and desires of social groups. (This third dimension is the reason for calling his view radical.) Lukes argues for the third dimension on the basis that merely studying both observable conflict and non-decisions is insufficient.

He expands on the work of the pluralists and Bachrach and Baratz, arguing that A may exercise power over B not only when A induces B to do what B would not otherwise do, but also when A “influenc[es], shape[s] or determin[es] [B’s] wants/needs”. Therefore, this exercise of power can “affect the formation of perceived interests” (Lukes, 1974; West, 1990, p.57). Thus power can reduce the occurrence of conflict “by manipulating the interests of one party to the conflict” (West, 1990, p.57).

For Lukes, conflict of interests is not only observable and overt, but may also be latent. Latent conflict occurs when there is a contradiction between interests of those who exercise power and the real interests<sup>10</sup> of those who are excluded. He says that it can be assumed that if those who are subject to power become aware of their real interests then it is assumed that there will be conflict of needs and preferences between the

---

<sup>10</sup>According to Lukes’, the exercise of power produces changes in the conduct of the power subject. Thus, the real interests of power subjects are revealed when they are not subjected to power (Wrong, 1995).

excluded and those who exercise power over them. That is, despite the lack of overt conflict it is nevertheless latent.

The main formulations of the three relational views of power that have been discussed are summarised in Table 2.1. Those aspects in which the views differ are shown in italics. The three-dimensional representation offers a more sophisticated version of what can occur in situations in which social actors interact. However, it does carry with it the difficulties of actually observing, measuring or evaluating these differential aspects (non-decision making, shaping desires, potential issues, latent conflict, real interests), which are undoubtedly formidable.

**Table 2.1 Three views of power within the relational perspective**

	One-dimensional	Two-dimensional	Three-dimensional
Dimensions	Decision-making	Decision-making <i>Non-decision-making</i>	Decision-making <i>Non-decision-making</i> <i>Shaping desires</i>
Issues	Key	Key <i>Potential</i>	Key <i>Potential</i>
Conflict	Observable Overt	Observable Overt and <i>covert</i>	Observable Overt and <i>covert</i> <i>Latent</i>
Interests	Subjective -as policy preferences	Subjective - as policy preferences or grievances	Subjective <i>Real</i>

Source: Based on Lukes (1974, p. 25)

Key: common aspects  
*differential aspects*

Studies which embrace either the two- or three-dimensional perspectives on power necessitate a quite lengthy time-scale. This would be inconsistent with the inevitable constraints of doctoral research. Furthermore the sometimes ephemeral nature of grassroots organisations (see Chapter 5) places severe limits on the availability of either written records or oral history accounts extending over longer periods. For all these reasons the one-dimensional view of power will be adopted, as a reasonable first approximation, in this thesis.

### 2.1.2 Resources for power

In this thesis the intention is to explore a hypothesis about empowerment (this term will be defined more clearly in the process of these conceptual chapters). It is thus necessary to adopt a view on what gives social actors power over others.

Implicit in the relational view of power, which has been adopted, is that resources are the basic sources of power (Dahl, 1961; Wrong, 1995). No two social actors bring into a relationship or interaction “exactly the same combination of resources” (Wrong, 1995, p.253). The social actor who is able to exercise influence and achieve his/her preferred outcomes is the more powerful in this situation/relationship. This implies either that the social actor who has been subjected to this exercise of power did not have enough resources, or that the combination of resources s/he had was insufficient, to counteract the power of the other social actor in the situation. This unequal control over resources is the basis of the power relation between social actors. This inequality, or existence of power differentials among social actors, by definition, affects the extent to which social actors’ preferences prevail in achieving their preferred outcomes (Dahl, 1961).

In the unlikely event of social actors having equal resources, there would in principle be no issue about power. In practice, however, there are always inequalities. This makes the discussion of the influence of resources upon power of crucial importance.

Resources are the assets which permit or constrain social actors’ actions and interactions in their ‘lifeworld’.<sup>11</sup> The meaning of power-giving resources will be limited in this thesis to those which are principally and most often used to make a difference in the ability of social actors to achieve preferred outcomes. There are many alternative categorisations of power-giving resources (Dahl, 1961, 1986; Lukes, 1986; Testa, 1986; Lasswell and Kaplan in Dahl, 1986; Galbraith, 1986; Robbins, 1987; Boulding, 1989; Friedmann, 1992; Rosenstone and Hansen, 1993; Davies, 1994; Etzioni in

---

<sup>11</sup>Habermas (cited in Love, 1995) defines lifeworld as “the locus of moral-practical knowledge or relations of meaning shared in families and workplaces (private) and in political action and opinions (public).”

Wrong, 1995; Wrong, 1995; Harsanyi in Dowding, 1996).<sup>12</sup> However, according to Dahl (1986, p.44), “there is no accepted way of classifying resources.”

Nevertheless, an analysis of the lists of resources proposed in the literature permits the derivation of a broad and inclusive categorisation. This has been produced by analysing the various schemes and looking for overlaps and duplications. In deriving this categorisation the framework developed by Habermas (Love, 1995; Mingers, 1997a, 1997b) has been particularly helpful. This distinguishes between the relationships and interactions which social actors have within three inter-dependent worlds: material, personal, and social, and the use of language as the interconnecting medium between them.

The material world concerns physical space-time, entities and objects. It exists and “is independent of human beings” (Mingers, 1997a, p. 10). In this sense, the material world is characterised by objectivity. Human beings relate to it through observation and can mould it by their actions.

The second world is the personal which is made up of each individual’s thoughts, emotions, feelings, desires, fears, experiences and beliefs. Rather than observing, as in the material world, individuals *experience* the personal world. This world is characterised by subjectivity in that it is unique to each individual. It is the outcome of each individual’s “history of choices, interactions and structural couplings” (Mingers, 1997b, p. 424).

The social world is an intricate ‘web’ of “language, meaning, social practices, rules and resources that both enables and constrains” the actions of humans and is “reproduced through them” (Mingers, 1997a, p. 10). They share and participate in this world. Its existence is therefore dependent on human beings; although it is “generally independent of any particular person” (Mingers, 1997b, p. 424). Human beings appreciate or interpret the world independently. However, there can be a degree of intersubjective agreement, if not objectivity, about the nature of the world.

---

<sup>12</sup>Thus Etzioni distinguishes between coercive (instruments of force), utilitarian (material rewards such as goods and services) and normative (symbols of legitimacy, prestige or love) assets; Gamson’s typology is constraint, inducement and persuasion resources; Lasswell and Kaplan developed a list of eight “base values” of power which correspond to eight “forms of power and influence”. These are

The capability that individuals have developed for communication and self-reflection, leads us from the material world to the personal and social ones. The medium through which humans communicate is language. Its aim is intersubjective communication (Strong and Sposito, 1995). In general, relationships with these three worlds and language are comprised or expressed in all human action and inaction. (Mingers, 1997b). Any situation in the real world can be characterised by the complex interaction of these elements.

Habermas' three worlds together with the language medium can be used to classify the elements of the lists of power-giving resources proposed in the literature. Given that language has communicative purposes it will be taken as part of a broader category which will be called communicative resources. Therefore the categories of power-giving resources used in this thesis are: material, personal, social, communicative. Each category is briefly defined below.

*Material resources* provide the capacity for consumption or acquisition of goods and services. *Personal resources* are social actors' distinctive, unique qualities which are the result of their life history. These include those qualities which may enhance or hinder their interactions with others. The bases for the interactions between social actors are provided by *social resources*. These bases include those which give access to the channels and processes for collective action. *Communicative resources* provide the necessary elements for the sharing and transmission of knowledge between social actors about their action-relevant context. The principal elements falling within each of these categories are given in Table 2.2.

The discussion of the more significant of these resources will be deferred until the presentation of our model for empowerment in Chapter 4. However, it will be useful to discuss some general characteristics of power-giving resources here; in particular whether power is a potential capacity or an actual exercise.

---

power (as a base for more power), respect, rectitude or moral standing, affection, well-being, wealth, skill, and enlightenment.

**Table 2.2 Proposed classification of power giving resources**

Type of Resource	Resource	References
Material	- Employment	Dahl, 1961; Rosenstone and Hansen, 1993
	- Money (Credit/Cash)/Wealth	Dahl, 1961; Lukes, 1986; Lasswell in Dahl, 1986; Galbraith, 1986; Friedmann, 1992; Rosenstone and Hansen, 1993; Wrong, 1995
	- Ownership of land/property	Galbraith, 1986
	- Supplies	Friedmann, 1992
Personal	- Experience	Rosenstone and Hansen, 1993
	- Strength	Lukes, 1986
	- Personal magnetism	Lukes, 1986
	- Respect/Prestige/Reputation	Lasswell in Dahl, 1986; Wrong, 1995; Dowding, 1996;
	- Rectitude/Moral standing	Lasswell in Dahl, 1986
	- Affection	Lasswell in Dahl, 1986
	- Leadership	Galbraith, 1986
	- Personal appeal	Wrong, 1995
	- Self-confidence	Rosenstone and Hansen, 1993
	- Charisma	Dahl, 1961
	- Popularity	Dahl, 1961
	- Energy	Dahl, 1961
Social	- Network of relationships	Friedmann, 1992; Rosenstone and Hansen, 1993
	- Time	Dahl, 1961; Friedmann, 1992; Rosenstone and Hansen, 1993
	- Organisation	Lukes, 1986; Galbraith, 1986; Friedmann, 1992; Wrong, 1995
	- Solidarity	Dahl, 1961; Wrong, 1995
	- Access to decision-making bodies	Boulding, 1989
	- Patterns of influence	Dahl, 1961
	- Capacity to mobilise groups	Wrong, 1995
Communicative	- Legitimate authority	Wrong, 1995; Harsanyi in Dowding, 1996
	- Education	Dahl, 1961; Rosenstone and Hansen, 1993
	- Channels of communication (formal, informal)	Boulding, 1989
	- Information (formal, informal)	Dahl, 1961; Friedmann, 1992; Harsanyi in Dowding, 1996
	- Specialised knowledge	Friedmann, 1992; Rosenstone and Hansen, 1993; Wrong, 1995

There is an evident difference between having the potential capacity to exercise power and the actual exercise of power (Wrong, 1995).<sup>13</sup> This difference implies that there must be an intervening activity in which this potential capacity is transformed

<sup>13</sup>In making this distinction, Wrong (1995), following Ryle, refers to the capacity to perform acts of power as a "dispositional" concept of power, and the actual exercise of power in a specific behavioural event as an "episodic" one.

into the actual exercise of power. In this intervening activity, if social actors wish to make their power effective, then they need to deploy their power-giving resources. The actual exercise of power of social actors thus implies that they have been able to successfully employ their resources, i.e., transform their potential capacity.

To make their capacity effective, social actors will require various types and variable quantities of their power-giving resources. In making their preferences prevail it is not only the amount which is important but also the types of power-giving resources social actors have. They need different combinations in different circumstances (Goldman, 1986). For example, the combination of resources deployed by a rich landowner in a situation of influencing government policy, are not likely to be the same as that employed by him in a situation of purchasing a parcel of land from a poor farmer.

Thus, every circumstance has specific characteristics which determine the nature of the required resources and their substitutability. These circumstances include the propensity of other social actors to exercise the power-giving resources which they control.

Clearly, though, the less power-giving resources social actors have, the less powerful these social actors can be. However, they can still be adequately powerful in some situations while not in others. The reason for success being variable is that it depends on whether or not other social actors choose to exercise some of their power.

The knowledge of less-powerful social actors as to which social actors are powerful is likely to constrain the actions of the former. If they *know* that a social actor has the potential to exercise influence over a particular issue, because they are aware of the resources s/he has, then this social actor's reputation for power will restrain the actions of the less powerful. Their actions will be guided by what they perceive to be the limitations in their capacity to be influential (Wrong, 1995). For example, a rural peasant who is aware of the powerlessness of other social actors, will avoid undertaking any actions which might jeopardise "future employment, tenancy, loans, favours or protections". This peasant "knows that in the short term accepting powerlessness pays" (Chambers, 1983).

These issues must be taken into account in any statement made about social actors' ability to participate in and have an impact on decision-making processes with a view to making their preferences prevail. Clearly, the more types and quantities of resources social actors have, the better in general their chance of prevailing.

In this section, the relational view of power has been discussed. From this perspective resources are seen as determinant in affecting the capacity of social actors to interact with others and achieve preferred outcomes. The purpose of the discussion has been to provide a conceptual basis for the treatment of power. However, the particular focus of this research is on the ability, not of people in general, but of disadvantaged individuals and groups in particular, to maintain or develop effective control over their own lives. The issue for them is not the extent to which they can affect the behaviour of others, but the extent to which they can avoid being the objects of such control by others. This capacity, which will be called "self-power" is discussed in the following section.

## **2.2 Self-power**

The voice of the poor is generally ignored in the decision-making processes which have a direct impact on their lives. Their participation, if any, is usually limited to some form of tokenism. (The concept of participation will be discussed in Section 3.2.) A possible explanation for this situation is that the poor lack resources. Among these are those related to the satisfaction of their 'basic needs' (e.g. securing access to food and shelter, and to services such as health and sanitation). In addition, they also lack those resources which could provide them with the capacity to articulate their wants and needs, establish their demands and priorities, defend their interests and influence decision-making processes.

These latter resources are of especial interest because our concern in this thesis is to investigate the possible role of PSMs in working with the poor. The particular focus given to this concern is to explore how cognitive assistance, through PSMs, can lead to people having more control over their lives through generating better

understanding. In this section we will develop this argument, and identify the set of those resources required for self-power.

In developing the supporting arguments we draw from the literature related to development, in particular from the work of Sen (1981, 1984, 1985) on capabilities and functionings, and from Doyal and Gough's (1991) human needs theory. Each of these will be presented in turn.

### *2.2.1 Sen on capabilities and Doyal and Gough's human needs*

Sen (1984, p.511) regards development as "enhancing the capabilities of people". He refers to this development orientation as the capability approach. This approach is one which can be used to evaluate a person's well-being, a key aspect on which improvement of life is based. The fundamental concepts of this development orientation are commodities, characteristics, functionings, capabilities, and entitlements.

For Sen, a commodity is a good. Many of the examples the author provides are tangible goods linked to his work on poverty and famine, such as rice (Sen, 1984) or bread (Sen, 1985), which are quantifiable. Characteristics are the properties of commodities. For example, the characteristics of bread include calorie provision, nutrition, and meeting demands for festivities.

Functionings are personal features which refer to the achievements of a person. Functionings tell us what the person succeeds in 'doing' or 'being' with the commodities, through their characteristics, at his/her command (Sen 1984, 1985). 'Doings' consist of activities (e.g. eating, reading, walking, seeing), and 'beings' are states of existence (e.g. be well nourished, not being ashamed because poorly dressed, not suffer malaria) (Sen, 1997). With the bread commodity, in combination with other commodities, a person's 'beings' could be being well nourished, or living without calorie deficiency. One of the person's 'doings', contributed by bread, could be entertaining others. Thus commodities are the means to achieve functionings. According to Sen, there is a conversion process by which commodities become

functionings.<sup>14</sup> Different people achieve different functionings with the same bundle of commodities. This is explained by what is referred to as 'interpersonal variations' (Sen, 1984).

Interpersonal variations can be illustrated with the bread example. The nutritional levels attained by different people who have command over bread may be determined by personal factors such as metabolic rates, body size, nutritional knowledge and education, medical conditions. Interpersonal variations may also depend on social factors such as a person's position in society, or the nature of social conventions and norms in force in the society a person lives. This example suggests that it is not the possession of commodities *per se* which determines the well-being of a person, but rather what the person is able to do with the commodities at his/her command.

Capabilities are what the person *can* 'do' or 'be' with the commodities s/he has (Sen, 1984). The capabilities of a person depends on two things. One the one hand, capabilities are determined by the bundle of commodities over which a person can establish command (given the person's income, price of goods, etc.), and choose to consume or exchange through trade and production (e.g. labour for pay, pay for food). Sen refers to these bundles of commodities, which a person has or can obtain, as entitlements and endowments, respectively<sup>15</sup> (for a discussion see Sen, 1981, 1986, 1987; Dreze and Sen, 1989).

On the other hand, a person's capabilities depend on the feasible set of the uses that the person can actually make of those commodities. The feasible set is, thus, made up of functionings. So according to Sen, a person's capabilities are the various alternative functioning bundles from which s/he can choose.

Capability reflects the idea of positive freedom (Sen, 1985). Positive freedom refers to "what a person can or cannot do, or can or cannot be" (Sen, 1984). In other

---

<sup>14</sup>There are other complexities. For example, material resources can be either consumed (like bread) or occupied (like a bicycle). Nevertheless, social resources (such as social networks) are not consumed in this way. There might be advantages to using them but that is a different issue. In this thesis, the simplest version will be used; this is that commodities are consumed.

<sup>15</sup>Sen distinguishes between endowments and entitlements. The former refers to the commodities a person has through inheritance and transfer. The latter refers to the commodities acquired through trade, production, claims made on the state (e.g. unemployment benefit) (Sen, 1981).

words, capabilities connote the “the extent of freedom that people have in pursuing valuable activities or functionings” (Dreze and Sen, 1989, p.42). In the sense of this statement, the authors’ interpretation of freedom is the positive ability to choose (i.e. positive freedom). Positive freedom suggests having not only the opportunities for choice and for action but also “those supportive influences which actually help a person to do the things s/he wants to do” [or be] (Dreze and Sen, 1995, p.25).

By contrast, an individual’s negative freedom means “not being prevented from doing certain things” (ibid., p.25).<sup>16</sup> In other words, the negative view of freedom interprets freedom as not being restricted in one’s capacity, to choose and to act, by the acts of others. These interpretations of freedom can be illustrated by the bread example as follows. If a person chooses to use the bread commodity for the functioning of entertaining others, then this person has exercised his/her positive freedom. However, if this same person is prevented by others from using this commodity to entertain others, even though it is an activity s/he has chosen to carry out, then this would be a lack of negative freedom. Thus, if A *does not* prevent B from carrying out B’s chosen activity, then B has negative freedom. And if A *does* prevent B from carrying out B’s chosen activity, then B’s negative freedom is curtailed.

Capabilities and functionings are evidently closely related. The difference between them can be understood as follows. Functionings represent the chosen patterns of use (the activities or states of existence) that a person achieves with a commodity. The capabilities of a person are the alternative combinations of possible functionings - or choice set - that s/he can achieve through choice.<sup>17</sup> So possible functionings are capabilities, and those capabilities which are chosen are functionings.

In summary, the significance of Sen’s capability approach to development is that what is valuable to study when evaluating people’s well-being is the real

---

<sup>16</sup>Negative freedom is secured by various legal instruments such as the constitution or the law.

<sup>17</sup>In an article which attempts to operationalise Sen’s concept of poverty, Desai (1994) proposes five co-realisable capabilities that are indispensable to human life. These are the capability: to stay alive/enjoy a prolonged life; to ensure (biological) reproduction; for healthy living; for social interaction; to have knowledge and freedom of expression and thought. The author gives new meaning to the concepts, a meaning different from that of Sen. For Desai capabilities are a set smaller than functionings because otherwise “the list of capabilities would be very long”. In other words, he argues for a small number of capabilities which can support an unlimited number of functionings. Desai’s redefinition of the word ‘capabilities’ is similar to Doyal and Gough’s intermediate satisfiers, which are discussed later in this section.

opportunities, or range of options, people have in deciding the kind of life they may lead with the commodities at their command (see Sen, 1985).<sup>18</sup>

Sen's concepts provide the basic foundations for the development of the concept of self-power. The work of Doyal and Gough on human needs, which will be discussed next, will enrich Sen's approach. Sen's notion of capabilities is very similar to Doyal and Gough's 'basic needs'. Their theory systematises Sen's concept of capability and makes it operational. (Gough and Thomas, 1994).

Doyal and Gough's idea of basic human needs is oriented to avoiding "serious harm". Serious harm is regarded as equivalent to "the significantly impaired pursuit of goals which are deemed of value by individuals" (Doyal and Gough, 1991, p.50). The authors argue that whatever goals individuals may deem valuable, these goals can only be achieved through interactions with others. This is the reason why success in social participation is important (Gough and Thomas, 1994).

For Doyal and Gough (1991), basic human needs are the preconditions for human action and interaction in any culture. They identify two such basic needs - physical health and survival, and autonomy. Physical health and survival (referred to henceforth as health) must be adequately satisfied, so that individuals can successfully and effectively participate in their relevant environment to achieve their valued goals. They argue that although the satisfaction of these needs does not guarantee successful participation, it does increase the possibility of success.<sup>19</sup>

Particular emphasis will be given, however, to the basic need for autonomy. This is more closely associated with the focus of this research on enabling social actors' to be more effective, enhancing their capacity for choice, and their ability to influence the decisions that directly affect them.<sup>20</sup>

Autonomy, for these authors, is "the ability to make informed choices about what should be done and how to go about doing it" (ibid., 1991, p.53); "the ability to

---

<sup>18</sup>Sen (1985, 1997) explains that a person's choice for option A when option B is also available is a different 'refined' functioning than when a person chooses option A when option B is not available.

<sup>19</sup>The authors propose factors related to issues of gender, race, culture, age, class, among others, which affect the success or failure of participation.

<sup>20</sup>Evidently, being sufficiently healthy, that is, enjoying relative absence of disease and disability, will expand the "scope of action and interaction" of social actors (Doyal, 1993).

reason and to act on the basis of those reasons". These abilities produce the "unique human potential ... to plan one's life" (Doyal, 1993, p.115).

According to Doyal and Gough (1991) autonomy has three key components. These are (1) degree of understanding, (2) psychological capacity and, (3) opportunities to engage in social participation. *Understanding* refers to social actors' understanding about themselves and their culture, and about what society expects from them. Understanding enables social actors to identify with greater confidence the set of choices available to them. It is thus necessary for social actors not to ignore the skills (e.g. language use, literacy) required to learn about their environment and to consider what actions to take in it (Doyal, 1993).

*Psychological capacity* refers to people's "emotional confidence and cognitive capacity" to make choices and act for themselves (ibid., p.115). An important component of psychological capacity is people's "practical rationality and responsibility" in their dealings with their environment (Doyal and Gough, 1991, p.62). Practical rationality refers to individuals' intellectual capacity to formulate options for themselves, while responsibility concerns individuals taking actions in the light of reasonable appreciation of their possible consequences.

And *opportunities to participate* refer to the extent to which social actors are enabled by social or environmental conditions to take significant action. By 'significant' the authors mean those role-related activities<sup>21</sup> which are deemed of social importance or which social actors value as important for their effective participation in their surrounding circumstances. 'Participation' is used in the sense of being active in aspects of social life. Having more opportunities to participate, enhances social actors autonomy<sup>22</sup> (Doyal and Gough, 1991). They argue, under the

---

<sup>21</sup>Gough and Thomas (1994) identify four social roles which they argue are common to all societies: production, reproduction, cultural transmission and political authority.

<sup>22</sup>Doyal and Gough go beyond autonomy (also referred to in their work as ordinary autonomy) and propose critical autonomy. According to the authors, critical autonomy refers to an individual's "ability to situate, criticise and if necessary challenge the rules and practices of the culture one is born, or currently lives in" (Gough and Thomas, 1994, p.40). Critical autonomy entails the same levels of health as ordinary autonomy but "with extra amounts of cognitive skills and social opportunities". The authors argue that these include "certain knowledge of other cultures and of a world language through which this can be accessed." An additional required precondition is political freedom. Our focus is on ordinary autonomy because achieving critical autonomy requires prior satisfaction of ordinary autonomy. In the case of poor and disadvantaged groups, ordinary autonomy has generally not been satisfied.

assumption that no one else gets harmed, that social actors should not be prevented from trying to achieve their goals. (Gough and Thomas, 1994). This is clearly an expression of their support for the importance of having negative freedom, as has been discussed above.

So far the key ideas of the two basic human needs proposed by Doyal and Gough, health and autonomy, have been summarised. The authors identify what they refer to as intermediate needs or 'universal satisfier characteristics', which serve to enhance the satisfaction of these two basic needs. The properties of goods, services, activities and relationships are means of satisfying intermediate needs. According to the authors, satisfaction of these needs provides positive freedom.

These intermediate needs are: (1) adequate nutritional food and water; (2) adequate protective housing; (3) a non-hazardous work environment; (4) a non-hazardous physical environment; (5) access to appropriate health care; (6) security in childhood; (7) significant primary relationships; (8) physical security; (9) economic security; (10) basic education; (11) safe birth control and childbearing (Gough and Thomas, 1994). Optimal physical health requires needs (1) through (5), while optimal autonomy within a society demands needs (6) through (10). And particularly for women need (11) is required.

The authors argue that a minimum level of satisfaction of each intermediate need is required if the basic needs of health and autonomy are to be optimised (Gough and Thomas, 1994). Doyal and Gough refer to this idea as "minopt level". The appropriate 'minopt' level of intermediate need satisfaction is where minimum input (of intermediate needs) yields optimum output (of basic needs). They argue that to optimise health and autonomy, a satisfaction level of each intermediate need (e.g. housing) must be reached. (However, beyond this level no additional inputs will improve the output of basic need satisfaction.) Therefore, certain levels of intermediate needs ought to be reached if basic need satisfaction is not to suffer (Gough and Thomas, 1994).

In summary, Doyal and Gough's propose that a minimum level of satisfaction of intermediate needs will optimise the satisfaction of the basic needs of health and autonomy. And if satisfied, successful social participation will be made possible.

To summarise our discussion in this section, how do the different concepts of Sen, and Doyal and Gough articulate with each other? Sen's notion of capabilities and Doyal and Gough's notion of basic needs are similar. Both reflect the capacity of social actors to choose what they desire to do or be. The extent of social actors' capabilities or their autonomy depends on the resources they have. Securing a sufficient amount of resources contributes to social actors' positive freedom. And negative freedom is instrumental to achieve functionings - what social actors actually achieve.

These writers concur that, to the extent that social actors have the ability to understand their situation and environment, and to choose between or pursue courses of actions or activities based on that understanding, these social actors will be better able to make the changes in their lives which they consider are in their interest.

### 2.2.2 *The concept of self-power*

The concept of self-power which will be used in the thesis builds on the ideas of Sen, and Doyal and Gough discussed above.<sup>23</sup> The importance of elaborating on the idea of self-power is that, it may be recalled, the particular concern of the research is in enhancing the capacity of disadvantaged individuals and groups to maintain or develop effective control over resources and decisions which affect them. This capacity is what will be referred to as self-power.

One of the key objectives of participatory development is to achieve increases in the self-power of these disadvantaged social actors. To assess any proposal for effecting these increases, it is necessary to take a view on what the main components of social actors' self-power are. That is why the first part of this section focuses on identifying them. The second part discusses how the different categories of resources contribute to social actors' self-power. The resource categories of particular interest for the purposes of the research will be identified.

---

<sup>23</sup>The related terms 'self-control' (Wrong, 1995) and 'power within' (Nozick, 1993) were not used in our research as they seemed to impart other ideas. The former may be perceived as self-containment and the latter as psychological control.

Self-power will be treated in this thesis as a sub-category of power\*; the other sub-category is power (see Section 2.1). There are difficulties in establishing a demarcation between power and self-power. However, an attempt is made to clarify the differences between these two concepts.

There are three underlying assumptions to the distinction between power and self-power. These are: (1) the same resources can be used either for power and self-power; (2) the use of these resources depends on the situation in which interaction between social actors occurs; and (3) all social actors have both power and self-power.

In the interaction between social actors (say A and B) these concepts articulate with each other in the following way. If A exercises his/her power in his/her relationship with B, then B's self-power is likely to be affected. However, A's self-power is likely to remain unchanged.

There is a subtlety in this last statement which needs to be discussed. This can be illustrated even by an example in which both social actor A and B are powerful. Lets assume that a rich landowner (A) wants to buy a piece of land off his neighbouring and also rich landowner (B), who refuses to sell it to him. It is possible that A could succeed in buying the land because he had more resources he could use in this interaction with B – not just more money but external influences which meant that B would suffer in other areas of his concern if he did not agree to this transaction. The land purchased is an increase in A's power. However, B's self-power is negatively affected because he was prevented from doing what he wished which was not to sell his land. Or alternatively, B's power was not enough to counteract A's power because he could not prevent A from purchasing his land. The resource of land could also be viewed as an increase in A's self-power because this resource could be used in future interactions to avoid the successful exercise of power by others. This would tend to indicate that resources give power or self-power depending on the circumstances in which interaction between social actors occurs. In this section, these connections between these concepts will be developed more fully.

Doyal and Gough are followed in identifying the key components of self-power. Their components of autonomy (understanding, psychological capacity, and

opportunity to participate) are clearly relevant to our concept of self-power, though not identical to them. Because of the claimed mode of operation of the methods whose effectiveness is being investigated in this thesis, it is appropriate to sub-divide the concept of 'opportunities to participate' into two new categories: 'opportunities to act' and 'spaces for dialogue'.

Spaces for dialogue will be defined as opportunities for interaction between social actors in which dialogue can take place to resolve conflict, engage in negotiation, or reach consensus by achieving mutual understanding. Thus the absence of spaces for dialogue would prevent many forms of interaction, and, in particular, virtually eliminate the scope for PSMs – which depend on such interaction. Conceptually, the elaboration of Doyal and Gough's scheme can be justified as follows. If social actors have the capacities to understand, to be active, to act, but there is no effective forum for them to share their experiences and views, and negotiate with other social actors, then they are less able to make their self-power effective. 'Spaces for dialogue' makes this requirement explicit.<sup>24</sup>

Thus the key components of social actors' self-power are: cognitive skills to understand, mental ability to be active, opportunities to act, and spaces for dialogue. The first two of these are effectively the same as Doyal and Gough's components of autonomy (see Section 2.2.1).

Having self-power, a combination of these four components, is more likely to contribute to social actors' ability to avoid being prevented to achieve preferred courses of action (or functionings). Having the ability to choose these courses of action, by contrast, means that these social actors have secured their positive freedom. This can be interpreted as equivalent to Sen's notion of capabilities.

In the presentation of Sen's work the distinction between positive freedom and negative freedom has been discussed. In the conceptual scheme used in this thesis the equivalent of positive freedom is power. Social actors can use this liberty to choose to exercise control over others. It is also important that they do not have their capacities for choice and for action curtailed by other social actors. This means that their

---

<sup>24</sup>Evidently, this sense of the word 'space' goes beyond the narrow meaning of a physical setting, and is used in a more metaphorical sense, as will be discussed in Section 3.3.

negative freedom should not be reduced. In other words, negative freedom is equivalent to self-power. These capacities are determined by the established infrastructure in society, by the resources social actors have, and by what they are able to achieve with those resources. Therefore, both positive and negative freedoms provide the context in which self-power is exercised (or not).

Each of the components of self-power evidently relates to the resources which social actors have (as will be discussed in more detail in Chapter 4). Self-power-giving resources are the assets which provide social actors with self-power.

In discussing the different types of self-power giving resources, the categorisation of power-giving resources derived in Section 2.1.2 will be used. This may seem paradoxical. However, resources will give power or give self-power depending on the purposes for which and circumstances under which social actors use them. In the discussion that follows the contributions of each of these four categories (material, communicative, social and personal resources – see Table 2.2) to self-power will be presented.

*Material resources* are the most important resources for the poor and disadvantaged individuals and groups. This is because these are the fundamental assets that enable them to survive and to provide for themselves a secure livelihood (Chambers, 1983; Stieffel and Wolfe, 1994). Survival and subsistence are the main priorities of these social actors (Stieffel and Wolfe, 1994). It is only when material resources are minimally satisfied (i.e. satisfaction of the basic needs for subsistence and survival) that they begin to exercise control over their own lives (Friedmann, 1992).

To the extent that their material base is satisfied social actors will consider using their time and energy in activities oriented to changing or improving their living conditions, and participating in their action-relevant context.<sup>25</sup> It is through access to communicative and social resources that the disadvantaged have the opportunity to work towards achieving these improvements.

---

<sup>25</sup>Clearly, if their secured livelihood is threatened the disadvantaged can be expected to use their time and energy to defend it.

*Communicative resources* provide the skills (cognitive, written, verbal) and information necessary to understand what is happening in their relevant circumstances and how it can be improved. The communicative deficit of the poor or disadvantaged groups is substantial (Chambers, 1983; Friedmann, 1992). They are generally less educated, and have less access to channels of communication which provide information about their action relevant context (Chambers, 1983; Galjart, 1995). This lack of skills and information significantly affects their capacity for systematically analysing and understanding their situation.

The interaction with other social actors, provided by *social resources*, creates the opportunity to share worries and views, and to identify problems of common concern. However, this interaction, whether through networks of informal relationships or through more formally convened activities, is commonly limited because the activities for survival and subsistence of the poor or disadvantaged groups take up most of their time and energy (Friedman, 1992; Rosenstone and Hansen, 1993). Time is an important resource. It is when social actors have surplus time (i.e. time beyond that needed for survival and subsistence) that they can devote it to organising and mobilising with others to improve their situation (Friedmann, 1989; 1992).

Organisation, in the context of community development, means social actors coming together for a common purpose. It is a source of “relevant information, mutual support and collective action” (Friedmann, 1992, p.68). Solidarity is a crucial resource for the success of any organisation and for collective action (Wrong, 1995). Without organisation, social actors’ options are seriously limited because collective efforts are often required to achieve improvements in their life situation (Friedmann, 1989). Through mobilisation social actors induce others to become involved and be part of these collective efforts (Rosenstone and Hansen, 1993).

In persuading social actors to mobilise, *personal resources* such as leadership, respect, reputation, personal appeal and charisma are activated. Some of these resources can be augmented as a result of collective activities (Wrong, 1995; Goldman, 1996). Such augmentation contributes to social actors’ self-power. For

example, increases in the confidence of organised disadvantaged groups will make them aware that together their desired changes can be effected.

In the above discussion the contribution of each category of resources to self-power has been presented. Based on this discussion, it is now possible to identify which of the categories will be most central to the purposes of this research. As indicated earlier, the focus of this research is on studying ways by which the self-power of disadvantaged communities may be increased. The hypothesis of interest is that the provision of cognitive assistance to the poor, through PSMs, can in appropriate circumstances, lead to their more effective participation; and that this participation will in turn lead to an increase in self-power. This means that our intervention is oriented towards enhancing these communities' analytic capability and improving their capacity to be active and effective in influencing decisions and activities which have a direct impact on their lives.

PSMs are participatory methods. As such their application is entirely dependent on the involvement and interaction of the social actors who are intended to benefit from them. Through dialogue and discussion, these social actors provide information (e.g. about their perspectives on a problem, their environment) which is then structured by PSMs. Evidently, communicative resources will help social actors in their utilisation of PSMs, and indeed in making the most effective use of them. Social resources are concerned with interactions of social actors. Given the participatory nature of PSMs and our interest in assisting collectivities in particular disadvantaged communities, this category of resources is also clearly relevant for the research.

The importance of the other categories of resources (material and personal) in contributing to self-power, are not in anyway undermined. Their significance has already been established. However, for the particular purposes of increasing self-power through the provision of cognitive assistance and through more effective participation, the resources in the communicative and social categories are most valuable.

For these reasons, it is the subset of the communicative and social categories of resources which will be the focus of this research. This subset, shown in Table 2.3,

provides the means of improving social actors' understanding of their action-relevant context.

**Table 2.3 Subset of self-power giving resources: from the perspective of the poor**

Type of Resource	Resource
Social	- Network of relationships
	- Time
	- Organisation
	- Solidarity
	- Access to decision-making bodies
	- Patterns of influence
	- Capacity to mobilise groups
	- Legitimate authority
Communicative	- Education
	- Channels of communication (formal, informal)
	- Information (formal, informal)
	- Specialised knowledge

*Sources:* Drawing from Dahl, 1961; Lukes, 1986; Galbraith, 1986; Boulding, 1989; Friedmann, 1992; Rosenstone and Hansen, 1993; Wrong, 1995; Dowding, 1996.

Clearly, this subset is only part of the 'minimum bundle' of self-power giving resources which social actors require to be effective in increasing their self-power. (This minimum bundle can be thought of as that required to achieve Doyal and Gough's minopt level of need satisfaction.) This subset provides the foundations for the less self-powerful social actors (e.g. the poor), to increase their self-power. This bundle is context dependent because as the conditions both of living and for participation of social actors change, the resources needed by the less self-powerful must also correspondingly change.

The minimum bundle of resources is one of a threshold. The threshold is the level of self-power giving resources social actors must reach to be effective in society. There are practical differences in establishing the value of the threshold level.<sup>26</sup>

<sup>26</sup>In the basic needs literature (see Streeten, 1981; Stewart, 1985) there is much debate on what the basic needs are that constitute such a minimum bundle. These needs are usually defined by technocrats, excluding people from having their own voice. It is not the purpose of this section to contribute to this debate. However, an approach consistent with the participatory orientation of this research is that to adequately determine basic needs it is necessary to take into account the views and opinions of both the people themselves (e.g. through their subjective observations) and those of outside observers/consultants.

However, if these can be overcome it could be developed into a useful instrument for monitoring progress in reducing inequalities (c.f. the poverty line).

The concept of a threshold implies that social actors, such as a community (as defined in this thesis), need to have enough self-power giving resources to control their own lives, above which cultural preferences and stylistic differences between individuals could prevail. This would suggest that it is plausible that having surplus resources (i.e. going beyond the minimum level of self-power giving resources) might generate the possibility of or opportunity for these resources to be used to control others. Thus, if it is accepted that the minimum bundle is what is needed to be effective in society, then the question of what social actors do with this minimum bundle is only one of two related issues. The second is the question of what they might do with any surplus. (This will be discussed in more detail in Chapter 4).

In this section the concept of self-power has been developed. It is social actors' capacity to maintain and develop effective control over resources and decisions which affect their local development. A discussion of its key components has been presented as well as the importance of the resources which give self-power. This has provided the conceptual basis for understanding self-power. However, the focus of this research is on finding ways of increasing the self-power of the poor and disadvantaged social actors. Increases in social actors' self-power are referred to as empowerment. This concept is discussed in the next chapter.

## Chapter 3

### *Conceptual Framework Part II: Empowerment, participation, and spaces for dialogue*

In Chapter 2 the concepts of power\*, power and self-power were defined. Power\* was taken to include the abilities social actors have both to control others and to control their own lives. The concept of power was used to refer to the former, and that of self-power to the latter.

The concepts in Chapter 2 are necessary in order to be able to define those of empowerment, participation and spaces for dialogue. These concepts will help arrive at a clearer specification of the possible role of problem structuring methods (to be discussed in Chapter 5) in local development planning in Third World situations. Claims which have been made about this family of methods include: that they empower; that they are participative; and that they enable less unequal dialogue (Rosenhead, 1989a; White, 1994).

These three concepts of empowerment, participation, and spaces for dialogue will be derived in this chapter. These will be used, together with the concepts developed in the previous chapter, to develop a model of the analytic contribution to empowerment.

It will be helpful, at the outset, to clarify some of the terminology which will be used. A further discussion of the meaning and implications of these terms will follow. Increases in the self-power of disadvantaged<sup>27</sup> social actors are referred to as *empowerment*. Any mechanism by which such increases can be generated is a *process of empowerment*. These terms will always be used in this sense in order to avoid confusion.

---

<sup>27</sup>The word 'disadvantaged' will be used to describe individuals and communities who are less self-powerful.

A prerequisite for this process, it will be argued, is *participation*. Participation of social actors, as will be discussed shortly, is the means through which the disadvantaged engage in this process. But participation of social actors in the process of empowerment can only happen if they have opportunities to voice their needs and be heard, and to share their views and concerns with other social actors, with the intention of effecting desired changes in their lives. These opportunities will be referred to as *spaces for dialogue* – a term already introduced in the previous chapter.

The three concepts of empowerment, participation and spaces for dialogue will be discussed in the following three sections.

### 3.1 Empowerment

In Chapter 1 the examination of the inadequacies of development planning methods suggested the need for more participatory approaches. These latter approaches (to be discussed in Chapter 5) attempt to involve people in the planning and implementation of actions that ultimately affect their lives, with a view to enhancing their ability to have control over them. Social actors' control over the resources and decisions which directly affect them was referred to in Section 2.2.2 as self-power. An increase in the self-power of disadvantaged social actors is what will be called empowerment.

The concept of empowerment has been widely studied.<sup>28</sup> Power, interpreted in this thesis from its relational perspective (see Section 2.1.1), is at the heart of the

---

<sup>28</sup>The fields within which the concept of empowerment has been addressed include community psychology (Smail, 1994 and in same issue commentaries to Smail by Fryer, Rappaport, McGill and Hawks; Rappaport, 1987; Zimmerman and Rappaport, 1988); women studies (Hashemi et al, 1996; United Nations Non-governmental Liason Service, 1995); education (Freire, 1972, 1973; Shanahan and Ward, 1995); local public services (Skelcher, 1993); environment (Young, 1996); and development (Singh and Titi, 1995; Shragge, 1993). Articles in special issues of the Health Education Quarterly (Summer 1994; Fall 1994) provide a review of empowerment theory and practice including tools for measuring empowerment and empowerment programs/case studies in the area of health education and promotion. For other health related studies of empowerment see: Braithwaite and Lythcott, 1989; Wallerstein, 1992, 1993; O'Neill, 1992; Stevenson and Parsloe, 1993; Stilwell and Stilwell, 1995.

concept of empowerment however interpreted.<sup>29</sup> Although there is lack of consensus on the meaning and use of the concept, most authors concur that the principal idea underlying empowerment is a positive 'redistribution of power' (Stilwel and Stilwel, 1995). This redistribution can be interpreted in terms of our concepts of power and self-power, discussed in Chapter 2, in the following way.

'Redistribution of power' refers to shifts in the balance between the self-power that social actors have and the power that other social actors may have over them. To the extent that the self-power of the disadvantaged increases, these social actors will be less vulnerable to the exercise of power by other social actors. In other words, positive changes in the 'power/self-power balance' benefit the disadvantaged. (When using the phrase 'power/self-power balance' what is meant is that the balance is between the power of 'A' and the self-power of 'B'.)

This research is concerned with exploring the utility of PSMs in helping the disadvantaged in Third World countries increase their self-power. The effects of PSMs on self-power occur only through their effects on the *problématique* conversion process (as will be discussed in Chapter 4). For these reasons it is necessary to understand the process by which these increases may be achieved. That is why, our interest will be mostly on the empowerment process as opposed to empowerment. This section discusses the characteristics of empowerment as a process. Particular emphasis is given to that which occurs at the level of a community.

In this thesis, the phrase *empowerment process* will be used to refer to any mechanism by which increases in the self-power of the disadvantaged are produced. By contrast, the outcome of the empowerment process is the state of being more self-powerful than before engaging in the process. The noun *empowerment* will be used to describe this change. Empowerment is very specifically a directional movement signalling an increase in social actors' self-power.

The empowerment process can be one of transforming the disadvantaged into more self-powerful social actors. Or it can be one making the more self-powerful, still more self-powerful. Cases in which the more self-powerful are made less self-

---

<sup>29</sup> For distinct approaches which support either the transitive or intransitive use of the verb "to empower", see for example, Rappaport, 1985; Labonte, 1989, 1994; Bernstein et al, 1994; Israel et al, 1994; Purdey et al, 1994; Wallerstein and Bernstein, 1994; Nelson and Wright, 1995.

powerful, or the less self-powerful, less self-powerful are certainly possible. These latter two cases constitute examples of a process of 'dis-empowerment'. In this thesis the term 'empowerment process' will be restricted to the sense of making the less self-powerful, more self-powerful; that is, disempowerment is excluded, and the concern is only with the disadvantaged.

The process of empowerment occurs at different levels (individual, organisation and community) and they are mutually influencing.<sup>30</sup> However, for the purposes of the research, it is the community empowerment process which is of particular interest. This is because local development planning activities and actions, as was discussed in Chapter 1, are directed towards benefiting collectivities rather than individuals. Participatory development planning approaches (to be discussed in Chapter 5) are also oriented collectively through assisting the efforts of the disadvantaged in solving problems of common concern. These efforts are more likely to be effective through actions by organised groups rather than those of individuals (Staples, 1984). Moreover, the particular focus of the present research is to explore the role of a family of participatory methods – PSMs – which are designed for use with groups rather than by individuals. For these reasons, the focus will be on the community empowerment process.

A community empowerment process refers to collective efforts both of individuals and organisations, who employ their skills and resources to satisfy their particular needs; to provide mutual support; to address community conflict; to increase their influence and control over their community's quality of life; and to gain the ability to influence decisions and changes in the broader social system. This process affects members of a community differently (Labonte, 1989; Friedmann, 1992; Wallerstein, 1993; Israel et al, 1994; Wallerstein and Bernstein, 1994).

The empowerment process operates on all of the members of the collectivity, but some members may make more use of it or may benefit more than others. This is because groups are heterogeneous; they are made up of individuals with varying levels of self-power (and power) depending on the resources (e.g. educational levels,

---

<sup>30</sup> For a discussion about the different levels at which the empowerment process can occur, see Friedmann (1992); Israel et al (1994); Ovrebo et al (1994); Robertson and Minkler (1994); and Zimmerman (in Bernstein et al, 1994).

access to channels of communication, information, employment, financial position, ownership of land, social status) which they already have, as discussed in Chapter 2.

These differential attributes are an aspect of Sen's interpersonal variations discussed in Section 2.2.1. Sen explains that because of interpersonal variations different social actors are likely to achieve different functionings with the same commodity. In our research, the differential attributes characterising individuals have two distinguishable effects. One effect is the variability of individuals, in terms of achieving different outcomes given a fixed level of resources. The other is the variability of the level of resources which a group of individuals may have as a result of the compounding effect of all of their resources. This implies that these individuals will benefit differently from the same community empowerment process.

The attributes of each individual within a group 'locates' him/her in a better (or worse) position, as compared to other individuals in it, when engaging in or benefiting from the community empowerment process. The rationale is that the capabilities which an individual has depends on his/her resources. An individual who has more capabilities has a broader choice set of functionings s/he can choose to achieve.

There are many mechanisms and processes at work which ensure that members who have different self-power giving resources will be affected differently by the community empowerment process. For example, having less access to channels of communication and information may make one individual less aware of the opportunities which are available and which are being missed, or the arguments which can be advanced, or about features that could be useful to him/her. Lower levels of education and articulateness (communication skills) may affect members' ability to argue within the collectivity or to recognise the possible improvements in self-power giving resources which could benefit them. Therefore, it is less likely that resources which are actually acquired through the community empowerment process can be useful to them.

The discussion so far has concentrated on the characteristics of the community empowerment process. How does a community empowerment process begin? The process can be initiated in two ways - internally or externally.

An internal community empowerment process only occurs when the community members through their own initiative combine to seek increases on self-power for themselves. This can be referred to as a community ‘self-empowerment’ (Friedmann, 1992) process. The objective of an internally motivated empowerment process may vary. It could, for example, be a community wish to gain extra self-power giving resources (e.g. information or education for its members). Another possible objective may be to affect decisions due to be taken by others or other activities which have a direct impact on their lives. For example, they might wish to influence the local government’s plan to build a dam.

An empowerment process which is attempted but fails, or at least fails in its explicit objective, can still be valued as beneficial for community members. This is because the activity of organising can in itself generate a gain in self-power.

A community empowerment process initiated externally refers to one where a deliberate intervention occurs from outside the community. It is this type of outside intervention with which this thesis is concerned. Since PSMs are virtually bound to be carried out or assisted by non-community members, the implication is that our interest is in the cases where there is an externally contributed empowerment process.

This suggests that the combined efforts of the interveners and of the disadvantaged themselves can produce increases in the self-power of the latter. The analytic assistance with PSMs provided by interveners will be described in the discussion of our model for empowerment in Chapter 4. This will explain the mechanism by which the disadvantaged, through the improved understanding and structuring of their situation facilitated by PSMs, can enhance their capacity to empower themselves.

Thus external assistance can be considered a prior step to community self-empowerment. This is because a possible consequence of the community’s experience with external assistance, is the activation of awareness regarding its capacity to make more effective use of the resources available to it. With this activated awareness the community is likely to be more self-confident to act, on its own initiative, with the aim of generating increases in self-power.

Community self-empowerment processes can be regarded in principle as more desirable, because they are more sustainable than a community empowerment process facilitated through outside intervention. However, they are less frequent (Friedmann, 1992). In the case of severely disadvantaged communities, self-empowerment is relatively infrequent because they are generally poorly organised and informed (World Bank, 1996). Another possible explanation is that they may not have the resources to help themselves (Friedmann, 1992). As discussed in Section 2.2.2, most of their time is necessarily dedicated to activities for survival and subsistence, thus reducing the time available to participate in other activities within their action-relevant context (Staples, 1984; Zakus, 1988; Friedmann, 1989, 1992; Rosenstone and Hansen, 1993).

The community empowerment process would be contradictory if the disadvantaged, who are the intended beneficiaries, do not engage in it. A means to achieve this is through their participation in decisions and activities that have a direct impact on their lives. The concept of participation is discussed next.

### **3.2 Participation**

A community empowerment process cannot actually begin, unless members of the community engage in the process. Therefore it becomes necessary to identify mechanisms which enable them to become actively and effectively involved in the planning of their local development.

Although there has been extensive discussion of the importance of participation for development,<sup>31</sup> and has been widely promoted in different fields,<sup>32</sup> community participation in practice remains a challenge. There are diverse views regarding what it

---

<sup>31</sup>See for example, Cohen et al, 1978; Vargas, 1979; Midgley, 1986; Goulet, 1989; Stone, 1989; de Valk, 1990a; Kurup, 1991; Stiefel and Wolfe, 1994; Mikkelsen, 1995.

<sup>32</sup>Participation has been deemed desirable in U.S. federal social programs (Arnstein, 1969); in health and health promotion (Nichter, 1984; Paul and Demarest, 1984; Ugalde, 1985; Madan, 1987; Rifkin et al, 1988; Johnston, 1990; Brown, 1991; Sherraden, 1991; OMS, 1991; Thunhurst and Ruck, 1991; Castro Pérez and Hernández Tezoquipa, 1992; O'Neill, 1992; Bermejo and Bekui, 1993; Lupton et al, 1995); in housing and neighbourhood management (Hollnsteiner, 1977); in urban renewal and rehabilitation (Soen, 1981; Armstrong, 1993; McArthur, 1993); and in environmental management (Renn et al, 1995).

is, what it entails, how it should be implemented, who should participate and when they should do so.<sup>33</sup>

In general all definitions agree that participation<sup>34</sup> involves organised efforts by community members to increase their influence over the allocation and use of resources (Muller in MacPherson and Midgley, 1987; Stiefel and Wolfe, 1994). “Organised efforts” here refers to the struggles and actions of people who come together for a common purpose.

Participation clearly relates to the concepts of power, self-power, and empowerment discussed earlier. Empirical studies have shown that social actors who have more power (and self-power) tend to participate more (Hollnsteiner, 1977; Zakus, 1988; Rosenstone and Hansen, 1993). If this happens then it is more likely that the advantages of the participation which accrue would be to the more self-powerful from among the less self-powerful. Therefore, although there may be improvements for some sections of the disadvantaged, those who are in most need will not benefit as much. This is contradictory with the general purpose of the type of community empowerment process discussed in Section 3.1.

In this thesis, participation is defined as an activity which may, under suitable circumstances, allow social actors’ influence over events to be deliberately shaped and affected. As such, participation is the means of contributing to the effectiveness of the empowerment process.

---

<sup>33</sup>See, for example, Midgley, 1986; Brownlea, 1987; Dreze and Sen, 1989; Sherraden, 1991; Bhatnagar and Williams, 1992; Morgan, 1993; Phillips and Verhasselt, 1994; Walt, 1994; World Bank, 1994; Lane, 1995; Nelson and Wright, 1995.

<sup>34</sup>In the literature participation has been found to be qualified by other words; for example, citizen participation (Arnstein, 1969; Paul and Demarest, 1984; Burns et al, 1994); community participation (Vargas, 1979; Hollnsteiner, 1977; Soen, 1981; Midgley, 1986; Reinke, 1988; Stone, 1989; Green, 1992); public participation (Sewell and Coppock, 1977; Loewenson, 1999); political participation (Lipset, 1981; Pasquino, 1988; Robertson, 1993); popular or people’s participation (Rahnema, 1992; Singh and Titi, 1995); and social participation (Hersch Martinez, 1992). Citizen, popular, and public participation are used interchangeably, they are concerned with people’s involvement in ‘the political, economic, social life’ of a country; whereas, community participation refers to the ‘direct involvement of ordinary people in local affairs’. Although political participation focuses on the exercise of vote because it is the most ‘visible’ way in which people participate; there are other ways in which people participate politically, for example, political party affiliation, membership in associations, striking.

Several frameworks have been proposed for analysing participation.<sup>35</sup> This section discusses a particularly useful one which relates participation with power. A 'ladder' representation is sometimes employed to depict this relationship. As will be explained below, the 'ladder' is helpful for identifying the genuine/non-genuine participation boundary. This boundary will also serve to establish the types of participation which are valuable for the community empowerment process. It will then be argued that participation of the disadvantaged is desirable in the area encompassed within the genuine participation limits. The question of when genuine participation takes place is also addressed.

### *3.2.1 Types of participation for the process of empowerment*

Not all types of participation are conducive to enabling poor and disadvantaged groups to have a voice and be heard, or to influence decision-making processes that directly affect them. As such not all are equally valuable for the process of empowerment. This section focuses on a discussion of the types which are valuable for this purpose.

A starting point is to define what constitutes 'authentic' (Midgley, 1986) or 'genuine' (Arnstein, 1969; Hollnsteiner, 1977) participation and what does not. Those types that do not constitute genuine participation are referred to as 'false' or 'pseudo' (Midgley, 1986) or 'non-genuine' participation. Non-genuine participation limits community involvement to implementation and/or ratification of decisions that have already been taken by outsiders to the community (*ibid.*, p.26). By contrast, genuine participation allows a more active, direct role for social actors in the planning process; in non-genuine participation social actors are in general passive and less influential on outcomes.

The participatory processes which are of particular interest in this research are those which contribute to an empowerment process. Empowerment processes, as has been seen, can in principle generate extra resources for the disadvantaged. These extra

---

<sup>35</sup> See, Wengert cited in Sewell and Coppock, 1977; Cohen and Uphoff cited in de Kadt, 1982; de Kadt, 1982; Midgley, 1986; Zakus, 1988; Goulet, 1989; Beresford and Croft, 1993; Lane, 1995.

resources, depending upon the extent of success and position of particular members of the community, may generate resources for power or self-power.

Particularly useful in this discussion are a number of models in which participation is related to power (or self-power), whether implicitly or explicitly. In their models, several authors (Arnstein, 1969; Hollnsteiner, 1977; Paul, 1987; Klein cited in Zakus, 1988; Skelcher, 1993; Burns et al, 1994; Eyben and Ladbury, 1995) used a ladder metaphor or a continuum to organise the types of participation. Each rung of the ladder or point on the continuum represents a particular kind of participation. Movements from the bottom rung towards the topmost rung of the ladder (or analogously on the continuum) indicate increasing degrees of citizen power or self-power.

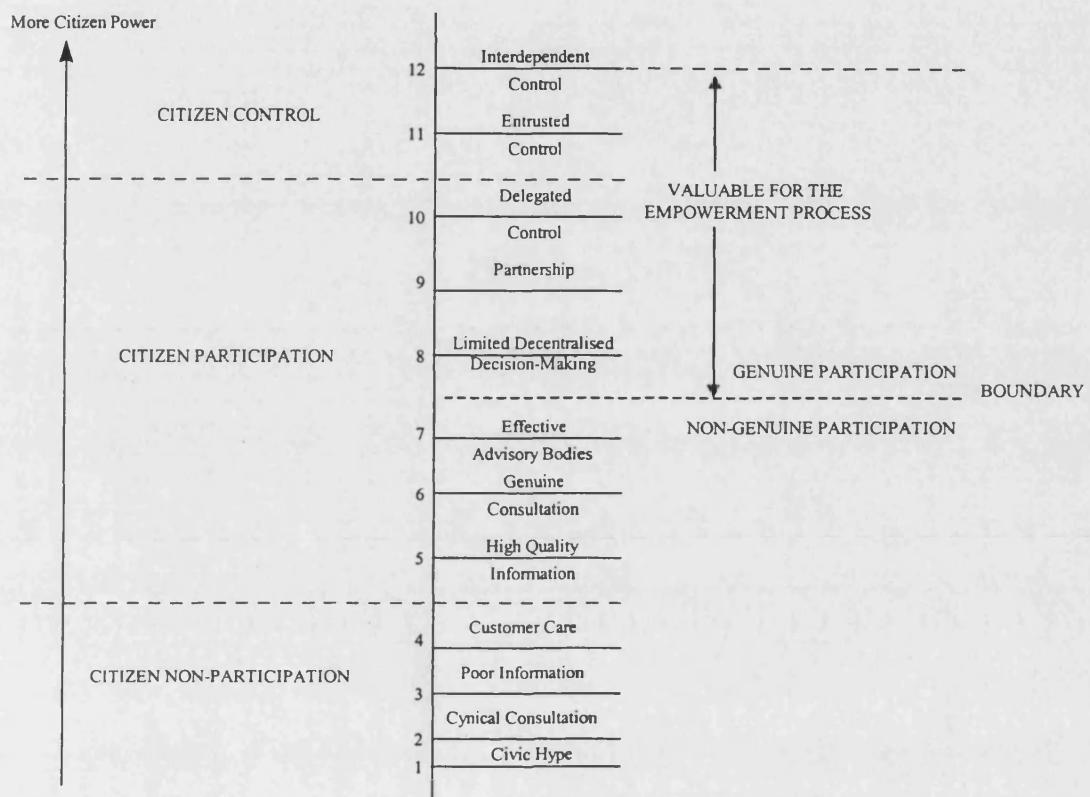
There are advantages in choosing the model of Burns et al (1994), itself a modification to Arnstein's classical ladder of citizen participation. This is because their version explores more fully than does Arnstein's different types of citizen participation valuable to citizen influence in decision-making. Their main modifications to Arnstein's ladder are that additional forms of empowerment are formulated in the upper half of the ladder; a more precise distinction is made between participation and control; and the rungs are not considered equidistant - as we go up the ladder the rungs are harder to climb. It is easier for the more powerful to accept access to those rungs that represent citizen non-participation rather than to the upper ones.

Burns et al call their framework a 'ladder for citizen empowerment'. What their ladder actually does is it to map types of participation onto levels of power, as can be seen in Figure 3.1.

The twelve rungs of the ladder are divided into three groups: citizen non-participation (rungs 1-4), citizen participation (rungs 5-10) and citizen control (rungs 11-12). Burns et al distinguish between limited (rungs 1-7) and significant (rungs 8-12) citizen influence. In the former, service organisations may have a commitment to consider citizens' views prior to making decisions, but there is no promise to act on those views. In contrast, in the latter rungs there is at least some power (or self-power) transferred to citizens and thus they obtain 'genuine bargaining influence'. In terms of

citizen empowerment, the gap between rungs seven and eight is considerable. Therefore it is represented by a wide gap in the ladder.

**Figure 3.1 Ladder of citizen empowerment**  
(Based on Burns et al, 1994)



Our focus will be on the top five rungs because it is they which are valuable for the community empowerment process. On the rungs of partnership and delegated control, respectively, local people have real opportunities to influence local decision-making and policies. Although on rung ten, local stakeholders have control, it is highly limited when compared with entrusted control (rung 11) and interdependent control (rung 12). On these top rungs, "citizens have the [power] to govern a programme, area or institution", with a high degree of independence of local government. (ibid., p.174)

From this brief review of the model of Burns et al, it can be established that rungs eight to twelve are valuable for the process of empowerment. This is because they serve as mechanisms to achieve changes in the distribution of power, that is, in the power/self-power balance. Therefore it is on these rungs that community members are likely to be more successful in achieving improvements in resources.

### *3.2.2 When participation takes place*

If the types of participation identified above are those which are valuable for the empowerment process, when does participation take place and who participates? Not all people in the community participate, and those who do participate, do so predominantly in specific phases of planning and decision-making processes and in some particular areas (e.g. public health, education). Following Green's (1992) categorisation, the stages in the planning process are taken to be: situational analysis; priority, goal and objective setting; option appraisal; programming and budgeting; implementation and monitoring; and evaluation.

It has already been seen, earlier in this chapter, that the social actors who are most likely to participate and make their views known are those who have more resources, and viceversa. The disadvantaged, those who lack access to or have less resources, usually fail to express their views and press their case effectively. Yet it is the disadvantaged who are the intended beneficiaries of the empowerment process.

There are suggestions that active community participation is desirable at all stages of a planning process (see for example, Cox and Annis, 1988; Friedmann, 1989; Goulet, 1989; Mullender and Ward, 1991; Onyx and Benton, 1995; Desai, 1996). Others (see Sewell and Coppock, 1977) propose that inputs from the community are 'more critical' at some stages, such as priority setting and option appraisal, than others.

Based on the assumption that genuine community participation is desired, it has been argued that participation of the community should not be limited to implementation (of actions designed by outsiders to the community), which is the most common phase at which the community participates (de Kadt, 1982; Madan, 1987; Lane, 1995). The community would need to become actively involved from the beginning of the planning process so that the activities undertaken would be more responsive to their problems and needs (Hollnsteiner, 1977; Friedmann, 1987).

In this section, the conceptual basis of participation has been established. Participation has been defined as community members' involvement in an empowerment process with a view to making it more effective. Effective is used in the

sense of generating empowerment. Empowerment is the state of having more self-power than before engaging in the empowerment process.

In exploring the possible empowering role of PSMs in Third World disadvantaged communities, a defining consideration need not be whether the communities' participation is by reaction or by invitation.<sup>36</sup> Rather what is relevant is the utility of analytic assistance available with PSMs in producing empowerment of the disadvantaged through genuine participation. If well posed such assistance may help dialogue and argumentation between social actors.

Genuine participation of disadvantaged communities, can only be effective if it involves dialogue and argumentation. For this to take place there need to be appropriate fora, and both spatial and temporal opportunities, where social actors can voice, press and share their views, and be heard. These opportunities are what will be referred to as spaces for dialogue. This concept is discussed in the following section.

### **3.3 Spaces for dialogue**

Genuine participation was defined, in the previous section, as that type of participation that assists in the empowerment process. It will be shown that genuine participation can only occur in open dialogue. A possible consequence of dialoguing is that the disadvantaged can realise their potential strength, and thus achieve empowerment. In this sense, it will be argued that empowerment of the disadvantaged is always a latent possibility which may be manifested through dialogue.

Thus it becomes extremely relevant to explore the circumstances which enable dialogue to take place or impede it. It will be argued that there are necessary and sufficient conditions for dialogue to occur. A minimum of two people, who have the mental and cognitive skills to be able to deal with the situation at hand, are needed. Fora are needed to make it possible for them to meet and share their opinions and

---

<sup>36</sup> Brownlea (1987) distinguishes between "taking part" and "being allowed to take part". "Taking part" occurs spontaneously, it is a 'reaction' by the community, and requires having access to decision-making and planning processes which directly affect it. By contrast, "being allowed to take part" occurs when social actors are 'called in to participate', are 'invited'; when another social actor gives them

views. The existence of these fora is not enough, people have to be able to reach them. And if accessible, people are likely to participate in these arenas if they are willing to become involved, feel that they are going to be effective and that they will not be deterred from doing so. The significance of these fora – spaces for dialogue – is the focus of this section.

In order to elaborate the idea of ‘spaces for dialogue’ it is necessary to clarify the concepts both of ‘dialogue’ and of ‘spaces’, starting with the former. Dialogue, it will be argued, depends on the willingness of social actors to listen and to respond. Various types of dialogue which are more likely to occur in participatory planning will be distinguished.

All these dialogue types, it will be argued, can only occur in practice if there are opportunities for the disadvantaged to communicate with other relevant groups on the issue at hand, in an environment relatively free from obstacles.<sup>37</sup> Such an environment is what will be referred to as a ‘space for dialogue’. In the analysis which follows, the desirable conditions and possible obstacles affecting the existence or improvement of spaces for dialogue are discussed. This discussion will make a partial use of Habermas’ formulations on communicative action, in particular his ideas on the public sphere and the Ideal Speech Situation.

### 3.3.1 *The concept of dialogue*

This section begins with a description of the general characteristics of all dialogue. These characteristics will be useful to understand the differences between different dialogue types which can occur in participatory development. Regardless of the type of dialogue participants engage in, it will be argued, the level of communicative competence of the participants in dialogue affects its quality and balance.

---

discretion to participate in certain activities but not in others. In this case participation does not occur spontaneously.

<sup>37</sup>The dynamics of the dialogues will tend to be very different depending upon ‘who is dialoguing with who’. For example, there are likely to be differences between dialogue carried out in an internal group meeting of one group of disadvantaged individuals (that is, a discussion between members not notably different in terms of power and self-power), and that engaged in in a meeting of representatives of the disadvantaged with representatives of groups who in principle might have the capacity to deliver things that the disadvantaged desire.

In general terms, dialogue is what happens when social actors have a communicative encounter. More precisely, following Walton (1992, p.82), dialogue may be taken as “a process of communication among two or more persons through a series of back and forth messages, in which these messages are organised in a sequence toward fulfilling a goal.” Habermas (1970, 1984) refers to these back and forth messages as speech acts. A speech act thus represents a move in a dialogue from one communicative actor to the other.<sup>38</sup>

The choice of speech act<sup>39</sup> tends to be determined by the type of dialogue engaged in. Walton (1992) identifies twelve types of dialogue of which four are particularly relevant to a community empowerment process; namely, negotiation, persuasion, action-directed dialogue, and deliberation.<sup>40</sup> Which of these types of dialogue will be engaged in, in any particular instance, will depend upon the initial situation from which dialogue arises. For example, dialogues may arise from situations in which there is conflict or differences (personal, of interest, of opinion); a lack of knowledge or information; or a need for action or advice (Walton, 1989, 1992).

The initial situation, the individual goal of participants, and the collective goal of dialogue together with its benefits can be used to broadly characterise these four types of dialogue, as summarised in Table 3.1. The relationship between these

---

<sup>38</sup> It should be noted that Habermas (1970) limits the term ‘communicative actors’ to refer to those social actors who have what he refers to as communicative competence.

<sup>39</sup> Habermas (1984) distinguishes the following five type of speech acts. *Imperatives* are used to influence the will of another (a request or a suggestion). *Constatives* serve to assert a truth claim (an assertion or a statement). *Regulatives* govern or regulate through a moral code (forbid, allow, warn) the interpersonal relationship between speaker and listener. In *expressives* a participant reveals his/her subjective thoughts or identity (thank, apologise, welcome.) And *commissives* are used not only to regulate such matter as turn-taking, but to assure, affirm or deny. “Avowals” are speech acts that correspond to the functions of expression, to the disclosure of wishes, feelings and intentions.

<sup>40</sup> Other types of dialogue include quarrel, debate, pedagogical (or educational) dialogue, information-seeking, interview, inquiry (or investigation), and expert consultation. (For details, see Walton, 1989, 1992.) These dialogue types are not considered further in the thesis because their characteristics are not conducive to the genuine participation of the disadvantaged. In a quarrel, there are no rules and the aim is to win at all costs by verbally attacking the opponent. In a debate, although there are rules which regulate the dialogue, there is a third party (outside the dialogue) which judges which party has argued more effectively. Clearly, being allowed to verbally attack an opponent or to have an outside judge pronounce on the victor are not the most desirable characteristics of a dialogue embedded in genuine participation. In pedagogical, information-seeking, interview, inquiry and expert consultation types of dialogue, one of the sides to the dialogue takes on a rather passive role while the other side takes on an active one by imparting knowledge or providing information. For our purposes these dialogue types operate heavily on a one way flow of information or knowledge. This diverges from the way genuine participation is defined in this thesis as well as from one of the basic ideas of participatory planning which is “combining knowledge” (see Chapter 5).

characteristics is first explained briefly, before the particularities of each dialogue type are discussed.

**Table 3.1 Types of dialogue more likely to be found in participatory planning**

Type of dialogue	Initial situation	Individual goals of participants	Collective goal of dialogue	Benefits
Persuasion	Difference of opinion	Persuade other party	Resolve difference of opinion	Understand position
Negotiation	Conflict of interest	Maximise gains (self-interest)	Settlement (without undue inequity)	Harmony
Action-directed	Need for action	Implement goals	Intelligent action	Articulate goals
Deliberation	Contemplation of future consequences	Promote personal goals	Act on a thoughtful basis	Formulate personal priorities

Source: Walton, 1989; 1992

The initial situation is the circumstances which cause dissatisfaction among different parties (individual or collective), thereby generating a motivation for dialogue. Each participant seeks to fulfil his/her own goals through engaging in dialogue (and they can only achieve this if they achieve the collective goal of dialogue). For dialogue to work, co-operation is required between the participants. As a result, they have two obligations for dialogue to be effective,<sup>41</sup> in the sense of achieving the collective goal of the dialogue. Not only does each participant have the obligation “to work towards fulfilling his (sic) own goal in the dialogue.” They also, have an obligation “to cooperate with the other participant’s fulfilment of his (sic) goal” (Walton, 1989, p. 3).

Thus the collective goal is the final state, which all parties expect to achieve, as a result of participating in a particular type of dialogue. Benefits will be derived from dialogue depending on the extent to which both the collective and individual goals are achieved.

The dialogue types selected (persuasion, negotiation, action-directed dialogue and deliberation) will now be described in turn. *Persuasion* is usually initiated

<sup>41</sup> For dialogue to be effective it needs to be guided by ethics. For a discussion on the ethics of dialogue see Habermas (1984), Gurevitch (1990), Coles (1995). Ajzner (1994) critically reflects on Habermas’ theory of communicative action, and provides among others, interesting insights into his notion of communicative ethics.

because of the existence of conflict of interests or opinions between participants. In this type of dialogue, each participant tries to demonstrate that a proposition or point of view is true or right, and based on evidence. A persuaded party is the most likely to make concessions. Persuasion, thus, is done to resolve the differences which led to dialogue in the first place. The expected benefit is to improve understanding between parties.

*Negotiation*, by contrast, is a form of bargaining based on participants' self-interest. As such, in this type of dialogue the individual's goal is to maximise gains or "get the best deal" (Walton, 1992). Although persuasion may often be heavily involved in negotiation, persuasion is not the main objective in this type of dialogue.<sup>42</sup> The collective goal is to reach a settlement which is satisfactory to the parties. In this way, the expected benefit is harmony between parties. Negotiation, like persuasion, is thus oriented towards the resolution of difference.

The need for action motivates *action-directed dialogue*. In this type of dialogue, the goal of one party is to bring about a specific course of action by another party. Participants collectively seek to reach agreement on how to carry out an action which is of concern to them. This type of dialogue often involves persuasion and negotiation. The expected benefit is that parties articulate their desired plan of action.

*Deliberation* is a sub-type of action-directed dialogue. Each party exposes their preferred courses of action and priorities. These provide the grounds for discussing the possible future consequences of particular courses of action. The aim is to be able to act on an informed and thoughtful base.

The dialogue types described above are likely to occur with the application of PSMs in the empowerment process (see Chapter 4). Indeed, the analytic assistance provided by PSMs is claimed to help, among other things, in negotiations between parties with different perspectives and interests; in building consensus; and in arriving at a commitment to an action, as will be discussed in Chapter 5.

So far the characteristics of four types of dialogue have been discussed, identifying the particularities and the initial situations in which each one is more appropriate. It is

---

<sup>42</sup>According to Walton (1992) persuading the other communicative actor in negotiation that your point of view is right is not a good method of successful negotiation.

relevant to note, however, that for genuine participation to take place the quality of dialogue is also important.

Quality of dialogue is defined, by Habermas (1970), in terms of the Ideal Speech Situation (ISS) and communicative competence. An ISS is one which allows communication between participants which is characterised by freedom, co-operation, and equality of opportunity to openly express themselves. The ISS is Habermas' ideal model for communication.<sup>43</sup> He argues that genuine communication ('linguistic exchanges') between participants occurs when the exchanges are comprehensible, true, sincere and legitimate.

These four presuppositions of communication will be met depending on the participants' communicative competence. Communicative competence within the ISS, is determined by the skill and facility that participants have in speech and symbolic interaction (ibid.). According to Habermas (in Love, 1995, p.53), participants "demonstrate communicative competence through the mastery of the ideal speech situation." Thus, the capacity of the participants involved in communicating with each other largely determines the quality of dialogue.

Deficiencies in the communicative competence of participants, it is argued, can be expressed in terms of what was referred to in Chapter 2 as communicative deficit. A social actor's communicative deficit may be due, among other things, to the lack of substantive and contextual information, lack of verbal abilities, and problems of language. It was argued that this communicative deficit is likely to result in non-satisfaction of the minimum bundle of self-power giving resources (i.e. the minopt level) needed to be effective in augmenting self-power. It is reasonably conceivable that the existence of such communicative deficit poses a limitation on social actor's communicative competence. This limitation has consequences both 'before dialogue' and 'during dialogue'.

'Before dialogue' refers to the period in which the disadvantaged are deciding whether or not to engage in dialogue. The communicative deficit limitation on communicative competence may become a factor contributing to their lack of willingness to do so (Chambers, 1995), through feelings of lack of preparedness or self-

---

<sup>43</sup> For more details on the ISS, see Habermas (1970, 1984) and White (1995).

confidence in expressing themselves and defending their positions and priorities. In this way feeling communicatively incompetent acts as a deterrent when making the decision of whether or not to engage in dialogue with others.

‘During dialogue’ refers to the entire period which starts when the decision to engage in dialogue is made. Given the limitations on their communicative competence the disadvantaged will from the beginning be in a less favourable position in relation to the other social actors involved in the dialogue.<sup>44</sup> The differences between participants will be noticeable throughout the dialogue when some participants are better able to express themselves, defend their positions, achieve their goals. These differences will tend to bring about unbalanced dialogue. Unbalanced dialogue is thus a possible consequence of the communicative deficit of participants.

Unbalanced dialogue is one of the negative effects on the quality of dialogue which is possible. There are other ways in which it can be adversely affected. For example, if there is non-existence of dialogue (participants remain in silence), if there is lack of co-operation between participants, or if certain issues or stakeholders are excluded from discussions (see Section 2.1.1, for more details on non-decision making) dialogue departs from the ISS.<sup>45</sup>

Poor quality dialogue has the potential ultimately to affect the achievement of empowerment of the disadvantaged. This is because genuine participation will be severely obstructed. And if participation, the means for contributing to the effectiveness of the empowerment process, is deficient then it implies a hindrance to potential increases in the self-power of the disadvantaged.

As has been stated earlier, in this research the aim is to generate a converse effect. That is, the concern is to improve the quality of participation through the provision of analytical assistance which helps make dialogue between participants more balanced. The provision of analytical assistance, in principle, will occur in fora

---

<sup>44</sup>When differences between participants are large, it might appear that persuasion and negotiation are more likely to be the operative forms of dialogue. On the whole, although not always, one might expect these types of dialogue to be found when the dialogue is between groups, or at least between interest groups, rather than between members of a group united by some kind of common identity.

<sup>45</sup>Habermas’s ISS, by definition, seeks to have equality in dialogue between participants.

created by or for social actors (e.g. by government, by communities). Therefore for the purposes of discussing issues, the existence of appropriate opportunities for dialogue becomes relevant. These opportunities will be referred to in the following section as ‘spaces for dialogue.’

### 3.3.2 *The concept of spaces for dialogue*

In the previous section the importance of generating less unbalanced dialogue has been established. The related concept of ‘spaces for dialogue’ will now be elaborated. The section begins with a review of some relevant uses of the term ‘spaces’.<sup>46</sup> A discussion will follow about the sufficient and necessary conditions for spaces for dialogue.

One of the broadest definitions of the term ‘spaces’ is due to Mostov (1992). Her context is that of a process-oriented understanding of popular sovereignty<sup>47</sup> in such areas as policy-making, politics, and the workplace. She argues for the need of “spaces for participation in social decision making” and “spaces for public expression of the exercise of sovereignty.”

A concept more appropriate to our more limited sphere is that of “free spaces”, due to Evans and Boyte (1986, pp.17-20). The authors define free spaces as the environments or settings between the private lives of ordinary citizens and large-scale institutions where they can act with dignity, independence and vision. These free spaces include mainly voluntary forms of association which are relatively open and participatory in nature. Neighbourhood groups, religious organisations and self-help groups are some examples. The use of ‘spaces’ by Evans and Boyte has both a physical (objective) dimension and subjective one. They suggest that the objective dimension of space describes how places are organised and connected. And space

---

<sup>46</sup> The uses of the term ‘space’ in areas such as astronomy, geometry, architecture and geography are not included in this review.

<sup>47</sup> Sovereignty is defined as “the absolute final decision exercised by some person or body recognised both as competent to decide and as able to enforce the decision” (Mostov, 1992, p.105). According to Mostov, the underlying assumptions in the process-oriented understanding of popular sovereignty are that individuals are competent to share as equals in decision-making and that they have collective power to enforce their decisions. The focus is on the resources each citizen has to exercise their capacity in social decision-making.

understood as the perceived, lived daily character of networks and relationships is its subjective dimension.

A closely related perspective is that of Mucci et al (1989, p.525). These authors define “interaction space”<sup>48</sup> as “an informal, abstract structure, defined and recognised by the intervening actors themselves, allowing exchange and communication conditions by a public confrontation.” These authors use the concept of space to represent “informal meeting domains” used to interact around issues.<sup>49,50</sup> Social actors are present in these domains because of a “reciprocal necessity”. The interaction is ‘activated’ by an action promoted by at least one of the social actors.

All these different uses of spaces can be seen as involving dialogue. The use of space by Mostov, and even more by Evans and Boyte, and by Mucci et al, points us to an interactive process in which the different actors are immersed in discussion of an issue. A similar concept is advanced by Habermas (in Chambers, 1995, p.252) when he proposes the creation of spaces “for the articulation and exchange of ideas, grievances, and claims” which fall within what he calls the “public sphere”. This public sphere, according to Habermas, is the arena<sup>51</sup> where individuals (communicative actors) come together to discuss issues and problems which concern them, with a view to achieving mutual understanding. This realm is in principle always “free of coercion or dependencies (inequalities) that would incline individuals toward acquiescence or

---

<sup>48</sup> Nelson and Wright (1995, p.6) use a similar term - “interactional space”. This refers to chances (opportunities) social actors have to pursue their different interests by expressing their views and bargaining with each other. However, they leave the concept somewhat underdefined.

<sup>49</sup> Grindle and Thomas (1991, p.8) use space differently in the term ‘policy space’ to refer to decision-makers’ (at the governmental level) “room for manoeuvre and capacity to influence the content, timing and sequence of reform initiatives.” A policy space within an issue area is composed of the set of alternatives which can be considered, and is similar to the idea of a ‘solution space’ within operational research. In linear programming, a “solution space” refers to the set of feasible solutions that satisfy the constraints.

<sup>50</sup> In his discussion of the democratisation process, Bobbio (1987) uses the term space in a different sense. He argues that an indicator to say whether or not there has been democratic progress is the number of spaces outside politics where the right to vote is exercised rather than an increase in the number of people with the right to vote. In other words, it is not “who” vote but “where” they can vote.

<sup>51</sup> Bryson and Crosby (1989, 1992) distinguish between the concepts of arenas (e.g. city councils, legislatures), forums (e.g. task forces, public hearings), and courts (e.g. professional licensing bodies, military courts, Supreme Court) to explain the skills needed by public leaders in the design and use of these “shared-power settings”. They analyse the interactions between communication, process, power and institutional arrangements in the context of strategic planning.

silence" (Warren, 1995, p.171). It is within this environment that Habermas proposes an ISS should occur.<sup>52</sup>

Building on our discussion of dialogue and spaces, a 'space for dialogue' for the purposes of this research will be taken as the spatial and temporal opportunity for social actors to communicatively interact. Any space for dialogue ensures some possibility of engagement between social actors, and thus can be seen as an enabler of participation and action (as will be represented in the model discussed in Chapter 4). This can be distinguished from 'opportunities to act' (discussed in Section 2.2.1) in that this opportunity is more likely to be 'advantageously materialised' if it follows a communicative encounter between relevant social actors. In other words, the potential action is more likely to be achieved and effective if it is better informed as a result of dialogue. Moreover, there is a feedback cycle between opportunities to act and spaces for dialogue. As will be discussed in the chapter which follows, dialogue informs action, and action informs dialogue.

A space for dialogue, as will be explained below, is a protected and serviced environment for people to communicate in. It needs to be protected from interference from other activities or events which would discourage participation in the dialogue or inhibit its effectiveness. A serviced environment means that there is not only a suitable physical setting but also that the necessary supplies and services are available (Friend and Hickling, 1987; Slocum et al, 1995).

By definition, a space for dialogue implies the absence of obstacles which would prevent the engagement of social actors on the topic or topics of interest. Obstacles come in many shapes and forms. They can be classified in terms of accessibility to and availability of spaces for dialogue. Obstacles to accessibility include problems of travel or distance as well as problems of cost (World Bank, 1996). Among the obstacles to availability are lack of information; the absence of a suitable location; problems of right to legal association; lack of freedom of assembly

---

<sup>52</sup> In this thesis it is not being asserted that the ISS in the pure sense suggested by Habermas, is achievable. Nevertheless, even if it is not entirely achievable, it does provide a sense of direction toward what should be the expected factors to interact to make dialogue between participants likely to be effective in achieving their goals. Thus, the existence of a space where dialogue between social actors can take place, where they are able to freely share their views with one another is evidently desirable in the context of a truly participatory development. Participatory (or people-centred) development is concerned with providing opportunities for social actor interaction.

and speech; opposition to changing the status quo (for example, by government or by powerful interest groups); and lack of support from government for the existence of spaces for dialogue (Friedmann, 1992; Stiefel and Wolfe, 1994; Guggenheim, 1996).

The existence of only one of these obstacles can cause a space for dialogue to be eliminated or made much less effective. It can be eliminated, for example, if there are obstacles to accessibility; or if there is lack of freedom of assembly and speech. Obstacles to availability may act as deterrents to those willing to participate in these spaces, thereby making them less effective. For example, if there is lack of support from government, participants may be afraid of this encounter with other social actors.

Evidently, it would be desirable to have a space for dialogue characterised by the total absence of obstacles such as Habermas' ISS. However, it is not possible to have the complete absence of such obstacles within existing political social structures and processes. Removing some obstacles can nevertheless make dialogue more possible, and therefore move us in the right direction.

Spaces for dialogue cannot in themselves secure the genuine participation of the disadvantaged. Some of the issues related to why the disadvantaged do not participate or are not able to participate as much as other social actors have already been discussed earlier. These relate to lack of access, or having less self-power giving resources. One of the key factors affecting their participation, it was argued, is the lack of surplus available time due to the focus on activities for subsistence and survival which are their top priority. This lack of surplus time makes accessibility even more important.

Nevertheless, the mere existence of a space for dialogue does remove important obstacles to participation. The availability of ensured opportunities for the disadvantaged to get together and share their views about issues which affect their lives constitutes a clear step towards the achievement of genuine participation.

Once the opportunity is available, a space for dialogue will be more or less effective to the extent that the disadvantaged are capable of taking advantage of it. The less unbalanced the dialogue between the participants, the more they will be able to make better use of this opportunity. An interpretation of our hypothesis is that

PSMs' role is precisely to facilitate a more equal involvement of social actors through the utilisation of tools and techniques designed to encourage their participation. These methods will be discussed in more detail in Chapter 5.

Space for dialogue concludes the set of the concepts which will be used in this research to explore the possible role of PSMs in Third World participative development planning. These are power, self-power, empowerment, participation and spaces for dialogue.

The bases for proposing a revised definition of the community empowerment process have now been provided. The community empowerment process can be seen as one which:

transforms disadvantaged communities into more self-powerful ones, by providing them with both improved spaces for dialogue and cognitive assistance, in order to combine their resources in a more effective way to achieve preferred outcomes in certain aspects of their action-relevant context, thus increasing their level of control over their lives.

This definition implies that if we are able to contribute through outside intervention to an enabling environment, a community can more fully exercise its capacity for choice and for action, thereby being empowered.

To understand how the different elements of the community empowerment process articulate with each other, in the next chapter a conceptual model of empowerment as a process is developed. This model will also be useful to identify the elements which can be potentially affected by the analytical assistance provided with PSMs.

## Chapter 4

### *A conceptual model of the empowerment process*

Positive changes in the self-power of social actors may be achieved by enhancing their capacity to:

- understand their situation in its action-relevant context,
- articulate their needs and wants,
- consciously choose and commit to courses of action,
- organise to undertake chosen courses of action.

Any process which aims to effect these positive changes in the self-power of the poor and disadvantaged groups, involves many transformations of self-power giving resources into functionings (see Section 2.2.1). The transformations required depend on the characteristics of the specific situation which is of concern to these social actors. Our interest in this research is particularly with situations in which individuals alone cannot be effective in transforming their circumstances; only through group work can they achieve the desired changes. A transformation process which helps generate such a group's commitment to an effective course of action that is both conscious and informed will be discussed below. The question which will be addressed: Is there a role for analysis in such processes of transformation?

Analysis evidently has a role in human affairs, but equally evident it is different in different circumstances. The purpose of this chapter is to provide an intellectual framework within which a possible role for analysis in support of social action for improvement, or to meet the wishes of the disadvantaged people can be developed.

Sen's work, discussed in Section 2.2.1, is formative for us, but has not as yet addressed certain issues which are important for research into the role of analytic assistance. In particular there is no specification either of the pre-conditions required for this conversion process to occur, or of the activities which need to take place if self-power giving resources are to be transformed into functionings, with a view to positively affecting the self-power of social actors.

To this end we will in this chapter develop a model of the analytic contribution to empowerment. As far as possible established formulations and findings in the appropriate social science disciplines will be used so that the model is at least a plausible representation of the principal factors which contribute toward generating increases in self-power and how they articulate with each other. The theoretical basis is not itself subject to test as part of this research, but the theoretical basis of this model gives rise to a clearer role for analysis which can then be tested. This model is intended to serve the function of deriving a possible role for the form of analysis provided through PSMs in problem situations confronting Third World grassroots organisations. In addition it may be hoped to increase general understanding of the empowerment process, and generate testable hypotheses about how it might be improved.

#### **4.1 Overview of the conceptual model for empowerment**

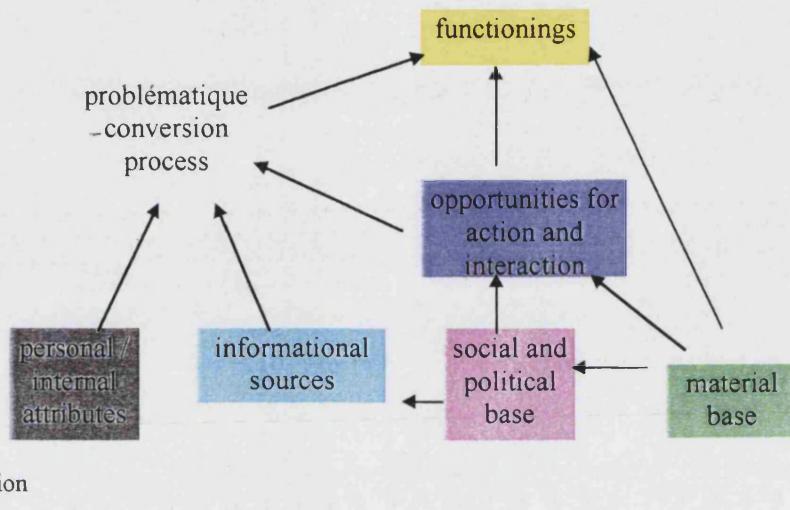
The factors which have been identified (in preceding chapters and in the literature about to be reviewed) as operating towards increasing self-power can be organised into seven sets, which will be referred to as sub-areas. The main work on which our categorisation of sub-areas is based is Friedmann's (1992) (dis)empowerment model of poverty. The underlying assumption of his model is that the poor lack the social power (power associated with civil society) to improve the conditions of their lives. The basic divergence from his model is that Friedmann takes as a basic unit of analysis the household. In our model, by contrast, it is the grassroots community organisation, itself composed by members of different households.

It is argued here that any benefits derived from analytic assistance in the community empowerment process will impact them as a group. Any subsequent effects on the self-power of individual members of the organisation is, thus, not analysed here.

The sub-areas which make up the model are material base, social and political base, informational sources, personal/internal attributes, opportunities for interaction, conversion process, and functionings. The inter-relation between the different sub-

areas can be represented diagrammatically, as shown in Figure 4.1. This figure illustrates only the general structure of the model. The sub-areas require some introductory explanation as to what they are, in preparation for the more detailed discussion of the elements within them which will be carried out in Section 4.2.

**Figure 4.1 Overview diagram of the conceptual model of an empowerment process**



Key: → association

The most fundamental of these sub-areas is the *material base*. It provides the means for satisfying social actors' basic physical survival requirements. The modes of production determine their available time for activities within their action-relevant context, in addition to those of survival. Evidently, if the material base of social actors is insufficient to satisfy their basic human needs, then they will be in a less favourable position 'to afford' to participate (Rosenstone and Hansen, 1993).

The material base is commonly viewed as exercising a powerful influence on the arrangements in society (see Marx in Giddens, 1985, p.88), both social and political. The *social and political base* of a society is the organisational structure in which its social actors live, and provides the norms of interaction between them. Within this structure, the role of the state and its institutions have a determinant role in conditioning the existence (or lack) and forms of social actors' opportunities for action and interaction.

*Opportunities for action and interaction* between social actors are the formal and informal arenas which provide the 'openings' for social actors to share their

views and concerns, about issues affecting their action-relevant context with a view of bringing about desired changes.

The effectiveness of these opportunities is largely dependent on social actors' access to *informational sources* relevant to their situation. Information, generated within the structure of a society, provides social actors with one of the basic elements needed for an equal and favourable interaction with others. It can also serve to inform actions which are directed at improvement of their livelihoods (Friedmann, 1992).

The extent to which social actors are capable of expressing, analysing, and understanding this information is determined by social actors' *personal attributes*. The elements in this sub-area characterise, and as such are particular to, each social actor. These internal attributes are a result of the life history, experience and educational background of social actors. They are determinant factors in social actors' capacity (communicational, cognitive skills) to be active and effective in their action-relevant context. For the purpose of this model and in the time scale being considered they can be treated as given.

Having a sufficient amount (see Section 2.2.2) of personal attributes, informational sources and opportunities for action and interaction is likely to improve social actors' effectiveness in the *conversion process*. The activities that take place within this process are largely analytical. Analysis helps transform the 'problématique'<sup>53</sup> confronted by social actors into a defined problem structure with identifiable elements and their interrelations. The phrase *problématique conversion process* will be used to refer to this process. These activities thus tend to enhance social actors' understanding of the local development issues that they wish to affect.

Social actors' improved understanding is likely to lead to the achievement of their chosen *functionings*. To achieve particular functionings, this understanding is necessary but not sufficient. Social actors also need to have both the opportunities to act on these desired functionings and the available time to do so.

So far the level of detail which has been used to describe the model is helpful for explaining the broad relationships between the sub-areas which compose it.

---

<sup>53</sup>Problématique is the French term used to refer to a cluster of problems (Quade, 1980) or equivalently a problem situation (Mucci et al, 1989)

However, it does not enable us to make specific statements about how the different sub-areas can contribute to the *problématique* conversion process. For this a more detailed description of the elements, within the sub-areas, and how they operate in generating self-power is required.

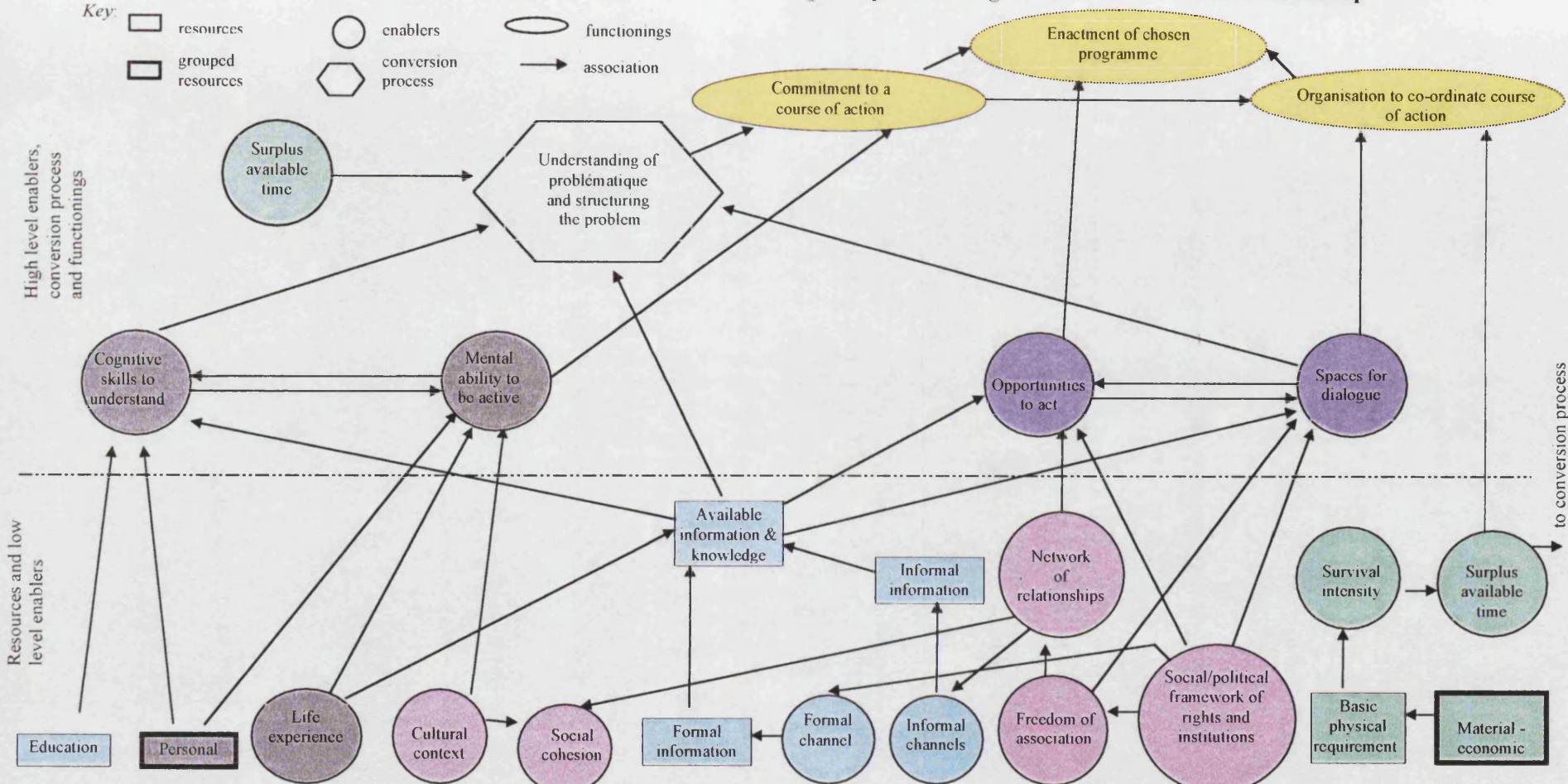
## **4.2 A conceptual model of the empowerment process**

The elements involved in the representation of a process by which social actors can increase their self-power, and how these elements relate to one another is shown in more detail in Figure 4.2. (The colours correspond to the sub-areas in Figure 4.1.) Each element of the model falls into one of four types: resources, enablers, conversion process, and functionings. The resources and enablers are inputs to the conversion process, and are transformed in this process into functionings.

Resources are the assets which permit or constrain social actors' capabilities. The resources included in the model are based on the categorisation in Chapter 2, but various changes of terminology have been adopted and not all the elements have been included to avoid making the model overcomplex. These include the minimum bundle of communicative and social resources, whose relevance has already been explained. These resources will be considered separately. Personal (with exception of life experience) and material/economic resources are also included in the diagram, although in aggregate form for each of these categories. (Resources are indicated as rectangles in Figure 4.2; a heavier border distinguishes those included in aggregate form.) As will be shown, some of the resources of the minimum bundle of communicative and social resources will in practice take the role of enablers.

Enablers are a new type of resource. They are based on Doyal and Gough's conceptualisation of the components of autonomy (see Section 2.2.1). In the process of empowerment, enablers 'activate' other resources; they act as 'facilitators' or 'catalysts'. Enablers will thus be defined as the assets which are provided on an individual basis or a communal basis across society. (They are indicated in Figure 4.2 as circles.)

**Figure 4.2 Conceptual model for increasing self-power: diagram of elements and relationships**



Enablers exist to varying degrees in different societies. The individual consumption of an existing enabler, in principle, does not prevent other social actors from using it.<sup>54</sup> Where an enabler does not exist, then it may in principle be possible to create it through a social process, as will be discussed later in this section.

There are two levels of enablers: higher and lower. The higher level enablers are those which encourage social actors to act by increasing awareness of their situation in their action relevant context (e.g. spaces for dialogue and cognitive skills to understand). The existence of higher level enablers depends on the available lower level enablers and resources.

The lower level enablers are embedded in the basic structure of society in which people live (e.g. social and political framework of rights and institutions, established networks of relationships, cultural context, formal channels of information). This type of enabler provides social actors with the means they need in order to act. For example, a social actor owns a piece of land (his resource) and wants to grow a new vegetable. The national extension agriculture service (the enabler) provides the material resource and the training to grow the new crop.

The conversion process of our model (shown as a hexagon in Figure 4.2) is the main transformation by which inputs (resources and enablers) are transformed into functionings. The conversion process significantly finds its justification in the generation of group interaction. In the conversion process of particular interest to this research, the process operates to transform the *problématique*, with the assistance of analysis, into a structured problem.

Based on this analysis, the functioning ‘commitment to a course of action’ is expected to be achieved. (This functioning is shown as a solid border oval in Figure 4.2.) Functionings, following Sen, are the achievements of social actors. These achievements represent, in the context of our model, increases in self-power. ‘Enactment of a chosen program’ and ‘organisation to co-ordinate courses of action’ are examples of functionings which are beyond the bounds of this research. They have

---

<sup>54</sup>In economics this is referred to as a “public good” or “non-exclusive” resource (Echaudemaison, 1996; Black, 1997).

been included in Figure 4.2 for closure. (These functionings are indicated by dotted ovals.)

Having defined the categories of the elements included in our representation, we are in a position to explain and justify the model shown in Figure 4.2. The relationship between elements in each of the sub-areas which constituted the general map (Figure 4.1) will be described, as well the cross links to elements in other sub-areas. Throughout the discussion, the elements of the model will be indicated in italics. The definitions of the resources and enablers which will be included in the discussion of the model are summarised in Table 4.1.

The notation of Figure 4.2 for the relationship between elements is organised in terms of the factors which influence the *problématique* conversion process. In many cases the relationship is in fact two-way. An element which contributes to or affects another element, may also be influenced itself by the latter. For example, 'spaces for dialogue' may be necessary for the *problématique* conversion process to be carried out; but the latter may also help to generate such a space. Thus many of the unidirectional links, so represented for clarity, correspond in practice to a relationship of mutuality.

The concentration on the factors required for the *problématique* conversion process to occur has also contributed to a further simplification of the representation in Figure 4.2. There are numerous interactions between the elements of the model which bear only indirectly on the conversion process, and so are not shown in the diagram.

The most influential elements in our model for empowerment are those in the material base (shown in green in the bottom right corner of Figure 4.2). This is because the participation of poor and disadvantaged social actors, in decisions and activities that directly affect them, depends not only on their capacity and interest to do so, but most significantly on their *surplus available time*. This is the time above and beyond that needed for subsistence activities (Friedmann, 1992). How much surplus available time do these social actors have?

**Table 4.1 Description of the elements that operate in a model of one of the processes by which self-power is generated**

CATEGORY	ELEMENT	DESCRIPTION
Resources	Education	Cognitive (including writing, arithmetic) and communication skills.
	Formal information	Official communications of the government which are available to social actors provided they have access to official channels.
	Informal information	Information generated by the interaction between social actors and available through informal channels.
	Available information and knowledge	Information which social actors have about their action-relevant context, and knowledge gained through their life experience.
	Material/economic resources	See Section 2.1.2
	Personal resources	See Section 2.1.2
	Basic physical requirements	Survival needs of social actors such as food and shelter.
Lower level enablers	Social and political framework of rights and institutions	Provides the foundations on which the basic norms that guide the lives of individuals in a society are defined. These basic norms are generally established through legislation and collected in a fundamental law - the constitution.
	Freedom of association	The extent to which social actors are allowed to organise for a shared purpose.
	Network of relationships	System of social actors' relationships formed through their interactions at friendship, kinship, school, work, and private associations (e.g. cultural, sport, political, economic, professional).
	Formal/official channels of communication	The mechanism through which governmental entities, such as the communication secretariats, transmit official information (e.g. governmental press releases, speeches and reports).
	Informal channels of communication	Channels of communication generated by the networks of relationships of social actors.
	Cultural context	The social norms, values and beliefs in society.
	Social cohesion	The strength of bonds between social actors.
	Life experience	The events throughout social actors' lives which contribute to the formation of their visions and opinions concerning their action-relevant context.
	Survival intensity	The extent of the effort social actors must put in for survival activities.
	Surplus available time	The time social actors have, above and beyond that needed for subsistence, for involvement in activities and decisions that directly affect them.
	Information processing	Organisation and analysis of information.
	Analytical tools	Tools used for the detailed examination of problematic situations.
Higher level enablers	Cognitive skills to be understand	See Section 2.2.1
	Mental ability to be active	See Section 2.2.1
	Opportunities to act	See Section 2.2.1
	Spaces for dialogue	See Section 3.3

Surplus available time is determined significantly by the *material-economic resources* (e.g. money, shelter) social actors have. This is because these are the resources with which they can satisfy their *basic physical requirements* (i.e. survival needs such as food and shelter). The degree to which these requirements are satisfied will determine the extent of the effort that social actors must put in for survival and subsistence activities. This will be referred to as *survival intensity*. Thus, the less satisfied are the basic physical requirements, the higher the survival intensity. The higher the survival intensity, the higher is the proportion of social actors' time and efforts likely to be invested to securing their material-economic resources. (Friedmann, 1992; Rosenstone and Hansen, 1993). This is thereby a vicious circle which will tend to hinder these social actors' possibility of participating, and so generate changes in their action-relevant context.

This possibility of becoming involved in broader, collective decision-making processes depends also on the existing social and political base of the society of which they are part. This sub-area is made up of five enablers: the social and political framework of rights and institutions; freedom of association; networks of relationships social cohesion; and cultural context. (These elements are shown in pink in Figure 4.2)

The *social and political framework of rights and institutions* provides the foundations on which the basic norms (for stability and order) that guides the lives of individuals in a society are defined. These basic norms are generally established through legislation and (in most countries) collected in a fundamental law – the constitution. The role of the state in establishing this framework is evidently crucial.<sup>55</sup> It determines the extent to which the policy environment is conducive to fostering and strengthening the organisation and participation of social actors in the improvements of their local environment (Friedmann, 1992; Clark, 1995; Abbott, 1996).

According to Annis (1988, p. 217), policies defined by the state are decisive in determining the character and capacities of grassroots growth. Sewell and Coppock (1977) propose that provision of enabling legislation and alteration of the existing

---

<sup>55</sup> See Midgley (1986), for a thorough discussion of the role of the state in community participation in development.

administrative structure are among the ways in which the state can induce a greater degree of participation. Others (Galston, 1996; Berger and Neuhaus, 1996) argue that the state can foster mediating institutions which intercede between the private life of individuals in society and the broader public life with a view to promoting empowerment. In other words, the state can act as a positive force for empowerment (Galston, 1996).

This social and political framework secures certain rights for individuals. One of these rights – *freedom of association* – is the extent to which social actors are allowed to organise for a shared purpose. Without it, individual's liberty to act collectively will be significantly curtailed (Galston, 1996). This enabler is shown separately (rather than as part of the social and political framework of rights and institutions) because of its significant role in enabling interactions between individuals. Individuals are likely to be disempowered not only if the state restricts their associational freedom, but also when it allows one type of civil association to dispossess others of basic liberties (ibid.). This restriction can be expressed in terms of a potential reduction in their negative freedom (see Section 2.2.1) since government norms could be seen as preventing individuals from associating with others. The infrastructural provision for freedom of association and the associational bonds created are essential for the establishment of networks of relationships.

A *network of relationships* is the system of social actors' relationships which is formed through their interactions at friendship, kinship, school, work and private associations (e.g. cultural, sport, political, economic, professional). These formal and informal networks can be important for reducing the differences (e.g. wealth, culture) that may separate social actors (Friedmann, 1992). Networks of relationships tend to foster solidarity between social actors, strengthen the community, support co-operative problem solving and reinforce the possibility of securing social change (Midgley, 1986; Friedmann, 1992; Brown and Asman, 1996).

The strength of bonds between social actors is their *social cohesion*. Evidently, there are more networks in societies which are themselves socially coherent, i.e. which have a greater degree of solidarity, than those in which social cohesion is low (Blau, 1974). This tends to imply that social actor participation is more likely to develop in communities which are less fractionalised, more coherent (Bermejo and

Bekui, 1993).<sup>56</sup> For example, social actors in communities that are coherent and well-integrated will tend to work more effectively together to generate changes that they deem important for their lives.

Cohesiveness in a society is largely influenced by the behaviour of social actors and the form and character of the interactions between them. The *cultural context* of the society which they are part of significantly determines their behaviour and interactions with others (Edwards and Jones, 1976; Brownlea, 1987; Doyal and Gough, 1991; Kleymeyer, 1994).<sup>57</sup> This context is the structure of social norms, values and beliefs. Culture tends to be a determinant factor, for example, in the standards of expected behaviour among social actors. There may be differences for men and women or through social hierarchies (Edwards and Jones, 1976). The cultural perception of the problem situation may also vary. Bermejo and Bekui (1993) have discussed, for instance, how differences in perception about causality of disease affect people's behaviour. The acceptance, whether implicit or explicit, of the practice of clientelism (Friedmann, 1989) is also likely to influence the behaviour of social actors and their interactions with others.

Based on this discussion of the social and political base it can be argued that the existence (or lack) of opportunities for action and interaction of social actors is largely determined by the different elements in this sub-area. Among these elements, the networks of relationships (Rosenstone and Hansen, 1993) and the social/political framework of rights and institutions (Midgley, 1986; Friedmann, 1992; Warren, 1995; Baynes, 1995) appear to be particularly relevant for the generation of opportunities for action and interaction.

This sub-area is made up of two higher level enablers shown in purple in Figure 4.2. *Opportunities to act* (the third component of Doyal and Gough's autonomy) are the available openings where social actors have the possibility of 'pulling a lever', of exercising their influence. Social actors are not likely to take advantage of these

---

<sup>56</sup>Evidently, by establishing the importance of social cohesion for networks of relationships and participation it is not our intention to imply that communities in the Third World are or can be a homogenous and undivided mass of co-operative people (Midgley, 1986; Stone, 1989)

<sup>57</sup>Menike (1993), a Sri Lankan peasants' leader, discusses the importance of recognising the culture of the poor when implementing development programs. The study undertaken for a watershed development project in Nepal discussed by Stone (1989) illustrates some of these issues.

opportunities unless they are convinced that their involvement in planning and policy-making, for example, is likely to make a difference (Sewell and Coppock, 1977).

Prior to acting, there is clearly a need for dialogue between social actors which, as has been discussed in Section 3.3, occurs in *spaces for dialogue*. It may be recalled that it is through group dialogue that social actors can critically reflect on their problem situation with a view to uncovering its causes. Critical thinking, however, goes beyond dialogue (perception) and leads towards action. Action may in turn generate the need for further dialogue. Dialogue and action thus form a continuous cycle of action and reflection (Wallerstein, 1993). This cycle is indicated in Figure 4.2 by two-way arrows between these two enablers.

The effectiveness of this cycle will tend to be improved if there is a sincere exchange of available information and knowledge between the social actors involved (see Habermas's conditions for an ISS in Section 3.3). This is because without an exchange or with a poor quality exchange of speech acts, the decisions and choices made and actions taken are likely to be based on partial truths and characterised by high levels of uncertainty (Beresford and Croft, 1993).

*Available information and knowledge* is a resource which can reach social actors through a two-stage process, involving both the existence of the information, and its accessibility to them. *Formal* and *informal channels* of communication are the mechanisms which exist in societies to transmit information to and between social actors. Both formal and informal information are generally available in society in a 'latent' form. These types of information are not likely to become available to social actors unless the channels of communication are activated. This can occur most commonly through networks of relationships (Friedmann, 1992; Brown and Ashman, 1996) or more formally through mechanisms created by the state and mediating institutions (Berger and Neuhaus, 1996; Galston, 1996). In other words, the channels are enablers of information.

The closing-off of information, particularly of the formal kind, can often be a crucial control mechanism. This mechanism of control inhibits social actors' awareness, among other things, about what is being decided, what resources are available (Green, 1992), or issues of strategic importance (Brownlea, 1987) for the

more powerful social actors. As a result there is likely to be selective access to information. Differences in this access between social actors will tend to become apparent in the interactions that occur (or not) in spaces for dialogue.

The resource of *available knowledge* of social actors is generated, also through interaction with other social actors, by their life experience, and by education. (These two personal attributes will be discussed below). There is tacit knowledge that social actors have about their environment. The events surrounding social actors' lives contribute to expanding their knowledge about their action-relevant context and how it works (Beresford and Croft, 1993).

There is a particular type of knowledge whose importance is frequently emphasised in the development literature (see for example, Chambers, 1983; Haverkort et al, 1991; Scoones and Thompson, 1994), namely indigenous technical knowledge (ITK) or alternatively, rural people's knowledge (RPK). This type of knowledge is related to activities of everyday life, and originates from and is naturally produced in rural areas.<sup>58</sup> It emphasises the practical nature of the knowledge which is *in* people (i.e. rarely recorded in writing) about the area in which they live. These people have a knowledge system which includes "concepts, beliefs and perceptions, the stock of knowledge, and the processes whereby it is acquired, augmented, stored, and transmitted" (Chambers, 1983, p.83). As will be discussed in Section 5.2.1, Chambers argues for the importance of this resource of knowledge in reversals of learning and sharing between local people and outsiders, specialists and professionals.

In terms of our model, RPK is a crucial resource for the effectiveness of analysis which is to be undertaken during the empowerment process. Not including it in analysis is likely to result in decisions and actions based on partial truths and beliefs, and in particular could lead to problems of commitment and implementation on the part of the intended beneficiaries of the process of empowerment. The above five elements, which make up the informational sources sub-area, are shown in blue in Figure 4.2.

---

<sup>58</sup> Although these terms emphasise rural knowledge, there is clearly also a knowledge system in poor urban communities.

Available information and knowledge require the intervention of social actors in order to be used to make judgements, to shape and voice their views, or in negotiations with others. This is less likely to be effective, the lower the level of *cognitive skills to understand* that social actors have. These skills largely depend on *education* (See Streeten, 1981; Stewart, 1985; MacPherson and Midgley, 1987; Friedmann, 1992). It is foreseen that with this resource social actors gain in cognitive (including writing, arithmetic) and communication skills (Hall, 1986). Clearly, the lower the educational level, the less likely that these social actors will have the opportunity to make a purposeful use of the available information and knowledge (Rosenstone and Hansen, 1993).

Education is thus instrumental for social actors' analysis and reflection of their action-relevant context. Nevertheless, social actors' personal *life experience* provides them with an unquestionable 'baggage' of knowledge and information which also gives them skills to understand their surroundings. For example, a peasant farmer might not know the names of the different types of clouds, but surely, he is capable of recognising how the sky changes. His 'reading' of the sky will inform him whether the storm, which is approaching, poses a threat or will be a blessing to his harvest. This is also an illustration of RPK.

Social actors' life experience together with their cultural context (see above) contributes to social actors having the *mental ability to be active*. Mental ability to be active, one of the components of Doyal and Gough's autonomy discussed in section 2.2.1, constitutes social actors' confidence and capacity not only to configure options for themselves but also to make choices and act responsibly over the choices made.

The interaction between the high level enablers of *mental ability to be active* and *cognitive skills to understand* may be explained as follows. As social actors gain cognitive skills to understand, they improve their mental ability to be active. And as they improve their mental ability to be active, social actors will in general be able to make better use of their cognitive skills. That is why, this interaction is represented diagrammatically in Figure 4.2, with two-way arrows between these two higher level enablers.

All the elements of the sub-areas which are inputs to the conversion process have now been discussed. The *problématique conversion process* is the catalyst through which resources and enablers of social actors are transformed into functionings. The purpose of the conversion purpose, it may be recalled, is to lead to the functioning of *commitment to a course of action*. The activities that take place in the conversion process are described below.

The description of the conversion process will be made in terms of its inputs, activities within the process, and intermediate products. The conversion process takes as inputs the lower level enabler of surplus available time, the higher level enablers of cognitive skills and spaces for dialogue, and the resource of available information and knowledge. Social actors will only become involved in the conversion process if they have time available to do so. Cognitive skills assist this conversion process by converting the input of available information and knowledge into understanding. And spaces for dialogue are the forums where the conversion process occurs.

The two main activities within the conversion process are *understanding the problématique* and *structuring the problem*. These are not represented separately in Figure 4.2 because, as will be seen, they are so intimately related. *Understanding the problématique* is being able to perceive the factors which might appear to be implicated in a problem situation. In many practical situations there are difficulties in establishing clearly where the “problem” lies (Quade, 1980). The terms “mess” (Ackoff, 1974) and “wicked” (Webber and Rittel, 1973) have been used to describe such problem situations.

*Structuring the problem* builds on the understanding achieved by conceptually putting the problematic elements in a particular relationship with each other. The activity can be carried out in a more or less detailed and sophisticated manner, but is likely to include some or all of – the generation of action options, the recognition of mechanisms of cause and effect, the identification of possible consequences, and their valuation or prioritisation. Provided that social actors have the abilities to understand the *problématique* and structure the problem, then they are more likely to be able to produce the desired functionings.

The intermediate products (which will be discussed in Chapter 5) generated by the conversion process are the understanding and the structure of the problem. These are not shown in the diagram as they are products which, if effectively used, will lead to achieving the desired functioning – *commitment to a course of action*. The extent to which these intermediate products can be successful in generating this functioning, will depend on participants' cognitive skills to understand and mental ability to be active. For social actors to be committed to a course of action, it will tend to be necessary for them to understand their situation and to have the confidence to act based on that understanding. (Being committed to a course of action however will apparently be effective if the activity of *organising to co-ordinate the course of action* is carried out. This functioning has not been considered here in detail, as our focus has been on the possible roles for analytic assistance.)

Improvements in any of the model elements, which operate in an empowerment process, can in principle generate resources which can support increases in the self-power of social actors. In other words, the elements have cumulative and mutually supportive property in that each is a contribution to empowerment. For example, if there is a group of poor peasants, with scanty physical resources, and which also has a significant deficit in other types of resources, then each addition, including the addition of more food, will make a contribution to increasing their self-power. So in itself improvements in enablers or gains in resources contribute to increase self-power. Some examples of the former are: having more opportunities to act, having spaces for dialogue, being free to associate; having networks of relationships, having better social institutions, having better political rights. Examples of gains in resources include having information (whether formal or informal), having a house, having a truck, taking a course, learning a skill.

The various resources and enablers, as well as the conversion process itself, operate to generate empowerment in the following way. The extent to which social actors have access to resources and enablers will condition the activation and effectiveness of the conversion process. Involvement in the conversion process implies that social actors have made effective their potential capacity to activate some of those resources and enablers. So beginning to participate in the conversion process itself can be seen as an indicator of an increase in self-power. Once the conversion

process ends, any improvements in resources and enablers, and the potential generation of functionings means that the community empowerment process has succeeded in increasing participants' self-power.

The process by which self-power can be maintained or augmented has been described in terms of resources, enablers, a conversion process and functionings. Nevertheless, the interest in this thesis is in the analytic contribution of PSMs to increasing self-power. The element in the model in which these methods potentially have a significant role to play is the *problématique* conversion process.

This process has not yet been described in detail. One factor whose presence or absence might be expected to make a difference to the effectiveness of the conversion process would be that of analytical tools. These tools are sets of systematic, formal processes which have as their practical purpose the detailed examination of problem situations. Analytical tools might be helpful, for example, in situations in which there are difficulties in handling complexity especially if the cultural preparation of participants is limited. A more detailed representation of the conversion process in which the role of such tools is clarified will be described next.

### **4.3 The role of analytical tools in the conversion process**

There is a widely accepted view that the benefits of analytical assistance in organisational decision-making are: social actors' engagement in the critical evaluation of their problems, in their classification and prioritisation, in the identification of factors and their cause and effect relationships, and in the assessment of possible courses of action and consequences, all with a view to making informed and conscious choices. (Rosenhead, 1989a, 1993; Friend, 1998)

Participative planning methods incorporate the use of analytic tools because their guiding principle is that people themselves (e.g. the poor and disadvantaged) are capable of critical reflection and analysis, and their knowledge is relevant and necessary (Chambers, 1983; Annis and Hakim, 1988; Scoones and Thompson, 1994). Participatory development planning methods (PDPMs) and problem structuring methods (PSMs) are two families of participative methods which have been

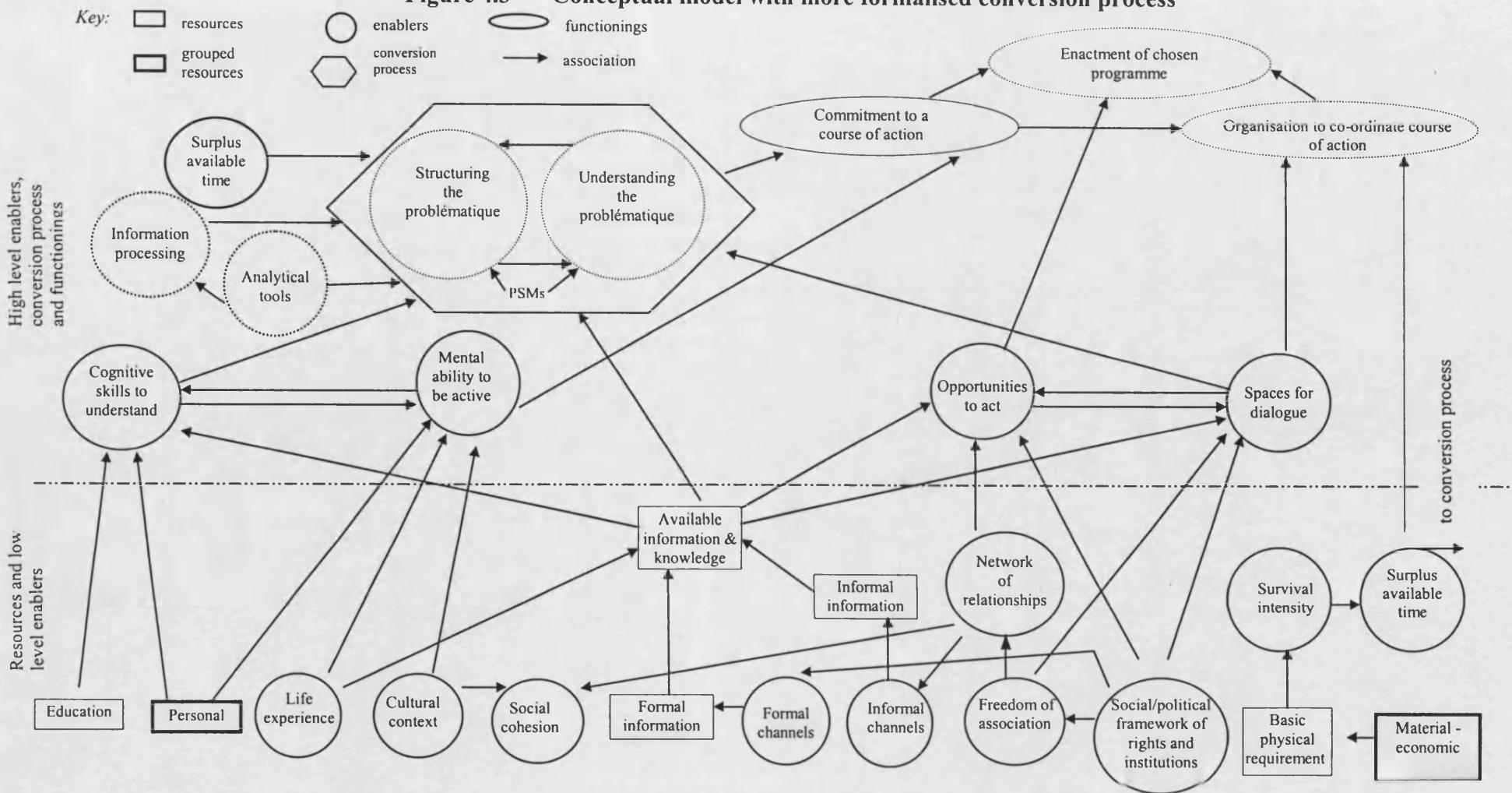
developed independently. As will be seen in Chapter 5, PSMs share several fundamental characteristics of PDPMs (e.g. a bottom-up approach to planning, low quantitative data requirements). However, PSMs will be shown to be distinguished from PDPMs (and specifically from PRA) in a number of ways, notably in offering enhanced technical options.

This thesis can now be seen as exploring whether PSMs are potentially valuable in assisting the poor's active and effective involvement in the *problématique* conversion process. In order to clarify the possible role of PSMs in this process, it is first necessary to establish what functions that analytic assistance needs to perform if it is to contribute to the process of generating self-power.

The conversion process, as we have seen, has two component activities – *structuring the problem* and *understanding the problématique*. These two activities operate cyclically. By this it is meant that as the problem is structured, understanding is improved; and as improved understanding is achieved, problem structure is further clarified. In other words, the problem structuring that occurs in the conversion process enables the social actors involved to understand the system better, and viceversa. This modification has been incorporated to our model as shown in Figure 4.3. The two activities are represented as enablers within the conversion process (shown in dotted circles). They act as catalysts which help the activation and operation of the process. (The dialogue types discussed in Section 3.3.1 are relevant to this process.)

Two further enablers are relevant to any problem structuring activity. These are *information processing* and *analytic tools* (also shown in Figure 4.3 in dotted circles). Information processing is used to help organise and analyse information about the problem situation which is being studied. These tasks can be supported with the use of information technology (such as computer hardware and software, calculators). For example, if one of the tasks were to be the tabulation of information on the state budget, then although it would be easier to complete this task with the help of a spreadsheet programme, the spreadsheet is not necessary for the tabulation.

**Figure 4.3 Conceptual model with more formalised conversion process**



The analytical tools of prime interest to this research are clearly PSMs. As will be discussed in Section 5.3, the claim made for these methods is that they tend to generate commitment to consciously chosen and informed courses of action. Our conceptual model, it may be recalled, is focused particularly on a *problématique* conversion process which leads to the functioning of “commitment to a course of action”. In so far as they contribute to this particular functioning, PSMs not only help in committing to a course of action, but also assist social actors to find one which they prefer. With the addition of PSMs in Figure 4.3, the representation of the *problématique* conversion process is enriched. However, there remains the question of which elements can be considered affected in this process of empowerment as a result of the application of PSMs.

Although the principal effects of PSMs can be expected to manifest themselves within the conversion process, several other elements in the model can be affected either directly or indirectly by their application. For example, PSMs may also have an indirect effect on networks of relationships, since the collective PSM-supported conversion process implies some level of mobilisation. However, as will be explained in more detail in Section 6.3.3, our concern will be limited to the expected principal and direct effects – specifically those which are within one-step of the conversion process.

These effects are quite various. Thus social actors may enhance their cognitive skills to understand as they learn about and apply analytical tools that assist them, and which they may use again. The experience of being involved in the process of conversion may also tend to activate social actors’ awareness and self-confidence.

The activities of problem structuring and of understanding the *problématique* that make up the conversion process can expand social actors’ available information and knowledge through the resulting improved understanding and articulated problem structure. With the assistance of PSMs in these activities dialogue<sup>59</sup> is likely to be improved, thereby having an effect on spaces for dialogue. These elements which can be potentially affected directly by PSMs, together with the principal effects in the

---

<sup>59</sup> The type of dialogue (see Section 3.3.1) to be carried out in the conversion process depends on the characteristics of the *problématique* being structured and on the unity of purpose (or lack thereof) of participants.

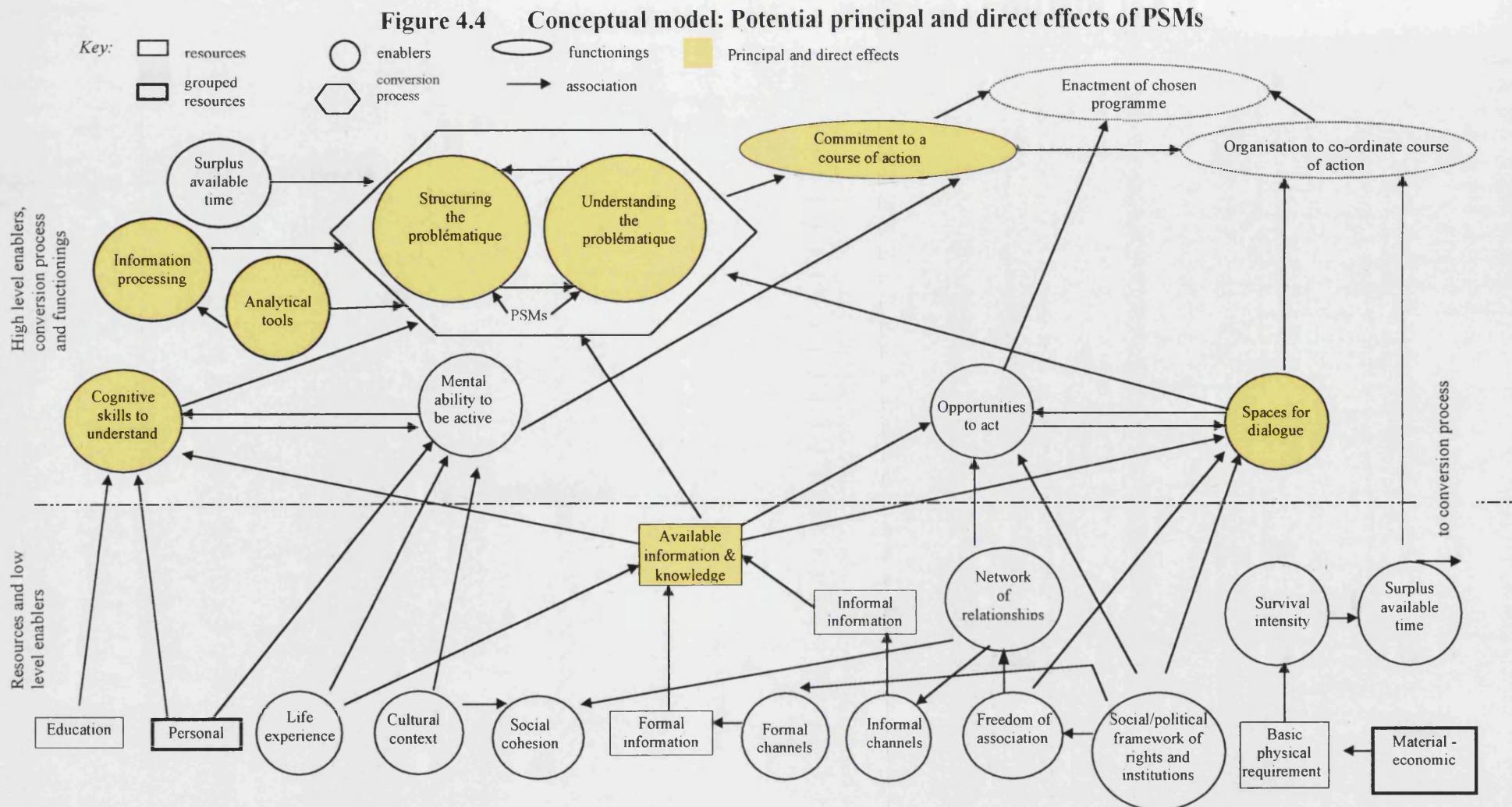
conversion process itself, are highlighted in yellow in Figure 4.4. They will provide the basis for the discussion of our case study in Chapters 6 and 7.

Based on the conceptual work carried out in the development of this model, it is now possible to elaborate a more precise hypothesis, derived from our research strategy proposed in Chapter 1. The general purpose of this strategy, it may be recalled, was to clarify the potential role of the analytical assistance provided by PSMs in helping poor and disadvantaged social actors to achieve more effective control over their decisions and activities concerning their local development.

The hypothesis can now be rephrased as follows:

The analytic assistance provided by PSMs to a process of empowerment can be expected to operate principally through improving their understanding of their problematic situation, and through providing structure to this understanding. PSMs generate this effect through improving the quality of dialogue between participants. Effects can also be expected on the provision of space for dialogue, on cognitive and information processing skills of participants, and on the availability of relevant information and knowledge. In combination these effects should tend to impact positively on commitment to a course of action, and on longer-term increases in self-power.

The characteristics of PSMs and other participatory methods will be discussed in detail in the chapter which follows, in preparation for the description of their application in a case study in Mexico.



## Chapter 5

# *Problem Structuring Methods and Participatory Development Planning Methods*

The change in emphasis of development theories from a purely economic growth focus to a more people-centred, participatory approach to development<sup>60</sup> has been associated with the emergence of numerous participatory development planning methods (PDPMs). Evidence of the significance of the spread of these methods can be found in the extensive literature on development planning experiences in Third World countries.<sup>61</sup> The wide promotion, acceptance and use of PDPMs by governments as well as by non-governmental organisations and development agencies have been major contributing factors to this spread.<sup>62</sup>

In parallel with this process, but so far with almost no interaction, a family of participatory methods have been developed within the discipline of operational research (OR). These methods, which have been termed problem structuring methods (PSMs), have been mostly applied in industrialised countries particularly in Europe (more extensively in the United Kingdom - the cradle of PSMs), Canada, and New Zealand. Nevertheless, the knowledge and application of PSMs in the Third World has been increasing (see for example, Mingers and Taylor, 1992; White, 1994; Macías-Chapula, 1995). Indeed claims have been made in favour of the usefulness of PSMs in grassroots, community based planning both in Third World situations and in community OR. (See for example, Bornstein and Rosenhead, 1990; Thunhurst, 1992,

---

<sup>60</sup>Predecessors to people-centred development date back to 1950s with the community development and conscientisation movements (See Appendix A for a review of development theories).

<sup>61</sup>See for example the compilation of experiences provided in Slocum et al, 1995; Cornwall et al (1993); PLA Notes Series (formerly RRA Notes) of the International Institute for Environment and Development (IIED), London.

<sup>62</sup>Among the numerous development agencies which promote participatory approaches to development are: European Bank for Reconstruction and Development (1995); Food and Agriculture Organisation (Molnar, 1988; Huizer, 1997); GTZ (1994; Eschborn, 1996); Inter-American Development Bank (1997; Schwarz and Deruyttere, 1996); United Nations Development Programme (1998); World Bank (Bamberger, 1986; World Bank, 1996; Ayerigg, 1998); and World Resources Institute (Zazueta, 1995). Among the non-governmental organisations which have used participatory methods are (in alphabetical order): Action Aid, CARE, Oxfam, Outreach, MYRADA, Save the Children, and World Neighbours.

1996; ICORD '92, 1993; Rosenhead, 1993, 1996; White, 1994; White and Taket, 1997).

The purpose of this chapter is to analyse PSMs and PDPMs based on their potential usefulness in Third World development planning. PDPMs, and in particular, Participatory Rural Appraisal (PRA) - the most widely applied PDPM - have already demonstrated their ability to be useful in practice. By contrast, the relevant experience or use of PSMs in development is extremely limited. This reaffirms this research's purpose to explore whether and how PSMs can be employed usefully in this context. This chapter focuses on identifying whether or not there is a distinctive role for PSMs either independently or in combination with PRA.

Different frameworks have been used in the literature to structure separately discussions about each of these two families of methods. Given the scarcity of literature about PRA and PSMs together (the work of White and Taket, 1997; Fassolo, 1997; and Friend, 1998 are exceptions), there is no developed framework for an analysis of the kind proposed.

The chapter is structured as follows. Section 5.1 discusses the particularities of the Third World decision-making environment. This discussion will be used as a basis to identify a possible role for independent use of PSMs in Third World development planning. Sections 5.2 and 5.3 present the general characteristics of PRA and PSMs, respectively. These overviews will be used in the comparison of these two families of methods which is carried out in Section 5.4. Finally, Section 5.5 explores the issues concerning the acceptance of PSMs as an innovation by Third World grassroots groups.

## 5.1 Third World decision-making and development planning

Some general aspects of the Third World environment have already been presented in Chapter 1. That discussion emphasised broadly the macro-conditions of developing countries such as continued dependency on their more developed counterparts, prolonged economic crises, high structural and growing poverty, high

unemployment rates, increasing population, and low levels of education. What is intended in this section is to discuss certain intermediate-level aspects of the Third World planning and decision-making environment which make it different from that in developed countries. Development planning approaches and methods will then be analysed based on the changes which have occurred to accommodate development beneficiaries' involvement in the planning and decision making processes which have a direct impact on their lives.

### *5.1.1 Characteristics of Third World decision-making*

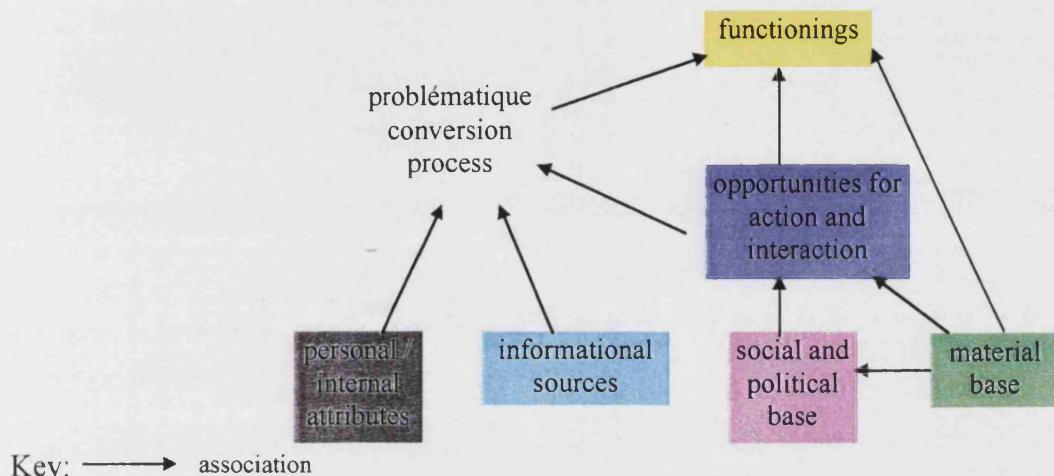
The Third World decision-making environment is as varied as the number of countries which compose it. Numerous analyses have identified a complex web of historical, economic, political, social, cultural, demographic, and informational factors which confluence to shape the processes of taking and implementing decisions in particular societies. (See for example, Ackoff (1977); Grindle and Thomas (1991); Sagasti (1988, 1992); Todaro (1994); Filgueira and Lombardi (1995).) Despite the inherent differences between countries, it is nevertheless possible to identify some common trends in decision-making environments in the Third World (Grindle and Thomas, 1991; Todaro, 1994).

A detailed discussion about the full range of factors is beyond the scope of this thesis. For the purposes of our research, particular attention will be given to those conditions which facilitate or hinder the involvement of poor and disadvantaged groups in decision-making processes which directly affect them. The reason for this emphasis is that our investigation seeks to explore the potential contribution of analysis, particularly that provided through problem structuring methods, in the empowerment of these groups. (See Section 3.1 for a discussion of the concept of empowerment). First, however, a brief review of some general aspects of Third World decision-making will prepare the ground for the more focused discussion.

The review will be structured around the components of the model of the analytic contribution to empowerment developed in Chapter 4, the overview diagram of which is reproduced below as Figure 5.1. As may be recalled, the model is

composed of seven sub-areas each of which can be further divided into enablers and resources. Here the focus will be on the sub-area level.

**Figure 5.1 Overview diagram of the analytic contribution to empowerment**  
(reproduction of Figure 4.1 from p. 73)



The discussion in this section will be structured around five of the sub-areas in Figure 5.1, namely material base, social and political base, opportunities for action and interaction, personal/internal attributes and informational sources. Particular emphasis will be given to the social and political base as it helps to explain the institutional arrangements which characterise decision-making in the Third World. The discussions draws largely on the work of Sagasti (1988; 1992); Grindle and Thomas (1991) and Todaro (1994).

One of the key aspects which significantly restricts the extent of involvement of the poor and disadvantaged in decision-making activities is their *material base*. In many developing countries the middle class is disappearing and the number of families living below the poverty line is increasing (Grindle and Thomas, 1991). These trends have resulted in deepening the survival intensity (the extent of the effort social actors must put in for survival activities) of the poorer sectors of the population (see Chapter 4). The resulting lack of surplus available time generally decreases the amount of time they can dedicate to community organisations and to participating in decision-making activities (Rosenstone and Hansen, 1993; Chambers, 1997).

Moreover, the devotion of the poor and disadvantaged to the needs of subsistence is likely to lead to individualisation of community members (de Kadt, 1982). This individualisation in turn negatively affects social cohesion and obstructs relationships with other social actors (as discussed in Chapter 4). It is in this way that the material base may influence the social and political base in a society.

The *social and political base* of a developing country conditions the existence and forms of action and interaction of its population. In the majority of Third World countries, decision-making responsibilities are highly centralised (Grindle and Thomas, 1991). National governments make major decisions which affect the population - from those living in large capital cities down to those living in remote villages. Governments are confronted with the task of responding both to the changing international context (e.g. international trade, aid, globalisation), and to internal demands from diverse societal interests. The rapid and erratic changes in developing countries and their political instability generates continuous demands on government and makes continuity of decisions and plans difficult. This environment of uncertainty does not facilitate effective decision-making processes (Grindle and Thomas, 1991; Sagasti, 1992; Todaro, 1994; Fassolo, 1997).

In the institutional arrangements for planning and decision-making in Third World countries (as in developed countries, although in a less acute form), it is quite common to identify, within central government, a separation of planning offices from daily decision-making, and a lack of interaction and co-ordination between government ministries (which results in sectoral separations), and between central and peripheral administrative levels. This lack of integration, communication, and co-ordination results to a large degree from: interministerial personal and departmental rivalries (e.g. ministry of finance and planning offices are often in conflict rather than work in co-operation); the continuing competition between different sectors and levels over scarce resources (which, as will be discussed, contributes to corruption); and the diversity of interests of different social groupings which can easily tend to conflict situations. Integrated decision-making requires information (as will be discussed further in Section 5.1.2), negotiation and continued consensus building. However, in most of the developing countries continuous dialogue and communication between

planners, administrators, political leaders, and the population tends to be scarce or unsuccessful. (Todaro, 1994).

The outcomes of non-integrated processes tend to be incompatibility, omissions, overlap or duplication of services; and contradiction between sectoral programs, and between central level and peripheral ones. Since the government itself does not integrate, it is necessarily not very good at co-ordinating its activities with those of NGOs. (See Sagasti, 1992; Todaro, 1994; Filgueira and Lombardi, 1995).

Institutional arrangements like these clearly enable powerful interests to have a strong influence on those parts of the government process which are of most concern to them without undue consideration of its links to other aspects of policy. However, those who do not have a powerful interest group and whose living conditions are affected by a wide variety of policies have no place where they can attempt to achieve redress. The interests and preoccupations of the poorer groups of the population tend to be placed in a second-order of importance. The more powerful social actors most commonly act on behalf of their own interests rather than collective (general) ones.

So far, this discussion has focused on aspects of different sectors and levels of government institutions. However, different interest groups also wish to influence decision-making processes through their demands on government. Such interest groups in developing countries can include industrialists, religious movements, the military, trade unions, the media, large landowners, bankers, shanty town dwellers, subsistence farmers, and landless/migrant labourers.

There are differences between interest groups in developed and in developing countries (and indeed their extent of organisation and influence varies among Third World countries). Such groups are generally less organised and less influential than is the case in developed countries. However, by contrast to developed countries, small and powerful elites rule, directly or indirectly, to a greater extent in developing countries. In developed countries, interest groups are more institutionalised and have more formal mechanisms to access government (e.g. lobbying activities) than in the Third World. That is why the connection between societal interests and the decision-making processes of developing countries is more difficult to identify. (Grindle and Thomas, 1991; Todaro, 1994).

In developing countries, large segments of the population (e.g. peasants, indigenous tribes) are neither organised nor prepared for a continued input to decision-making. Many centralised governments do not formally recognise peasant or indigenous organisations, which are thus not represented in the processes of taking decisions (de Kadt, 1982; Grindle and Thomas, 1991; Kleymeyer, 1994). The lack of access to the closed decision-making processes tends to incite excluded groups or individuals to public protest or to the use of other informal mechanisms. Among these are: corruption (e.g. use of bribes, exchange of favours), patronage, and clientelism (e.g. contacts and connections). These informal, common practices are widely accepted as part of the culture and customs of developing countries (Ackoff, 1977; Grindle and Thomas, 1991; Todaro, 1994; Filgueira and Lombardi, 1995).

In summary, in the highly centralised systems of most developing countries, in which the interaction and communication between the centre and the periphery is largely controlled by the centre, the scope for participation by local people is significantly reduced, and particularly for poorer segments of the population. In cases where they are able to participate, their influence on decisions tends to be limited (de Kadt, 1982). Thus in centralised systems, it is more difficult for peripheral groups to find a “space for dialogue” (see Section 3.3), which is one of the elements of the *opportunities for action and interaction* sub-area.

Decentralisation,<sup>63</sup> in principle, increases the interaction between the centre and the periphery, and carries with it the potential to stimulate the participation of local people, through local organisations (e.g. local government, co-operatives, women's and peasant organisations), in decisions concerning their own development (de Valk, 1990a, 1990b). Such initiatives imply increases in the responsibilities of peripheral and local level actors and creates the need to enhance their decision-making capabilities. The adoption of these new responsibilities by poor and disadvantaged groups, particularly those related to their personal attributes and informational

---

<sup>63</sup>For readings on decentralisation see the work by Rondinelli, 1984; Mills et al, 1990; de Valk, 1990a, 1990b; Meenakshisundaram, 1994.

resources, is problematic.<sup>64</sup> The following discussion of these conditions is predominantly based on the work of Grindle and Thomas (1991).

*Informational sources*, in principle, provide social actors with one of the key elements needed for a more equal and favourable interaction with others. However, in the case of poorer segments of the population access to information about central level activities, which bears on their action-relevant context, is difficult. As may be recalled from Chapter 1, in developing countries the involvement and influence in decision-making processes of poor and disadvantaged groups, whether living in rural or urban areas, is generally tenuous. This situation is perhaps more acute for the rural poor. This is because a rural population, which is both dispersed and distant from central government, is less likely to have a significant influence on government than is an urban population. Moreover, difficulties in access to formal channels of communication are common in rural areas, and make the acquisition of knowledge regarding government activities problematic.

The flow of official information just described is top-down. In fact this is only one half of a two-way flow of data and information. In developing countries, as elsewhere, the local level is generally the producer of data (although decentralisation hopes to contribute to changing this) which the central level collects and records. Feedback from the central to local level tends to be limited, which contributes to the lack of integration between levels. Planning carried out at the central level does not necessarily use inputs from the local level. The lack of analysis of data collected locally combined with its unreliability has repercussions on the decisions taken and plans made (as will be discussed in the following section). These are likely, therefore, to be unresponsive to the problems and priorities of the population (MacPherson and Midgley, 1987; Grindle and Thomas, 1991).

Poverty and education (which is a resource within the sub-area of *informational sources*) which jointly serve to explain the differences in access to communication between developing and developed countries. This is because the relationship between poverty and illiteracy tends to be strong. Low educational levels restrict the

---

<sup>64</sup>For a discussion of problems and failures of decentralisation in Latin America, see Filgueira and Lombardi (1995).

scope and the complexity of communication among members of the population about problems facing the country. Inadequate communication is likely to translate into feelings of powerlessness among the more isolated and least informed sectors of the population.

In summary, a large rural population, limited communication and high illiteracy rates combine to produce a situation in which a significant percentage of the population is unaware of important aspects of what is happening to affect their lives, especially when governments are highly centralised. These elements confirm the central role of decision-makers and at the same time distance them from the realities of the lives of their population (Grindle and Thomas, 1991). One consequence is a lack of trust and confidence in government institutions, reinforcing the perception of poor and disadvantaged groups that whatever they do, their situation will not change (Ugalde, 1985).

Some aspects of the Third World decision-making environment have been presented. Their role in generating or maintaining the prevalence of conflict, uncertainty and complexity in developing countries which combine to shape their decision-making processes will be discussed next.

### *5.1.2 Development planning in the Third World*

This section discusses some of the changes that have occurred in development planning approaches and the significance of these modifications for development planning methods. It begins with a clarification of certain terms which will be needed for our discussion of development. This prepares for a brief account of traditional development planning methods, focusing on the limitations specifically concerned with their lack of appropriateness within a participatory development context.

In Chapter 1, development planning was defined as a co-operative process involving a plurality of actors throughout society to identify strategies for guiding social change (Sagasti 1988, 1992). What will be referred to in this thesis as the conventional or traditional approach to development planning falls within the economic growth focus orientation of development thinking (as reviewed in more

detail in Appendix A). This approach to development planning has been led by policy- and decision-makers at the central level, or as Ugalde (1985) calls them - by "armchair planners". It has thus been characterised by centralised planning and decision-making (see Section 5.1.1). Accordingly, it envisages the formulation of national plans by central government planning agencies, and their implementation with the assistance of regional or sectoral authorities (Sagasti, 1988). Professionals, most commonly development economists, follow a prescriptive, top-down approach to development planning which has the effect of confining the participation of the intended beneficiaries of development to the area encompassed within the non-genuine participation boundaries (as discussed in Section 3.2.1) (Chambers, 1997).

Changes in this conventional approach to development began in the 1960s with the realisation of the importance of social aspects of development. These changes gave rise to the incorporation of social considerations into development planning which sought to enrich the traditional approach. However, the conventional approach to development was not entirely replaced.

By contrast to the conventional approach to development planning, the new participatory (or people-centred) orientation requires the intended beneficiaries' involvement as an important factor for the success of development initiatives. Chambers (1994d, 1997) calls this a shift "from the paradigm of things to the paradigm of people". This shift connotes, among other factors, decentralisation of the decision-making process, clients becoming partners, top-down planning being replaced by bottom-up planning, controlled clients being substituted by empowered clients, and power shifting to local people.

Evidently, achieving this shift, where participation and empowerment are keywords, requires major structural changes within society as well as in the development establishment. These modifications affect both social and administrative arrangements and political relations (Cernea, 1992), because procedures and culture need to accommodate participatory management and decentralisation of decision-making (Chambers, 1994).

The technology (tools, techniques and methods) used in conventional development planning support an analysis of the development situation, following a

prescriptive approach, to evaluate alternative courses of action in order to choose between them. Among conventional development planning methods are the Logical Framework Approach<sup>65</sup> and its variants ZOPP and GOPP,<sup>66</sup> and techniques and tools which include social and economic surveys (using standardised questionnaires), forecasting, economic models, and cost benefit analysis.<sup>67</sup>

In these techniques, representativity and objectivity are crucial aims; there is preference for factual over subjective data (Chambers, 1992). The emphasis on objectivity leads to an attempt to keep the degree of involvement between the planner and the beneficiary to a minimum. This distant relationship between the planner and the beneficiary hinders the consideration of local peoples' knowledge, problems and priorities as they themselves might express them.

The lack of opportunity local people have to voice their opinions and be heard within a conventional development planning context, limits their role to that of passive recipients, dependent on development plans designed by others. The 'planned for' are reduced to a dependent role in this paternalistic approach. Furthermore, these plans typically exhibit a lack of sensitivity to local needs and conditions (McCracken et al, 1988; Chambers, 1992; Cornwall et al, 1993).

In support of the bottom-up planning approach, numerous participatory development planning methods (PDPMs) have been developed. Some PDPMs are specifically concerned with assisting people's participation in the analysis leading to decisions which directly affect them. (See Appendix B for a discussion of PDPMs' characteristics and a brief comparison between the different methods). Participatory Rural Appraisal (PRA) is one of the many PDPMs which has been developed, and particular emphasis will be given to it below for the following reasons.

---

<sup>65</sup>For details, see NORAD (1990).

<sup>66</sup>The methodologies "Ziel-Orientierte Projekt Planung" (Objectives-Oriented Project Planning) and "Goal Orientierte Projekt Planung" (Goal-Oriented Project Planning) are widely referred to as ZOPP and GOPP, respectively.

<sup>67</sup>Details about these different techniques and tools, and examples of their application in development can be found in the following: surveys (Chadwick et al, 1984; Frenk et al, 1988, 1994b; Robson, 1993); case studies (Yin, 1989, 1993; Hamel et al, 1994; Stake, 1995); forecasting (Fitzsimmons and Sullivan, 1982; Field and MacGregor, 1987); economic models (Chowdhury and Kirkpatrick, 1993; Todaro, 1994; Pindyck and Rubinfeld, 1998); cost-benefit analysis (Dasgupta and Pearce, 1972; Dreze and Stern, 1985; Woodhall, 1992; Nas, 1996; Kirkpatrick and Weiss, 1996; Heal, 1997; Brent, 1998).

PRA (together with its predecessor Rapid Rural Appraisal) has contributed some of the most interesting recent innovations in participatory approaches, and is widely accepted as the “common denominator” for the large diversity of PDPMs (Mikkelsen, 1995). Moreover, PRA is one of the most widely promoted participatory approaches which explicitly defines as an aim the empowerment of poorer and disadvantaged groups (Chamber, 1992; Scoones and Thompson, 1994). Furthermore, it is among the most widely used participatory methods, with application in a variety of areas and with an extensive geographical coverage.<sup>68</sup>

Some characteristics of PRA are discussed in the section which follows. This review will be used in particular in Section 5.4 which compares PRA with PSMs.

## 5.2 Participatory Rural Appraisal (PRA): its characteristics and technology

In order to explore the scope for PSMs in the area of participatory development planning, it is seems sensible to take as reference PRA, the most commonly applied PDPM in the developing world. This is because the extended experience of PRA can serve to inform PSM promoters and practitioners not only about the needs of poor and disadvantaged groups but also of difficulties encountered in the adoption of participatory methods by these groups.

In this section the literature on PRA is reviewed in order to identify some of its key characteristics. In describing PRA, an attempt will be made to identify characteristics which are significant not only for PRA itself, but for its comparison with PSMs.

However, it will be helpful to divide these characteristics into process and procedure on the one hand and technology on the other hand. PSMs are particularly noted for their tools and PRA for its processes and procedures, although both families of methods have attributes of the other type. As they are introduced in the following

---

<sup>68</sup>Given the widespread use of PRA, it has been given different names in different languages. In French, it is referred to as Méthode Accéléré de Recherche Participative (MARp) (see Gueye and Schoonmaker-Freudenberger, 1991). In Portuguese PRA is called Diagnóstico Rural (or Rapido) Participativo (see Guijt and Neefjes, 1991).

two subsections, members of each category of attributes will be identified distinctively in the text as follows: process and procedure attributes will appear in *italics* and technology characteristics in Arial typeface. The attributes identified in this way are summarised in Table 5.1.

**Table 5.1 Attributes of PRA**

Process and Procedures	Technology
Participative analysis	Representation with diagrams
Interaction between participants	Low technology approach
Clients as active participants	Reduced quantitative data requirements
Professional as facilitators	Accessibility/transparency
Work with groups	Flexibility of tools use
Iterative learning	Diversity of tools
Ownership (of process and outcomes)	Modelling
Non-linearity	

PRA has continuously extended from its beginnings in Africa and India, into numerous other African and Asian countries as well as Latin American ones (Chambers, 1994a, 1994b, 1994c). Originally, PRA was developed for use in rural areas, as its name suggests, and in developing countries. However, it has successfully spread into other settings; for example, to urban areas (Ong et al, 1991; Reusen and Johnson, 1994), and there are an increasing number of applications in developed countries (see Inglis and Lussigne, 1995).<sup>69,70</sup> PRA has been adopted by non-governmental organisations and government field organisations (Chambers, 1994a, 1994b, 1994c). The application areas in which PRA has been employed include, among others, forestry (Clark and Baneerjee, 1996); health (Joseph, 1992; Adriance, 1995; Ssembatya et al, 1995); women and gender (Guijt, 1994; Gandhi, 1996); and food security (Maxwell, 1990).<sup>71</sup>

<sup>69</sup>For experiences of applying other participatory approaches in urban areas see the *Special Issue on Participatory Tools and Methods in Urban Areas (Number 21)* of the RRA Notes series (currently PLA Notes) published by the International Institute for Environment and Development (1994).

<sup>70</sup>Chambers (1997), in the preface to his book "Whose Reality Counts?", questions the appropriateness of the term "Participatory Rural Appraisal" to describe this family of methods. According to him, unlike "participatory", the "rural" and "appraisal" terms are no longer precise. In the case of "rural", there are numerous applications in urban areas, diverse sectors, and in developed countries. "Appraisal" is no longer appropriate because PRA goes beyond finding out and assessment. Therefore, Chambers suggests that the term "Participatory Learning and Action" grasps better the ideas of decentralisation, empowerment, and the support of local people which are inherent in the methods.

<sup>71</sup>A source of continuous and updated information on applications and experiences of PRA is the PLA Notes series published three times a year by the International Institute for Environment and Development in London. The World Bank Participation Sourcebook, published in 1996, compiles

### 5.2.1 Characteristics of PRA

PRA has been defined as “a family of approaches and methods to enable local people to share, enhance and analyse their knowledge of life and conditions, and to plan, act, monitor and evaluate.” PRA promotes bottom-up planning which seeks that the local people, especially the weaker and the poorer, gain in skills, confidence, and knowledge<sup>72</sup> (Chambers, 1994c, 1997).

PRA evolved, in the late 1980s, from Rapid Rural Appraisal (RRA).<sup>73,74</sup> As a result, PRA shares many of its principles with RRA; namely, offsetting biases; triangulation; seeking diversity; optimal ignorance; appropriate imprecision; optimising trade-offs; and reversal of learning. Each is briefly described below.

- **Offsetting biases** - means counterbalancing the biases (spatial, project, person, elite, seasonal, diplomatic) which obstruct outsiders’ contact with local people.
- **Triangulation** - means approaching a topic from a number of different points of view or with a number of different methods to obtain a richer picture of and to

---

sixteen experiences of applying participatory approaches in European, African, Asian, and Latin American countries, including examples of the use of PRA. Chambers (1997, pp. 119-122) provides an extensive list of references of practical applications of PRA in natural resources management; agriculture; people, poverty and livelihood; health and nutrition; and urban areas.

<sup>72</sup>This is the sense that Chambers gives to empowerment. His use of the term is somewhat different from our own. In his sense, empowerment is defined as occurring at a more abstract level, in contrast to the definition used in this thesis which also incorporates material/economic factors (see Chapter 3). However, his definition of the concept can be interpreted as corresponding to positive effects achieved in certain elements in our model, namely, the information processing resources, the enablers of cognitive skills to understand and mental ability to be active.

<sup>73</sup>RRA was developed in the late 1970s by a group of researchers, from the Institute of Development Studies in Sussex, England, headed by Robert Chambers. They were dissatisfied with large scale questionnaires which produced delayed and unreliable results, and found the need for more cost-effective methods of learning about rural life and conditions (Chambers, 1981, 1992; McCracken et al, 1988.).

The landmark book on RRA was published in 1987 by the Khon Kaen University in Thailand based on the proceedings of the 1985 International Conference on Rapid Rural Appraisal. The papers included in this book provide an insight into the early work of the methodology.

RRA was pioneered in the area of rural development planning, particularly in relation to agriculture (Hildebrand, 1981; McCracken, 1988; McCracken et al, 1988; Pretty et al, 1988). However, there are also cases of its application in the areas of health (Walker, 1979; Welbourn, 1992; Melville, 1993); natural resources (Stocking and Abel, 1981); forestry (Molnar, 1989); and in urban areas (Mitlin and Thompson, 1994).

<sup>74</sup>Other methods which have been influential on PRA are: agroecosystem analysis (See Conway 1985, 1986); participatory action research (Fals-Borda and Rahman, 1991; Whyte, 1991; Rahman, 1993); and farming systems research (Shanner et al, 1982). The field of applied anthropology (Scrimshaw and Hurtado, 1987; Bentley et al, 1988) has also influenced the development of PRA. For a discussion of the influences of each on PRA see Chambers (1992, 1997:106-113).

confirm observations about the development situation; thereby it also helps to offset biases.

- **Seeking diversity** - goes beyond the cross-checking done in triangulation. Through sampling (in a non-statistical sense), variability (rather than averages) is sought by looking for, noticing and investigating contradictions, anomalies, and differences.
- **Optimal ignorance** - means selectivity in both the amount and detail of relevant data to be collected.
- **Appropriate imprecision** - means that the relevant data is not collected or analysed to a greater degree of accuracy than is needed.
- **Optimising trade-offs** - means relating the costs of learning to usefulness, with compromises between quantity, relevance, accuracy and timeliness; includes optimal ignorance and appropriate imprecision.
- **Reversal of learning** - means learning from and with, as well as by, local people on the site and face-to-face, and increasing understanding based on their own local physical, technical and social knowledge.

(See Chambers, 1981, 1994a, 1994b, 1997; Pratt and Loizos, 1992; Mikkelsen, 1995.) For more details on these principles see Appendix C.

These shared principles with RRA provide some insight on the ideas which were formative for PRA. The focus in this discussion will be on what has been called the “three pillars” of PRA, because they are the foundations supporting the shift in control of the analysis to local people. The essence of PRA lies in (1) changes in behaviour and attitudes of all those taking part, (2) sharing and partnership and, (3) its methods. These three pillars are mutually reinforcing, as will be explained. The discussion which follows is predominantly based on the work of one of PRA’s main developers, Chambers (1992, 1994a, 1994b, 1994c, 1994d, 1997).

The most fundamental of these three pillars of PRA concerns changes in the relationship between professional and local people (the intended beneficiaries of development). PRA emphasises the importance of role and behavioural changes in a process of analysis which is *participative* and *interactive*. *Clients* are to be treated as *active participants* in the planning of decisions and activities which have a direct impact on their lives. They become partners of the professionals. In this partnership *professionals take the role of facilitators* who assist local people in undertaking and sharing their own investigations and analysis in development planning work, as has

already been discussed in Section 5.1.2. Thus interaction of professionals with clients is an enabling, rather than the directive one characteristic of RRA.

This kind of interaction helps to reduce client dependency on professionals, because the aim of PRA is to transfer project leadership as well as much of the burden of research to the beneficiaries. In other words, PRA attempts to shift control from professionals to beneficiaries (Rifkin, undated; Pratt and Loizos, 1992; Chambers, 1994d). This shift can only occur if the professionals recognise rural peoples' capabilities and allow them to shape their own destiny. These role changes by outsiders, whether academics or development workers, abandoning the belief that their knowledge is superior to local knowledge, are important to the success of PRA (Chambers, 1992).

Expected changes in the behaviour and attitudes of outsiders towards local development work include, among others, learning from and respecting local people; avoiding professional superiority; avoiding professional possessiveness; or in summary, "handing over the stick" (Chambers, 1994b, 1997). To achieve these changes implies that outsiders need to exercise critical self-awareness and responsibility; they need to examine their behaviour, learn from their mistakes and incorporate this learning into new experiences. Behavioural changes such as those described enable the methods to be effective and produce an attitude of sharing and partnership.

The second PRA pillar is sharing and partnership. Emphasis is given to the *work with groups* in which local people share their knowledge and analysis as well as information, life experiences, food, and learning, among themselves and with professionals. Organisations and PRA trainers also share their experiences with others (NGOs, governments, donor agencies, universities, research centres); which helps to spread PRA and maintain a culture of openness. This sharing reinforces rapport and the *iterative learning* nature of PRA. It also helps create a solid partnership between local people and outsiders to work together towards improving local people's lives and livelihoods.

Methods, the third pillar of PRA, promote open participation by all local people and encourage them to freely express their knowledge and information. *Participatory*

analysis by groups is preferred to analysis by individual experts. Visual methods (non-verbal representations) are more appropriate than verbal ones because they help to include the poorer local people who are otherwise frequently excluded (e.g. the disadvantaged, the illiterates). (PRA experience suggests that verbal and visual methods combined express more than either alone.) Finally, comparisons are preferred to measurements because on many occasions what is needed for practical purposes are relative rather than absolute values. Comparing helps to identify trends or changes, is easier, quicker, cheaper and less aggressive than applying measurement to sensitive issues (e.g. wealth). PRA methods are known particularly for their visual representations, their low technology orientation (use of local resources) and analysis which is shared by local people (e.g. participatory mapping, scoring and ranking).

PRA methods will be discussed in more detail next. This aspect of PRA is emphasised because for our research it is particularly relevant in terms of identifying the possible contribution of (method intensive) PSMs.

### 5.2.2 PRA technology

As has been discussed above, PRA has been extensively applied in the Third World. The empirical evidence thus demonstrates that PRA can work in developing countries. Therefore, it might reasonably be assumed that PRA is fully adequate to manage the conditions of complexity, uncertainty and conflict typical in Third World development planning.

Indeed, PRA has been developed in part in reaction to the failures of Logical Framework Approach and other top-down approaches (see Section 5.1.2). However, the fact that these latter methods, which have been so criticised, continue to be used indicates that the application of a method does not imply necessarily the ability to successfully handle all the conditions of the environment. Therefore what is relevant to explore here is the technology available in PRA which helps to manage these conditions. The discussion which follows draws largely on McCracken et al (1988), Mosse (1994), Mikkelsen (1995), Chambers and Guijt (1995), and Chambers (1994a, 1994b, 1997).

PRA technology<sup>75</sup> has been developed in a form which encourages local people's *ownership of decision-making process and outcomes*, and learning. This is achieved through a low technology approach which is characterised by: reduced quantitative data requirements; an emphasis on local people's knowledge and observation; and the use of local and generally inexpensive resources such as sticks, basic grains, leaves, rocks, and newspapers (Welbourn, 1992; Slocum et al, 1995). These local resources can be used for developing visual aids such as maps, figures, tables and matrices to physically represent, for example, local infrastructure, wealth, or food availability (Chambers, 1994b). These attributes make PRA technology both transparent and accessible to the layperson.

PRA technology can be used flexibly to adapt to the particularities of each local development situation. This flexibility of PRA technology is possible because of the diversity of tools, techniques and methods available. These may be differentiated between those which have an element of data analysis and those which do not.<sup>76</sup> The focus here will be on those which have a data analytic component. This is because in this research the interest is to examine the possible role of PSMs in contributing to the analysis carried out in participatory development planning. Clearly, any complementary contribution of PSMs needs to be studied in relation to the relative strengths and weaknesses of already existing technology.

PRA technologies which include an analytic element can be divided into two main groups: ranking and scoring exercises, and diagrams (or diagrammatic models). Each group is presented below.

Ranking and scoring techniques are generally used in interview sessions as a way of finding out about an individual's or group's preferences, priorities, opinions, expectations, and beliefs. In general people in the community rank (put in order) and score (weight differences) other individuals, households or problems according to various identified characteristics. The most common technique for ranking is card sorting (sometimes called pile sorts). The first step in this technique is to prepare a

---

<sup>75</sup>For a review of PRA technology, see Mikkelsen, 1995; Slocum et al, 1995.

<sup>76</sup>PRA techniques which are specific for data gathering include secondary data reviews; direct observation; semi-structured, key informant and focus group interviews, stories and portraits, and aerial

series of cards each containing an issue to be ranked, and identify the informants who will participate in the exercise. Then the informants discuss their perceptions regarding these issues. The idea is to group cards into piles based on similarity. Informants provide their own criteria for “sameness”. (Local materials can be used for scoring when cards are not available.) The cards within each group are reviewed and discussed to verify whether or not any changes are needed. Then the results are tabulated in an “item-by-item” similarity matrix. Ideally, many of the informants will sort the same cards, providing a basis on which to generalise (Weller and Romney, 1980).

Ranking and scoring techniques include:

- **problem, preference and opportunity ranking** - serves to identify and classify according to importance main problems, opportunities or preferences as perceived by individual or group members of a community. Individuals list the problems to be ranked and then rank each item (1=best, 2=next best...). Discussion is based on the reasons for the ranking order. Then the total scores are added and based on them an order (e.g. highest to lowest priority, most feasible to least feasible) is established of problems, preferences or opportunities.
- **wealth, well-being or health ranking** - is based on individual interviews in which each participant is asked to rank households by using card sorting. This is used to stratify the community based on criteria about households defined by participants. These kinds of ranking help target the poorer households of the community and can contribute to analysis of difference.
- **analysis of difference** - helps identify group differences (especially by gender, social group, wealth or poverty, occupation, age), their problems and preferences. Uses contrast comparisons in which one group explains its reasons for considering the other different, and vice versa.
- **matrix ranking or scoring** - uses matrices and counters (such as seeds or stones) to compare, for example, types of trees, soils, crops, animals. Useful to identify the different criteria used by different groups (e.g. old men, young men, old women,

---

inspection surveys and photographs. For more details on these techniques, see McCracken et al (1988); Dewees (1989); Mearns (1989); Cornwall et al (1993).

young women) in the ranking and scoring of crops, animals... The value each group gives to what is being ranked or scored reveals the reason for preferences of different groups. This is commonly used in pairwise ranking.

- **pairwise ranking** - compares interviewees' preferences among a series of paired alternatives to produce a preference list (e.g. food preference, tree preference for reforestation).
- **options assessment chart** (or innovations assessment<sup>77</sup>) - is a three step process for scoring and ranking different alternatives. First, the group generates a range of possible interventions. These interventions are then assessed by the local participants based on the criteria which they have formulated. Outsiders act as facilitators with the role of ensuring clarity about the criteria and of leading the discussion about each option. An example of the criteria (Mikkelsen, 1995) which have been used is:
  - impact on each of productivity, stability, sustainability and equity (values: unknown, negative, none, positive, very positive)
  - implementation cost (values: high, medium, low)
  - time to benefit (values: long, medium, short)
  - technical feasibility (values: high, medium, low)
  - social feasibility (value: high, medium, low)

After completing the assessment of all proposed options, these are ranked by the local participants in terms of priority for plans of action.

A diagram or diagrammatic model is “any simple schematic device which presents information in a readily understandable visual form” (Conway, 1989, p.77). The use of the term ‘modelling’ in PRA, as well as in other PDPMs, carries a ‘geographic’ connotation (Fassolo, 1997). (This usage is different in both classical OR methods and in PSMs, as will be seen below.) Types of diagrams include:

- **maps and models** - are generally prepared by the community members themselves. Sometimes the professional prepares them based on inputs from community members. Participatory mapping and modelling are among the most widely used techniques, and serve to show, for example, the distribution of the population, soil types, facilities, hazards, household composition, local infrastructure and services. Two commonly developed map types are ‘resource maps’ and ‘social maps’.

---

<sup>77</sup>This is the final phase of Agroecosystem Analysis method (Conway, 1985, 1986).

Resource maps can be used to outline, for example, the location of natural resources, wells, land use, or field plots. ‘Social maps’ show social characteristics (e.g. literacy, asset ownership, employment) of a community and are used to identify and understand the relative position and wealth of social groups within it.

- **seasonal diagrams** - are constructed by the community members, to show the changes and events that occur in their lives over an annual cycle or a season. Examples of events and changes include rainfalls, festivals, illness, and household members’ workloads. These diagrams are useful for awareness when planning visits or interventions, or for monitoring activities (e.g. harvest) and resource supply (e.g. food or water availability).
- **daily time-use analysis and activity profiles** - are diagrams which are constructed by community members to indicate relative amounts of time spent on different activities, on a daily basis or over longer periods. Useful to show activity trends for groups or individuals, and degrees of intensive labour.
- **causal and flow diagrams** - aid in the analysis of processes, sequences of actions, causes, choices and potential effects. Causal and flow diagrams are useful for “what-if” analysis, understanding what has happened and what might happen in areas as varied as migration, marketing, or impact of interventions (such as an immunisation campaign or building a new highway).
- **Venn (or Chapatti) diagrams** - consist of touching or overlapping circles of various sizes, where each circle represents an individual, social group or institution. The size of the circle indicates their importance as perceived by the local participants and the overlap indicates the degree of contact or shared membership. Venn diagrams are used to analyse relationships and to identify areas of improvement.
- **transects (or cross-sections of an area)** - are diagrams of different zones in an area (e.g. farms, village), based on systematic walks and observation. They are used to compare main features, resources and uses of different areas, and to identify where the major problems and opportunities are located. Transects are useful for increasing mutual understanding among community members, and

between them and professionals, and of perceptions about general characteristics of the area and its surroundings.

- **time trends** - are diagrams which show changes that occur through time. There are two types of time trends: historical profiles and transect-through-time. **Historical profiles** indicate a chronology of events during a particular period of time. **Transect-through-time** shows both temporal and spatial patterns.
- **decision trees** - depict sequence of actions and outcomes of a particular problem. They are a valuable aid to understand individual's or group's strategies for managing their resources, and to understand the key determinants of their decisions.

Possible future workshops, scenarios workshops and drama are also components of PRA technology. In **possible future workshops** participants identify and evaluate critical issues (such as crime prevention and overcrowding), use brainstorming of ideas to propose solutions, assess and prioritise those solutions, choose a preferred course of action and prepare a plan for their implementation. The main difference between possible future workshops and **scenario workshops** is that in the latter experts or outsiders prepare the scenarios discussed by participants. Scenario workshops are commonly used for technology assessments.

**Drama** (and game and role play) are useful for discussing sensitive issues and enables participants to express their views and priorities. Role play is particularly helpful in training exercises (Mikkelsen, 1995; Chambers, 1997)

As can be seen from the above descriptions, the technology available with PRA is varied. Choice of a tool or technique depends on the purpose of the analysis. For example, matrix ranking or scoring techniques can be selected if community members want to target and allocate resources; if they want to monitor activities which have been implemented they could use seasonal diagrams.

Some of the PRA tools and techniques described above have been used in combination or sequences. This is possible because of their characteristic *non-linearity* – which means the ability to switch between the different parts of the methods. The results of one PRA technique may be used as an input to another. One

of the examples cited in Chambers (1994b, p. 1257) illustrates the use of sequences: “A participatory resource map leads to planning transect walks in which villagers who made the map act as guides for outsiders. The transects in turn lead to the identification and discussion of problems and opportunities, which then lead to list and ranking options or ‘best bets’”. According to the author, the advantages derived from the use of sequences in PRA include increased commitment of participants, the possibility of triangulation between the different “steps” in the sequence, added detail and enriched information (“the whole becomes more than the sum of its parts”), and enriched learning process.

PRA technology, described above, goes beyond the extractive, elicitive nature of its predecessor RRA by incorporating tools and techniques which facilitate analysis by local people which was formerly performed by outsiders. However, it has some limitations in terms of handling conflict and making decisions under uncertainty.<sup>78</sup> (See Cornwall et al, 1993; Chambers, 1994c.)

The process and procedures and technology attributes of PRA discussed in this section will be the basis for the comparison with PSMs which will be carried out in Section 5.4. The characteristics of PSMs are reviewed next.

### 5.3 The characteristics of Problem Structuring Methods (PSMs)

The focus of this thesis is on the possibility that PSMs can contribute to participatory development planning. In order to explore the scope for PSMs in this area, a review of this family of methods is required. An exercise similar to that carried out for PRA will be applied to PSMs, using as far as possible the same characteristics as those identified for PRA. Where there are attributes for PSMs which are clearly related, the identical terms used in the PRA exercise will be used. As in Section 5.2, process and procedure attributes will appear in *italics*, and technology ones using Arial typeface. This exercise will be carried out as preparatory work for the comparison in Section 5.4 between PRA and PSMs.

---

<sup>78</sup> Chambers (1994c, p.1445) agrees: “The identification, expression and resolution of conflicts of interest remain a frontier for participatory methods...There remain both potential and need for new and better participatory methods for negotiation and equitable conflict resolution.”

This discussion is largely based on Rosenhead (1989a, 1992, 1996), who presents a thorough review of PSMs' characteristics. This section begins with a brief account of the emergence and development of PSMs.

Since its development in the 1930s, operational research (OR) has evolved from a discipline which consisted largely of "algorithmic and optimising tools" (e.g. mathematical programming, game theory, queuing theory, stock control) (Rosenhead, 1989a, p.1), to one "enhanced" (Jackson, 1988) by a range of newer methods developed to help analyse and structure problems and decisions. The optimising tools are also referred to as "hard OR" because of their reliance on objective data and quantification, and their high mathematical content. The newer methods are known as "problem structuring methods" (PSMs), or alternatively as "soft OR".<sup>79,80,81</sup>

PSMs have been developing in the United Kingdom since the late 1960s.<sup>82</sup> This family of methods arose in response to the limited applicability of hard OR for dealing with what has been referred to as "swamp conditions" (Rosenhead, 1989a): multiple actors, multiple interests, multiple perspectives, conflict, uncertainty, and complexity.<sup>83</sup> According to Rosenhead (1989a, 1996), unlike PSMs, hard OR assumes, explicitly or implicitly, a single decision-maker, who has a clearly defined objective (or, if multiple objectives is able to specify trade-offs between them) and whose interest is to find an optimal solution. With its characteristic use of algorithms and mathematical equations, hard OR attempts to abolish uncertainty by using probabilities to weight possible outcomes. The opacity of much of the consequential

---

<sup>79</sup>For historical accounts of the development of OR since its conception in the 1930s see Trefethen (1954) and, Kirby and Capey (1998). Rosenhead (1989b, 1991) and Bowen (1994) provide accounts of specific periods of the development and practice of OR and personal experiences.

<sup>80</sup>For a thorough review of these techniques see Hillier and Lieberman (1995); Ravindran et al (1987).

<sup>81</sup>Taket and White (1993) and White and Taket (1997) prefer to use the phrases "issue structuring methods" or "issue analysis methods" to refer to PSMs. They argue that the use of the term "problem" may function to prevent the social actors involved "from seeing possibilities for change."

<sup>82</sup>Although the first PSMs (e.g. Metagame Analysis, Robustness Analysis, Strategic Choice Approach) were developed in the mid-1960s, it was only in the 1980s that these methods were recognised as a significant part of the practice of OR (Rosenhead, 1996).

<sup>83</sup>A landmark study which provided empirical evidence for the lack of appropriate OR technology in these types of situations was that of Greenberger et al (1976). These authors analysed the experience of the Rand Corporation with the New York City government. The work addressed urban problems such as those concerning New York city's fire and public health services.

mathematical formalism also tends to inhibit interaction and negotiation between multiple actors.

Moreover, the existence of multiple perspectives nullifies the search for an optimum. This is because an optimal solution can only be defined in terms of a particular view of the problem situation; in general this optimum cannot expect to be preferred under other perspectives and interests, or value systems (Rosenhead, 1989a, 1996).

Clearly, decision making under complexity, uncertainty and conflict is very difficult. OR developed model-based methods for handling situations characterised by complexity. When making decisions in the presence of uncertainty, optimisation is not practically simple or maybe not possible at all. In conflict situations, where there is no single objective, it is also not feasible to optimise. As a result, methods different from those in hard OR were needed.

Thus PSMs rose in general to make the type of decision support, which had already been given to problems with low levels of uncertainty and conflict, and high levels of complexity, available in situations with high levels of uncertainty, conflict or a combination of the two. PSMs took from the hard OR origin the model-based approach which enables people to structure and handle the problem situation more easily. Some of these new methods also incorporated technology for the representation of uncertainty and of conflict, as will be seen below.

PSMs are qualitative decision-aiding approaches which are intended for use in group situations. They have been developed to assist decision-makers and organisations gain a better understanding of their problems. They do so through the exploration of different perspectives, and the facilitation of dialogue and negotiation, with a view to generating consensus on problem structure and usually, on initial commitments to be made (Rosenhead, 1989a; 1996).

The key word in PSMs is “structuring”. Structuring is used in the sense of identifying concepts which are relevant to the problem situation; of clarifying the relationship between the concepts; of interpreting them through alternative perspectives; and of focusing on key areas and excluding others, at least temporarily.

Some PSMs also generate and evaluate alternative options. The purpose of structuring is to increase understanding of the problem situation by and between participants, so that they can reach agreement both on the nature of their shared problem, and on commitments which will address it.

The more major PSMs are listed in Table 5.2 with an accompanying description and references for further consultation.<sup>84</sup> Practical applications of PSMs are overwhelmingly in developed countries. Areas of application include health (Hindle et al, 1995; Friend, 1994; Gains and Rosenhead, 1993; Moulin, 1991; Best et al, 1986); and agriculture (White, 1994). Applications are also identified in particular classes of organisations such as government agencies and transnational corporations (Checkland and Scholes, 1990); food retailing (Ormerod, 1995); a scientific journal information centre (Macías-Chapula, 1995); the publishing industry (Eden, 1985); manufacturing industry (Williams et al, 1995); and voluntary service organisation (Ragsdell, 1994; 1996).

In Section 5.1.2 it has been observed that conditions similar to those for which PSMs were developed exist in some development planning situations in the Third World. There is, for example, the existence of multiple actors with distinctive perspectives and interests that sometimes conflict. Internal and external uncertainties compounded by the intrinsic complexity of the system, make it difficult to anticipate the consequences of actions. These similarities indicate that the contextual requirements for which PSMs are designed, in fact are broadly equivalent to the contextual characteristics of developing countries. Therefore, there is a *prima facie* case that PSMs might be useful in these situations in developing countries.<sup>85</sup> To arrive at a clearer specification of how PSMs might assist these situations in the Third World, it is necessary to characterise the process and procedures of applying these methods and their available technology.

---

<sup>84</sup>More detailed presentations of some of the methods can be found in Rosenhead (1989a) and Flood and Jackson (1991).

<sup>85</sup> See, for example, the work of Thunhurst and Barker (1999) with the health sector in Pakistan.

Table 5.2 The more major PSMs and their aims

	COMPLETE NAME	PERIOD	AIM/Method (+reference)
CSH	Critical Systems Heuristics	early 80s	To assist critical reflection and judgement about the existing and proposed social systems, and their possible consequences (Ulrich, 1983; Jackson, 1988; Flood and Jackson, 1991).
DT	Drama Theory	early 90s	To investigate how preferences and perceptions of action opportunities for each participant develop during interaction with a view to resolve differences in a way which satisfies emotion as well as rationality (Howard et al, 1992; Bennett and Howard, 1994). Development of HGA and MGA.
HGA	Hypergame Analysis	late 70s	To explore interactions between actors in situations of conflict and co-operation by representing their differing perceptions of the situation (Bennett et al, 1989a, 1989b).
IP	Interactive (or Idealized) Planning	80s	To design a desired organisational future and how to implement it (Ackoff, 1974; 1979b; 1981).
MGA	Metagame Analysis	late 60s	To explore interactions between actors in situations of conflict and co-operation by identifying threats and promises in order to analyse the stability of alternative scenarios (Howard, 1989a, 1989b).
RA	Robustness Analysis	late 60s	To identify initial decisions which can keep useful options open for the future and thus secure flexibility (Rosenhead, 1980; Rosenhead, 1992b; Wong and Rosenhead, 1996).
SCA	Strategic Choice Approach	mid 60s	To manage uncertainty and develop a progress package of commitments and explorations in interconnected decision making situations (Friend and Hickling, 1987).
SSM	Soft Systems Methodology	early 70s	To develop conceptual models of a system or area of interest based on alternative world views (Weltanschauungen) in order to generate discussion and debate, with a view to developing agreements for action (Checkland, 1981; Checkland and Scholes, 1990).
SAST	Strategic Assumption Surfacing and Testing	70s	To help decision makers, through a dialectical approach, understand the different points of view which may exist concerning a problem (Mitroff and Emshoff, 1979; Mason and Mitroff, 1981).
SODA	Strategic Options Development and Analysis	late 70s	To represent individual and group perceptions of a situation by identifying concepts and their relationships using cognitive mapping, with a view to expanding shared understanding as a basis for commitment to action (Eden 1988, 1989).

The orientation of PSMs (as discussed earlier) is to aid groups in agreeing the nature of their common problem (Rosenhead, 1995a). The diversity of the methods listed in Table 5.2 were designed for *working with groups*. (The only partial exception is Robustness Analysis). This is because in the environment characterised by swamp conditions, there is a plurality of actors from different interest groups and who are not in any hierarchical relationship with each other (Rosenhead, 1996). If problems are to be resolved other than by exercise of power or open conflict, then there will be a need for dialogue, and any methods employed must be appropriate to this context. Therefore, group representatives need to participate in a process of understanding the *problématique* and structuring the problem (the two key activities within the analytic process discussed as part of the model in Chapter 4). Those group representatives are *active participants* or shapers of the PSM structuring process. *Professionals take the role of facilitators* (Rosenhead, 1996) in their work with participants, which is carried out in a workshop format. Professionals support a bottom-up planning process which is participative, interactive, iterative and non-linear.

The process of working with PSMs is *participative* in that participants use dialogue to exchange their understandings and views about the problem situation which is being structured. PSMs are *interactive* methodologies not only in that they assist dialogue between participants but more specifically because they involve interaction between the participants and the analysis. This latter interaction reshapes the analysis, and the analysis reshapes the discussion. It is also *iterative* in that through dialogue, knowledge and information is provided by group members and then structured during analysis. These steps are repeated until the problem situation is sufficiently structured that the group can be confident in making commitments (see below). Built into many of the different methods are features which enable participants to distance themselves from previous bindings. This allows them to change their position based on what they have learned. The consequence of this adaptability is that it becomes easier for participants to shift away from views that they had expressed earlier in the process of analysis.

The fact that PSMs typically operate *non-linearly* fits well with their iterative nature. The non-linearity of PSMs is possible given that these methods are phased/modular. Phased methods have two related aspects: “stagedness” and

intermediate products. Stagedness of a method is the attribute which indicates that the method is organised into stages (or modes). This structure makes it possible for the method's users to stop without completing all the stages that compose it, and still have a product which can be of use to them. The outcome at the end of a stage is an intermediate product (e.g. cognitive maps, decision graphs) which is short of a decision but that it is still useful for the organisation and/or participants. In this way, PSMs offer flexibility in their application and can be responsive to the dynamics of group work and of the particularities of the problem situation (Rosenhead, 1989a, 1996). This flexibility also allows the combined use of different soft OR methods.<sup>86</sup>

The technology available with soft OR methods is model-based. Modelling is the defining characteristic of this family of methods which gives it its OR identity. The conceptual models, common in the majority of the PSMs listed in Table 5.1, are expressed in visual, diagrammatic form. Among the numerous examples are: decision graphs in the shaping mode of SCA, robustness matrix in Robustness Analysis, matrices or trees of preferences or strategic maps in Hypergame Approach, 'rich pictures' in SSM, or cognitive maps in SODA.

In these conceptual/qualitative models, much of the mathematical formalism (algorithms and algebraic equations) common in hard OR is not employed (Rosenhead, 1992). They are thus characterised by reduced data requirements. Nevertheless, if the purpose in PSMs is to explore possibilities rather than find an optimal solution, then the loss of the analytic strength of hard OR has little practical significance (Rosenhead, 1989a).

These diagrammatic approaches are all developed independently and in the various PSMs they are used in a number of different ways. The fact that these graphical formats have been generated independently evidently indicates a general tendency. It has been claimed that visual methods are of particular value in representing complexity to lay audiences who might otherwise find traditional OR means of handling complexity extremely opaque. In these graphical representations there is nothing hidden, which makes PSMs transparent (easy to understand) and

---

<sup>86</sup>An area of continuing discussion in the literature is that of combining methodologies; see for example, Jackson and Keys (1984); Bennett (1985); Eden (1990); Flood and Jackson (1991); Holt (1994); Ormerod (1995); Flood (1995a); Mingers and Gill (1997); Mingers and Brocklesby (1997).

accessible (simple to use) to the layperson. These attributes of transparency and accessibility have made it possible to promote PSMs as low technology approaches. The use of visual, diagrammatic aids characteristic of PSMs is thus a crucial feature to encourage people's involvement in analysis.

Active participation by group members in analysis has important consequences. As active participants, group members witness at first-hand their views being taken into account. This in turn leads to *ownership* of the problem formulation, and of the actions to be implemented, as well as to the acceptance of responsibility for the consequences of the actions implemented.

Models in PSMs are used to graphically represent, among other things, relationships between concepts, relationships of similarity, and relationships between options (i.e. potential decisions). More commonly the aim is to model cause and effect relationships. The different elements that make up the problem situation are identified. This model-based approach for the analysis of cause and effect relationships enables the generation of discrete options for action, and the anticipation and assessment of their likely consequences (e.g. action X affects Y and Z, action A affects B). In this way PSM modelling assists discussion between participants and helps them to 'look beneath the surface' to establish problem structure. Cause and effect models in PSMs assist participants in handling the systemic complexity of the problem situation.

Knowledge and understanding of cause and effect relationships between alternative options and their consequences gives participants more basis for choice. The selection between discrete options assists the *meaningful expression of judgement* by participants in a process of choice (Rosenhead, 1989a, 1996). The negotiation between individuals about key issues and feasible decisions is designed to lead to agreed partial commitments (see below). Thus, PSMs can accommodate participants who have *alternative perspectives* on the problem situation. Different perspectives can lead to conflict. Situations characterised by conflict, which are frequently aggravated by uncertainty, will commonly require participants to adjust their behaviour to take into consideration the possible objectives and strategies of others (Rosenhead, 1989a, 1996). The only PSMs which explicitly address conflict are the

game theoretic-approaches listed in Table 5.2 (Hypergame Analysis, Metagame Analysis, Drama Theory).

*Partial commitments* (Rosenhead, 1995a), a feature touched on above, is another way in which these methods handle the systemic complexity and non-unitary perspectives of the problem situation, particularly one characterised by high levels of uncertainty. This feature encourages participants to be satisfied with something less than a comprehensive solution; to make incremental progress without taking actions in all areas. This leaves scope both for future reduction of uncertainty (see below), and for concentrating discussion selectively on aspects or issues where multiple agendas overlap. The process of mutual adjustment involved in a PSM workshop may require coalition formation, consensus building, debate and negotiation (Rosenhead, 1989a). Outcomes are obtained through mutual understanding (Rosenhead, 1995a). (The dialogue types discussed in Section 3.3.1 are clearly relevant to this process of mutual adjustment.)

PSMs offer explicit means of handling uncertainties by translating them into elements in the decision process. For example, SCA<sup>87</sup> provides methods to identify what the uncertainties are, and to establish exploratory actions aimed at reducing them (Friend, 1989).

Scenarios are generally used for grasping uncertainty, exploring alternative futures and generating ideas for action options. Scenarios are different and novel stories of the future which can be used to stimulate discussion between participants about 'threats and opportunities' of the environment which they do not control. (Wack, 1985; Hadridge et al, 1995). Therefore, they are useful to handle uncertain futures, as has sometimes been used in Robustness Analysis.

The characteristics of PSMs regarding its process and procedures and technology which have been discussed in this section are summarised in Table 5.3. These will be used for the comparison between PSMs and PRA which is carried out in the section which follows.

---

<sup>87</sup> See Appendix D, for a description of SCA.

**Table 5.3 Attributes of PSMs**

Process and Procedures	Technology
Work with groups	Diversity of tools
Clients as active participants	Stagedness
Professional as facilitator	Intermediate products
Participative analysis	Flexibility of tool use
Interaction between participants	Modelling
Iterative learning	Representations with diagrams
Non-linearity	Reduced quantitative data requirements
Ownership (of process and outcomes)	Accessibility/transparency
Meaningful expression of judgement	Low technology approach
Alternative perspectives	Analysis of cause-effect relationships
Partial commitments	Generation of discrete options
	Representation of uncertainty
	Representation of conflict

#### 5.4 Comparison between PSMs and PRA

The comparison between PSMs and PRA is not only relevant to their joint use, but also to the question – do PSMs offer advantages that PRA does not have? In other words, could PSMs, if applied in the types of situations where PRA might be applied, would PSMs offer any added value?

This discussion will be based on the characteristics of PRA and PSMs which have been highlighted in Sections 5.2 and 5.3, respectively. All the attributes which have been identified, whether for PRA or for PSMs, are summarised in Table 5.4. Those which are common to both PSMs and PRA are indicated by a single tick, and attributes where one family of methods has an advantage over the other are represented by double ticks. A question mark indicates the lack of an attribute. Clearly, such ‘gap’ attributes in one of the approaches could be alleviated by the presence of the corresponding advantage attributes in the other.

In Table 5.4 it can be observed that the two families of methods have many features in common. There is a significant degree of convergence between them, particularly in the area of process and procedures. This indicates a basic compatibility of PSMs and PRA which would suggest, for example, that they might be used in similar circumstances or possibly in conjunction with each other.

**Table 5.4 Comparison of attributes: PSMs and PRA**

Category	Attribute	PSMs	PRA
<i>Process and Procedures</i>	Work with groups	✓	✓
	Clients as active participants	✓	✓
	Professional as facilitator	✓	✓
	Participative analysis	✓	✓
	Interaction between participants	✓	✓
	Iterative learning	✓	✓
	Non-linearity	✓	✓
	Ownership (of process and outcomes)	✓	✓
	Meaningful expression of judgement	✓✓	?
	Alternative perspectives	✓✓	?
<i>Technology</i>	Partial commitment	✓✓	?
	Reduced quantitative data requirements	✓	✓
	Diversity of tools	✓	✓
	Stagedness	✓✓	?
	Intermediate products	✓✓	?
	Flexibility of tool use	✓	✓
	Modelling	✓✓	✓
	Representations with diagrams	✓	✓
	Accessibility/transparency	✓	✓✓
	Low technology approach	✓	✓✓
	Analysis of cause-effect relationships	✓✓	?
	Generation of discrete options	✓✓	?
	Representation of uncertainty	✓✓	?
	Representation of conflict	✓✓	?

KEY: ✓✓ Advantage attributes

✓ Common attributes

? Gap attributes

There are however some differences on process and procedures between the two approaches and also between their technology attributes. On process and procedures the differences are in meaningful expression of judgement, alternative perspectives and partial commitments. These are advantages that PSMs offer over PRA in that they are supplementary features which in many instances would be of practical use, for example, in forwarding discussion and generating agreement.

The differences in the technology attributes between the two families of methods are greater and they arise perhaps naturally from PSMs as a branch of operational research, which places a greater emphasis on decision support technology. These technology attributes generally offer an enriched repertoire to support decision-making particularly by facilitating the representation of complexity, uncertainty and conflict. Therefore while evidently being consistent with PRA's process and

procedures (since PSMs' process and procedures are so similar), the application of PSMs by its extended repertoire offers advantages that PRA does not have.

The next question to address is what is the practical significance of these differences. They offer in principle two alternative routes. One is that because PSMs offers an enriched decision technology it may be applied with advantage by itself in development planning situations. Or alternatively because PSMs process and procedures are compatible with those of PRA, the two families of methods could be used in tandem (see White and Taket, 1997 and Friend, 1998, for theoretical discussions of the joint use of PRA and PSMs). Their use in conjunction would offer the possibility of greater assistance to decision-making than either could separately. Indeed there is already some practical experience reported in White (1994).<sup>88</sup>

Based on this discussion, it can reasonably be supported that PSMs have some potential advantages with relation to PRA. However, PSMs are not currently institutionalised in the Third World. There remains the question of the acceptance of PSMs as an adoption by potential users in Third World grassroots groups. The acceptance of PSMs in comparable developed world contexts needs to be explored. The relevant issues surrounding the acceptance of PSMs as an innovation are discussed in the section which follows.

## 5.5 Acceptance of PSMs as an innovation

The factors affecting the adoption and use of relatively new technologies has been widely studied in both developed and developing countries. Everett Rogers' classical work on diffusion of innovations<sup>89</sup> (1995) provides numerous case

---

<sup>88</sup> White used the Strategic Choice Approach in combination with PRA's predecessor, RRA, in Belize (Central America). In this case study, White applied PANDA, a framework further developed by White and Taket (1997) for combining PRA and PSMs. PANDA stands for Participatory Appraisal of Needs and the Development of Action. The authors describe PANDA as a framework within which different approaches and methods of PRA and PSMs can be flexibly and creatively combined to enable local participants to obtain, share, and analyse knowledge of their life and conditions, to plan and act according to that knowledge.

<sup>89</sup> Rogers builds, among others, on the work of Tarde on "laws of imitation"; Hägerstrand on how spatial distance affects diffusion; Greenberg on earliness of knowing about innovations; Ryan and Gross on communication channel use; Fliegel and Kivlin on rate of adoption; Deutschmann and Fals-Borda, and Mohr on correlates of innovativeness; and Sharp on consequences of innovation. For a history of diffusion work, see Rogers (1995, Chapter 2).

illustrations of adoption of such “innovations” in both of these contexts. In developed countries there is evidence that individuals or organisations considering the adoption and use of an innovation are affected by, among other issues, the complexity of their choice, the available and required human and financial capacity, and the added competitiveness and profit increases, or loss of flexibility which can derive from the adoption of a new technology (Vanclay and Lawrence, 1994; Rogers, 1995; Kurtenbach and Thompson, 1999).

These factors can also be found to be influential in the case of developing countries. However, the factors which tend to be more significant, especially in the adoption of innovations by grassroots groups, are social structure, cultural values and beliefs, political context and psychological variables (Bordenave, 1976; Eberhard, 1984; Doorman, 1991).

The relative significance of these factors varies within and between developed and developing countries contexts. An innovation is more likely to be adopted and used if it is perceived by potential adopters as valuable and useful to them. We will draw principally on Rogers work to analyse the issues related to the adoption of PSMS, either independently or in conjunction with PRA, in developing countries. First however some of the relevant concepts proposed by Rogers will be introduced.

According to Rogers (1995, p.10) *diffusion* is “the process by which (1) an *innovation* (2) is *communicated* through certain channels (3) *over time* (4) among the members of a *social system*. The four main elements are the innovation, communication channels, time, and social system. These elements can be identified in every diffusion study, campaign or program. In this section particular emphasis is given to elements 1, 2, and 4. The time element will not be considered because it refers to the period of time it takes for an innovation to be universally adopted. Evidently, this is beyond the scope of our research.

Rogers (1995, pp.15-16) proposes that the five main relevant characteristics of innovations are relative advantage, compatibility, complexity, trialability, and observability. These characteristics are defined as follows:

- *Relative advantage* is “the degree to which an innovation is perceived as better than the idea it supersedes.”
- *Compatibility* is “the degree to which an innovation is perceived as being consistent with the existing values, past experiences, and needs of potential adopters”.
- *Complexity* is “the degree to which an innovation is perceived as difficult to understand and use.”
- *Triability* is “the degree to which an innovation may be experimented with on a limited basis”.
- *Observability* is “the degree to which the results of an innovation are visible to others”.

Later in this section these characteristics will be used to analyse how they fare in relation to PSMs.

According to Rogers, these five characteristics are the most important in explaining the adoption rate of a new technology by potential adopters in developed countries but they are also applicable to developing ones. Communication and adoption should be viewed, according to Rogers, from the perspective of the host country. Greater relative advantage, compatibility, triability, and observability positively influence the adoption of an innovation, unlike complexity which is inversely related to adoption.

The ‘newness’ characteristic of innovations, Rogers argues, generates a state of doubt among potential users, who as a consequence seek information to help cope with the prevailing uncertainty. Three types of information which are likely to alleviate this state of mind are: information about the innovation, information about how it works, and information about how well it works (innovation-evaluation information).

Information can be provided to potential adopters through two principal types of communication channels: interpersonal and mass media. Interpersonal channels are essential for forming and changing attitudes towards the new technology and therefore influence the decision to adopt or reject it. They involve face-to-face exchanges of information between two or more individuals. Mass media are necessary to diffuse initial information, or create knowledge, about an innovation. The target is to reach large audiences rapidly. The typical mass communication media are used (e.g. newspapers, television and radio) (Rogers, 1995).

In terms of our research, the innovation is the family of participatory methods – PSMs. The status quo in developing countries will be treated as incorporating the use of PRA. In this case, the social system is for practical purposes made up of three identifiable classes of potential adopter: specialists (e.g. PRA practitioners and promoters, development planners), intermediary organisations (e.g. NGOs), and grassroots community organisations. The communication channels, as will be seen, can be either interpersonal, specialised mass media, or selective persuasion. The selection of communication channel depends on who the potential adopters are. How do the five characteristics listed above apply to the innovative adoption of PSMs in developing countries?

Of Rogers five characteristics, relative advantage, compatibility, trialability and observability seem to favour PSMs as an innovation. Complexity, however, seems to be a negative element. These characteristics as they apply to PSMs will be discussed in turn.

- *Relative advantage* - The relative advantages of PSMs vis-à-vis PRA have been discussed in Section 5.4. There is, however, in principle another situation which can be considered. This is that of the independent use of PSMs in circumstances where there is no other participatory method being applied. In this case, part of the process of persuading potential users to adopt these methods is to provide them with evidence that PSMs have something to offer relative to the status quo of no use of method.
- *Compatibility* - PSMs (the innovation) are compatible with PRA (previous technology) as has been shown in Table 5.4. PRA is consistent with the needs of potential adopters, as has been seen, because it has been widely used. Therefore, PSMs are *prima facie* likely to be consistent with the needs of the adopters. As a result, the possibility of their adoption appears promising.
- *Complexity* - In Chapter 5 this idea was discussed in terms of the transparency and accessibility of PSMs. The discussion about PRA (the existing technology) seems to suggest that there may be some difficulties for non-specialists to understand the technology of PSMs. These difficulties will tend to be more intense for the grassroots organisation members than for NGO workers.

- *Triability* - Those PSMs which are staged will be more triable. The characteristic of stagedness of some PSMs discussed in Section 5.3 offers potential adopters the possibility of testing parts of the methods to verify their utility.
- *Observability* - The visible intermediate products (e.g. cognitive maps, decision graphs), see Section 5.3, which result at the end of a PSM stage are evidence of the outputs possible from the adoption of new technology. These are highly observable by participants.

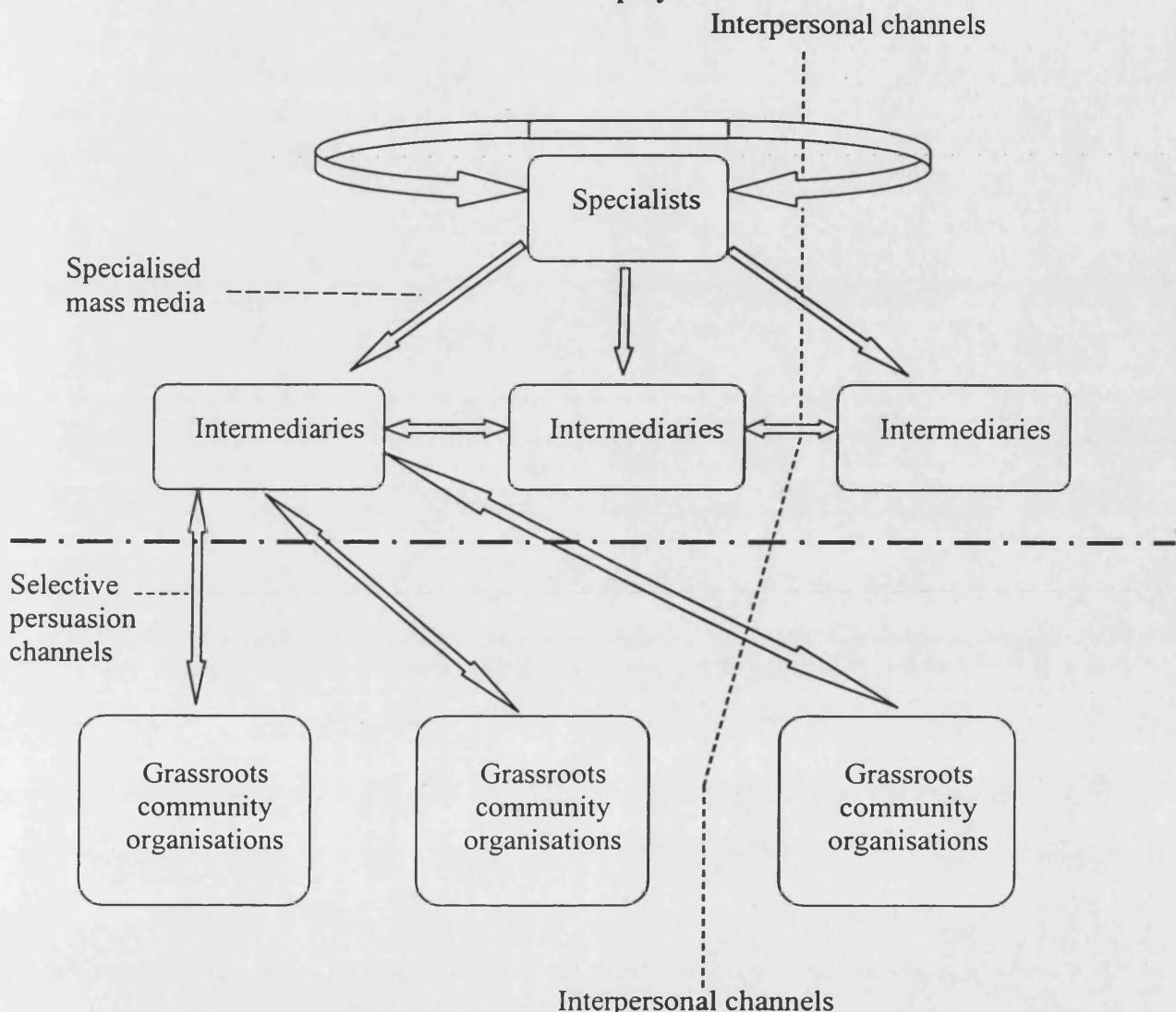
This analysis suggests that there are some obvious difficulties but also some good opportunities for wider dissemination of PSMs. Certainly it suggests that there should be a premium on finding ways of making the methods more accessible and transparent to non-specialists in order to reduce the obstacles to adoption.

In the dissemination of PSMs there also needs to be clarity on who the potential adopters are and what channels of communication are employed to reach these “target users”. In the terms of this research, the objective of PSMs’ dissemination is to reach grassroots community organisations in developing countries.

The selection of the communication channel to be employed depends on which of the potential adopters are identified as target users. An outline scheme of the different possible relationships between potential adopters is shown in Figure 5.2.

Arising out of the rather selective and specialised nature of PSM adoption, we distinguish two forms of communication channel not included in Rogers’ typology. These are the channels through which specialists reach intermediaries (e.g. NGOs), and intermediaries reach grassroots community organisations. A different type of channel is used for each of these interactions. These will be referred to as specialised mass media and selective persuasion channels, respectively.

**Figure 5.2 Dissemination of PSM: its potential adopters and the communication channels employed**



There can be a number of different types of specialised mass media. Academic literature is one prevailing example. Within the academic literature there are different types of literature. For example, there is specialised OR literature, and writing on development planning. Sometimes there might be an overlap, that is, specialists in OR write in the development literature.

Selective persuasion channels are used for dissemination of PSMs from intermediaries to grassroots community organisations. Intermediaries because of their extensive field experience are aware of the characteristics of these grassroots groups

and the most appropriate approach to persuade them to accept an innovation, or at least try it (Bebbington et al, 1993). This type of communication channel is selective in that intermediaries will tend to direct their efforts to selecting one or a few grassroots organisations which are likely to be more receptive to the innovation.

The diffusion of PSMs to grassroots community organisations can in principle occur directly from specialists to these organisations. This could be the case if PSMs were to be used independently. However, direct contact, through interpersonal channels, with grassroots organisations is likely to be difficult to achieve. That is why it has been omitted from Figure 5.2. It appears more feasible and effective for specialists to go via intermediaries to reach grassroots community organisations. In the joint use of PSMs with PRA, reaching these community groups broadly implies going through intermediaries, in particular NGOs.

The elements which operate in the acceptance of PSMs as innovation by each of the potential adopters varies. These are discussed next.

◆ *Potential adopters: PRA promoters and practitioners*

It is plausible to believe that specialists will commonly adopt an innovation if it is written about it in the academic literature (i.e. through specialised mass media) and sometimes through contacts with colleagues who have used them (interpersonal channels). One of the most important sources for evaluative information on PSMs for specialists (and also possibly for intermediary organisations) can be found in the published reports by practitioners of the applications of the methods. The experience of independent use of PSMs in Third World countries in general, and in development planning in particular, has been relatively limited (see Section 5.3). By contrast, it may be significant for the spread of these methods, described in Table 5.2, that PSMs have been widely applied in the developed world.

This favourable situation may be seen as significant for influencing existing PRA exponents. Where the conditions under which developed country PSM work has been done are broadly comparable with that in the Third World, then practitioners of PRA are more likely to be willing to try the innovation. The documented uses of

PSMs in the area which has become known as Community Operational Research (COR) provide appropriate evidence for this. COR is oriented to assisting community organisations, defined as those formed to defend group interests, which possess limited resources, are non-hierarchical, and work through building consensus (Rosenhead, 1993). Applications of a widely varied character have been reported (e.g. health, welfare, voluntary agencies, social, housing, employment, community enterprise, education/training, and civil rights) (Thunhurst and Ritchie, 1992; Thunhurst et al, 1992; Ritchie et al, 1994; Rosenhead and White, 1996).

COR is in essence 'developmental', although developmental within disadvantaged sections of the developed world. This provides some similarities of context. The features of COR application are common to situations of grassroots, community organisations in the Third World, though less severe. Community organisations in the developing world suffer even more strongly from volatility, high turnover, and lack of influential leverage than those in developed countries (Annis, 1988; Friedmann, 1992; Navarro, 1994).

◆ *Potential adopter: Intermediary organisations*

Intermediary organisations may have sufficient experience and networks to be able to persuade people at the grassroots to use an innovation but then, how do PSMs promoters or practitioners persuade the intermediary organisations? The role of intermediary organisations is to supply the necessary credibility, contacts or clout so that grassroots community organisations feel they can and should accept the use of the methods. There is evidence of COR work carried out directly with intermediary organisations which serve the community, as is the case with NGOs<sup>90</sup> (see for example, Keys, 1987; Rosenhead, 1993; Rosenhead and White, 1996).

Once specialists communicate information about an innovation to intermediaries, two outcomes become possible. One possibility is that intermediaries communicate among themselves (through interpersonal channels). This is likely to

---

<sup>90</sup>See Bebbington et al (1993) for a review of the role of NGOs in agricultural development in Latin America. Friedmann (1993) analyses their role in the context of an alternative development.

facilitate the spread of PSMs because an NGO is likely to innovate if it knows of other NGOs who have used them. Secondly the onward dissemination to grassroots community organisations may be easier because the intermediary is in a one-to-many relationship with grassroots groups. Intermediaries may act as 'amplifiers' of the innovation.

◆ *Potential adopter: grassroots community organisations*

Grassroots community organisations will be encouraged to adopt an innovation if they know of some other community group which has used it. For this category of potential adopters, the subjective evaluation of peers will have more weight for them than scientific studies or mass media channels (Rogers, 1995). Generally, however, the adoption of PSMs requires, at least initially, a very scarce resource, namely a specialist trained in the use of the methods. It is possible that by the end of an intervention the people within a grassroots community organisation may have taken PSMs on board enough to use it themselves on a future occasion. However, it is unlikely that they will feel able to use it with other groups. Therefore the only effective networks to communicate the 'infection of adoption' from one potential adopter to another are those originating at the levels of specialists (or technical experts) and of intermediary organisations.

In sum, one might expect that the innovation is likely to spread most easily among specialists as a result of documented work. However, this will not necessarily provide them with a clientele who want to use the methods. This is more likely to happen through the contacts an NGO may have with grassroots organisations, or through networking between NGOs. On this analysis a key link in the chain of innovation which would need to be fostered to improve the prospects for adoption is that between PSM specialists, and NGOs and other intermediaries.

The comparative analysis carried out in this chapter has demonstrated the potential symbiosis between PSMs and PRA, suggesting their joint use. There is also the option of using PSMs independently. Both of these possibilities will be considered in Chapter 6 in the practical context of the work in Mexico.

The next chapter will discuss the design and re-design of a case study based on this analysis which intended to explore whether the potential of PSMs identified in principle was realisable in practice. The case study, in the area of participative health services planning in Mexico, is described in the following two chapters as a vehicle both for exploring the adequacy of the conceptual model (see Chapter 4), and also to investigate the hypothesis that PSMs can assist in improving the situation of disadvantaged groups in the Third World.

## Chapter 6

### *Designing the case study*

In Chapter 5, the scope for PSMs to be used in developing countries either independently or in combination with PRA was explored. The aim of this chapter is to discuss the design and re-design of a case study, in the context of Third World participatory health planning, carried out to investigate whether the potential of PSMs identified in principle was realisable in practice. The case study is also a vehicle for examining the adequacy of the conceptual model developed in Chapter 4. This discussion will begin by presenting the arguments for choosing the particular field of health for undertaking this investigation.

Participatory development planning methods (see Chapter 5) are increasingly being used to assist Third World community groups to improve their participation in health-related decisions and activities, and achieve empowerment (understood as increasing control over their lives).<sup>91,92</sup> The participation of the community in health-related activities has been especially fruitful in programs such as maternal and child health (Gandhi, 1996), family planning (Castro Pérez and Hernández Tezoquipa, 1992), and water and sanitation (Kurup, 1991; Adriance, 1995). In parallel to PDPMs, but with almost no interaction, PSMs have been used in the area of health in developed countries (see for example, Best et al., 1986; Gains and Rosenhead, 1993; Lehaney and Paul, 1996). However, their application in assisting participative health planning in the Third World is relatively sparse (White, 1994; White and Taket, 1997). Thus the potential role of PSMs in this context has not been extensively examined. For these reasons, health is an attractive area in which to investigate the possible role of analytic assistance of PSMs in developing countries.

In the Third World, Mexico offers a particularly potent arena in which to undertake research to test ideas about community participation and empowerment in health. On the one hand, it is one of the many developing countries which has

---

<sup>91</sup>See, for example: Johnston and Rifkin (1987); IIED (1992); Joseph (1992); Melville (1993).

<sup>92</sup>For a more detailed discussion of the concepts of participation and empowerment, see Chapter 3.

undertaken decentralisation of planning and management of its health services. On the other hand, Mexico is characterised by its traditional highly centralised planning. With the combination of these features, research of the kind proposed is likely to produce interesting possibilities as well as contradictions.

Decentralisation efforts within the Mexican health sector have been intensified since the 1980s.<sup>93</sup> The decentralisation of the health sector has sought to transfer control and responsibilities over resources and planning to state health systems, and through them, to the local levels (health jurisdictions, municipalities, communities).

At the local level, community health committees (CHCs) have been created with the purpose of opening up opportunities to community members to have a voice and be heard in health activities and plans which directly affect them. These elements, as have been seen in Section 3.3, are among those which characterise “spaces for dialogue”. It was argued that spaces for dialogue are important not for the powerful who already have access to them but it is a concept which is particularly meaningful for the disempowered. In terms of our model for empowerment developed in Chapter 4, the CHC can be viewed as a space for dialogue. This makes the CHC potentially an arena where empowerment activities might be effective.

The case study which will be described in this chapter, and the following one, concerns the investigation of the scope for PSMs in community health services planning in Mexico. The case study attempts to investigate the applicability and usefulness of PSMs in Third World community organisations by means of a study in a particular Mexican locality.

In preparation for the case study, it is first necessary to review how health services under the Mexican national health system (NHS) are organised. In Section 6.1, emphasis will be given to the Ministry of Health (*Secretaría de Salud*, SSA), one of the several institutions that make up the NHS. This institution is largely responsible for the provision of public health services to poor and disadvantaged groups, groups which are of particular interest in the context of this research. Particular attention will be paid to the decentralisation of public health services carried out by the SSA. As has

---

<sup>93</sup> See, de la Madrid et al (1986); Ruiz de Chávez and Lara Ponte (1988); González-Block (1989); Álvarez Gutiérrez (1990); González-Block et al (1994); Secretaría de Salud (1996).

been argued in Chapter 5, decentralisation is relevant to the research as it, in principle, brings planning and decision-making closer to communities, thereby providing opportunities for community participation and empowerment (Conyers, 1990; Mills, 1990; Green, 1992). Decentralisation will be discussed in terms of the features contained in the latest Mexican health sector reform which encourage the active involvement of communities in the planning of their health services.

Having introduced this background information on Mexican health care arrangements, the sections which follow concentrate on the research design and the community selection process. Section 6.2 provides a description of the initial research design. Arguments will be presented supporting the decision to investigate the independent use of PSMs rather than their joint use with PRA (see Chapter 5). The reasons which led to changes in the original design, from a positivist to an action research approach, are explained. In Section 6.3 the reorientation given to the case study and the new research design are described. The expected effects of the application of PSMs are introduced. These will be explored in detail in Chapter 7.

## **6.1 Healthcare arrangements in the Mexican NHS and the scope for community participation**

For the most part, the northern area of Mexico is more developed than the South. This uneven development and the existing profound contrasts among the country's federal entities is both reflected and magnified in imbalances within the health sector (Frenk et al, 1994b). These imbalances pose challenges to the country's health system which should, in principle, be responsive to the health problems and priorities of its diverse population.

This section will focus on describing the Mexican NHS and its institutions in preparation for the case study discussion in this chapter and the one that follows. A brief explanation of the decentralisation strategies of the public health services provided by the SSA is presented. The scope for community participation through CHCs under decentralisation is discussed, since the research is focused at the level of working with a community organisation.

Although there have been notable improvements in the health status of the Mexican population since the creation of the modern Mexican health system in the 1940s,<sup>94</sup> demographic and epidemiological transitions require continuing adaptation of services to changing needs (Frenk et al, 1994a). However, the Mexican NHS has evolved, not necessarily in agreement with the needed adaptation, but rather influenced by institutional interests to provide services for specific population groups (see Secretaría de Salud, 1996; González Rossetti et al, 1995; Frenk et al, 1994a). Health services in Mexico are organised according to “functional or occupational groups” (González Rossetti et al, 1995). This means that those population groups which fall within the responsibility of an institution are selected according to their economic or political role rather than the group’s health needs and its demographic or epidemiological profile.

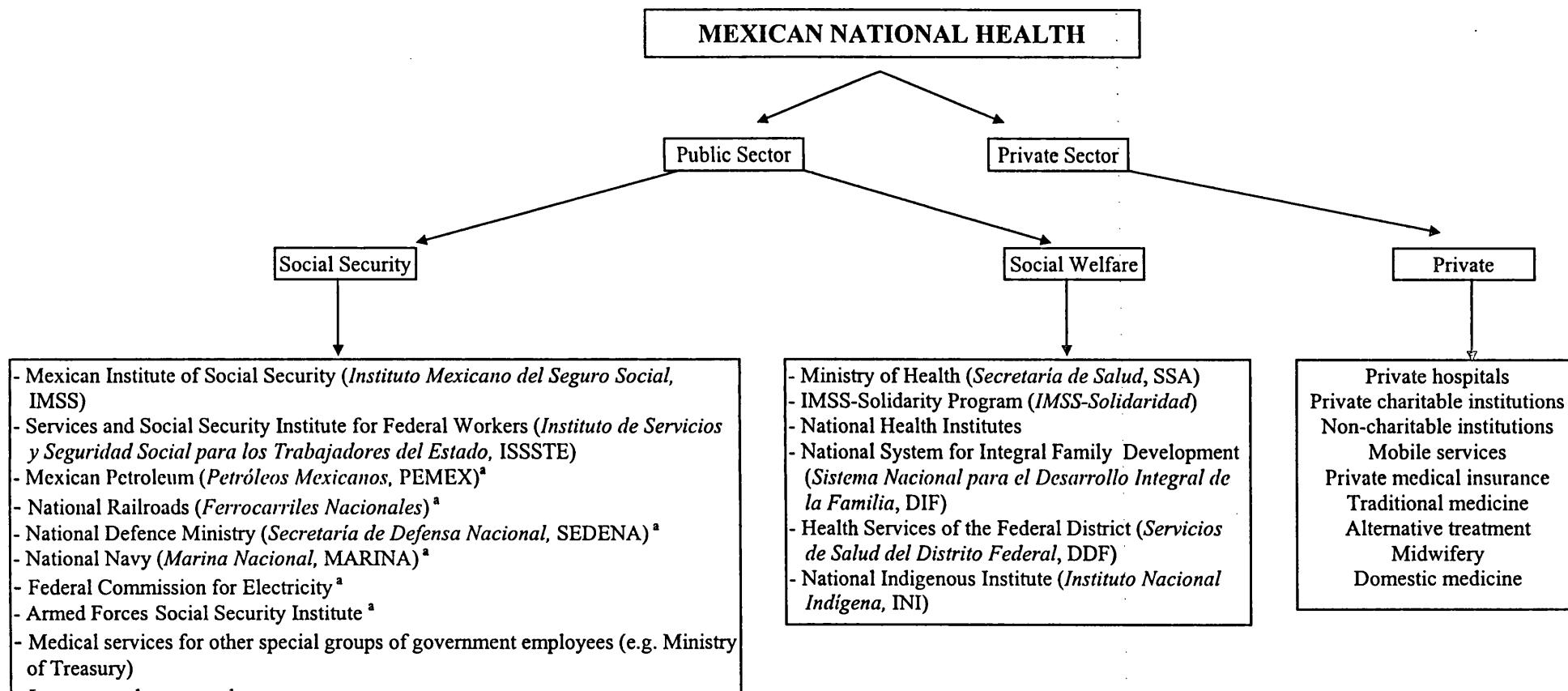
Healthcare arrangements within the Mexican NHS can be described in terms of three main categories of institutions: the social security and social welfare institutions which constitute the public sector, and private institutions.<sup>95</sup> This structure is illustrated in Figure 6.1. The private sector is not relevant for the public sector focus of our research. Within this sector a distinction must be made between the SSA and the other public sector institutions. As may be recalled from Chapter 1, the purpose of this research is to clarify the scope for analytic assistance to poor and disadvantaged groups. These groups, which make up the majority of the uninsured population, are principally the responsibility of the SSA. The capacity of the SSA to satisfy the health needs of these groups is insufficient (Nigenda López, 1995). As a result, there are other institutions which share the responsibility with the SSA to provide health coverage to marginal urban and rural population. These are the other social welfare

---

<sup>94</sup>For historical reviews of the Mexican national health system see López Acuña, 1980; Moreno Cueto et al, 1982; Frenk, 1990; González Rossetti et al, 1995.

<sup>95</sup>For an historical review of Mexican health institutions, see Nigenda López (1995), (in English).

Figure 6.1 Structure of the Mexican National Health System



<sup>a</sup> Organisations which have their own medical services for their employees

Source: National Academy of Medicine, 1992; Secretaría de Salud, 1996; Nigenda López, 1995

institutions included in Figure 6.1. (The community organisation investigated in the case study in Chapter 7 is a frontline unit of the SSA).

The social security institutions, by contrast, provide health services for the salaried workers of the formal economic sector: those who are in regular private, and state or federal government employment, and their dependants (González Rossetti et al, 1995). These salaried workers make up the insured population group.

Unlike social security institutions, the “open, public assistance” or social welfare institutions provide health care for the general population. This segment of the population is referred to as un-insured (*no asegurado*) or ‘open’ population (*población abierta*). The individuals in this segment do not have a formal working relationship through which they can gain access to health services. This group includes the urban and rural poor; the unemployed; and those individuals who are part of the informal economic sector such as street vendors. The socio-economic situation of the open population is quite diverse. Within this group there are self-employed individuals with high incomes through to peasants and indigenous groups who live in highly marginal conditions (Secretaría de Salud, 1996; González Rossetti et al, 1995).

This complex institutional configuration of the Mexican NHS has hindered its performance.<sup>96</sup> Despite the apparent universal provision provided by these arrangements, in practice there is incomplete coverage especially of the poorer segments of the population who largely live in rural areas and in marginal urban ones. More than one tenth of Mexicans had no regular access to the health services in 1990<sup>97</sup> (Secretaría de Salud, 1996).

The common strategy of various health reforms in Mexico has been to increase the coverage of the poorer, uninsured segments of the population through decentralisation.<sup>98</sup> The decentralisation efforts during both the de la Madrid (1982-1988) and Salinas (1988-1994) administrations achieved important progress in

<sup>96</sup>Frenk et al (1994a, pp. 155-198) provide an in-depth analysis of an interrelated set of obstacles which interfere with the performance of the Mexican NHS. See also, Secretaría de Salud (1996, pp. 14-17).

<sup>97</sup>Frenk et al (1994a) argue that if available service provision capacity and percentage of the population requiring health services are used as criteria for health services coverage estimates, this figure would increase to as close as 21%.

<sup>98</sup>For details of the health reform 1994-2000, see Secretaría de Salud (1996).

improving the capacities of state health systems (SHS) to handle the responsibilities deriving from decentralisation.<sup>99</sup> During the former administration, fourteen states received decentralised status<sup>100</sup> (de la Madrid et al, 1986; Álvarez Gutiérrez, 1990). During the latter, emphasis was given to the strengthening of health jurisdictions (see below)<sup>101</sup> in all federal entities.

Under the Zedillo presidency (1994-2000), the lack of access to health services of a significant segment of the population has continued to be the system's Achilles' heel. The decentralisation program under the current health reform is of particular interest as it describes the on-going situation within which the case study (reported in Chapter 7) took place. Emphasis will be given below to the actions planned to increase local level participation in health services planning, and within these, the role of community health committees.

Decentralisation in the context of the latest health reform has been defined as the devolution of resources and authority to the states.<sup>102</sup> In this manner, states would in principle have the legal transfer both of administrative functions and control over resources (personnel, infrastructure and financial) to oversee the health services provided to the un-insured population within their territory (Secretaría de Salud, 1996).

Theoretically, this devolution would allow for decision-making at the local level - that is, where the problems arise. The stated aims have been to create SHS in those states which had not been decentralised in the previous administration and to reinforce existing ones. Health jurisdictions, the corresponding municipal governments, and health committees would take an active role in defining health services priorities and programs (Secretaría de Salud, 1996; Poder Ejecutivo Federal, 1995). Figure 6.2

---

<sup>99</sup>For further reading on the decentralisation of the health sector in Mexico, see: de la Madrid et al (1986); Secretaría de Salud (1988); Ruíz de Chávez and Lara Ponte (1988); González-Block (1989); Álvarez Gutiérrez (1990); González-Block et al (1994); Cardozo Brum (1995).

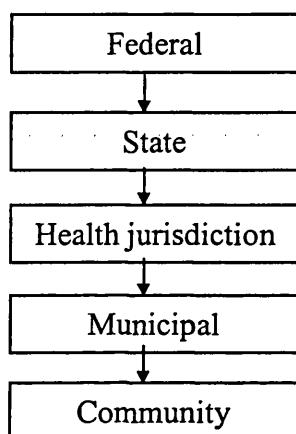
<sup>100</sup>The decentralised states were Aguascalientes, Baja California Sur, Colima, Estado de Mexico, Guanajuato, Guerrero, Jalisco, Morelos, Nuevo León, Querétaro, Quintana Roo, Sonora, Tabasco, Tlaxcala (de la Madrid et al, 1986).

<sup>101</sup>For further reading on the development of health jurisdictions as part of the National Health Program (1990-1994), see: Secretaría de Salud and OPS (1988, 1994); Ruíz de Chávez (1988).

<sup>102</sup>Decentralisation of public health services under the current reform includes the seventeen states and the Federal District which were not decentralised in the 1988 health reform. (Secretaría de Salud, 1996)

illustrates the different levels of health management responsibility of the SSA. The key activities of the health jurisdiction, municipality and community levels are discussed below. As will be seen in the discussion of the case study in Chapter 7, the health jurisdiction and the municipality are important components in the network of relationships of the CHC.

**Figure 6.2 Levels of responsibility in health management within the SSA**



Health jurisdictions are the regional technical-administrative units of the SHS. A health jurisdiction (formerly, health district) is the level of health management of the SSA which has the responsibility to provide health services to the open population within a delimited geographical region, and to oversee its health. Its tasks also include planning, co-ordinating and implementing priority health programs, intersectoral activities, and social participation as well as supervising the functioning of first level care units and, in some cases, second level hospitals. The geographical limits of a health jurisdiction in the federal entities vary from one to several municipalities, depending on the state's size and population<sup>103</sup> (Ruiz de Chavez, 1988; Secretaría de Salud, 1996; Secretaría de Salud and OPS, 1988, 1994).

<sup>103</sup>A federal entity may have between 1 and 17 health jurisdictions. The total number of health jurisdictions in Mexico has fluctuated over time, mainly because larger health jurisdictions which have more capacity and infrastructure may absorb the smaller ones; for example in 1989 there were 248 while in 1994 there were 220 (Secretaría de Salud, 1994, p.4).

At the municipal level, the Healthy Municipality Program (*Programa de Municipio Saludable*) was created to contribute to improve the health of the population through projects designed jointly by the different sectors of the local population. Among its aims is to guide the activities directed towards the promotion of organised community participation. The Healthy Municipality Program is intended to encourage and support the participation of the community in defining health priorities, designing and implementing local health programs, and evaluating programmed activities (Secretaría de Salud, 1996).

Among the local organisations promoted in the Healthy Municipality Program are the CHCs. The role of health committees has been highlighted by the Zedillo administration as important to the success of SHS. The participation of the municipal government and the community - through municipal and community health committees - is deemed vital to the definition of local strategies which are responsive to local health needs and priorities. The objective of the CHC is to secure improvement of the health status of the population it serves through community participation activities (*ibid.*). This community organisation can be viewed in principle as a space for dialogue. Based on our discussion of spaces for dialogue, in Section 3.3, the CHC is the most immediate arena which is both accessible and available to community members. In this space, its members can express their views about health-related problems and their possible solutions. The guidelines for establishing CHCs and their functions, both in theory and in practice, will be discussed in detail in Section 7.1.2.

Our interest in studying a CHC is to analyse the possible role of problem structuring methods in enabling its meaningful participation and empowerment (as defined in Chapter 3). The research carried out in Mexico is described in the following sections and in Chapter 7.

## **6.2 Initial research design**

The research design prepared prior to the fieldwork in Mexico needed to be changed at an early stage of implementation. This section discusses the initial idea for the design and the problems encountered once in the field. The final research design which responded to these difficulties will be discussed in detail in Section 6.3.

The hypothesis of the research, after its reformulation in Chapter 4, was that the analytic assistance of PSMs provided during the conversion process activities, understanding the *problématique* and structuring the problem, are likely to lead to generating improved quality and more balanced dialogue (see Section 3.3.1). Dialogue with these characteristics is oriented at taking more informed choices and decisions. Direct effects which can also be expected are improvements in cognitive skills, on available information and knowledge, and on information processing skills of participants. These effects from PSMs can be considered a contribution to increasing the self-power of participants. Therefore, it can reasonably be argued that PSMs are empowering.

As discussed in Chapter 5, there were two options to test this hypothesis: to study the independent use of PSMs, or to test their joint use with other participatory development planning methods such as PRA. Within the confines of Ph.D. research, it was not possible to investigate both of these options. The study of these two uses of PSMs would have required entirely separate case locations. In making the choice between these options two important considerations were involved. First, case study work in any case has its difficulties. These are compounded if there is a need to liaise not only with the grassroots stakeholders but also with a development project.

Second, in research of this kind both time and resources available are inevitably limited. To select joint use of PSMs and PRA as the focus would have restricted the selection of communities to among those which were already participating in an on-going project using PRA. This requirement threatened to make the search for feasible locations protracted, or even ultimately unsuccessful. These factors indicated that a

strong case could be made for concentrating research efforts on the study of the independent use of PSMs.

Following a positivist approach, the initial research design was to be a quasi-experiment. As discussed earlier, decentralised systems can, in principle, facilitate the genuine participation (see Chapter 3) of community members in health services planning and decision-making. Therefore, the intention was to select two communities located in one of the Mexican states in which health responsibilities had been decentralised. One of the selected communities would serve as the control (i.e. there would be no intervention). The other would be the experimental community in which the intervention would take place. The intervention was planned to consist of applying PSMs with the CHC to help structure and understand their problem situation. In the process of applying these methods, their adequacy, acceptability and utility would be studied. The test of the hypothesis was, broadly, that PSMs would generate improvements in self-power giving resources and enablers which operate to generate the empowerment of the target community organisation relative to that of the control.

The community organisation to be studied needed to operate in the context of health services planning, given the health planning orientation intended for the case study. The CHC was selected as the subject of study because in principle it can serve as a space for dialogue, in which community members can take an active role in making health related decisions that affect their lives. It is an entry point for community members to participate in organised efforts to plan for their health services. In Section 7.1.2, the tasks which are, in principle, the responsibility of CHCs will be described.

From a survey of relevant documentation on a large number of CHCs, a small number were identified for more detailed consideration. For each of these, more particular investigations were carried out using official data. The project was also discussed with researchers and public officials at the state and local levels. Based on the outcomes of these consultations, three defects in the initial design became apparent.

First, there was inadequate time and resources to undertake a research study of such magnitude. Selecting two matching communities (one control and one

experimental) would not be feasible because the limited available time would not allow for the thorough advance study of both communities. It was realised that cultivation of relationships with two sets of individuals geographically separated could only be done in sequence, hence extending the length of the research unreasonably.

Second, it became clear that it would be difficult to find two communities that were similar enough to serve as effective comparators. This defect generated uncertainty about the case study's validity. A research's validity can be divided into internal and external. Internal validity means that the conclusions arrived at within that investigation are correct. By contrast, the external validity of an experiment focuses on the factors which affect the generalisability of its results (Sierra Bravo, 1983; Preece, 1994).

A failure to select two matching communities would threaten the case study's internal validity. Internal validity is a necessary but not sufficient condition for the results to be externally valid. For results to be generalisable, communities selected should be representative of others. These validity issues would, thus, prevent meaningful conclusions being drawn from an experiment designed in this way. Changes observed in the two communities could be due to initial selection differences between them rather than to the intervention.

The third defect in the design, it was increasingly realised, was that the results of an intervention would take a considerable time to be implemented, and still longer to produce their effects. As a result, the issue of implementation would present severe problems for the research timetable.

These problems encountered with the initial research design led to its reorientation. The differences between the initial and the alternative proposal concerned both the research approach and the intervention. These differences will be discussed in the section which follows.

### 6.3 Reorienting the case study: the use of an action research approach

In the previous section the initial research design and the related problems encountered were identified. This section discusses the revised design for the case study. A significant change was the decision to focus available time and resources on the thorough study of a single community. This necessary reorientation had important implications for the research approach undertaken in the fieldwork. Focusing the study on one community meant that the research had necessarily to move away from positivist research towards action research (AR), since there was no longer to be a control community. The main features of AR will be reviewed below. Then the implications of this shift in the research approach will be discussed.

#### 6.3.1 *An action research approach*

AR refers to the combination of three indispensable elements: research, action and participation. It is a form of research that produces knowledge claims for the specific purpose of taking action to promote social change. The social change sought is that of increasing “the ability of the involved community or organisation members to control their own destinies more effectively and to keep improving their capacity to do so” (Greenwood and Levin, 1998, p.6)

AR focuses on “what could be rather than on what is” (Elden and Chisholm, 1993), unlike positivist research. AR is a method for action and for change as well as for research. Brown (1993) identifies two traditions within AR: the “Northern” and the “Southern”. The former emphasises on the improvement of organisational performance and producing social science theory in developed countries (See Whyte, 1991; Greenwood et al, 1993). The latter focuses on the conscientisation (see Appendix A) of oppressed and disenfranchised groups to accomplish community transformations and social justice in developing countries (See Fals-Borda and Rahman, 1991; Rahman, 1993; Chisholm and Elden, 1993). In this research, the Southern tradition is followed since it focuses on work with poor and disadvantaged groups in Third World countries.

AR attempts to raise the level of consciousness, explore new approaches to basic social problems and empower the oppressed. (Elden and Chisholm, 1993). It is an emergent and cyclical process generally characterised by the phases of reflection, plan, action and observation (Susman and Evered, 1978). AR emphasises the importance of reflection which leads to action during the intervention. By contrast, in the positivist approach reflection about action occurs after the intervention (Eden and Huxham, 1996a). The AR process may either be dominated by the researcher, or co-managed by the researcher and the researched. The latter is increasingly referred to as participatory action research. (Chisholm and Elden, 1993; Elden and Chisholm, 1993; Green wood et al, 1993).

AR has three main objectives. First, AR aims at a positive intervention which is beneficial to the participant community organisation; that is, there will be an improvement. The second objective is to enhance the capacity of the system (e.g. company, organisation, community) being studied, to study and change itself. In other words, the system will have the capacity for future improvements. And the third aim of AR is to produce new social knowledge. In summary, AR seeks the empowerment of participants, collaboration through participation, and acquisition of knowledge through social change (Susman and Evered, 1978; Chisholm and Elden, 1993).

There are underlying implications of these aims for the roles both of the researched and of the researcher in an AR study. The researched seek to improve their surrounding circumstances. The researcher has twin roles: those of consultant and of investigator or knowledge producer. These need not be mutually exclusive. As a consultant, his/her function is to help the researched achieve their objective. And the investigator (even as a Ph.D. student) also engages in the task of identifying lessons to be learned from the resulting experience, which can be applied in other cases which are similar (Eden and Huxham, 1996a).

Some of the characteristics of AR which provide a general understanding of this research approach have been discussed. It is necessary, however, to have some clarity about the implications for our research of the shift from a positivist approach to AR.

### 6.3.2 Implications of the shift to AR for the research

This section will discuss the implications that the shift from positivist approach to AR has for the intervention, the hypothesis, and the generalisability of results.

Following an AR approach, the application of PSMs *per se* would not be the sole or principal focus of the research. The reason for this shift can be explained as follows. The first aim of AR (see Section 6.3.1) is to help the researched achieve an improvement. The other two objectives should only be achieved through the first; that is, only if there is success in helping the researched can their capacity be enhanced and new social knowledge be generated. Therefore, the new emphasis of the intervention would rather be on assisting the CHC in achieving its objectives through applying PSMs in circumstances in which these methods were expected to be helpful to the researched. Thus, the direction of our intervention would be about attempting to change “the ways in which problems are discussed, which has the effects of initiating other changes” (Hart and Bond, 1995).

In this attempt, CHC members would be expected to bring to the research process their practical knowledge and experience in the problematic situation. And the researcher’s contribution to the process would be her theoretical knowledge and problem-solving skills. (Susman and Evered, 1978; Elden and Chisholm, 1993; Greenwood and Levin, 1998). In AR, the *problématique* is studied as part of the change process. Throughout this process, understandings about the meanings of issues in terms of possible problem constructions and their solutions are developed (Hart and Bond, 1995). As Greenwood and Levin (1998, p.85) state “the meaning construction process linked to solving practical problems is the major knowledge generation element in AR”.

This knowledge generation element within AR has in turn implications for the test of the hypothesis. Unlike the positivist approach to research, in AR there is no *hypothesis-testing* (Eden and Huxham, 1996b). The task of action researchers is rather an exploratory one in which hypotheses/theories are generated throughout the research process – a process which is context specific. In other words, AR theories are grounded in action (Susman and Evered, 1978) or emerge from the research process (Eden and Huxham, 1996a). This means that the hypothesis stated in Section 4.3 will

not be tested as such in our AR study.<sup>104</sup> Our exploration will end with a hypothesis or “local theory” which reasonably explains the observations during the process (Elden, 1981; Eden and Huxham, 1996b). “Local theory”, theory which is context-bounded, is the “shared social construction” resulting from the interaction between researched and researcher “in common social settings” (Levin, 1993; Eden and Huxham, 1996a).

Going beyond the context specific to the project is the concern of the generalisability of research outcomes. The basis for generalisation in AR is narrow, situational and context-bound (Susman and Evered, 1978; Elden and Chisholm, 1993; Greenwood and Levin, 1998). Nevertheless, Eden and Huxham (1996b, p.78) argue that to be considered research, necessarily this research approach “must have some *implications beyond* those required for action or generation of knowledge in the domain of the project.” In this sense, the results produced by our AR study must fulfil two requirements. They ought to be characterised or conceptualised in ways which make them meaningful to others. The results must also serve to inform other research projects, if minimally to suggest areas which could be considered (e.g. procedural knowledge about the experience, participants’ learning process) in other research situations.

History and context also have an important role in the generalisability of AR results. Knowledge is required about the history of the organisation, its individuals and the relationships between them as well as the broader context within which the research takes place. This is because it will help in the construction of judgements about the possibility of applying knowledge generated in one situation in another (Eden and Huxham, 1996a; Greenwood and Levin, 1998, p. 85). Thus, in the interpretation of the AR process results, it will be important to take them into account.

---

<sup>104</sup> The exercise of having arrived at the hypothesis formulation, nevertheless has the value of contributing to the researcher’s recognition of relevant information during the engagement with the CHC.

### 6.3.3 Potential principal and direct effects from the use of PSMs in the AR process

The implications for this research of following an AR approach have been discussed. These helped to shape the intervention and to clarify issues of validity. Based on the new design, this section will discuss the expected benefits from the use of PSMs in the AR process. Clearly, the researcher who engages in an AR study does not totally disregard ideas about expected outcomes from the research process. Therefore, during the work with the community organisation, the researcher sought to identify: (1) apparent lacks in the self-power giving resources of the CHC; (2) whether the problem situation of the CHC had characteristics appropriate for PSMs; and (3) the extent to which there were grounds to believe that PSMs had contributed to an improvement in their situation. This was to be accomplished through observation and interaction with the members of the CHC. Given that it is of the nature of AR that it cannot be carried out in laboratory settings the researcher cannot control all conditions. In the discussion of results of the project experience (see Section 7.3) supporting evidence is provided of the extent to which the results achieved were in line with our expectations.

The potential direct effects of the analytic contribution of PSMs in processes for increasing self-power were identified in the model developed in Chapter 4 (see Figure 4.4). This model, it may be recalled, incorporated elements in the roles of resources, enablers, conversion process and functionings, together with the links between them. The potential role for PSMs was identified as being principally in relation to the conversion process and its two main activities: understanding the *problématique*, and structuring the problem.

Based on this model, it was argued (in Section 4.3) that there are a series of principal and direct effects from using PSMs which it was hoped to generate in a community empowerment process. These benefits are those which occur in elements which are within one-step away of the conversion process: cognitive skills to understand, mental ability to be active, available information and knowledge, spaces for dialogue, analytic tools, information processing and commitment to an effective course of action. Table 6.1 provides a summary of the main effects which can be expected in each model element if the claims for PSMs (see Chapter 5) can be

substantiated in this context. (The extent to which the expected effects were achieved in the case study will be discussed in Section 7.3.)

**Table 6.1 Principal and direct effects from the PSM intervention**

Element of the model affected by the intervention	Expected effect
Conversion process (Structuring the problem and understanding the problématique)	Improved CHC understanding of its own situation and of their action-relevant context. Structured problématique. Achieved felt ownership of the problem situation by the CHC.
Analytical tools	Adoption of PSM used. Improved CHC skills to take more informed actions and decisions.
Spaces for dialogue	Achieved active participation by CHC members.
Information processing	Improved CHC abilities to use available information and knowledge.
Cognitive skills to understand	Improved CHC abilities to structure their arguments and defend their positions before other social actors.
Commitment to a course of action	Agreement on action and responsible follow through.

Clearly, there are enablers in the model which the use of PSMs was quite unlikely to affect (e.g. the social/political framework of rights and institutions, freedom of association, survival intensity). However, given that our model elements form a system of relationships, interactions and activities, if a change occurs in any of parts of this system, it may have quite wide effects. These potential changes would, however, require longer time periods to be able to detect if changes occurred. Furthermore, the more intervening steps there are before arriving at a certain model element, the more likely it is that some other factors will intervene and ‘corrupt’ the effect which might have been expected. This implies that the further the element is from the conversion process, the higher the uncertainty with which any result can be attributed to PSMs.

To evaluate the extent to which expected effects have been achieved in this case study, an approach has been used based on the work by Eden and Ackermann (1994). They propose sets of criteria for evaluating group decision support systems from the perspective of different stakeholders (including developers, facilitators, clients, key actors, users, vendors, and academics). In the research reported here particular

emphasis has been given to their criteria for users and for academics, the two participant actors in this case study. In the following chapter the AR study undertaken with a Mexican CHC is described, and the effects of the intervention will be evaluated against these criteria.

## Chapter 7

### *Participatory health services planning in Alpuyeca (Mexico)*

Chapter 6 presented the final design of the action research study whose aim was to clarify the role of PSMs in Third World community organisations. It was proposed that principal and direct effects of PSMs would be evidenced, among others, in the selected organisation's improved understanding of their problem situation and the improved quality of dialogue between its members.

The case study carried out over a six-month period with the health committee of the Mexican community of Alpuyeca is discussed in this chapter. The discussion is organised as follows. In Section 7.1, a description of the community and the community organisation selected for the study is presented. This background information prepares for the discussion, in Section 7.2, of the work undertaken with the selected community health committee (CHC) during the study. The interpretation of the project experience is then presented in Section 7.3.

The information provided throughout this chapter is drawn from a mixture of secondary material, researcher's observations, notes from meetings and informal conversations, individual interviews<sup>105</sup> and focus group discussions.<sup>106</sup>

---

<sup>105</sup> Semi-structured interviews were conducted as preparatory work for the case study with the selected CHC. No subsequent systematic content analysis was intended. However, in particular sections in this chapter references are made to some interviews in support of the theme being discussed. (See Appendix E for a list of interviewees and Appendix F for the questions which guided some of the interviewees.)

<sup>106</sup> Focus group discussions were carried out with the CHC of the selected community of Alpuyeca, and the health team from the local health clinic. The purpose of these discussions was twofold: to become familiar with the action-relevant contexts of these two groups, and to evaluate with them the project experience. (See Appendix G for questions that were used as a guide to initiate the discussions).

## 7.1 Describing the community selected for the research and its health committee

This section describes the community organisation which was selected for the study. The criteria for selecting the study community are explained first. Thereafter the focus of this section is on the description of the community organisation selected for the research.

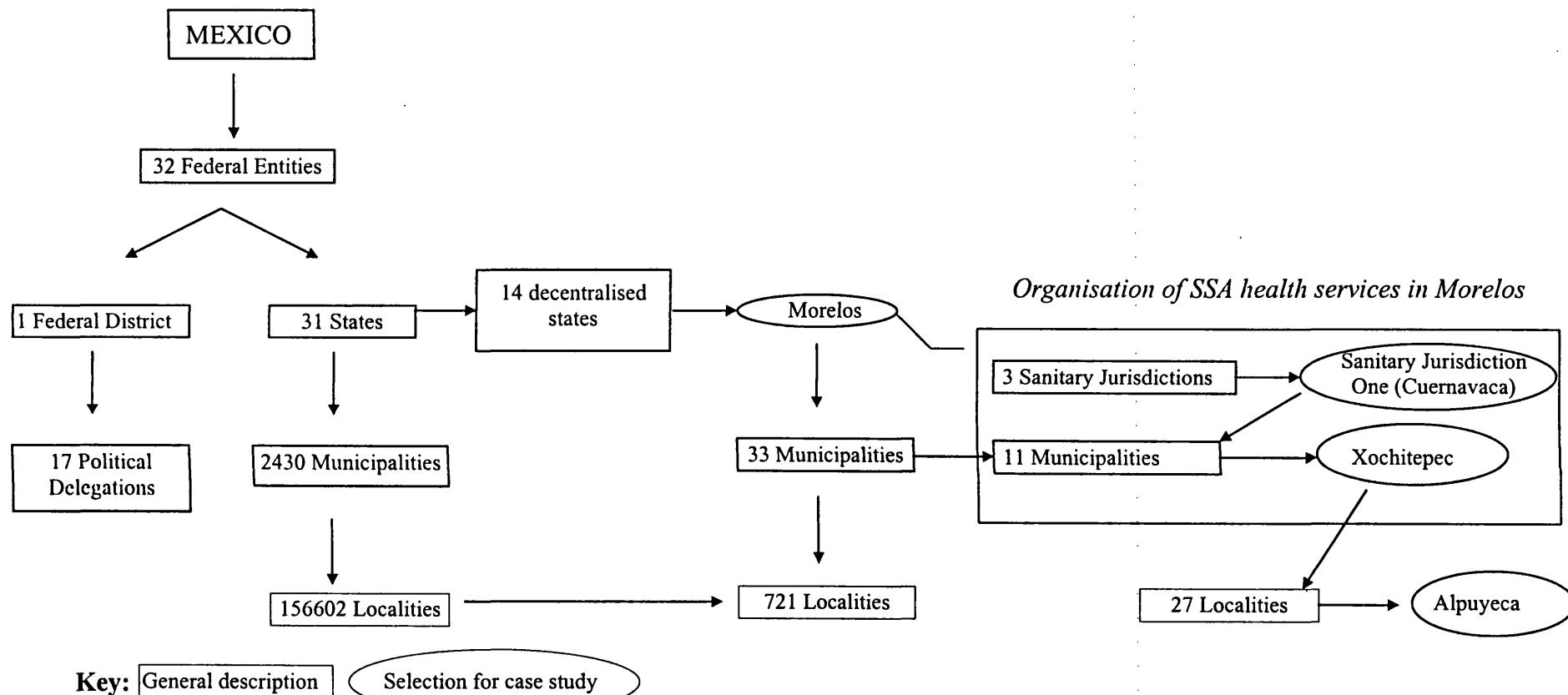
Within the revised view of the project using action research (AR), the investigation could be limited to a single community. A pre-stage of the casework was to identify and establish relations with a particular health committee with which to carry out the case study.

It may be recalled from Section 6.1, that the SSA was selected as the most relevant public sector institution for the study, since it is the main provider of health services for poor and disadvantaged groups – those of interest in our research. Based on the SSA structure discussed earlier (see Section 6.1), the process of selecting the community was necessarily hierarchical: first state, then health jurisdiction and finally community. These successive filters were needed in order to obtain authorisation to carry out the research (see Figure 7.1).<sup>107</sup> (Clearly, this use of successive filtering does not guarantee that the best communities for our research purpose could be found.)

The administrative and political structure of the Mexican federation is quite complex, as is shown in Figure 7.1. This figure indicates within rectangles the different levels of the organisation of the Mexican state system. An oval represents a selection made for the case study.

---

<sup>107</sup> At the time the fieldwork was to take place, there was a continuing preoccupation with political upheavals and disturbances (especially the Chiapas uprising of 1994). Although possible, it was not advisable, to approach the communities directly. Therefore it was necessary to obtain authorisation at each level.

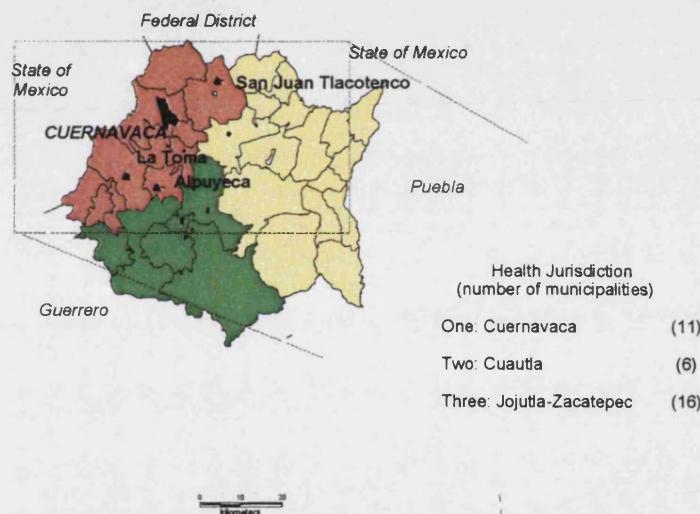
**Figure 7.1 Structure of the Mexican Federation and case study selection**

Source: Based on information from INEGI, 1990, 1995.

Morelos was selected because it was one of the decentralised states of the Mexican NHS. (See Section 6.1, for the relevance of decentralisation for the research). The process of acquiring authorisation from the state health authorities to carry out the research was also expected to be easier in Morelos than in other states because of the researcher's previous work experience there.<sup>108</sup>

For the purpose of providing coverage for the state's uninsured population, the state of Morelos is divided into three health jurisdictions (see Map 7.1) of varying size (and provision of health care facilities) covering in total 721 communities (INEGI, 1995). For reasons of practicality, it was appropriate to focus on contacts within one jurisdiction rather than in a number.

**Map 7.1 State of Morelos –health jurisdiction and potential communities**



In the absence, at this stage, of more detailed information, the health jurisdiction with the highest number of communities was to be preferred because it would supply more community options. Of the three health jurisdictions within Morelos, Health Jurisdiction One provides services to the largest number of communities, covering

<sup>108</sup> The researcher had worked at the National Institute of Public Health (INSP) located in Cuernavaca, Morelos.

almost half of the states' uninsured population (INEGI, 1990a; Secretaría de Salud, 1995.)

### 7.1.1 *Community selection criteria*

The community for the case study was therefore selected from among the most promising communities within Health Jurisdiction One. The criteria employed were derived from secondary material and consultation of staff from the health jurisdiction. The criteria for choosing the research community necessarily concerned the activity level of the CHC and the absence of key potential obstacles. Moreover, in order for the research to generate any significant contributions, it would be necessary to find a community which was likely to be willing to engage with PSMs. Therefore, it seemed sensible to filter out those communities in which lack of effective organisation meant that meaningful engagement was improbable. Each criterion will be discussed in turn.

- As has been discussed in Section 6.1, the CHC was the community organisation selected for the fieldwork. Therefore, the selected community needed to have a CHC which had more than a purely nominal existence. CHCs in the state of Morelos (as well as in the rest of the country) are registered at the health jurisdiction once they are established. However, in practice it is common to find communities where no CHC has been organised or where it has ceased to exist.
- It was not only important for the CHC to be organised but also that its activity level was high. A highly active CHC is one that participates in at least one of the following activities: initiating and managing its own projects; diagnosing community needs in collaboration with the health staff; implementing national health program campaigns (e.g. immunisation, family planning); and local service planning and evaluation.<sup>109</sup> (Departamento de Fomento a la Salud, undated).

---

<sup>109</sup> Members of a CHC which is working well and actively participant are more likely to be confident enough to try methods which are unfamiliar to them. Therefore, the possibility that PSMs could have a positive reception would be higher than with a CHC that was not active.

- The locality in which the CHC was situated should be easily accessed from Cuernavaca. Thus, the locality should be one which could be reached by public transport, and to which day trips would be possible. Clearly, this criterion of accessibility affects the social and economic situation of the community, which therefore cannot be treated as necessarily representative of communities elsewhere in the jurisdiction, the state or further afield.
- It was preferable that the medical student in social service (*médico pasante en servicio social*, MPSS),<sup>110</sup> who is also the director of the community clinic during his/her year of service, was not due to change in the course of the fieldwork. The MPSS start their social service in either February or August. The research was to begin in June, so the community to be chosen needed to be one in which the MPSS changeover occurred in February.
- The zonal supervision teams considered that a community where there was an on-going external project (i.e. researchers external to the community undertaking their own project) would not be an option. (A project is a work plan with objectives to be fulfilled). The teams argued that participation of the CHC and health centre staff in an additional project would be too great a burden. (Satisfying this criterion would have prevented using PSMs with PRA, as discussed in Section 5.4.)
- Given the above consideration it was extremely important that the CHC should have its own internal project. Having such a project would provide the researcher with the opportunity of seeing the CHC's work dynamics in a process in which its members had a goal to achieve. An on-going project would also facilitate the CHC's interest in and acceptance of the proposed research, as their project could potentially benefit from it.
- Finally, it would be advantageous if the CHC had regular scheduled meetings. This would enable the research to 'fit' into the meetings, and not require additional meetings to fit the research.

---

<sup>110</sup>The MPSS is a fifth year medical student fulfilling his/her compulsory, one-year social service in underserved rural areas. This social service program began during the Cárdenas administration (1934-1940).

These criteria were identified at an intermediate stage of the community selection process, and the ratings of the CHC on the criteria were necessarily based on the incomplete knowledge of the Health Jurisdiction One staff as to the status of the CHCs in the apparently most promising communities. Up-to-date information did not exist centrally and could only be verified through visits to the communities. As a result of these visits, three potential communities were selected. These were: San Juan Tlacotenco (in the municipality of Tepoztlán), La Toma (in the municipality of Miacatlán), and Alpuyeca (in the municipality of Xochitepec), as shown in Map 7.1.

In a second visit to these three communities, the researcher surprisingly found out that two of them did not have an on-going internal project.<sup>111</sup> The locality of Alpuyeca was therefore eventually selected for the fieldwork because it had a well-organised and active CHC, willing to engage with PSMs, and the only one of those visited that had a current internal project to carry out in the short term. The CHC's project was the construction of a dental clinic as an annex to the community health centre.

### 7.1.2 *About the community of Alpuyeca and its health committee*

Alpuyeca is the second largest locality of 27 in the municipality of Xochitepec. This community is made up of five neighbourhoods (including the downtown area) which together had a total of 5,032 inhabitants in 1990 (INEGI, 1990a, 1990b, 1995).

Alpuyeca is an “organisationally dense” community (Sherraden, 1989, p.154). This means that there are many local organisations, and an individual community member may be involved in several of them. Community organisations include the school committees, Soccer League Committee, Public Works Committee, Committee of the State-run Food Stores (*CONASUPO*), Religious Celebrations Committee, Neighbourhood Vigilance Committee, Taxi Association, Sugarcane Growers Association, Merchants Association, Tenant Farmers’ Association, Common Property

---

<sup>111</sup> A possible explanation of this situation is that during the preliminary visits to the communities, the CHC deduced that if the researcher had the support of the jurisdiction director it would be possible to secure additional resources for the community if they claimed that they had an on-going project.

Commission, and the Community Health Committee (CHC). Of these organisations, the CHC is the only community organisation in Alpuyeca whose principal concerns are health and health services-related issues.

According to the official guidelines for establishing community health committees developed by the SSA, their objective is “to achieve community participation in activities that yield a collective benefit which will enable the improvement of the health status of the population” (Departamento de Fomento a la Salud, undated). The organisational structure and functioning of the CHC is established by these official guidelines.

In what follows these official guidelines will be discussed and compared to the reality of Alpuyeca’s CHC. For the purposes of clarity, the guidelines will be grouped into three categories: membership requirements, election procedures, and functions and activities. In each of these categories, the discussion will alternate between how a CHC is in principle supposed to operate, and what occurs in practice in the case of the CHC selected for the case study.

Prior to this discussion about guidelines, a general remark should be made about Alpuyeca’s CHC. The CHC of Alpuyeca was, at our first encounter, made up of 12 members. However, by the time work with them began (about one month later), it had reduced to three. The nine members who left the committee did so because of internal conflict between CHC members or for personal reasons, especially family problems. The description made in this section will be of the remaining three members and the new member who joined during the month prior to our first work meeting. In other words, the CHC of Alpuyeca which participated in our AR study consisted of four members.

According to the official guidelines for establishing CHCs, there are five requirements that need to be fulfilled to be a candidate for membership of the CHC. The candidate should be: (1) 18 years or older; (2) a permanent resident of the community; (3) preferably literate; (4) willing to dedicate the necessary time for the fulfillment of activities of the CHC; and (5) capable of reconciling opinions and

avoiding friction that might arise among community members during the fulfillment of his/her functions. CHC members are volunteers who are not paid for their services.

In the particular case of the CHC of Alpuyeca, its four members fulfilled the five membership requirements. Nevertheless it is important to note that requirements (4) and (5) are subjective. Unless members have been previously involved in community activities, it is difficult to evaluate, prior to the election, if they fulfill these two requirements. And even if they have, the assessment by other community members is likely to be rather subjective.

According to the official electoral procedures, the CHC should be representative of its community and members should be democratically elected. This election should be carried out in a community general assembly (summoned by the civil and community authorities of the locality or municipality), in which candidates are proposed or a community member proposes him/herself. Those attending the assembly vote for the candidates to the different posts. The health committee should be made up of six posts – that of a president, a secretary, a treasurer, and three voting members. The responsibility for representing community issues regarding health, nutrition and sanitation is divided among each one of the three voting members. A deputy should be elected for each member. CHC members may be substituted or ratified by the community during or at the end of their two-year term.

However, CHC membership can be adjusted according to the population of the community. In the event that the six posts are not filled, the minimum number of members required to form a CHC is three. This smaller CHC should be constituted by a president and two voting members (one responsible for health, and the other for both nutrition and sanitation).

The four members of Alpuyeca's CHC were not all selected by the same procedure. Three of the four people who joined the study – the treasurer, president substitute<sup>112</sup> and president – were elected (along with the nine other previous

---

<sup>112</sup>In the case of the CHC of Alpuyeca, only one replacement was elected. One of the voting members was chosen by her CHC colleagues for the post of president substitute. A president substitute is expected to take over the president's post if s/he is not able to complete her/his term in office.

colleagues) at a general town assembly which was summoned by the municipal aide<sup>113</sup> (attendance was approximately 50 community members). Both the president substitute and treasurer volunteered their services at the general assembly. The president, a man,<sup>114</sup> was proposed at this town assembly by a doctor who was a member of a 6-month national university medical brigade (i.e. not a member of the regular health team of the local health centre).

The secretary (the last member to join the CHC) was encouraged, during one of her visits to the health centre, by the same doctor who proposed the president, to collaborate with the CHC. She was unanimously accepted, by the three CHC members elected at the general assembly, to join the committee. Evidently, her election did not take place in a town assembly. None of the four members was specifically responsible for nutrition or sanitation.

The elected CHC is expected to fulfill certain functions and activities with the support of the health team of the local health unit. Hierarchically, the CHC goes through the health team (especially the health promoter) to express its demands and concerns, and report its activities to the jurisdictional level. The official guidelines enumerate the following functions of the CHC:

- a- Establish and maintain the co-ordination between the health team of the local clinic and the community to develop the health programs;
- b- Identify with the health team the health needs and problems of the community;
- c- Propose alternative solutions for the health needs and problems identified;
- d- Program, implement and evaluate activities, together with the health team, oriented towards the solutions of the problems identified;
- e- Prepare an annual program of activities;
- f- Collaborate in the preparation and execution of the annual program of activities of the health team;
- g- Promote the community's interest in activities that help improve the health level of the community;
- h- Attend training meetings and seek advice from the health team;
- i- Collaborate in health education activities of the community;
- j- Register activities, in the notebook of community activities, carried out for the improvement of the community; and
- k- Inform the community, the health team and the corresponding authorities the CHC's achievements.

---

<sup>113</sup>The municipal aide is a member of the municipality president's staff who is elected by the community s/he represents. S/he is responsible for gathering all community needs and responding to them.

<sup>114</sup>In all the communities visited during the community selection process, the president was male.

In the case of Alpuyeca's CHC, not all of these functions were fulfilled during the period of the study. Those functions which CHC members did carry out will be discussed first. Then some explanatory reasons about the CHC's lack of fulfilment of other expected functions will be provided.

In the day-to-day operations of the health centre, the CHC was responsible for the queuing system for appointments (for both morning and afternoon shifts). On a first-come, first-serve basis, a CHC member would give each patient a number which established the order for doctor consultation. The CHC was also responsible for managing the collection of the voluntary, co-operation quota. (This quota was collected when the number was assigned.)<sup>115</sup> Although the provision of health services is free, community members were requested to voluntarily pay a quota in exchange for services. The quota was set at 5 new pesos (equivalent to 50 pence in 1995 or one third of daily wages). However, as it was a voluntary contribution, patients could pay according to their economic situation. Health services were still provided to those patients who could not afford to make a monetary contribution. The collected funds from these contributions were used for the purchase of supplies (e.g. cotton, alcohol, gauze, sutures) for the health centre, because the state was not providing enough.

The secretary of the CHC maintained a register of the group's activities. Information for community knowledge was posted at the main entrance of the health clinic, and the information was shared with the health team both during and outside regular meeting hours.

Alpuyeca's CHC was mainly concerned with its project: the construction and operation of a dental clinic. Therefore, their main activities - raising funds, obtaining construction materials, and securing voluntary labour - revolved around this task. The CHC actively sought to generate the interest of the community particularly in these activities. In relation to CHC's participation in national health program activities, their involvement was limited to providing the health team with support in the national immunisation and anti-rabies campaigns.

---

<sup>115</sup>The health team is not allowed to take money from patients. Thus it was the CHC's responsibility to collect the voluntary contributions from them.

So far a description has been provided of the functions the CHC members carried out in practice. Other functions were not fulfilled mainly because of lack of training and of knowledge. CHC members never received any training. The lack of training meant that CHC members did not have knowledge about the functions they were expected to fulfil. Alpuyeca's CHC and several members of the health team had never seen the guidelines described above. (The researcher showed them a copy of the guidelines at one of the meetings.) For example, the CHC is expected by the jurisdictional level to complete a monthly activity report together with the health team, but it never did so because of the lack of knowledge of the requirement for such a report. The only information they had about the CHC was a set of ten pamphlets which the municipal health officer<sup>116</sup> gave them, at their request, but which they never read. These pamphlets did not include the complete set of guidelines described above. (Focus group, A and B).

As can be seen from the comparison provided in this section, there are differences, both in relation to election procedures and to functions, between the official guidelines and the reality of Alpuyeca's health committee. With respect to election procedures, although three of the four members of the CHC were elected at a general assembly, the posts filled did not entirely match those proposed in the official guidelines. Alpuyeca's CHC could thus be described as a hybrid between a minimum 3-member CHC and a six member one.

It could also be seen above, that in practice the fulfillment of expected functions and activities by the researched CHC, varied significantly. The main reason identified for the failure to fulfill activities was the lack of knowledge of CHC's members about the functions and activities they were expected to fulfill. This was due to the lack of training of the CHC. (Focus Group A). (In terms of the ladder of citizen empowerment, the CHC's participation in expected functions can be interpreted as falling within the non-genuine participation boundary (see Section 3.2). CHC members even had a relative control over activities and decisions related to their dental clinic project, as will be discussed later in this chapter.)

---

<sup>116</sup> The municipal health officer is based in Xochitepec (capital of the municipality) and is responsible for health related issues across the entire municipality.

### 7.1.3 The dental clinic project of Alpuyeca's CHC

Despite these deficiencies, participants in Alpuyeca's CHC were motivated by their willingness to complete the dental clinic project. (It may be recalled from Section 7.1.1, that among the criteria applied for the selection of the case study community was the requirement that the CHC had an on-going project.) A brief account of the origins of this project will be presented next, in preparation for the discussion of our work with the CHC.

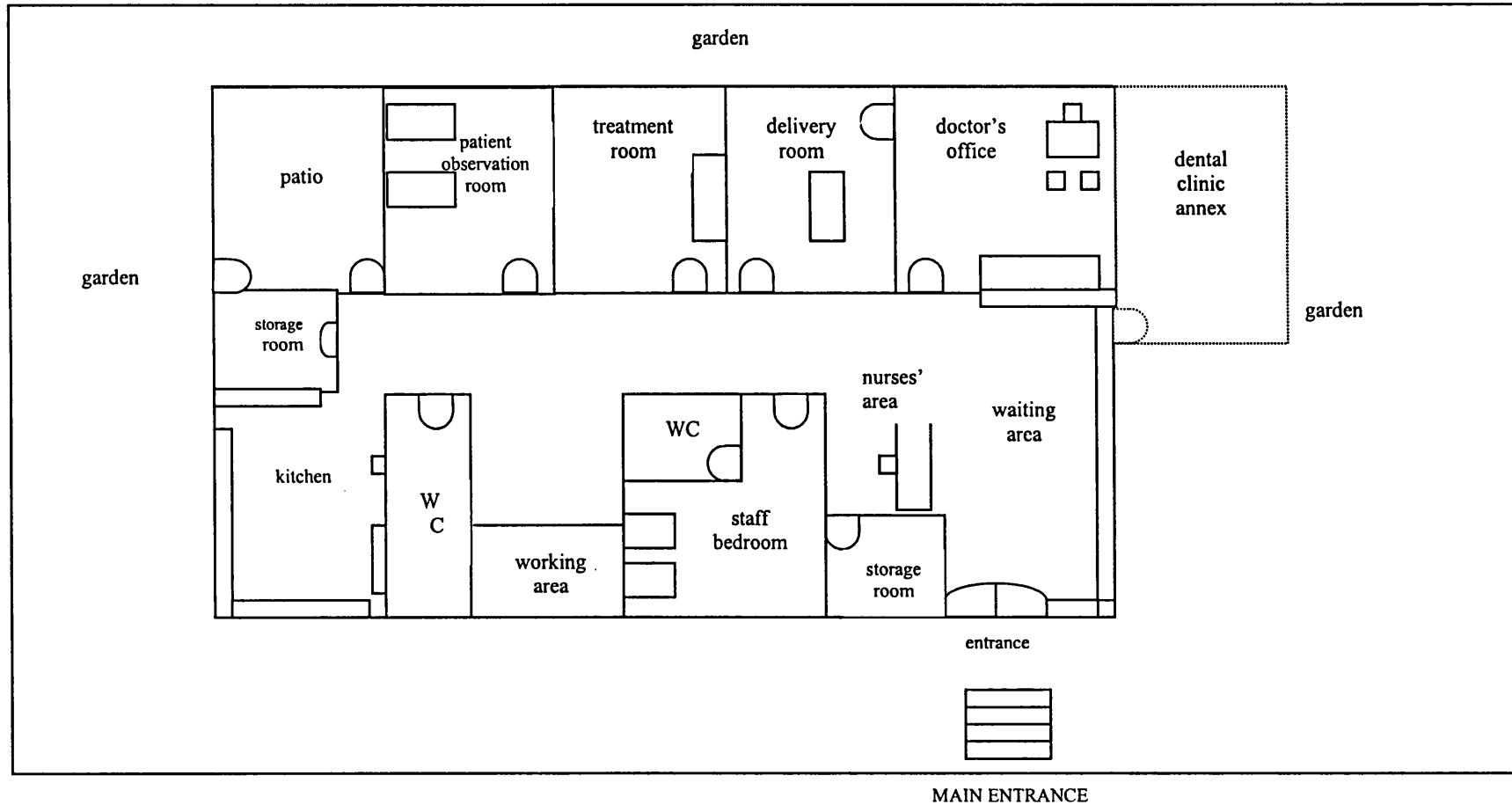
Alpuyeca has one of the five health centres located in the municipality of Xochitepec. It is a first level of care unit, classified as a "rural health centre for dispersed population".<sup>117</sup> This type of health unit has the following characteristics. The centre's health team is made up of a doctor, a nurse, a nurse auxiliary, and a health promoter (Secretaría de Salud, 1995). The health centre has morning and afternoon shifts to provide a wide variety of services to the community. These services include medical consultation, emergency treatment, health education, immunisation, family planning, oral re-hydration treatment, maternity care, and school health program for children. The health centre is also responsible for referring patients to second level units. A diagram of the spatial arrangement within the health centre is shown in Figure 7.2.

As can be seen from this description, dental services were not among those regularly offered at Alpuyeca's health unit. Members of the Alpuyeca community usually had to travel approximately thirty minutes, to the health centre at the municipality capital, to receive dental care services.

---

<sup>117</sup>Other types of health units are: rural health centre for concentrated population, auxiliary health unit, urban health center and health centre with hospitalisation (See Secretaría de Salud, 1995).

Figure 7.2 Spatial arrangements within the health centre of Alpuyeca



Before the researcher's first contact with the CHC, a medical brigade from the National Autonomous University of Mexico (UNAM) had visited Alpuyeca for a six-month period of social service. (It was the doctor from this brigade who had proposed the CHC president as candidate to the post). Another member of the brigade was a dental student. Since regular dental services had not been provided in Alpuyeca's health centre there was no dental chair or equipment. Thus, the dental student had to improvise using a bed or a regular chair. The CHC which effectively disbanded shortly before our study, raised funds and purchased a dental chair to facilitate the dental student's work. This was located in the treatment room (see Figure 7.2).

However, when the treatment room needed to be used for patient treatment, dental patients either had to wait for the room to be available or were relocated to other available rooms. Despite the inconvenience of these arrangements, the community was satisfied to have dental services provided locally, became used to not travelling for them, and were pleased to reduce costs (Focus groups A and B).

Prior to its disbandment, the 12 member CHC decided that an important project to undertake was to establish a physical space dedicated specifically for the provision of dental care. A proposal was made through the health team to the health jurisdiction director to secure authorisation to construct a dental clinic as an annex to the health centre. (The area chosen for dental clinic construction is shown in Figure 7.2 with dotted lines. Also see Appendix H, Photograph 1.) The CHC argued that having such a space would not only reduce any delays in service provision but would also make dental care services accessible to a wider segment of the community. The ownership of the dental chair was also used as an argument supporting the community's interest in having a dental clinic. The agreement negotiated with the health jurisdiction director was that the CHC had the responsibility to construct the dental clinic (i.e. raise the necessary funds, obtain donations in money or kind, purchase construction material). In turn, the health jurisdiction would provide necessary guidance for technical installation and would guarantee a permanent dental post for the new clinic. Once the dental clinic was ready for opening the jurisdiction would make the necessary arrangements to allocate the dentist. The expected date for dental clinic opening was six-months after the researcher's work with the CHC began.

The activities carried out and the problems encountered by the CHC in meeting the conditions will be discussed in more detail in Section 7.2.

At the time the researcher's intervention began, parts of the walls of the dental clinic had been raised (see Appendix H, Photograph 2). CHC members had secured some construction material. However it was insufficient for completing the building. The sections which follow describe in detail the periods of intervention.

#### *7.1.4 Periods of the intervention/Chronology of the project*

The research involvement with the CHC of Alpuyeca lasted six months. The intervention can be divided into three identifiable periods: familiarisation, methodology selection and analytic work. First was the "familiarisation period" in which the researcher became acquainted with CHC members and their dental clinic project. Second, as a result of the work carried out during this period, a PSM was selected to apply in the problem situation of the CHC. Third, the chosen method, the Strategic Choice Approach, was used in a series of workshops with the CHC.

This section will focus on describing the familiarisation period; the latter two periods will be described in the appropriate sections below.

The familiarisation period covered the first two months of the intervention. During this period the researcher engaged in trust building tasks through both informal and formal routes. Informally, conversations with the CHC members, the health team and the community took place at the health centre, during visits to the schools, local market and local shops, and during walks around the community. The researcher participated in CHC activities such as work in the garden (clearing, weeding, uprooting) and meal preparation.<sup>118</sup>

Formally, the researcher attended the CHC's regular scheduled meetings (Mondays 10:00-11:00am), and the occasional additional ones. In principle, the health team was required to be present during these meetings. (The health team co-operated

---

<sup>118</sup> Chambers (1994d) discusses the relevance of outsiders' behaviour and attitudes in participatory efforts in development work. He proposes that the paradigm shift (from things to people) requires reversals and changes of role in which outsiders change "hand over the stick" to disadvantaged groups and listen and learn from its members.

with the CHC but was not formally part of it.) Frequently, however, the doctor and the nurses did not attend the meetings because times coincided with clinic opening hours. They would attend when patient load was low or when the patients were notified in advance that consultation would be interrupted temporarily. The health promoter was the most regular health team participant because it was easier for her to accommodate the meetings in her schedule. Meetings took place mostly in the patient observation room and sometimes in the doctor's office. (See Figure 7.2.)

During the familiarisation period, the participation of the researcher was limited to observation; however, when requested her opinion on issues was given. The objective of the investigator's presence during the CHC's meetings was to learn, for example: what meeting format was followed (how meetings were organised, who chaired them); what kinds of problems the CHC was confronted with; what types of decisions were made; how those decisions were made; who participated in the decision-making process; and what, if any, frictions or divisive issues existed within the group, and between the CHC and other social actors.

Throughout the process of observation, the researcher was able progressively to advance her thinking about the nature of the problem situations which could lend themselves to PSM analysis. Some issues which could potentially benefit from the use of PSMs were provisionally identified by the researcher. These issues can be organised using a four-way classification of problems, proposed by Rosenhead (1993) for COR/OR for development work. The issues identified are presented below. A brief explanation is provided in italics for some of them.

- Physiological
  - a) How to secure the collection of patients' voluntary contributions for services?
  - b) Who to contract for health clinic maintenance and what salary to pay this person?
  - c) How to secure the signature of the jurisdiction director on CHC members' individual identifications?
- Persuasion
  - d) How to convince other social actors to give donations in the form of money, construction material or voluntary labour? *These social actors included community members (e.g. bricklayers, hardware shop owners), municipality staff, senators and delegates of the state of Morelos.*

- e) How to convince jurisdiction staff that progress had been made in dental clinic construction so that the dental post assigned would not be taken away?
- Internal divisive issues
  - f) How to organise the rota of CHC members who give appointment slots for medical consultation, in a way in which was acceptable to all members and did not generate conflict?
  - g) How to resolve the lack of regular attendance at meetings of the CHC president?
- Strategic
  - h) What strategy to follow to request donations, in money and in kind, from other social actors, for the dental clinic project?
  - i) What fund-raising activities (e.g. raffles, dances) to organise for the dental clinic project?

It may be recalled (see Section 5.3), that Rosenhead suggested that although any method could be used in any situation, PSMs were likely to be more appropriate in two of the four categories. These categories are the following: internal divisive issues and external strategic ones. Thus, in the case of Alpuyeca's CHC, the potential use of PSMs was identified for issues f, g, h and i.

The issues which caused internal division within the organisation were those concerning the rota for managing the queuing system for appointments ('f'), and the lack of attendance at meetings (particularly of the president) ('g'). However, open discussion between members allowed for a relatively easy resolution of these conflict situations. For example, the reason for the frequent absences of the president from the meetings was that he had to secure a paid job. His absences meant that the weight of the work fell on the three remaining members. They decided to approach the president to express their lack of satisfaction with the situation. After views were exchanged, the temporary agreement reached was that when the president could not attend meetings, his wife would substitute for him and inform him of the decisions made. This was acceptable to CHC members because they considered the president a valuable worker, who was committed to the CHC, but who at that time was struggling to secure his material/economic resources. However, part of the agreement was that if the president's work situation was not clarified soon (no time limit was set), his CHC colleagues would be forced to find a replacement. (The president substitute did not

see herself as president and preferred to keep her elected post as voting member; the title was not important to her). (Fieldnotes).

The issue of determining the rotations for the queuing system for appointments was resolved in a similar fashion. With these illustrations, it seemed reasonable to conclude that problem situations which were characterised by internal conflict did not represent a serious threat to the organisation.

It was concluded, therefore, that the strategic issues confronting the CHC in terms of the dental clinic project should be the focus of the work with this community organisation. The eventual analysis on which this choice was made will be explained in the following sections. In the section which follows the processes of selecting and using the methodology with the CHC of our case study community will be described in detail.

## **7.2 Selecting and using the methodology**

This section which discusses the process of selecting and using the PSM for working with the CHC of Alpuyeca is organised in four parts. The first part presents our conceptualisation of Alpuyeca's CHC as an alternative OR client and of its problem situation. This is based on both the conceptual framework developed in Chapters 2-5 and on the work carried out during the familiarisation period (see 7.1.4). The second part discusses the extent to which the characteristics of the problem situation of the CHC matched those for which PSMs are likely to be more appropriate. Third, based on this matching, the selection of SCA as the most appropriate for the work with CHC is discussed. The final part describes the period in which analytic work was carried out with the CHC.

The account in this section is based on the researcher's field notes, the interviews, focus group discussions and informal conversations carried out during the fieldwork. (See Appendices E, F and G – for a list of the interviewees and the questions which served as guide during the semi-structured interviews and focus group discussions).

### 7.2.1 Alpuyeca's CHC: an alternative OR client?

During the familiarisation period the researcher had become acquainted with the way in which the CHC was organised. This was particularly useful in terms of identifying whether Alpuyeca's CHC met the criteria of a community client as defined by the British Operational Research Society (ORS), as will be discussed below.

The focus of the research reported here is on working with community clients using the Community Operational Research (COR) approach. The only workable definition which has been advanced is that of the British Operational Research Society (ORS) (see Section 5.5). Therefore it was appropriate to identify the extent to which Alpuyeca's CHC matched these criteria. If it did so, then the case for generalising the conclusions of the research to other community organisations would be strengthened.

These characteristics, advanced both by the ORS and Rosenhead (1993), present some interesting parallels between COR and OR in developing countries. Rosenhead discusses the set of characteristics which, in general, a COR client in Great Britain has to have in order to be comparable with community development situations in the Third World. However, no work to date has attempted to establish whether these characteristics apply to the practical cases which are generally regarded as COR work in developing countries.

Some prominent examples in the literature which can be regarded as COR in developing countries include the work by Bornstein and Villela (1990) about agricultural warehouse location in Brazil; White's (1994) study about development options for a "refugee-affected" village in Belize; and Szekely's (1984) work with *promotores* in Mexico. Although these examples can be regarded as COR work in developing countries, the authors have not explicitly applied these characteristics to their study's community organisations as a test to see whether they come within the defined scope of COR. If in our analysis of Alpuyeca's CHC it is possible to demonstrate that this CHC can be described as broadly equivalent to a COR client in

Great Britain,<sup>119</sup> then this would make it appropriate to consider the application of the set of categories discussed by Rosenhead.

The criteria advanced by the British ORS within its Community OR initiative are that these client organisations should:

- (i) exist to protect or advance the interests of their members,
- (ii) have no articulated management hierarchy;
- (iii) operate internally through consensus or democracy;
- (iv) possess scant physical or financial resources; and
- (v) not exist primarily for the production of goods or services for sale (Rosenhead, 1993; Rosenhead and White, 1996).

Each of these five aspects will be discussed in the specific case of the Alpuyeca CHC.

- (i) The CHC of Alpuyeca exists to protect or advance the interests of the members of the community but that is not quite the same as the members of the CHC. Keys (1987) and Rosenhead (1993) have discussed the relevance of these criteria to intermediary organisations. Alpuyeca's CHC can be described as a hybrid between an organisation which represents the interests of its own members, and an intermediary one which serves people who are disadvantaged. Although, there is no CHC mass membership, it is still answerable in some ways to the community it represents. So following Rosenhead, it is not unreasonable to treat an intermediary organisation as a COR client.
- (ii) Our study's hybrid community organisation is not structured as a managerial hierarchy. The different posts (president, secretary...) that make up the CHC work at the same hierarchical level within the community organisation's structure. No member gives or takes orders.
- (iii) Within this organisational structure, CHC members operate on the basis of consensus and democratic procedures. The group discusses the decisions to be made regarding actions and activities. During these discussions CHC members surface alternative options and their points of view on those options. Although some members are more articulate than others are, it is frequent that the more

---

<sup>119</sup>For examples of work with COR clients in Great Britain, see Wong and Mingers (1994), Thurnhurst et al (1992), Thurnhurst and Ritchie (1992).

participative members encourage others to voice their opinions. Decisions taken generally have the approval of all group members.

(iv) Most of the decisions made were related to issues of resources. The Alpuyeca CHC possesses limited physical and financial resources. In the classification of self-power giving resources discussed in Chapter 2, these CHC's resources fall within the material/economic category. The CHC in our study does not have a secured source of revenue to finance the activities it plans or to meet health centre expenses (e.g. procurement of supplies for the clinic, maintenance expenses). Financially, the CHC is largely dependent on contributions from patients, donations and the fund-raising activities it organises.

(v) This dependency is closely related to the final characteristic of OR's alternative clientele listed above. The CHC, in principle, does not exist to produce or sell goods and services. However, a significant amount of its members' time is spent on planning (and sometimes implementing) fund-raising activities (e.g. raffles, fairs, dances, movies) in order to have liquid assets. These activities can be conceived as "goods" or "services" for sale. This is a reasonable conception because these activities are mechanisms the CHC employs for "survival" (to achieve its dental clinic goal). The organisation obtains money in exchange for the "entertainment" services it provides to the community.

In terms of resources, this suggested categorisation is rather limited. The consideration particularly of physical and financial resources in the ORS definition tends to suggest that these are the only relevant resources for an alternative OR client. However, in the model of empowerment developed in Chapter 4, a wider set of resources was proposed. The presence or absence of these resources, it was argued, has an influence on the extent to which the self-power of disadvantaged groups can be increased. It may be recalled that these "self-power giving resources" were divided into the following categories: material/economic, informational, personal, and basic physical requirements. The physical and financial resources proposed in the categorisation of the ORS are covered by the first of these categories.

The above analysis of the CHC as an alternative OR client invites reflection about the role of self-power giving resources in describing this OR client. It could be

argued that an organisation's low level of material/economic resources helps to define it as a COR client. However, although financially weak, strengthening other self-power giving resources can affect the extent to which the organisation can be active and effective.

Accepting the proposition that material and financial resources are the only ones relevant to defining an organisation as a COR client, and that only if those resources are limited can it be considered as one has a significant implication. This is that if the organisation works at getting more of these resources, to the extent that it acquires them it becomes less eligible as a COR client. However, this is not a major consideration for organisations which are at the lower level of effectiveness and which are unlikely by nature of their position to be able to impose their will on others less advantaged than themselves.

However, it is not uncommon for organisations to match some but not all of these conditions. It has also been argued that COR can embrace such imperfect matches (Rosenhead and White, 1996). The CHC in our study is a community organisation which fulfils several but not all of the characteristics of OR's alternative clientele, as has been described. The CHC is not a pure form of community organisation. Nevertheless, the degree of correspondence of the CHC's characteristics with those of OR's alternative clientele are quite sufficient to consider it a potential COR client.

#### *7.2.2 Alpuyeca's CHC problem situation and the appropriateness of PSMs*

In our work with the CHC the issues which according to Rosenhead (1993) would be most promising for the application of PSMs were those of external strategy and those of internal differences. It may recalled from Section 7.1.4, that the area which seemed most promising was to assist in the management of the CHC's strategic problem issues. This was because of the lack of clarity and confidence among CHC members, observed during the familiarisation period, about their approach to securing funds for their dental clinic project. Therefore, it was decided that these two fund-related issues (donations and fund-raising activities) would be the focus of the intervention.

PSMs are arguably appropriate for complex problem situations involving: the interaction of multiple actors, the existence of multiple interests, the manifestation of multiple perspectives, the presence of uncertainty and of conflict (see Section 5.3). For reasons already explained the characteristic of conflict will not be considered in the analysis which follows. However, how do the strategic issues of Alpuyeca's CHC match the remaining characteristics?

Both the strategic issues of the CHC were directed to achieving the goal of constructing the dental clinic. The actors involved in these problem issues were the CHC, the health team of Alpuyeca's health clinic, the members of the community, and the municipality and jurisdiction staff. All the actors shared the goal of constructing the dental clinic. However, the level of interest of the various social actors in this shared goal differed, as well as the ultimate purposes of each, leading to differences among the social actors as to the route to achieve this goal.

As explained above, the CHC saw in the dental clinic an opportunity to achieve a project whose benefits could be enjoyed by the entire community. Although, the health team shared the view of the CHC, it also regarded the dental clinic as an opportunity to get more resources allocated by the health jurisdiction<sup>120</sup> (Focus Group B).

Both the jurisdiction and municipality staff were supportive of the project as long as it did not generate problems for them. However, the municipal president was conscious that implicit in his verbal support for the project would be the eventual provision of municipal resources. Thus project endorsement could affect his already hard task of striking a fair balance in the distribution of resources between multiple requests. (Field notes, visit to municipal president).

The municipal health officer supported the project not only for the benefits the community would obtain but also for personal and political reasons. Personally, he had an attachment to Alpuyeca. The municipal health officer lived in this community and had previously been its municipal aide. He was popular among the population, not only of Alpuyeca but also throughout the rest of the municipality, because he was

---

<sup>120</sup> The health team also considered that any fees collected in exchange for dental services would help alleviate the scarcity of medical supplies at the health centre.

a civil servant who responded to their demands and who kept his promises. As a result, the municipal health officer had gained the trust of the population. (Field notes; Interview 19).

Another social actor, the municipal aide, went on record as saying that he supported the dental clinic because it would benefit his community (Interview 20). However, in practice, his assistance (material, financial or bureaucratic) to the CHC was limited. It was the opinion of the CHC that he blocked their initiatives because he felt threatened by the high activity level of the CHC and the extent of their achievements. The municipal aide blocked several of the alternative activities proposed by the CHC (e.g. by not authorising a dance to collect money for the dental clinic) (Field notes).

The community members were interested in having dental services in their own community because it would be beneficial both for financial and convenience reasons. However, this motivation was in general not sufficient for them to become involved in activities organised by the CHC, even though the purpose of these activities was the completion of their dental clinic. In informal conversations with members of the community, reasons for the lack of support for the CHC were surfaced. Among these reasons were that it was the government's obligation to give them the dental clinic; they co-operated with the health centre when they went for medical consultation and were not willing to collaborate any more; they lacked confidence in the CHC members' capacity to secure dental clinic construction; and other problems in the community were a priority.<sup>121</sup> (Field notes).

As can be seen from this description, there was a general agreement that having a dental clinic would be beneficial to the community. Nevertheless, the degree of willing involvement in the project varied, which sometimes led to delays in its

---

<sup>121</sup> At the time of this study, many community members were concerned with a rape case at one of the local schools. One of the teachers had been accused of rape by one of his students. The case generated a lot of tension among community members, between teachers and parents, and between them and the Ministry of Education authorities. Some parents took over the school facilities. They argued that their children would not attend school until "justice was done". The teachers were split in their support for their colleague, and many requested their transfer to other schools. As can be seen, this was a divisive issue between those involved. A date for the hearing of the rape case was expected to be set imminently. Two members of Alpuyeca's CHC had children in that school (Field notes).

progress. The relationship between the CHC and the municipal aide illustrates some of the sources for project delays.

The CHC thus depended on the actions, decisions and support of the other social actors. This dependency of the CHC on other social actors generated a decision-making environment with a large degree of uncertainty, in which CHC members were often unclear about the courses of actions to adopt for the different decision situations which they were confronted with.

Uncertainty is, of course, one of the characteristics of problems for which PSMs are appropriate. To understand the role of uncertainty in the CHC's problem situation it is useful to consider Friend and Hickling's (1987) three-way classification of uncertainty. *Uncertainty about the working environment* is the lack of knowledge decision-makers have about aspects of the action-relevant context of the problem which they are concerned with. There may be a demand for more information, through investigation and analysis, to reduce this kind of uncertainty.

Not knowing what policy priorities are relevant to the choice of action is *uncertainty regarding guiding values*. Attempts to manage this kind of uncertainty require from decision-makers the clarification of their objectives. This may be done, for example, by establishing priorities.

*Uncertainty concerning related decision fields* arises when the problem situation is connected to and influenced by actions which may be taken in other decision areas. If this type of uncertainty is to be reduced, a broader view of the current problem situation, and co-ordination between related areas of choice is required.

Uncertainties of each of these three types can in general be reduced, with a view to increasing decision-makers' confidence to act. However, there is evidently a cost (e.g. financial, delay) in reducing uncertainty. Decision-makers have to weigh the benefits and costs of reducing uncertainty against the costs of "living" with it. There are also uncertainties which cannot be reduced because future events or their outcomes (for example, who will win the municipal president elections?) cannot be known in advance.

During the discussions at their regular meetings, CHC members surfaced numerous uncertainties of various types. The principal uncertainty the CHC members had about the working environment was generated by their lack of complete information about the SSA's established guidelines for the construction of dental clinics.<sup>122</sup> Following the guidelines correctly would have avoided design problems which could affect the proper installation of dental equipment. These design problems, if uncorrected, would not be helpful in obtaining a permit for operation for the dental clinic; evidently this could have an effect on its opening date.

The lack of clarity about these guidelines also affected any calculation of what the building cost would be. Therefore, it was difficult for CHC members to develop a clear budget plan in order to avoid unexpected outlays. An additional issue which also generated delays for the project timetable was not knowing whether they would obtain the signed identifications which accredited CHC members as members of the organisation. Not having the signed identifications created obstacles for CHC members in that they would have difficulties in approaching potential donors without proof of their membership of the CHC.

Additional sources of uncertainty for the CHC concerned the issues of securing commitment from potential donors and organising fund-raising activities. These are uncertainties about related decision fields. With respect to bringing potential donors to commit, CHC members had their doubts about the possibility of obtaining appointments with them, especially in the case of politicians (senators, congressmen). And if appointments could be made, they were uncertain whether the social actors approached would respond positively to their petitions. Verbal support was relatively easy to obtain, but actually getting the financial donations or the construction material was another issue which generated delays and placed additional strains to the already tight timetable.

These uncertainties related to the commitment of potential donors were compounded by the CHC's worries about being successful in the fund-raising activities for the construction of the dental clinic. CHC members planned several

---

<sup>122</sup> A technician from the health jurisdiction had visited the community health clinic and had given some verbal indications to the CHC about SSA guidelines regarding spatial dimensions and technical installation requirements. This was the only contact the CHC had with a technician during the period of our study (Fieldnotes).

activities but they could not be sure that these would generate the necessary financial resources, and they might even end up losing money. This can be classified as uncertainty about their working environment.

Closely related to this fund-related uncertainty, was that regarding the possibility of obtaining authorisation from the municipal aide to carry out fund-raising activities. This was because several CHC members were aware that other community organisations had had problems in getting approval for their activities to raise money, although others had been successful in obtaining authorisation. This is another example of uncertainty about related decision fields.

Added to these uncertainties about the effectiveness of approaching potential donors and of the fund-raising activities was the CHC member's main uncertainty about related decision fields. They were concerned about the ranking of their project, in relation to others supported by the health jurisdiction authorities and the municipal president. The priority given to their project would affect the resources they would be able to obtain. CHC members were not sure whether or not the municipality would supply part of the construction materials (e.g. cement, gravel, iron rods) which would be needed. In principle, the municipal president allocates resources to community projects carried out throughout the municipality. However, difficulties already experienced in getting such material in earlier stages of the project generated doubts among CHC members about their ability to secure it.

It is striking that the great majority of the uncertainties are of the related decision fields type. This tends to indicate the weak position of the organisation. Uncertainty about the working environment is less serious because the system that CHC members have to operate in is simple. Uncertainty about guiding values is not present possibly because they are united in their purpose.

It can be argued that the CHC's strategic problem situation related to resource acquisition for dental clinic construction, is not a uniformly good fit with the characteristics of problem situations for which PSMs are appropriate. Clearly, there are several actors whose level of interest in involvement with the dental clinic project varied. The degree of complexity of the CHC's problem situation was low. CHC member's decisions revolved mainly around the acquisition of resources (especially

financial ones), and there were few other interacting factors. However, their strategic problem situation was characterised by a high degree of uncertainty. CHC members had a lack of information about their context and other decision areas.

Although there was a low level of complexity in terms of decision alternatives available to the group, this complexity was made up by the complexity of their strategic situation (the number of actors involved, the multiple interests and perspectives, the manifestations of uncertainty). Therefore, lack of complexity did not seem to be a reason to disqualify the use of PSMs. The matching of the remaining characteristics between the CHC's problem situation and those for which PSMs are appropriate appeared sufficient to justify the use of these methods.

### 7.2.3 *Choosing the Strategic Choice Approach (SCA)*

So far we have argued that Alpuyeca's CHC was confronted with a strategic problem situation which, following Rosenhead's classification, broadly matches the characteristics of those for which PSMs are likely to be appropriate. Which of these methods or combinations of them were likely to be successful if applied in the work with the CHC?

Particular PSMs are developed to deal with problems where particular characteristics are dominant. Therefore it would be necessary to select an appropriate PSM for the strategic problem situation confronting the CHC.

Among the methods referred to in Chapter 5, the following PSMs are those which might initially be considered possible choices: Strategic Options Development and Analysis (SODA); Soft Systems Methodology (SSM); Robustness Analysis (RA), Strategic Choice Approach (SCA). The game theoretic approaches Metagame Analysis and Hypergame Analysis, were discarded from consideration in view of the lack of significance of internal or external conflict among the issues that would be analysed.

Alpuyeca's CHC, as we have seen, is a top-down community organisation with limited scope for action and influence. Its weakness may be a product of its members' powerlessness either alone or in combination with social pressures.

For example, it is possible that a community organisation with few resources or powerful members may be perceived as likely to be ineffective. As a result few people will agree to be recruited to the organisation, which in turn encourages people to fall away. This is a vicious circle.

Clearly, weakness of an organisation can be due to its members' individual powerlessness or that of the collectivity. A group of weak individuals is less likely to be powerful, than a group of powerful individuals. This tends to suggest that individuals' marginal situation as regards to power-giving resources individually leads to an organisation which is ineffective, virtually powerless.

These ideas of marginality might be applicable to the community of Alpuyeca as a whole, the CHC itself or its members. Whatever is true of individuals as a whole, is particularly true for women. This is because Alpuyeca's women are not only from a weak social group, but they are weak within that social group. This is certainly the case of female members within a CHC. Women within Mexican society are culturally expected to fulfil the roles of wife and mother. Their main responsibility revolves around household activities. The use of their time in activities beyond these, tends to generate problems with their families and criticisms from other community members. It was the social pressures such as these on female members of the initial twelve member CHC which led to their decision to withdraw from the organisation (see Section 7.1.2) (Field notes).

Given the characteristics of this organisation, what participatory methods could be of assistance to it? Due to the doubts regarding the sustainability of the organisation and the commitment of its members, methods which could provide this organisation with an intermediate product (see Section 5.3) in a relatively short period of time, without necessarily completing all their phases, evidently offered advantages. Methods with these attributes were referred to in Chapter 5 as *staged methods*. It may be recalled that phased methods have two related aspects: "stagedness" and intermediate products.

Stagedness of a method is the attribute which indicates that the method is organised into stages (or modes). This structure makes it possible for the method's users to stop without completing all the stages that compose it, and still have a

product which can be of use to them. The outcome at the end of a stage is an intermediate product, one which is short of a decision but that it is still useful for the organisation. An intermediate product may be useful, for example, because of the better understanding that people have of their situation or because it gives the organisation a shared view of the situation.

Being able to call a halt to the PSM contribution, temporarily or permanently, can be an advantage under circumstances when decision-making needs to advance faster than PSMs are able to proceed given their sometimes rather elaborate and extended process. The PSM contribution could also be interrupted when the resource (i.e. the expertise) needed to carry out the methods is no longer available. It could also be the case that a stage is reached where involvement of other social actors is required, who may not agree to participate in the PSM process.

Cognitive maps (SODA), problem focus (SCA) and root definitions (SSM) are examples of visible intermediate products. These can generate for participants better understanding of their problem situation, and improved confidence to make decisions (compared with their condition if they had not used the method). In terms of the model for empowerment developed in Chapter 4), these products are outputs from the conversion process in combination with the enabler of mental ability to be active.

Intermediate products are not only of value because these organisations may be insubstantial but also because these products may strengthen them and make them more sustainable. Analytic work with a grassroots organisation, which results in improved organisational cohesiveness and/or effectiveness via shared understandings, may make its members willing to stay in the organisation, and assist in recruiting new ones, and so make it still more effective in a virtuous circle.

In the circumstances of the CHC, it was likely that there would be the opportunity only for a limited number of workshops, and therefore only an occasion to use one PSM rather than several or a combination. It takes time for a group to learn the assumptions and language of a new method. This in conjunction with the short time availability both of CHC members and the health team, and also the time pressure to meet deadlines for dental clinic completion (see Section 7.1.3) led to the decision to concentrate our efforts on applying one PSM. This pressure evidently

excluded the possibility of spreading the workshops over several months. Moreover, it takes time for a group to learn the assumptions and the language of a new method. And therefore with only one method CHC members would probably only have to learn one language. As a result, set-up costs are reduced.

A combination of methods generally tends to be parts of different methods for different stages of problem analysis (e.g. method A for stage 1, method B for stage 2 and so on) or non-staged methods. In practice, if one proposes to adopt a combination of non-staged methods it implies that if one of these methods is too lengthy, then not only would the period of application be extended but also the generation of intermediate products would be delayed. Hence it was necessary to select one method which had the likelihood of being most productive.

From among the PSMs described in Section 5.3, the Strategic Choice Approach (SCA)<sup>123</sup> seemed to present some obvious advantages because of its modular structure, and its emphasis on managing uncertainty, which few of the other methods emphasised. The reasons supporting our choice of SCA as the method to apply with the Alpuyeca CHC are summarised in Table 7.1. Each of these reasons will be discussed below, as well as arguments to eliminate other PSMs from consideration.

**Table 7.1 Reasons for choosing SCA**

<ol style="list-style-type: none"> <li>1. Group work is immediate</li> <li>2. Level of abstraction is low</li> <li>3. Manages uncertainty</li> <li>4. Visible, intermediate products are generated in a short period of time</li> </ol>
---

SCA supports group work. Although most PSMs are designed to work with small groups, in many of them group work does not start from the beginning of the application of the method. Work as a group in SCA is immediate, unlike for example, SODA in which initial interviews with each CHC member are carried out separately<sup>124</sup> or SSM in which the finding out stage is not necessarily or particularly a group

<sup>123</sup> For a description of SCA, see Appendix D.

<sup>124</sup> SODA could have been considered but its Oval Mapping Technique (OMT) was not a known methodology at the time of the research. The OMT was “designed to enable *a map of aspirations, beliefs, and assertions* to be created by a group.” In other words, the group simultaneously builds a cognitive map together. For details of OMT, see Chapter P.2 in Eden and Ackermann (1998).

activity. Based on observations and information gathered during the familiarisation period, the researcher knew that CHC members did not feel comfortable with individual interviews, and were likely to be hesitant in agreeing to participate in them. They would not be able to recognise the utility of these interviews until they came together as a group, and part of the work would need to be done individually before they could see any results from the use of SODA. The utility of SODA's intermediate products (the maps) would be limited because the individual maps by themselves, as the outcome of SODA's first stage, would not be useful to them as a group until further processed by the facilitator.

This requirement for group work had other implications for the choice of method. The basic principle of COR is to work with members of the community directly. However, the CHC was an analytically unsophisticated group. Its members' experience with the use of analytic tools was non-existent. One characteristic distinction between SCA and SSM is the level of abstraction required by the method's users. SCA is concerned with the generation and reflection of concrete alternatives which are directly related to the decision areas of the problem situation which is being structured. By contrast, SSM requires of the group a significant amount of hypothetical conceptual work, the generation and manipulation of ideas which are not directly and concretely related to their own experience. For this reason, SSM seemed unsuited to the nature of the group which would have to use it.

Another reason to discard SSM is its characteristic focus on system design or redesign (Checkland and Scholes, 1990; Rosenhead, 1996). This was a poor fit on the situation of the CHC which had no aspiration to change the system, but only wished to extract some advantage from it as it was. This was not an easy task for the CHC because the system which it was part of had high levels of uncertainty.

To deal constructively with uncertainty, the researcher had in effect a choice only between RA and SCA. The difference between SCA and RA which is most relevant to this problem confronting the CHC is that RA deals with sequential decisions. The decision-making scope of the CHC was rather limited because of its disadvantaged position in the managerial hierarchy of the SSA, as has been explained in Section 7.1.2. For this reason, it was unrealistic to regard the CHC as an organisation which had enough control over its action-relevant context, that its

members could be expected to be concerned about what to do next in terms of what they might do later.

The uncertain extent of the organisation's survivability or of its continuity of membership was also unlikely to generate interest between CHC members about future decisions. Moreover, the CHC's goal of constructing the dental clinic was a short-term, or at most a medium-term goal. It was a very specific goal, an objective in its own right which did not lead on in any obvious way to further actions.

Another factor relevant to the sustainability of the CHC is the level of confidence they are able to sustain. The route to this goal was not free of obstacles (bureaucratic, material, financial), as may be recalled from Section 7.2.1. These obstacles negatively affected CHC's members confidence level about achieving their objective. This low confidence level tended to suggest that the generation of visible intermediate products (e.g. recommended actions) would be more significant to the CHC than invisible ones. When confidence is low, being able to actually see progress being made can be a confidence booster.

Invisible intermediate products, such as improved interaction or shared understanding between participants, tend to be particularly significant for organisations in which there are differences among the group members (for example, differences in perspective), who therefore need to find out how to work together. This was not the problem with the CHC of Alpuyeca, whose members were reasonably united in their view but who had little belief that they could achieve their dental clinic objective. Therefore in this particular case, it would be particularly valuable to generate external evidence of effectiveness, in other words, visible products. (This tends to contradict the general relevance of expected benefits in the form of invisible products discussed in Section 6.3. Clearly both types of intermediate products can co-exist.)

SCA provides the participants with methods in each stage which give them output in a structured form. By contrast, in SODA the only point at which participants get an output is after the workshop, and there is no structured form for that. In SSM, the only moment at which participants get output at all is the debate section. In each case this occurs at the final stage of applying the method. The visible product is

obtained as a result of a discussion and in no particular format. (The visible products of SCA produced with the CHC will be discussed in Section 7. 3).

For all these reasons, it was decided to select SCA as the most appropriate PSM to apply in the problem situation of Alpuyeca's CHC.

#### *7.2.4 The period of analytic work with the CHC: How the Strategic Choice Approach was used*

Once the selection of the PSM for application with Alpuyeca's CHC was made, the researcher concentrated on identifying the appropriate moment to introduce it to the CHC. This section discusses the use of SCA with the CHC of Alpuyeca.

The clear indication that the researcher should move from observation to facilitation<sup>125</sup> and SCA occurred at one of the meetings. On that occasion, the CHC members voiced their deep concern about the lack of progress in building the dental clinic, and expressed a mixture of emotions. Its members argued that they felt: overwhelmed by the numerous closed doors which kept obstructing progress towards their goal; indignant because they were not being taken seriously by the authorities; and disappointed by the lack of support received from the community. They expressed the need to demonstrate their capacity to the "unbelievers", and thus the construction of the dental clinic became a greater challenge. They wanted to prove they could do it. CHC members agreed that the only way they could do it was if they worked as a team, were organised, and were clear about what they wanted and how to go about obtaining it.

The researcher decided that this was the appropriate moment to introduce SCA to the CHC and to test its utility for this community organisation. The researcher offered her assistance at the meeting which followed and requested their approval to carry out a workshop. Relatively short sessions held on one full day or two consecutive half days were proposed for the sake of continuity and to secure attendance. Both the researcher and the CHC agreed that it would be advantageous to

---

<sup>125</sup> Facilitation is commonly used in the sense of managing group processes. This involves actively guiding the interactive work of a group and aiding communication between participants (Friend and Hickling, 1987).

the workshop if attendance of the health team could be secured. Therefore the CHC proposed that the health team suspend clinic consultation for two hours during the morning shift. At the same time, the CHC offered to place announcements at the health centre informing the community of the temporary changes in the consultation schedule. The health team accepted the CHC's proposition under two conditions. These were that the workshop did not require a significant amount of their time and that consultation was not to be suspended for more than one hour and a half per day.<sup>126</sup> Thus it was agreed that the SCA workshop would be carried out in two sessions each with one-hour and a half duration on consecutive days. This arrangement did not exclude having regular meeting sessions using the products of the workshop; in other words, it did not rule out the possibility that CHC members continued using SCA.

The researcher was required to work with an adapted, shortened version of SCA largely because of the resulting time pressure. As will be seen the modes were followed loosely, and their names (shaping, designing, comparing, choosing) or other technical language were not used to avoid confusing participants. (These labels will be used however in this thesis for exposition purposes.) This was because earlier in the fieldwork, in the process of obtaining authorisation to carry out the research, the investigator had had the opportunity to present the basic ideas of problem structuring methods to the jurisdiction staff. During the presentation, the zone supervision teams expressed their worries over the complexity of the methods and the language used, which they thought inappropriate to the generally low educational level of CHC members, who were usually peasants and housewives. Alternative common language explanations of these terms were used during the workshop. It was also clear from the onset that given the limited duration of the workshop, the work carried out needed to focus on the generation of outputs where the most progress could be made.

During the workshop the researcher had the tasks of workshop facilitation and demonstration of the general method of working with SCA. After the workshop and during the regular meetings, the researcher sought to encourage participants to take on the facilitator's role. At the workshop it was possible to bring together more people at the same time than during regular meetings.

---

<sup>126</sup> There had been complaints from patients that the doctor was frequently not present during consultation hours. The CHC explained that the doctor was usually absent for personal reasons (e.g. running errands, picking up pay check) or to attend meetings or courses at the jurisdiction. (Field notes)

The researcher also proposed the possibility of tape recording the workshop sessions. However, the participants expressed their reservations about tape recording. They saw as a potential threat the possibility that the information exposed could potentially be used against them. Tape recording the session would therefore have placed an obstacle on their freedom of expression. For this reason, the researcher decided to take notes during the sessions (when possible) and revise them to incorporate more detail immediately after the sessions.

The sessions were 'recorded' using large flip chart sheets fixed to the wall using masking tape.<sup>127</sup> The purpose of this was to enable as much of the work as possible to be exhibited at the same time so as to allow participants to make easy reference to previous work (Friend and Hickling, 1987). The available wall space would vary depending on the room used. It was decided to use the doctor's office for the workshop as there was more space for people to move around freely and access to wall space was easier than in the patient observation room, the room most frequently used for CHC meetings. (After the first day of the workshop the flip chart sheets were accommodated on the walls of the patient observation room because the doctor had an unexpected visit from a health authority.)

During the first session, the researcher started by explaining what it was hoped to achieve by the end of the workshop and the general purpose of SCA. After these introductory remarks, emphasis was given to the identification of decision areas. This session covered mainly the shaping mode of SCA. (There was time in this first session also to make a start with the designing phase. However, this will be described below in the context of the second session.)

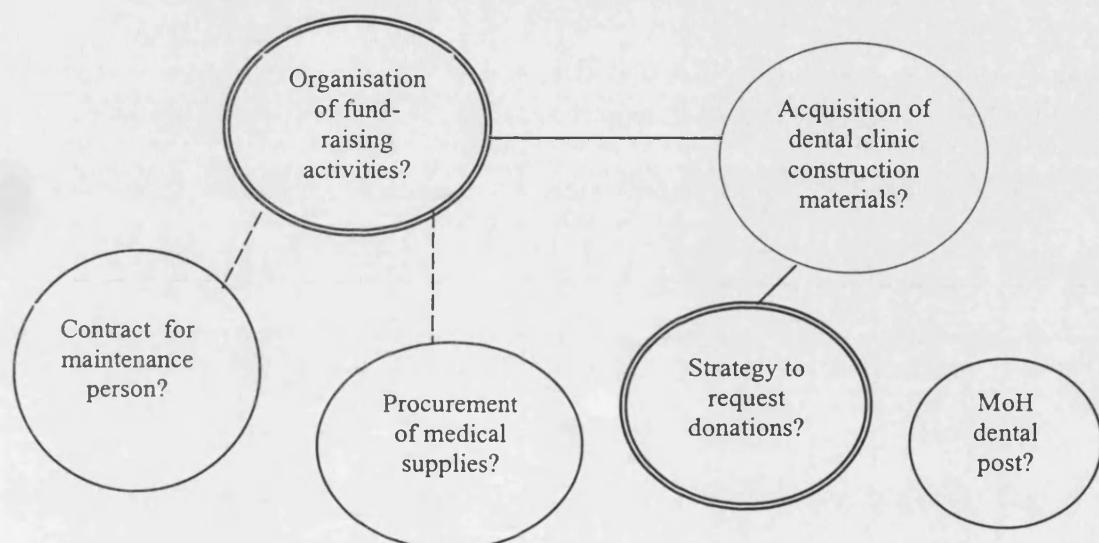
Participants made a list of the various decision areas and then indicated the relationships between them. There was general agreement between the participants about the areas where decisions needed to be made. The lack of funds for the dental clinic project was their main concern. Two aspects related to this preoccupation were planning fund-raising events and securing donations (gifts). Figure 7.3 reproduces the

---

<sup>127</sup> See Appendix H-Photograph 3, for a sample of the flip chart sheets which illustrate some of the work carried out with the CHC.

decision graph which resulted from the first session. The two areas identified as most important were thus “Organisation of fund-raising activities?” and “Strategy to request donations?”. These are indicated by double circles. These two decision areas were indirectly inter-related in that they both impacted on the possible purchase or acquisition of construction materials for the dental clinic. Uncertainty about the degree of inter-relatedness between decision areas is shown by broken line decision links. No link is drawn to or from the decision area of “MoH dental post?” because participants were unsure of the extent of their influence on that area.

**Figure 7.3 Decision graph from the first workshop session**



In relation to the decision area “MoH dental post?”, the CHC was concerned that delays in dental clinic construction could jeopardise obtaining the dental post to be assigned by the jurisdictional level. CHC members needed to decide whether or not to inform this level about the problems encountered in the construction process. They had doubts that their agreement with the jurisdiction director (that the jurisdiction would activate their promise to assign a dentist once the dental clinic was ready for opening) would be honoured.

The “MoH dental post?” was specified during the session as a decision area. After-the-event reflection led the researcher to consider that it would be reasonable to view “MoH dental post?” as an uncertainty, rather than a decision area. A corresponding exploratory action could be defined, to find out more information and thus reduce the uncertainty.

This session provided insight for both the researcher and the workshop participants. The researcher got insight into the extent of influence which the CHC saw itself having as well as how the health team regarded the CHC. It also served to confirm what had been discovered during the familiarisation period regarding the concerns of the CHC. More importantly, however, in this session participants got insight into each other. They became aware of the diverse points of view about their problem situation. They were able to surface the different decision areas which concerned them and to identify the inter-connections between them. They realised that their efforts should be centred around the fund-raising and material gathering activities for the construction of the dental clinic. If in the process they could alleviate the physiological problems regarding the health centre's supply scarcity and maintenance, then that would constitute an added benefit.

Securing the participants' 'ownership' of the problem structure during the first session proved to be significant for the project. Participants could recognise the problem structure as their own and was meaningful to them.

During the second session, the participants reviewed and revised the work done in the designing mode at the earlier session, and engaged in the comparing and choosing modes of SCA. The identification of options was achieved as follows. In a table with three columns, the two key decision areas were placed in the left column. A brainstorming exercise was carried out to identify the set of options for each decision area. (This exercise began at the first session and some options were identified for the "Organisation of fund-raising activities?" decision area. The second session began with the review of the options which had been identified in the first session. Some changes and additions were made.) The researcher asked each participant to propose an option, which was then recorded in the middle column. All the options surfaced were then discussed within the group to compare and evaluate each in terms of their feasibility, consequences and their related uncertainties, which were placed in the right column. (Issues of feasibility and of consequences were considered in the discussion, although they were not included in Table 7.2.) In this process of options analysis, the uncertainties identified crossed-over several options, as shown below in this table.

**Table 7.2 Extract of the options analysis**

<i>decision area</i>	<i>options</i>	<i>uncertainties</i>
Organisation of fund-raising activities?	Raffle	authorisation donation of prize
	Quermesse <sup>128</sup>	authorisation venue availability
	children's movie	authorisation venue availability cost of equipment rental
Strategy to request donations?	senator wood factory municipal president congressman farm visits	getting an appointment signature on IDs

The researcher facilitated the discussion about options not only to keep a relative order in prioritising alternatives and activities, but also to keep discussion focused so as to secure a product within the time constraints. Both the CHC and the health team voiced their opinions and concerns about options and uncertainties. The freedom of expression and evenness of contribution resulted in a rich discussion. This discussion gave rise to decisions regarding activities to be scheduled, assignment of responsibilities, and time limits for completion. Thus a “commitment (or progress) package” (Friend and Hickling, 1987) was in effect developed by workshop participants. A follow-up of this progress package was carried out at the regular meeting of the CHC a week later (see below).

In the discussion about the distribution of responsibilities, the CHC emphasised the importance of group cohesion and expressed their belief that despite earlier obstacles the dental clinic would be a reality. An indication of this belief was that for many of the programmed activities the CHC agreed that they should participate as a team because “unity is strength” (“*la unidad hace la fuerza*”), and were optimistic that working in this way progress could be achieved. This optimistic and ‘feel good’ attitude implied an ‘ownership’ of the progress package which in turn secured the CHC’s commitment to it. Ownership does not only suggest that they secured commitment to an action but also that there was a sense of team-building. CHC

<sup>128</sup> A quermesse is a popular party with dances, fairs, and contests which takes place outdoors.

members operated more cohesively and supported each other to complete their dental clinic project (and possibly in other areas) as a result of the work with SCA.

From this second session, it became clear that the health team was willing to help the CHC in its activities to achieve the dental clinic goal but in a semi-detached role; that is, as long as this help did not become a burden to them. Evidence of this was that the CHC carried the weight of the action responsibilities included in the progress package.

At the next regular work meeting, the researcher gave over the role of facilitator to the CHC secretary.<sup>129</sup> (In later meetings, this role was shared only with the health promoter. Other participants stated that they were not comfortable writing in front of an audience.) During this meeting, participants (CHC members, health promoter, head nurse) reviewed the actions and activities programmed in the progress package that had been elaborated at the workshop. The discussion surfaced the problems which had been encountered in completing progress package activities. Participants negotiated ways forward taking into consideration the uncertainties on actions. Most of these actions depended largely on the reaction and response of other social actors. A “new” progress package was written down for purposes of clarity.

This was the last stage of the intervention. The success in raising the necessary funds and securing the construction material enabled clinic construction to continue. CHC members were quite enthusiastic about what they had been able to achieve as a team. The almost completed construction of their dental clinic building was perceived as a clear sign of progress towards their goal.<sup>130,131</sup>

The researcher was not present at the time, about five months after the completion of the study, when the CHC disintegrated. At a follow-up visit to Alpuyeca, approximately two months after the break-up, one of the members of the CHC explained to the researcher that the cause of the rupture was that one of the CHC members had had problems with some members of the community concerning money. After the CHC dissolved, dental clinic painting, installation and functioning, came to

---

<sup>129</sup> See Appendix H-Photograph 4 of the secretary facilitating a meeting.

<sup>130</sup> See Appendix H, for photographs (1-2, 5-8) of the different phases of the construction of the dental clinic building.

<sup>131</sup> See Appendix I, for the researcher’s personal account of the experience in Alpuyeca.

a halt until an entirely new CHC was elected. No CHC member who participated in the AR study, completed the dental clinic project. The clinic started functioning on January 5, 1998 with a permanent dental post from the SSA, almost two years after the researcher's project with the CHC had ended. (Notes from follow-up visit in August 1996 and phone call conversation with health promoter).

### 7.3 Interpretation of the project experience

The previous section has described in detail the analytic work carried out in the AR study with the CHC of Alpuyeca. This section attempts a broader interpretation of the project experience. The discussion is organised in three parts. The first two subsections look at the experience of Alpuyeca. The first of these concentrates on the evaluation of the project made by the local participants of Alpuyeca. The second part discusses the evaluation made by the researcher in terms of the model for empowerment developed in Chapter 4. And finally, the third part discusses under what circumstances and to what extent the project experience can support an argument that PSMs are suitable for use with community groups in developing countries.

#### 7.3.1 *Evaluation of the Alpuyeca project by SCA users*

It may be recalled that the claims which the researcher wished to investigate for the application of PSMs in general, and SCA in particular, in this project were in terms of usefulness, more balanced dialogue between participants, accessibility and transparency, and empowerment (See Chapter 5).

This section discusses the CHC's perceptions of the method in terms of these claims. These perceptions were elicited at an evaluative meeting carried out with the CHC and the health promoter (other members of the health team were unable to be present). No evaluative survey questionnaire was used because CHC members expressed a reluctance to leave written evidence as a trail that could lead to them.

A highly significant indication that CHC members felt comfortable and confident enough in using this PSM, is that they continued to apply what they had learned about SCA on their own, at their subsequent regular meetings. (Mostly the secretary took the role of the facilitator and in some cases the health promoter.) Some initial difficulties which were encountered with the use of SCA will be discussed in Section 7.3.2.

In terms of the usefulness of SCA, workshop participants expressed the unanimous view, at the evaluative meeting, that SCA helped them to better organise their thoughts. This was because they were able to identify and understand the relationship between the different decision areas and to obtain a more complete picture of the situation.

Moreover, they agreed (as did the researcher) that their meetings were much more systematically organised than prior to the PSM application. This perception raises a claim about PSMs which has not been considered previously in the literature. The improved meeting format made it easier for participants to keep track of planned actions, decisions, and obstacles encountered. With the evidence available in our study it is not clear that the improvement in the meeting format can be without question attributed to PSMs. It could be argued that this improvement could also result from other formal business procedures or management training courses. Nevertheless, the available evidence does seem to indicate that in addition to the other claims which may be made for PSMs, systematic formalised structured discussion is another benefit from the use of these methods. This result is clearly worth further study.

Having more systematic, structured discussions also facilitated a greater and more even contribution of participants during the problem structuring activity. Participants stated that the discussion format made them feel comfortable to become involved because they did not feel frightened to express their views. Moreover, they could observe their views being taken into account and adding to the richness of the discussions.

Participants also expressed the clear view that the work carried out with SCA helped them improve their understanding of their problem situation and of fellow

participants, and to have clearer views of their options for actions. These options were limited because of their dependence on other social actors' decisions and the manifestations of uncertainty in their problem situation (see Section 7.2.3). Nevertheless, they stated that they felt they had control over the development of their project and the achievement of their goal. This gave them confidence to act. These are all indications of changes in the self-power of participants, as will be discussed in the following section. In other words, participants felt empowered as a result of the use of SCA.

The following example illustrates the extent to which the CHC incorporated SCA into its modus operandi after the end of the workshops. One day, while the researcher was at the health centre, a CHC member (X) who had not attended the last meeting came over to enquire about what had happened at the meeting and what now needed to be done. Another CHC member (Y), who was operating the queuing system for appointments, took X to the room where the flip chart sheets were posted. Using the flip chart sheets which contained the "old" and "new" progress packages, Y summarised to X the meeting's events and decisions, and indicated X's responsibilities for the next meeting. (A progress package is the format in which the decisions or outputs of SCA projects are conventionally recorded, see Appendix D.) This example illustrates that CHC members had a felt ownership of the products achieved with SCA, applied what they had learned, and saw the method's usefulness.

This example is also a case of what Eden and Ackermann (1998) refer to as "organisational memory". According to these authors, organisational memory can change the nature of the conversation carried out between members of a group. They claim that the maps generated in SODA, and which are available as an organisational memory, can serve as a device (or transitional object) to remind participants of what has been agreed and to brief absent or new participants (or other social actors). These authors propose that organisational memory is a potential product of PSMs. This claim is supported by the Alpuyeca project experience.

### 7.3.2 Evaluation by the researcher

This section presents the evaluation made by the researcher of the use of SCA in the Alpuyeca project. The evaluation is based on systematic and copious recordkeeping during the experience; and the analysis, which is attempted here, is made in terms of the model developed in Chapter 4. Some of the effects of the researcher's presence during the project are also discussed.

Although as has been seen in the previous section, CHC members were ultimately confident in using SCA, there were some initial difficulties which provoke interesting questions. The researcher's evaluation, thus, begins by presenting some of the difficulties encountered by workshop participants with the application of SCA.

The initial difficulties in the use of SCA at Alpuyeca principally concerned issues of accessibility and transparency. The use of decision graphs, in particular, generated some confusion among workshop participants, and they expressed their lack of understanding during the workshop. Difficulties in understanding decision graphs subsided once participants realised, during the process of identifying connections between the different decision areas, the usefulness of this form of structuring.

A possible explanation of their difficulties in understanding decision graphs is that the decision graph representation was very abstract to them. In explaining the representation the researcher had to move from a level of abstraction to a more concrete level which participants could relate to.<sup>132</sup> CHC members felt more comfortable when they could identify with concrete alternatives. Possibly they only felt 'safe' with what they could 'touch' or which was familiar to them. The use of more tangible or more familiar forms of representation could have been of assistance. This indicates an interesting parallel with PDPMs (see Chapter 5) which make use of objects such as beans, stones, and sticks in their representations of problems.

---

<sup>132</sup> This provides evidence which supports the arguments made to discard SSM from as an appropriate PSM to apply with Alpuyeca's CHC (See Section 7.2.3). If decision graphs generated difficulties to the group, problems in handling SSM would have been even more accentuated because of the considerable reliance on hypothetical conceptual work by this method.

This initial difficulty, encountered during the designing phase of SCA, tends to contradict the claims made about PSMs (see Chapter 5), that they are transparent and accessible to the layperson. The idea of a “set-up cost”<sup>133</sup> will be used to argue that this is not the case. At the beginning of the process of learning something new (like learning a foreign language or mathematics), if what is to be learned is not immediately and intuitively satisfactory, it can result in initial objection and rejection by the learners. But once it is grasped and used, thereby becoming familiar to them, the difficulties tend to subside. The smooth development of the workshop during the other phases of SCA, do indicate that these methods are understandable and usable by laypersons, though perhaps after those initial set-up ‘costs’ have been incurred, as was the case in Alpuyeca.

Having discussed the initial difficulties participants had with SCA, the discussion now turns to a more theoretically-based analysis of the experience. The model developed in Chapter 4 was intended to help understand the various factors involved in an empowerment process. The point of this research and therefore the reason of using SCA in Alpuyeca is to explore the ways in which PSMs can contribute to empowerment. The most relevant elements of the model are those shown in Figure 7.4. This reproduces (in the large box) the overview diagram of the model and shows the inter-relation between its different sub-areas. The rectangles, circles and ovals (shown in yellow) that have been added to the overview diagram, indicate the resources, enablers and functionings, respectively, within each of these sub-areas, which will be most relevant to our discussion. They are most relevant because they are within one step away from the conversion process. These are the elements which it would be most expected to be affected by PSMs if these methods were to be having an effect on empowerment, as has been discussed in Chapter 6.

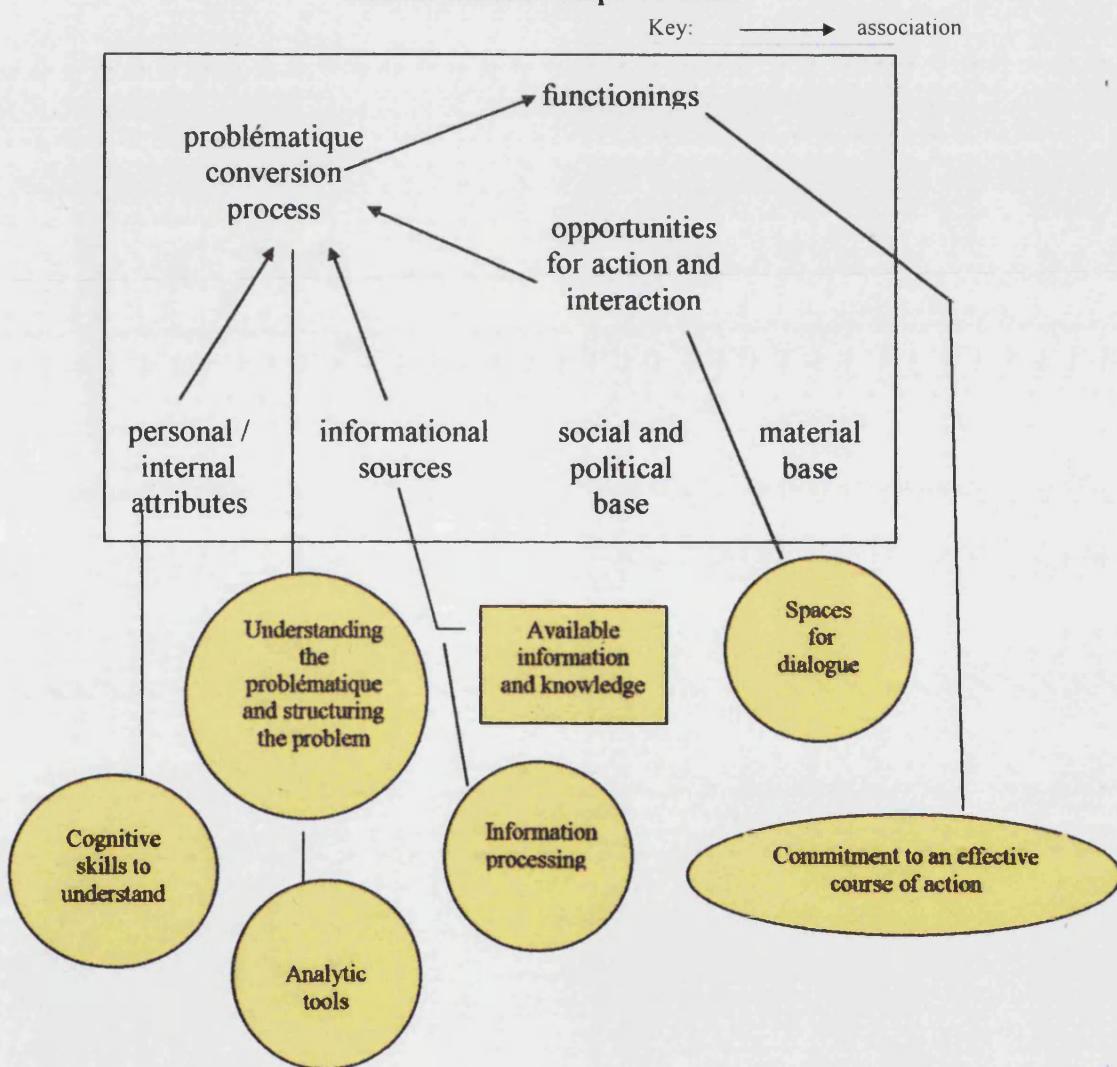
It is therefore appropriate to inquire to what extent the changes observed or experienced which have been explicitly articulated by participants or observed by the researcher fall within these categories, and would indicate a tendency to empowerment. The elements which have been affected will be discussed in turn.

---

<sup>133</sup> A similar idea advanced by Friend and Hickling (1987, p.276) is that of a learning curve. They explain that there is an initial period of quick learning (becoming familiar with their method - SCA). The duration of this period depends on the knowledge of participants.

Although the material base was not considered as one of the principal or direct effects, the construction of the actual dental clinic building<sup>134</sup> can be interpreted as an effect in the CHC's material base. It is reasonable to view the physical building of the dental clinic as a self-power giving resource within the material base, to which the project contributed. It is difficult to claim for SCA or the AR project, any particular degree of credit for the functioning of the clinic (see Section 7.1.3). However, its eventual existence must be seen as a positive rather than a negative element on our project intervention balance sheet.

**Figure 7.4 Principal and direct effects on model elements from the analytic contribution to empowerment**



<sup>134</sup> However, the building itself was only a step towards the dental clinic because other steps needed to be completed, such as purchasing and installing the equipment, and activating the appointment of human resources promised by the jurisdictional level. Bureaucratic obstacles and lack of financial resources frequently hindered the process which culminated in the operation of the dental clinic.

- **Opportunities for action and interaction** - Visible progress toward their goal, the operation of the dental clinic, was possible despite the structural limitations on the CHC's scope of action and influence, as discussed in Section 7.2.2. Evidence from our project experience tends to demonstrate that, within their limited opportunities to act, some changes in self-power could be identified as a result of the use of SCA. It was observed that CHC members were motivated, committed and effective in moving towards their goal. As will be discussed below, the meetings with the municipality president (despite the unhelpfulness of the municipal aide) and their visits to political representatives are examples of how CHC members "opened up" spaces for themselves. Their increased self-confidence, the belief in their capabilities to complete the project, the improved clarity of their view of the situation, made it possible to approach other social actors and make themselves known and be heard.
- **Informational sources** - Effective team work was also reflected during the workshop and subsequent meetings. The open communication and interaction between CHC members and the health team was the key to the generation of information. The information generated during the problem structuring activity with SCA enriched the information and knowledge available to the participants. In the process of surfacing information, improvements in the balance and quality of dialogue between participants were observed as well as enhanced understanding and clarity of the problem situation. The first of these effects can be seen within the Alpuyeca context as an improvement in the spaces for dialogue. The latter is a result of the conversion process activities: structuring the problem and understanding the *problématique*.
- **Problématique conversion process** - The use of SCA to assist the conversion process also means that the CHC gained in their available analytic tools. The incorporation of parts of SCA into their regular meetings indicates an added "tool" to their analytic "toolbox". The continued use of SCA tends to indicate that participants became adopters of the method. Commitment from participants was achieved to fund-raising activities and to strategies to secure construction material. They followed through their actions and 'updated' their progress package.

In our Alpuyeca experience, some of the observed effects could have been due to the presence of the researcher rather than the use of the method. This aspect of the evaluation will be discussed next.

It is at least possible that the increased regularity of attendance at the meetings, which did occur, was influenced by the presence of the researcher. Attendance at meetings was generally high during this period (averaging 3 out of 4 CHC members), quite possibly in response to the members' awareness of the researcher's commitment in their collaborative work.

Another possible effect of the researcher's presence was the meeting with the municipal president. The effect can be interpreted in terms of the outcome of the meeting. Following several attempts by the CHC to meet with the municipal president, the CHC asked the researcher to accompany them. The researcher helped the CHC to prepare for the meeting by introducing its members to the analytic method. This analytic assistance helped them to organise the arguments that would be presented to the municipal president. This can be interpreted as an improvement in their cognitive skills. The much needed authorisations for the purchase of construction material were achieved, which is certainly consistent with an interpretation that the analytic assistance which was provided helped make the meeting more effective.

After the visit, the CHC unanimously agreed that one of the factors in the success of the meeting with the municipal president had been the presence of the researcher. According to them, the municipal president felt pressured by the researcher's presence because the researcher had been authorised by the jurisdictional level to work with the CHC. If so, these effects resulting from the presence of the researcher at the meeting tend to indicate that the researcher had more credibility within the managerial power structure than did the CHC. Her presumed connections gave higher priority to the CHC's request.

These possible effects in our study of the researcher's presence should not be interpreted as having had a predominant influence on research results. The fact that CHC members continued using SCA after her departure is an indication that these non-analytic effects were by no means the only results of the intervention (Follow-up visit notes).

This section has discussed the evaluation by the researcher of the Alpuyeca project. Overall the experience was a positive one. Based on the evidence generated in our study, it is possible to argue that the use of SCA with the CHC of Alpuyeca was more than satisfactory both for participants and the researcher. It is however necessary to discuss the implications for the wider use of SCA in Third World community groups. These will be discussed in the section which follows.

### *7.3.3 Implications for wider use of PSMs in Third World community groups*

In AR (see Section 6.3.2), as it is also for other types of research, there is an intention to generalise from a context specific project experience to a wider context. However in practice, the characteristics of history and context, which are specific to a case study community, make it almost impossible to find another community with similar attributes. It is feasible to identify key variables in a particular experience which suggest the characteristics of other situations where similar methods might be usefully applied. It is thus possible to identify certain aspects from our Alpuyeca experience which can be conceptualised in ways which are meaningful to or serve to inform other research projects (Eden and Huxham, 1996b).

Generalisation will be discussed from two related, yet distinct standpoints. These are generalisation from Alpuyeca and the CHC to other places and organisations, and from SCA to PSMs. They will be treated in turn.

There must be numerous Alpuyecas in developing countries, all of them different but with key characteristics which are relevant. Among these, that they are disadvantaged in terms of economic and logistical factors. The localities commonly have numerous inhabitants who, in general, do not have a high degree of control over their futures. They focus their efforts on subsistence and survival activities. Alpuyeca perhaps is in a more favourable position than many places in the Third World. However, it is of the nature of things that the more disadvantaged an area or a group is, the harder it is to try to use PSMs with them. (See Rosenhead, 1993). It is only when groups and communities have a certain amount of surplus (resources, time) that they can begin to do planning on their own behalf. This is a typical problem for

organisations at the grassroots, without resources, with a measure of self-government to make their way in a world in which everything is weighted against them.

Therefore although Alpuyeca is in many ways unique, of course in many ways it can stand in for a perfectly undistinguished Third World community. Similarly, the CHC can stand in for one of the many versions of grassroots organisations.

What are the attributes of these organisations? It is precisely their “grassrootsness” which is their common characteristic. There are other numerous attributes which define these organisations which are relevant to consider in this context. Many grassroots organisations are composed of volunteer community members who come together for a common purpose and who are fairly loosely organised. Quite often they operate on small budgets and pursue short-term goals. These groups tend to have a tenuous existence. They rely on the passion, motivation and time availability of their volunteers. It is also frequent to find that membership to grassroots organisations is blurred and members’ commitment is uncertain. Given these characteristics, these organisations are often in danger of disbanding (Annis, 1988; Friedman, 1992; Navarro, 1994).

Two relevant issues for generalisation can be drawn from this description of grassroots organisations. On the hand, many of these characteristics are shared by the proposed COR clientele. It might both be plausible and valuable to explore the extent to which any of these characteristics could be used to enrich the definition of COR’s clientele. This could be a direction for future work.

The other issue is that the CHC is not a real grassroots organisation. Has this fact made it easier or harder for the application of PSMs? On reflection, this fact has made it harder for PSMs to work. It is reasonable to posit that it would have been easier if it were a real grassroots organisation, because then its members would have had the sense of more control over decisions and activities relevant to their context, more potential control of their destiny and therefore they would have had more complex problems to resolve. And the value of the PSMs would be greater. Members of such an organisation could be expected to already have, for example, a greater mental ability to be active, more cognitive skills and by the nature of these

organisations more opportunities to act. Therefore they are in better position to start a virtuous rather than a vicious circle (see Section 7.2.3).

There is also the question of generalisation from SCA to PSMs. As has been seen in Section 7.3.2, the use of SCA and its effectiveness can be understood in terms of assistance with some of the resources and enablers that help to generate empowerment. The analytic assistance provided by other PSMs, it can be argued, has the potential to generate effects on elements of the model. These model elements seem to correspond to areas which these other methods would purport to influence. Some of them may do it more or less effectively in particular circumstances. However, if they may have generated a positive effect as seems to be the case with SCA in Alpuyeca, then it is an encouragement to believe that other PSMs would have comparable effects. Or at least it tends to support rather than contradict the hypothesis.

Such results as the research produced tend to indicate that these methods were useful for our case study's 'client' organisation. However, an arguable deficiency for the research of the use of SCA with the CHC of Alpuyeca is that the work with them did not go through all the phases of the method. It might be thought that this factor throws a shadow over the apparent support for the usefulness of SCA in the context of Third World community organisations provided by this research. Nevertheless, because of the tenuous nature of many of these developing countries organisations, particularly the least powerful ones, a part of the methodology may often be all that a PSM practitioner/facilitator may get to apply.

This chapter has discussed the research carried out with the CHC of Alpuyeca. In the chapter which follows, a summary of the research, as well as some ideas, based on the experience of this AR study, are proposed for future work.

## **Chapter8**

### ***Conclusions***

Is there a role for PSMs in empowering poor and disadvantaged social actors in Third World local development planning situations? This was the broad research question which this thesis has attempted to answer. This concluding chapter will first summarise the research process, and some of its shortcomings will be identified. Then the most important findings will be highlighted, the discussion of which leads naturally to proposals for areas of future work.

#### **8.1 Summary of research process**

The topic of this thesis emerged from discussions questioning whether or not there was a possible role for problem structuring methods (PSMs) in participatory development planning in the Third World. In order to explore this question it was necessary to investigate the extent to which PSMs could be of use for members of grassroots organisations in developing countries, in the sense of enhancing their active and effective involvement in decisions and activities related to their development situation.

To avoid ambiguity in addressing these issues several key concepts commonly found in the literature of participatory development and PSMs required conceptual clarification. These were power, empowerment, and participation. Relying on the work of Sen on capabilities and functionings, and Doyal and Gough's discussion of the basic human need for autonomy, the novel concepts of self-power and spaces for dialogue were also developed.

Using this as a base, a model, which relates these redefined concepts to the processes by which self-power may be maintained or augmented, was developed. The broad categories of elements in this model are low level enablers, high level enablers, self-power giving resources, conversion processes, and functionings.

Within this model, those elements for which the analytic assistance possible with PSMs appeared to be most relevant were identified. The conversion process was found to be the principal element where this analytic assistance would be expected to play a significant role. Other secondary elements included cognitive skills to understand, spaces for dialogue, opportunities to act and analytic tools (enablers); and available information and knowledge (resources).

Two analyses were carried out. The first one identified Third World development planning situations for which the basic attributes of PSMs seem appropriate. The second analysis which compared PSMs and PRA, the most widely applied participatory development planning approach, identified: (a) a basic compatibility in fundamental aspects of their approach to decision support, and (b) significant differences particularly in technical aspects where PSMs appear able to augment the capabilities of PRA. This analysis suggested that PSMs could provide added value either applied independently or in conjunction with PRA. Among the advantages of the latter strategy are the widespread institutionalisation of PRA among intermediary organisations (e.g. NGOs) which can facilitate dissemination and adoption of PSMs.

The original research design was to incorporate a controlled experiment. However, the practicalities of field work and of organisational access led to a revision of the approach to be based on a single case study and an action research stance.

The case study, in the area of participative health services planning in Mexico, was undertaken as a vehicle both for exploring the adequacy of the conceptual model developed, and for investigating the hypothesis that PSMs can assist in improving the situation of disadvantaged groups. It had originally been intended to explore the combined use of PSMs and PRA, but due to the difficulties encountered in the initial research design, the focus was changed to the investigation of the independent use of PSMs. The main reason for this change was the difficulty in finding a community organisation and project leaders, with an on-going project using PRA, who were willing to apply PSMs. Time and resource constraints also proved to be limitations for

investigating the joint use of the methods. Therefore focusing a case study on exploring the sole use of PSMs was considered a more manageable alternative.

Given the health focus of the research, the Community Health Committee (CHC) of the locality of Alpuyeca in the state of Morelos was selected to undertake our case study. Its project was to build a dental clinic as an annex to the community health centre. The high levels of uncertainty which evidently characterised the project justified the selection of the Strategic Choice Approach (SCA) as the most appropriate PSM to apply with the CHC.

Clearly, a single case study cannot demonstrate applicability across a whole range of different situations. However, our case study not only produced some interesting findings in its own right, but it also contributes a piece of the jigsaw puzzle which can help provide some evidence in the under-researched area of applying PSMs with community groups in developing countries.

The extent to which one can justify generalisations from the research is conditional upon the rigour of the research reported in this thesis which in certain respects falls short of an ideal research design. Some arguable deficiencies will be discussed below.

First, the adaptations which were required in the initial research design conditioned the type of organisation selected for the research. The impossibility of working with an authentic grassroots community organisation led to the selection of one whose autonomy was less established than one could hope for. Access to the organisation in our study was through the local health government, which acted as our intermediary. Clearly, this posed a limitation on the scope of action and influence of our study organisation.

The CHC's restricted autonomy is a strong factor explaining the low level of complexity of its problem situation. However, a consequential effect was that the CHC's problem situation did have high levels of uncertainty. This was largely due to its dependency on and control by other levels of the managerial structure above it, and

other social actors. Despite these structural limitations, some effects were observed as a result of applying PSMs, as will be discussed below.

A second shortcoming of our research was the lack of a formal before-study. This generated difficulties in attributing the changes in model elements to the use of SCA. However, the evaluation made by the users of SCA at the end of the research period as well as the observations of the researcher throughout the case study process, support the findings of the research.

A third arguable deficiency, related to application of SCA with the CHC, is that participants did not use all the stages or modes of the method. Clearly it would have been better if they had gone through all the stages. However, the characteristic stagedness of SCA made it possible to stop its application and still generate intermediate products. Furthermore, the stagedness which is not only characteristic of SCA but also of many PSMs, should be viewed as advantageous for the combined use of different PSMs or the joint use of PSMs with other participatory methods such as PRA.

## 8.2 Key findings

The purpose of this research was to investigate the potential role of PSMs in empowering poor and disadvantaged social actors. However, all the work carried out in Alpuyeca was with just one of these PSMs – SCA. Therefore the findings of our research are formally limited to this particular PSM. In this summary we will both identify the findings from the application of SCA, and also discuss the extent to which these method-specific findings can be generalised to the broader family of PSMs. These two aspects will be discussed in parallel.

The conceptual clarification carried out as part of this research tends to suggest that under the appropriate circumstances the following results are likely to be observed: (1) The cognitive/analytical assistance provided by PSMs will improve these social actors' understanding of their action-relevant context; (2) this improved understanding will lead to more effective participation in the planning of local

development; and (3) the effective participation of poor and disadvantaged social actors will in turn lead to them having more control over their lives.

As a result of the research, these questions can now be stated more precisely in the following terms. The findings can be summarised in terms of whether or not an effect was observed in the elements which the model would suggest might have been impacted. These effects will be discussed in turn.

➤ *Analytic tools*

SCA was adopted and used by the CHC. SCA became a tool available to them which they could apply in future situations. Thus, the adoption of SCA itself is a form of empowerment. The researcher sought to investigate whether this addition generated an effect in the other model elements. The extent to which other PSMs might have generated comparable effects will be discussed below.

➤ *Structuring the problem and understanding the problématique*

The activity of identifying problem structure was key not only to the CHC members' improved understanding of their problématique but also to generating open discussions which could and did lead to proposed alternatives for action.

The effective participation of CHC members which mainly resulted from the use of SCA was evidenced in increased control over their activities as members of the CHC in several ways. They developed more formalised and systematic discussions during meetings.

Two particular issues about generalisation will be considered here. One is whether our findings generalise from one method (SCA) to other PSMs. The other is the extent to which they generalise from one community organisation (Alpuyeca's CHC) to other organisations. We will consider each of these questions in turn.

The role which SCA seems to have played in Alpuyeca raises a claim about PSMs which has not been considered previously in the literature on PSMs. It is at least arguable that other PSMs through the formalisation of factors and relationships to be considered, which is a defining characteristic of these methods, might equally be expected to play this additional role. However, such a hypothesis would need further work with other methods from the PSM family in order to be substantiated.

The CHC's problem as structured was characterised by high levels of uncertainty and low levels of complexity. It is plausible that problems with these characteristics are not atypical of community organisations whose scope of action and influence tends to be limited, in which case the findings of this research will have a relevance to the situation of other top-down community organisations in developing countries (as will be discussed below).

➤ *Commitment to an effective course of action*

The improved understanding of their problem situation generated increased confidence to act in CHC members. During the meetings they reaffirmed their willingness to work together towards their goal, which in turn increased group cohesiveness. The actions (aimed both at reducing uncertainties and at fund-raising) to which commitment was reached were undertaken, and had the desired effect of producing sufficient materials and funds for the construction of the dental clinic to proceed.

The building itself, to the achievement of which the research contributed, can be reasonably viewed as an increase in their material self-power giving resources. The intermediate products which can be generated with SCA also made it possible for CHC members to observe clear advances towards their goal: operation of the dental clinic.

Other PSMs also have intermediate products (for example, cognitive maps in SODA and root definitions in SSM). In these cases, it is at least plausible that other

PSMs will have similar effects to those reported in this case of SCA – though this would require further work to establish.

➤ *Opportunities to act*

The CHC's opportunities to act were regularly (during our study) curtailed, particularly in terms of fund-raising activities and obtaining construction material for the clinic. This type of obstruction, by more powerful social actors, is likely to be found in situations of other grassroots organisations in developing countries.

The effect of the use of SCA on this model element was hard to distinguish. The reason for this, it can be argued, is that this element will tend to be particularly highly influenced by factors external to the PSM(s) being used. If these other factors remove the opportunities to act then any analysis, whatever method is applied, will at least in the short run prove to be futile (although it may also increase understanding of the problem situation via the elements of structuring the problem and understanding the *problématique*). This argument applies equally to any PSM, as it depends on the context of decision-making and is independent of the PSM which is used.

➤ *Spaces for dialogue*

As a result and despite the obstacles they encountered in terms of opportunities to act, CHC members managed to “open up” dialogical spaces for themselves. This was particularly the case with potential donors and local health authorities. Some but not all were receptive to the CHC's members' requests. On occasions CHC members managed to articulate their positions clearly and achieved positive outcomes. This good result appeared to flow directly from the members' improved understanding of their *problématique*. It is reasonable to argue that the application of SCA contributed to these improvements in understanding and articulateness.

SCA shares with other PSMs the purpose of enabling group interaction, generating shared understanding and encouraging participatory analysis. It is therefore

at least plausible to speculate that the distinctly positive impact on spaces for dialogue which occurred in this case would also be observed in applications involving the use of other PSMs. To confirm this speculation would require further research.

➤ ***Cognitive skills to understand***

The Alpuyeca CHC found it possible to use the SCA methodology, after overcoming some initial difficulties with the graphical representations. The outcome of applying the method was the recognition of the different problematic areas which impeded project progress, and of the relevant actors involved. There were consequential improvements in the articulation of arguments before other social actors.

The flipchart sheets on which the progress of workshops and subsequent meetings was recorded were clear examples of organisational memory, and as such an extension of their cognitive skills to understand. Thus this research's experience with SCA suggests that it can, in this respect, be viewed as empowering. This may be seen as an example of or indeed supporting evidence for Eden and Ackermann's (1998) proposition that organisational memory is potentially a valuable product of PSMs.

We have discussed above the effects of the case study experience of applying SCA on these seven elements of the model. In six of them the effects of SCA are reasonably clear and positive. In one of the elements, namely opportunities to act, the effects are more ambiguous. However, any positive changes in model elements are evident contributions to increases in self-power.

The problem situation of Alpuyeca's CHC was characterised by low complexity and high uncertainty. The application of SCA, as has been seen, generated positive effects. These findings cannot be carried over unproblematically to the application of other PSMs in similar circumstances. However, as we have seen above, in many cases the similarity of characteristics between SCA and other PSMs gives reason to be

encouraged that they might also perform a useful empowering role under these circumstances. So these findings are certainly a positive indication for the more general application of these methods. Under the plausible assumption that the problems of many community organisations in the Third World share these characteristics of low complexity and high uncertainty, then these findings seem to be potentially generalisable.

How might SCA and other PSMs fare in situations with other characteristics? Evidently this question cannot be answered definitively on the basis of this research. However, it is possible at least to speculate in a more informed way. Consider the alternative situations summarised in Table 8.1. In situations of low complexity, low uncertainty there is not likely to be a need for analytical assistance. It can be argued, though, that PSMs might be applicable to problem situations in the other two quadrants.

**Table 8.1 Problem situations of Third World community groups in which PSMs can have an impact**

Complexity	Uncertainty	
	Low	High
Low	no need for analytic methods	the context of this research
High	potential benefits from PSMs	potential benefits from PSMs

In situations of high complexity, low uncertainty, the use of SCA is probably not the most appropriate as SCA specialises in the management of uncertainty. However, other PSMs such as SSM or SODA, whose strength is in the clarification of complexity, are more appropriate to such conditions. Situations of high complexity, high uncertainty are much more demanding for analytic methods; in so far as they are likely to be conflictive there may also be a potential role here for the game-theoretic approaches which are part of this family of methods.

It is thus at least plausible that benefits from the application of PSMs in problem situations of high uncertainty, high complexity, or low uncertainty, high complexity

might be achievable. Doubtless the particular advantages to be gained would be situation-dependent.

Insofar as the experience in Alpuyeca has tested the elements and relationships within the model developed in Chapter 4, that experience supports the model as a reasonable representation of an empowerment process. A fuller test of the model would, of course, require further experiences in which aspects of the decision-making context which were not active or subject to change in this case study were brought into play.

The findings from the experience of SCA use with Alpuyeca's CHC are consistent with the in-principle usefulness of PSMs in Third World development planning. Our research has supported the proposition that there is indeed scope for the use of PSMs with Third World community organisations, and that these methods do appear to have a positive role in empowering these groups.

### **8.3 Suggestions for future work**

In this section some potentially valuable possibilities for future work which have surfaced during this research are presented.

- (i) The conceptual model of the process of empowerment offers a significant opportunity for future work. Additional conceptual research as well as practical work can be undertaken to elaborate on the model and to validate particular aspects of it. Improvements to the model may enable it to be used to identify what type of analytic assistance may be of particular value to a specific disadvantaged group, given all its circumstances.
- (ii) The case study reported in Chapters 6 and 7 covered the case of the solo use of PSMs, specifically of SCA. In Chapter 5, the potential benefit of the joint use of PSMs with PRA was argued. Further work would be of value to investigate

whether the findings established in this research extend, as might be expected, to that case also.

- (iii) The current research would have greatly benefited from an established evaluation framework for PSMs (see the debate between Eden and Finlay<sup>135</sup>). A consolidated and empirically validated evaluation method would also be of value to the research opportunity identified in (ii) above.
- (iv) One proposition of a more technical nature which can be derived from this research is that PSMs could with advantage learn from PRA in developing less complex representations. This suggests as an interesting avenue of development to explore the extent to which one or more PSMs might be made more effective by adapting them to use icons (completely non-verbal representations) wherever possible. If successful, this could be expected to reduce the 'set-up costs' of adopting PSMs in developing countries.

The application of SCA with the Alpuyeca CHC largely avoided the use of the method's technical terms. CHC members nevertheless managed to use those parts of the method to which they were exposed. There is other evidence of this – see for example Taket (1994). Future development oriented to making the methods less threatening and therefore more accessible to the layperson (without sacrificing the manipulation which is possible with PSMs) could prove to be beneficial – particularly for promoters of PSMs who aim to assist development planning processes with Third World grassroots groups. Such adaptation would make PSMs more appropriate for groups which largely have low education levels and whose methods of approaching problems are currently rooted in their daily survival rather than on abstract, formal analytical methods.

---

<sup>135</sup>See, Eden (1992, 1995), Eden and Ackermann (1994), Finlay (1998).

#### 8.4 A final reflection

The application of participatory methods such as PSMs in Third World development planning has been explored in practice. The evidence in our research, although limited, can serve as a motivation to open up opportunities for further application of PSMs with poor and disadvantaged groups in developing countries. The ability to achieve increases in their self-power through the benefits of analytic assistance, which in turn improves the livelihood of these groups, should be an incentive to promote PSMs in the Third World. This does not imply that PSMs are a panacea for the problems of Third World community groups. Nevertheless, there is evidence to support the claim that it can contribute at least secondary support to their empowerment.

A large part of the history and the struggles of the Third World are conventionally understood and explained through the 'eyes' of the so-called 'developed world'. Sometimes one cannot avoid thinking about that certain degree of bad conscience that underlies most, if not all, of the efforts oriented to improving the life conditions of the inhabitants of that euphemism, the 'developing world'.

Nothing guarantees the success of our scientific and technical repertoire, until real change, a deep transformation of the social structures occurs in places where, still today, one's birthplace largely determines, for better or worse, one's future. Value judgements and panaceas aside, this thesis hopes to be a small contribution to scientific knowledge and, why not, along the way it has provided me with equal or more learning from those who in theory I was destined to 'teach'.

## Appendix A: Changing tendencies of development approaches - towards participatory development

To speak about development is to imply that the subject under study, be it a country or a human being is underdeveloped.<sup>1</sup> But how do we establish what is to be less developed? This naturally depends on the definition of the term. Definitions vary according to their origin; that is, to the conceptions of different authors, to their diverse academic ideologies, and to the historical context. The definition of development is thus not straightforward: “*there can be no fixed and final definition of development, only suggestions of what development should imply in particular contexts*” (Hettne, 1990, p.2). This view implies a constant redefinition of development as the understanding of the process increases, and as new problems emerge whose solution also involves ‘development’. Various definitions of the concept have been identified in the literature. Some focus purely on economic growth and measure the phenomenon by gross national product or by per capita income levels (see Seers, 1979; Simmons, 1988; and Todaro, 1994, p.14). Other definitions include social aspects such as distribution of resources, access to opportunities (e.g. services, jobs, housing, education) as well as political and human rights (Kitching, 1989; Phillips and Verhasselt, 1994, p.4). According to Seers, development means increasing the fulfilment of human potential, by satisfying people’s basic needs such as food, shelter, and clothing, by providing job opportunities, and by decreasing inequality in income distribution.<sup>2</sup>

---

<sup>1</sup>The difference between developed and developing countries is captured in a number of different ways. In development, the world is divided in countries of the North and of the South. The former are developed nations or the “haves”; while the latter are the underdeveloped or the “have-nots”. The terms underdeveloped, less developed, developing and Third World are used interchangeably in this work to refer to countries of the South.

<sup>2</sup>“(...) the questions to ask about a country’s development are therefore: What has been happening to poverty? What has been happening to unemployment? What has been happening to inequality? If all three of these have become less severe, then beyond a doubt this has been a period of development for the country concerned. If one or two of these central problems have been growing worse, especially if all three have, it would be strange to call the result ‘development’, even if *per capita* income had soared” (Seers, 1972, p.3)

The position taken in this research is that development is more than economic growth. In order to support this view we will review<sup>3</sup> the context in which the development paradigm<sup>4</sup> evolved from one with a pure economic focus to one which integrates social aspects of development.

Despite the emphasis on economic growth and industrialisation,<sup>5,6</sup> there were already during the 1950s movements addressing the limits of the economic aspects of development. Two strands deserve particular attention: the community development (CD) and conscientisation movements, both of which pointed out the lack of correspondence between development schemes (articulated from the top) and the felt needs of the population. In order to overcome this problem, the CD movement provided the idea of encouraging and supporting local communities to bring out their creativity, and to help them realise their own potentials to improve their living conditions (Asthana, 1994). In other words, emphasis was placed on the importance of involving people in their own development. However, the CD movement took an oversimplified view of community dynamics by assuming that there was consensus both within the community and with the national government regarding needs and aspirations. Furthermore, they assumed that the communities were homogeneous, and that there was equality in class relations. By ignoring the differences of socio-economic and political structures, the CD programmes thus resulted in continued inequality of benefits distribution (de Kadt, 1982; Gow and Vasant, 1983; Asthana, 1994).

Whereas CD focuses on community members getting progressively involved in development programmes that have been formulated from the top, in the

---

<sup>3</sup> Several writers have done comprehensive review of development theories, see for example, Griffin (1989), Hunt (1989), Kitching (1989), Larrain (1989), Hettne (1990) Hulme and Turner (1990), Toye (1993) and Todaro (1994). These writers use different classifications of development theories which in turn provide different frameworks for the study of the subject. Most of these classifications are based heavily on different economic theories to development; therefore they are not useful for the position we have adopted.

<sup>4</sup> The two volumes of *Pioneers in Development* (Meier and Seers, 1984; Meier and Schultz, 1987), published by the World Bank, provide a series of essays written by pioneers such as Bauer, Clark, Hirschman, Lewis, Myrdal, Prebisch, Rosenstein-Rodan, Rostow, Singer, Tinbergen, Schultz, Haberler, Myint, Harberger, and Furtado who helped to shape the theory and practice of development. The first volume covers the 1940s and 1950s, while the second one examines the 1960s and 1970s.

<sup>5</sup> In an attempt to address the repercussion of the international economic recession (1930s) and of the Second World War (1940-1944).

<sup>6</sup> The United Nations promoted economic development for the first time in its 1951 report called: "Measures for the Economic Development of Underdeveloped Countries". New York: United Nations Department of Economic and Social Affairs.

conscientisation movement they are empowered to undertake development activities themselves. Another difference with the CD movement is that the conscientisation movement (mainly promoted in Latin America) is based on the assumption that societies are conflictive and unequal. Conscientisation is often associated with the Brazilian pedagogue Paolo Freire, who argued that for development to succeed, the poor must be made aware both of their situation (the causes of their oppression) and of their capacity to change it. In other words, until the poor are able to translate their awareness into change by organising and mobilising the masses, development will not be successful. This theory has been deemed paternalistic because it assumes that the poor need outside intervention to become aware that they are exploited. Another criticism of conscientisation is that by challenging the existing social order, conscientising activities will possibly provoke such an opposition that this may well hinder their success from the start (Phillips and Verhasselt, 1994).

By the beginning of the 1960s, it was becoming more apparent that the benefits from economic growth were not “trickling down” to the poor population in developing countries (Sagasti, 1988; Hunt, 1989). It was in this decade<sup>7</sup> that the need to consider the social aspects of development and not only the economic ones became of concern, although during this period they were still treated as separate issues. It was during this period that for the first time there was an attempt to merge the study of both economic and social aspects of development.

In the 1970s<sup>8</sup> were launched the ideas of *another development* and of *alternative development*, both of which provided important bases for the participative orientation in development planning. The ideas of *another development* were introduced in the 1975 report, “What Now: Another Development” by the Dag Hammarskjold Project on Development and International Cooperation (Development Dialogue, 1975; Haque et al, 1977, Hettne, 1990). This report states that development should be “need oriented, endogenous, self-reliant, ecologically sound and based on transformation of social structures” (Haque et al, 1977). Need-oriented refers to meeting both material

---

<sup>7</sup> The United Nations considered the period 1960-1970 the First Development Decade, and 1970-1980 the Second Development Decade.

<sup>8</sup> Other approaches of the 1970s are basic needs, and integrated development and endogenous development the unified approach to development and planning.

and non material human needs. Priority is given to meeting the ‘basic needs’ of food, health, shelter and education. Since each society is characterised by its own values and views, development should be endogenous; that is, it should evolve from within the society. Self-reliance requires a society to rely on its members’ strengths and resources, its culture and its natural environment (Hettne, 1990). Also, local and global resources should be rationally used, and there should be ‘equitable access’ to these resources by the population.

*Another development* requires a methodology which promotes a process of interchange and evaluation of alternatives, so as to choose the most appropriate one for each specific society. Involvement in the development process by the beneficiaries<sup>9</sup> is considered essential. This involvement must be associated with transformation of the existing social and political structures, and economic activities in order to “realise the conditions of self-management and participation in decision-making by all those affected by it” (Simmons, 1988). Finally, to bring about this desired result these five dimensions must not be considered separately.

The ideas of *alternative development* were also put forward during the 1970s, although only in the 1990s have they been further developed. One of the main characteristics of *alternative development* -and the principal difference with the previously described *another development*- is that it considers the issue of empowerment. *Alternative development* is centred on human development, and this objective is to improve the “conditions of life and livelihood” of the poor; that is, “the excluded majority”. To achieve this, *alternative development* proposes the need for “the empowerment of the disadvantaged” in an attempt to correct the imbalance of economic, political, and social power (see Friedmann, 1992).

---

<sup>9</sup> Refers to those in the community who benefit from development policies and programmes.

While during the 1960s and 1970s there was a reappraisal of development which raised the social aspects of the process, in the 1980s, the focus became again economic growth. The debt crisis<sup>10</sup> had reduced the capacity of developing countries to design alternative development policies, and so these nations had to follow the strict policies demanded by the International Monetary Fund (IMF) and World Bank, which laid little emphasis on their impact on the social aspects. These policies were designed to foster *stabilisation and structural adjustment* programmes<sup>11</sup> in less developed countries. Due to these events, the 1980s is called “the lost decade for development”<sup>12</sup> (Hulme and Turner, 1990; Esteva, 1992).

Although both stabilisation and structural adjustment programs still continue, by the end of the 1980s, there was once again a revival of the emphasis of development theories towards social aspects. It was at this time that the Brundtland Report (1987), “Our common future”, was published and put forward the idea of *sustainable development*.<sup>13</sup> This approach attempts to find a balance between economic growth and the preservation of the environment, stressing the idea of intergenerational equity. Thus the environment should be managed in such a way that although it satisfies the objectives of economic growth of the present it does not endanger the existence of natural resources for the benefit of future generations. *Sustainable development* is also characterised by its emphasis on the linkage between the environment, population and resources, poverty, rural development, urbanisation and the global economy (for further details see Todaro, 1994, Ch.10). The integration of the environmental concerns with these development issues is particularly important since until then they had been considered separately (Esteva, 1992; Altieri and Masera, 1993; Schuurman, 1993).

---

<sup>10</sup> Following the oil crisis (1973), banks in the United States and United Kingdom made loans to developing countries. The realisation that Third World countries were unable to repay the loans came when Mexico suspended debt repayments. The resulting debt crisis coincided with the administrations of Thatcher in the United Kingdom, characterised by its monetarist economic policies; and Reagan in the United States, characterised by supply-side economics. Toye (1993) provides a comprehensive account of the origins of the world debt crisis and the attempts to resolve it by focusing on the policies of the United States and the United Kingdom.

<sup>11</sup> “Structural adjustment” meant for developing nations the removal of excessive governmental controls (for example, on foreign exchange, imports, process) and the promotion of market competition (see Toye, 1993; Todaro, 1994).

<sup>12</sup> In most of the Latin American countries, average per capita incomes were back to the levels of the late 1970s since international credit was not used to increase the countries’ productive capacity. Instead it was used for import of weapons, luxury goods, and speculation. (Hettne, 1990, p. 21).

<sup>13</sup> It is interesting to note that the idea of sustainable development is also indirectly linked to a new perception, namely that policy decisions in developing countries could, through effects in the environment, affect the inhabitants of developed countries.

As can be observed from the present review of the evolution of development theories, over the last four decades several new approaches have emerged as a response to the challenges presented by continuous poverty, fluctuating (un)employment rates, unequal distribution of income and other “development” problems. The most significant change in development theories was the shift from a focus purely on economic growth, to the incorporation of social aspects in the objectives of development, the latter being the approach taken in the research reported in this thesis.

The shift led to a more people-centred -or participatory- approach. Participatory development (PD) - or ‘popular participation in development’ (Rahman, 1995), was based on the ideas of conscientisation, basic needs approach, another development and alternative development described earlier. The underlying principle is that people themselves should become actively involved in the decisions and activities that ultimately affect their lives - their development.

## **Appendix B: Participatory Development Planning Methods**

The inherent requirement of beneficiary involvement within a people-centred approach to development generated the need for more appropriate development planning methods. Appropriate is used here in the sense of providing scope for beneficiary inclusion in development planning; that is, development planning with and for the intended beneficiaries (Mikkelsen, 1995). PDPMs emerged in response to the limitations posed by traditional development planning methods in the context of a participatory approach to development. The incorporation of PDPMs in development planning does not imply the exclusion of conventional development planning methods, techniques and tools.

However, growing adoption of participatory development ideas is reflected in the numerous PDPMs which have been developed since the 1970s (see Table B). An in-depth review of each participatory approach listed in Table B is beyond the scope of this thesis. However, a brief description of each is provided in the table, with references for further consultation. The list is based predominantly on Cornwall et al (1993), but the explanatory material has wider sources. What follows is a brief comparative review of some significant PDPMs, with the intention of highlighting some of their general characteristics. Reference to the PDPMs used for the comparison will be made following their commonly known acronyms, provided in Table B, for ease of presentation.

The promotion of participation by local people is one of the main attributes of PDPMs. However, many of these approaches limit participation of community members to providing information to outsiders. This is the case, for example, in AEA, BA, D&D, ES, FBF, FSR/E, RA, RAP, REA, RRA, RUEA, SA, SB. In these methods, outsiders remain in control of how information is used and/or elicited.

**Table B**  
**Some participatory approaches since the 1970s**  
**(In alphabetical order)**

	COMPLETE NAME	AIM/METHOD (+ reference)
AEA	Agroecosystem Analysis	To evaluate natural resource management problems on the basis of productivity, stability, sustainability and equity through interactive village planning (Conway, 1985, 1986).
BA	Beneficiary Assessment	To undertake systematic listening in order to "give voice" to poor and other hard-to-reach beneficiaries, and obtain feedback on interventions (World Bank, 1996).
DELTA	Development Education and Leadership Teams in Action	To identify and respond to local concerns by emphasising long-term commitment, and building confidence and trust (Cornwall et al, 1993)
D&D	Diagnosis and Design	To analyse problems and existing knowledge, and to develop action plans for community and farm forestry, by using a multi-stage set of diagnostic surveys and planning discussions at village and agency level (Raintree, 1987).
ES	Exploratory Survey	To zone the target population groups into homogeneous recommendation domains and evaluate farmers' social and economic circumstances (Collinson, 1981).
FBF	Farmer-Back-to-Farmer	To define the problem and identify solutions by an interdisciplinary team using informal surveys; the intervention is tested using farmer evaluation, and farmers deliver the "last judgement" (Rhoades and Booth, 1982).
FPR	Farmer Participatory Research	To involve farmers more closely in on-farm research by moving beyond the contracting or consulting of farmers done in FSR/E (see below) (Farrington and Martin, 1988; Cornwall et al, 1993).
FSR/E	Farming Systems Research/ Extension	To have farmers describe and analyse farming systems, identify problems, and plan both research and extension activities (Shanner et al, 1982; Fernández, 1988; McCracken et al, 1988; Doorman, 1991).
GRAAP	Groupe de Recherche et d'Appui pour l'Auto-Promotion Paysanne	To create awareness, among rural people, such that they become active participants in the development of their community (Kamp and Schuthef, 1989).
MAP	Methods for Active Participation	To involve rural people in expressing their vision about program activities, their views of the possible obstacles and ways of addressing those obstacles, and implementation issues (Bergdall, 1993).
MD	Mawas Diri Tool	To involve communities from the beginning of the planning process which is oriented to generate actions that aim to improve health status of families (Johnston, 1990).
PALM	Participatory Analysis and Learning Methods	To go beyond appraisal by sharing information for analysis and understanding of problem/decision situations (Mitra, 1993).
PAR	Participatory Action Research	To restore people's ability to transform their collective destiny through joint planning and evaluation (Fals-Borda and Rahman, 1991; Whyte, 1991; Rahman, 1993).

**Table B (cont'd)**  
**Some participatory approaches since the 1970s**

	COMPLETE NAME	AIM/METHOD (+ reference)
PFR	Planning for Real	To encourage people in a community to build a physical model of their area, to use it to identify their problems and resources, to explore alternatives, sort out options, rank priorities, allocate responsibilities and set out a Plan of Action (Gibson, 1993; Wratten, 1994).
PRA	Participatory Rural Appraisal	See Section 5.2 (Chambers, 1994a, 1994b, 1994c, 1997; Mosse, 1994).
PSAP	Productivity Systems Assessment and Planning	To involve farmers who have acquired land tenure in data-gathering and analysis, to consolidate data and analyse problems and opportunities (in Slocum et al, 1995).
PTD	Participatory (or People-centred) Technology Development	To change existing technology in a direction considered desirable by the different users of the technology; in this process a balance is sought between the knowledge of farmers, scientists and other parties involved (Kamp and Schuthof, 1989; Haverkort et al, 1991).
PUA	Participatory Urban Appraisal	To apply PRA approach in urban contexts (Mitlin and Thompson, 1994).
RA	Rapid Appraisal	To get information about a set of problems in a short period of time and without a large expenditure of professional time and finance (WHO, 1988).
RAP	Rapid Assessment Procedures	To conduct rapid and accurate evaluations of what people do, individually and collectively, to maintain and/or restore health (Scrimshaw and Hurtado, 1987; da Mota, 1992).
REA	Rapid Ethnographic Assessment	To collect data concerning people's beliefs and practices in relation to a specific disease (Bentley et al, 1988; Rifkin, undated).
REPIA	Rapid Epidemiological Assessment	To collect health data (e.g. risk or health status) of a small area in a short period of time (Selwyn et al, 1989; Rifkin, undated).
RRA	Rapid Rural Appraisal	See Section 5.2 (Chambers, 1981, 1992; McCracken et al, 1988).
RUEA	Rapid Urban Environmental Assessment	To assess environmental issues for planning at the level of the city and/or metropolitan area (Leitmann, 1994).
SA	Sondeo Approach	To combine disciplines (e.g. agronomists, animal scientists, and social scientists) in rapid appraisal so as to generate new technology (Kamp and Schuthof, 1989).
SARAR	Self-esteem, associative strength, resourcefulness, action planning and responsibility	To provide a multi-sector, multilevel approach to team building through training; to encourage participants to learn from local experience rather than from external experts; and to empower people at the community and agency levels to initiate action (World Bank, 1996).
SB	Samuhik Brahman (Joint Trek)	To facilitate several agricultural disciplines to interact effectively with local farmers, in a limited target area, to identify problems and constraints affecting crops, livestock, forestry patterns (Mathema and Galt, 1989).
TFD	Theatre for Development	To make the processes of drama-building accessible to people who can in turn use it as part of their access to development (Harding, 1987; Mavrocordatos and Martin, 1995).
TFT	Training for Transformation	To make causal or in-depth analysis of structural causes of their problems, using animation techniques (Hope and Timmel, 1989).

Other methods (e.g. DELTA, FPR, MAP, MD, PALM, PAR, PFR, PRA, PTD, PUA, SARAR, TFD) propose to give the opportunity to local people to explore, through forms they generate, their own ideas and solutions (Cornwall et al, 1993). What they have in common is a philosophy of generating grassroots mobilisation so as to encourage the disadvantaged to cooperate to find out why they are poor, and thus promote their awareness of their action-relevant context, and of what they can do to change it.

In other words, these latter participatory approaches aim for the empowerment of local people (However, this concept is generally defined in abstract terms rather than specifically related to increases in resources as defined in Chapter 3). In the case of these methods, local participants take a more active role, rather than just that of passive informants, in the decisions and actions that affect their lives. They become partners, with professionals - who act as facilitators - in the planning and decision-making processes (as has been discussed in Chapter 5).

This partnership is based on the idea of combining knowledge. On the one hand, there is the knowledge of development professionals<sup>1</sup> who provide the beneficiaries with information, training, encouragement and resources. On the other hand, there is the knowledge of the intended beneficiaries of development - the poor and disadvantaged - who can also mobilise local resources, provide information about community needs and a local perspective on the feasibility of development programs and activities (Kleymeyer, 1994). PDPMs thus encourage and rely on the combination of professionals' and beneficiaries' knowledges.

As can be observed in Table B, there is a proliferation of participatory approaches. This diversity may be considered to be a sign of strength. It implies that methods have been developed which are responsive to the contexts and to the specificity of the problem situation.

---

<sup>1</sup>Professionals are the development "experts" who are non-local; that is, they are not members of the community. When professionals act as "non-directive" guides we refer to them as *facilitators*.

## Appendix C: Principles of Participatory Rural Appraisal

Participatory Rural Appraisal (PRA) is one of the most widely applied participatory development methods in the work with community groups in the Third World. It evolved from its predecessor Rapid Rural Appraisal (RRA). In this section the underlying principles of PRA are discussed.

Both RRA and PRA seek to *offset biases*, especially those related to “rural development tourism” and “survey slavery”. “Rural development tourism” is the term used to refer to the phenomenon of the brief rural visit by the urban-based profession. This can result in bias in the professionals’ development plan and decisions. (See Chambers, 1983, pp. 10-12). “Survey slavery” is the term used to describe the experience with questionnaire surveys in rural areas. Generally, the use of rural surveys results in high costs and inefficiencies. Costs are related to researcher deployments and opportunity costs for research efforts being absorbed to survey application and analysis. Inefficiencies often become apparent in untimely or misleading findings. (ibid., Ch. 3)

Offsetting biases means counterbalancing the biases which obstruct outsiders’ contact with local people. There are six main types of biases: spatial, project, person, elite, seasonal, diplomatic. Drawing mainly from Chambers (1983, pp. 13-27) each type of bias is discussed briefly.

- *Spatial biases* refer to urban, and tarmac and roadside biases. Urban bias means concentrating rural visits near towns, capital cities and administrative centres. In tarmac and roadside biases attention is directed towards those who are less poor and away from those who are poorer because visible development follows main roads.
- *Project bias* means that projects are pointed to places where something is already being done. The information about existing projects is available to professionals through links to rural-urban networks.
- *Person bias* means that contacts during research are mainly: the rural people who are less poor and more influential (elite bias); men more than women (male

bias); users of facilities and adopters of innovations (user and adopter bias), and active, present and living community members because they are more visible, not hiding.

- *Seasonal bias* refers to professional visits being done in the dry and cool rather than the hot and wet seasons which are often worse for rural, poor people. This is because the wet season causes a lot of problems and worries (e.g. food shortage, high food prices, epidemics) for the rural people. Travel for the professional is easier during the dry season and local conditions are better thus making rural appraisal susceptible to a dry season bias.
- Training, values and interests of professionals give rise to problems. This is because the focus of professionals tends to be on the less poor and on issues which are of particular relation to their specialisation. This is *professional bias*.
- In *diplomatic bias* a combination of politeness and timidity blocks the professional from approaching, meeting, speaking, listening to and learning from poorer people. The professional does not wish to cause offence by seeking poor people or seeing the conditions in which they live.

(For more details see: McCracken et al, 1988; Pratt and Loizos, 1992; Rifkin, undated.)

*Triangulation* means using a range of methods to cross-check a particular topic. The aim is to get a richer picture and to confirm observations about the development situation; thereby it also helps to offset biases. There are five basic types of triangulation: data triangulation, investigator triangulation, theory triangulation, methodological triangulation, and discipline triangulation.

- In *data triangulation* data from different sources (e.g. interviews, observations, documents); is used to cross-check. Mikkelsen (1995, p.82) divides data triangulation into three sub-types: time, space and person.
- When more than one person studies the same situation there is *investigator triangulation*.

- If different - alternative or competing- perspectives are used to interpret a single set of data then there is *theory triangulation*.
- *Methodological triangulation* means multiple methods are used to study a single problem or question (e.g. quantitative and qualitative techniques, or two or more qualitative techniques).
- In *discipline triangulation* a problem is studied by different disciplines. (Chambers, 1994a; Mikkelsen, 1995)

*Seeking diversity* goes beyond the cross-checking done in triangulation. Through sampling (in a non-statistical sense), variability (rather than averages) is sought by looking for, noticing and investigating contradictions, anomalies, and differences (Mikkelsen, 1995).

*Optimal ignorance* means selectivity in both the amount and detail of relevant data to be collected. As Chambers (1981) states, optimal ignorance “refers to the importance of knowing what is not worth knowing.” Directly related to optimal ignorance is *appropriate imprecision* which means that the relevant data to be collected is not measured to a greater degree of accuracy than is needed (Mikkelsen, 1995).

Optimal ignorance and appropriate imprecision are necessary for *optimising trade-offs*. This operating principle attempts to strike a balance in the costs of learning to the useful truth of information, with trade-offs between quantity, relevance, accuracy and timeliness (*ibid.*). *Reversal of learning* means learning from and with, as well as by, local people (Chambers, 1994d, 1997) on the site and face-to-face from physical, technical and social knowledge (Mikkelsen, 1995).

## Appendix D: The Strategic Choice Approach

One of the developers of the Strategic Choice Approach (SCA), John Friend (1989) describes it as a method for “managing uncertainty” which “combines a concern for complexity with an emphasis on real-time decision-making”. This summary draws largely on Friend and Hickling (1987) and Friend (1989).

SCA sees uncertainty as crucial in decision-making. This approach classifies uncertainties into three broad areas: uncertainty about the *environment* (UE), uncertainty about *guiding values* (UV) and uncertainty about *related decisions* (UR) (See Section 7.2.1). SCA is a method which offers ways of identifying and managing these uncertainties. It operates in a workshop format in which participants have an active role. In the workshop, information is elicited within the SCA structure. Discussions with a view to decision-making occur within four broad modes: shaping, designing, comparing and choosing. Switching and looping between these modes is frequent in the application of SCA (which is consistent with the developers’ view that decision-making is a non-linear process).

In the **shaping mode** the first step is for decision areas to be identified. A *decision area* is an opportunity for choice within a problem situation in which different courses of action can be considered. Those pairs of areas within which decision-making may affect each other are indicated by links. These *decision links* are undirected and do not imply causality or order of attacking the problem. They only denote that there is a relationship between the corresponding decision areas and that there might be advantages in considering them together. The set of decision areas and decision links are represented diagrammatically in a *decision graph*. The workshop members are guided towards the selection of a subset of decision areas for closer examination. The criteria for selecting this *problem focus*, which should contain no more than four decision areas, are the urgency, importance and linkedness of its elements.

The identification of possible options for actions is carried out in the **designing mode**. For each decision area in the problem focus, participants agree a small set of mutually exclusive options. The next step is to establish where *option bars* should be

applied, representing incompatibility of a pair of options, each from different decision areas. The resulting set of decision areas, options and bars can be combined into an *option graph*, from which the *decision schemes* (sets of feasible combinations of options, one from each decision area) can be established. (This last facility is carried out by the Analysis of Interconnected Decision Areas – AIDA – algorithm.)

In the **comparing mode**, the advantage which one decision scheme has over another is examined. But first the group needs to agree acceptable threshold levels on at least some of the various dimensions of performance, which reduces the number of decision schemes to a *working shortlist*. From this, pairs of schemes are selected for advantage comparison. They are assessed for performance in terms of each of a number of *comparison areas* which the group has identified as relevant to choice. Rather then apply separate numerical scales for these assessments, each comparison locates the advantage of one or other decision scheme on a categorical scale ranging from ‘negligible’ through ‘significant’ to ‘extreme’. Members are then invited to agree an overall assessment, taking account of all of the separate comparisons, in the same categorical terms. This overall comparison may identify a clear advantage of one scheme over the other; and a series of such paired comparisons may identify a preferred decision scheme. However in most cases a key output of the comparing mode is the identification of uncertainty areas which for the time being prevent such a clear commitment to be made.

In the **choosing mode**, uncertainty areas are graded for their salience for the decisions under consideration, and *exploratory options* are identified with the potential to reduce or remove particular uncertainties. These exploratory options are evaluated in terms of *costs* (time, money, etc.) and effectiveness. *Action schemes* are developed which consist of feasible combinations of options in the urgent decision areas and are evaluated for their *robustness*.

The set of agreed actions – decision-commitments in some decision areas, exploratory options in others – can usefully be brought together in the shape of a *commitment (or progress) package*. Deferred choices and contingency plans can also be recorded in this progress package. The visible product of the SCA is this progress package.

Practical applications of SCA can be found in Friend (1984); Friend and Hickling (1987); van Steenbergen (1990); Thunhurst and Ritchie (1992); Thunhurst et al (1992); Ritchie et al (1994); White (1994); and Thunhurst and Barker (1997).

## Appendix E: List of Interviewees

The semi-structured and focus group interviews took place between 6 October 1995 and 18 January 1996.

### Central Level

#	POSITION	INSTITUTION
1	General Director of Health Economics Studies	Undersecretariat for Planning, Ministry of Health (SSA)
2	Director of Co-ordination	National Health Council
3	Director of the Healthy Municipality Program	General Division of Health Promotion (SSA)
4	Director of Social Organisation	Ministry of Social Development (SEDESOL)
5	General Director of Evaluation	Undersecretariat for Planning (SSA)
6	Undersecretary for Planning	SSA
7	Undersecretary for Health Services	SSA
8	Technical Secretary	National Vaccination Council
9	Technical Secretary	General Co-ordination of the Mexican Social Security Institute IMSS-Solidaridad Program

### State Level (State of Morelos)

#	POSITION	INSTITUTION
10	Director for Planning	Undersecretariat of Health
11	Director for Health Services	Undersecretariat of Health
12	Head of the Department for Health Promotion	Undersecretariat of Health
13	Undersecretary of Health	Ministry of Welfare, Health and Human Development of the State of Morelos
14	Director for Planning	Health Services of the Federal District

### Jurisdictional Level (Undersecretariat of Health, State of Morelos)

#	POSITION	INSTITUTION
15	Director	Health Jurisdiction No.1
16	Co-ordinator of Social Participation	Health Jurisdiction No.1
17	Co-ordinator of Health Services	Health Jurisdiction No.1
18	Health Promoter (zonal supervision team)	Health Jurisdiction No.1

**Municipal Level**  
**(Xochitepec, State of Morelos)**

#	POSITION	INSTITUTION
19	Health Officer (Councilman)	Municipality of Xochitepec
20	Municipal Aide in Alpuyeca	Municipality of Xochitepec

**Researchers/Ex-public officials**

#	POSITION	INSTITUTION
21	Researcher	National Institute of Public Health
22	Researcher	National Institute of Public Health
23	Co-ordinator of Health Programs	Mexican Health Foundation
24	Co-ordinator of Analysis and Research	Centre of Economy and Health of the Mexican Health Foundation
25	Co-ordinator of Planning and Development	Mexican Health Foundation
26	Executive President (Minister of Health, 1982-1988)	Mexican Health Foundation
27	General Director (Undersecretary for Health Services, SSA, 1988-1994)	National Institute of Public Health
28	Researcher	Mexican Health Foundation
29	Executive Vice-President and Director of the Centre of Economy and Health	Mexican Health Foundation
30	Adjunct Secretary (Undersecretary for Planning, SSA, 1982-1988)	Presidency of Institutional Revolutionary Party (PRI)

**FOCUS GROUPS**

**(Locality of Alpuyeca, Municipality of Xochitepec, State of Morelos)**

#	POSITION	INSTITUTION
1	President	Local Health Council
	Secretary	Local Health Council
	Treasurer	Local Health Council
	Vocal	Local Health Council
2	Director	Local Health Centre
	Head Nurse	Local Health Centre
	Health Promoter	Local Health Centre

## **Appendix F: Guide Questions for Semi-structured Interviews**

**Note:** Interviews were conducted in Spanish

### *Decentralisation*

- Background to decentralisation, particularly events that took place in the covering 1982-88, 1988-1994 and the current sexenio.
- How would you define decentralisation and deconcentration? Are there any differences?
- Why decentralise the health sector? What are the goals of a decentralisation strategy?
- What are the consequences/repercussions of implementing a decentralisation strategy in the health sector?
- What factors can influence the success or failure of a decentralisation strategy?
- What areas/functions should be decentralised? Why?
- Down to which level do you think decentralisation should occur? Why?

### *Participative planning*

- At present, who participates in the planning process?
- In your opinion, who should participate/be involved in the planning process?
- In what ways and in which areas should they participate?
- Are there any obstacles to participation? What are the main obstacles to participate in the planning process?
- What changes should occur within the health sector to overcome these obstacles? To have participatory planning?
- Should the community participate? In what ways? In what types of decisions?

### *Local health councils*

- Are there any institutionalised forums (spaces for the articulation and exchange of ideas) for the participation of the community in the planning and decision making processes? What are they?
- What was the purpose of establishing the Local Health Councils?
- Have they been successful? Have they had an impact (on the operation of the health centre; improvement of service; help answer community's demands)?

### *Power*

- Does power have a role in decentralisation? What role?
- What kind of power is decentralised (policy-making, implementation, administrative)?
- Is there a risk in a redistribution of power (between and within levels)?

## Appendix G: Focus Group Questionnaire

Note: Focus group discussions were conducted in Spanish

### *Community health council*

- Can you explain your election process to the community health council?
- What type of training did you receive?
- Have you participated in other community activities or organisations?
- Have you received training about the functions of a community health council?
- When was the last time?
- Can you tell me about that experience?
- Why do you think it is important to participate as a community health council member?
- What would you like to achieve as a community health council?

### *Health team*

- Have you received training/information about decentralisation?
- When was the last time?
- Can you tell me about that experience?
- What would you like to achieve as a health team?

### *Both*

- What do you understand by decentralisation?
- What good things have you heard about decentralisation?
- What do you think about that?
- What bad things have you heard about decentralisation?
- What do you think about that?
- What have you liked most about being a community health council member / working at the health centre?
- What have you liked least about being a community health council member / working at the health centre?
- How would you describe your relationship with the health team / community health council? The staff from the municipality (president, health officer, community aide)?
- Why do you think of your relationship is that way?
- What would you recommend so that members of the community participate in the health centre activities?
- Why would you recommend that?
- Why was the dental clinic selected as a priority?
- What other priorities has the community identified with respect to their health?
- What other projects do you have in mind?
- What problems have you encountered in your work?
- How have you solved them?
- What would you like to achieve?
- What would you like to learn?

## Appendix H: Photographs from the Alpuyeca experience

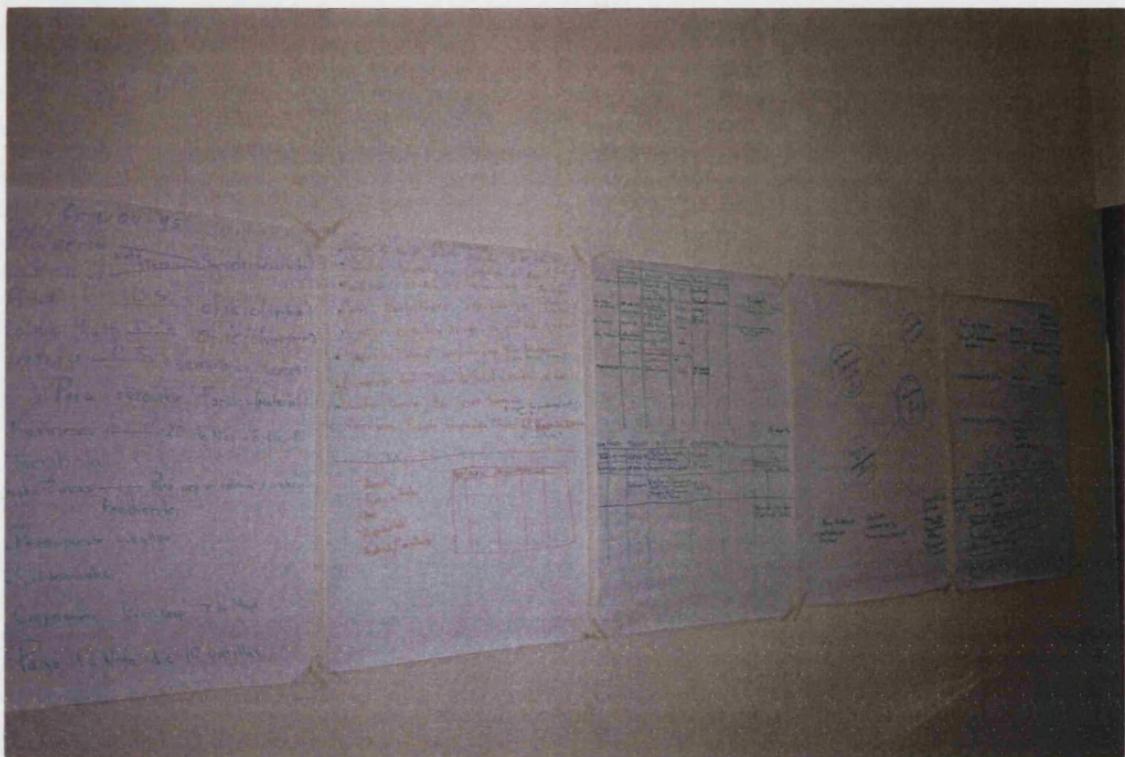
The following photographs were taken during the six-month period of research work with the community health committee (CHC) of the Mexican community of Alpuyeca. The pictures were taken during SCA workshops and construction of the dental clinic.



**Photograph 1** Location of the dental clinic as annex to the local health centre. ↑



**Photograph 2** Stage of the dental clinic construction when intervention began.

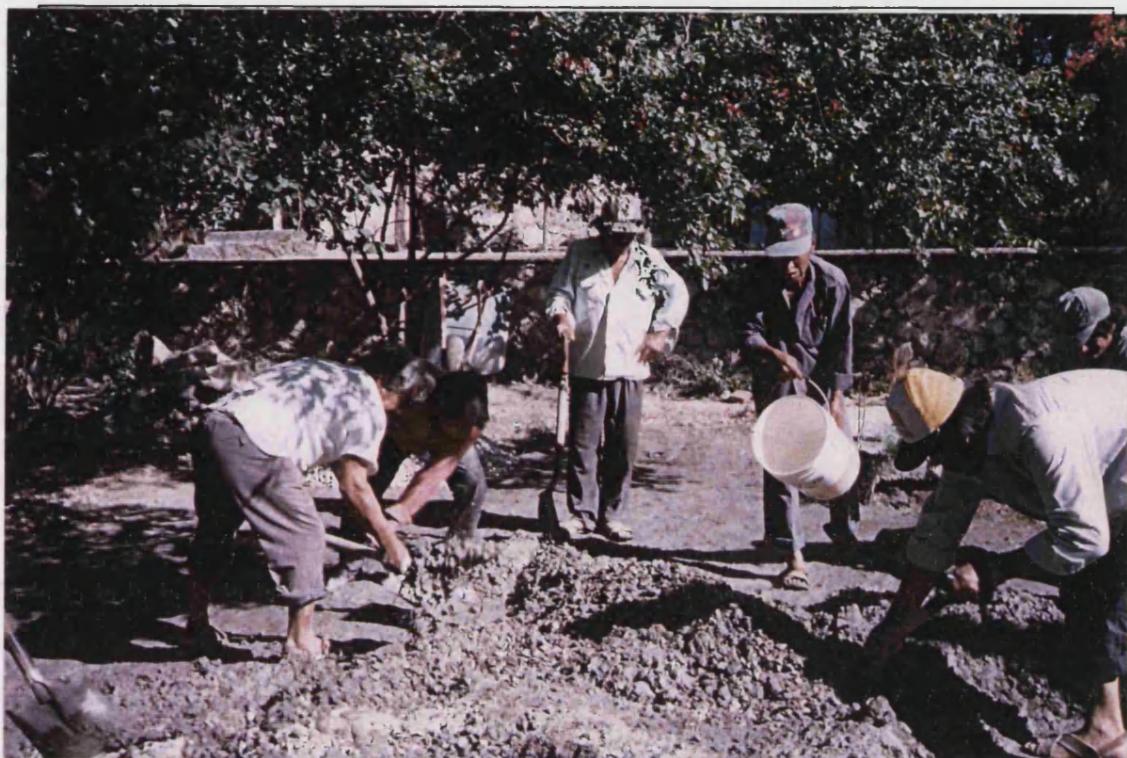


**Photograph 3** The sequence of these sample flip chart sheets illustrates some of the work carried out with the CHC: list of issues to be considered, a decision graph developed, options within decision areas, and the progress package.



**Photograph 4** CHC secretary takes on the facilitator's role during the discussion of activities to be included in the progress package.

**Photographs 5,7, and 8** Volunteer members of the community collaborate in the construction of their dental clinic.

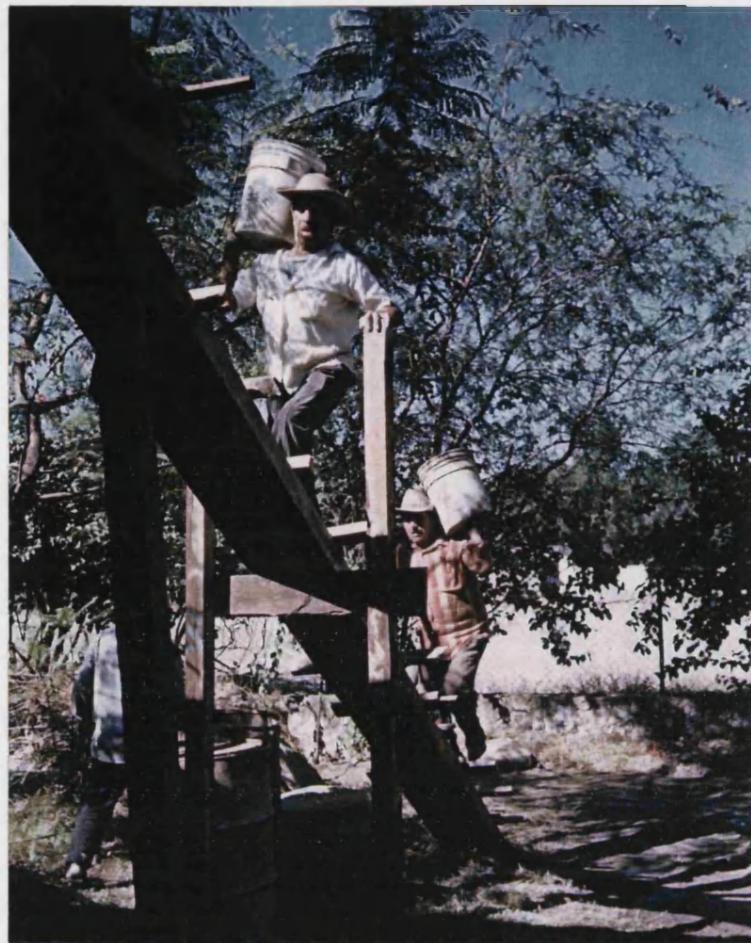


Photograph 5



Photograph 6 The building ready for roof work

**Photographs 7 and 8** Working on the roof



Photograph 7



Photograph 8

## Appendix I: My experience in Alpuyeca

The most gratifying period of my fieldwork in Mexico was the time spent with the community members, community health council (CHC), and the staff from the local clinic of the Alpuyeca locality. The present document summarises some of my most unforgettable moments of this stimulating experience.

Throughout the first couple of months, CHC members and the staff from the clinic were very curious about me, continuously asking me questions. Why had this Honduran girl chosen to work in their community? At first it was a question and answer game: If I asked something, they would answer and then they would ask me a question. Their questions were mainly personal; that is, concerning my place of birth, marital status, what I liked to do, what food we ate in Honduras, whether or not I liked Mexico, why I liked Mexico, etc.

My educational background was also a topic of many conversations. Particularly during the first couple of months, I was repeatedly asked: Are you a doctor? The most challenging experience during my fieldwork was trying to “convince” the CHC, health staff and other community members, that I was not a *medical* doctor. Much reflection about this issue has led me to believe that the confusion arose for two reasons. First, I was introduced to them by the supervision team from the jurisdictional office, as “la doctora” (the doctor) or they referred to my project as part of my “doctorado” (doctorate). Second, they assumed that because I was coming with the support of the jurisdiction, I was the substitute for the doctor that had left with the local university medical brigades. Until the end they kept asking who was going to come in my place...

The idea of being thought of as a medical doctor worried me immensely. The first couple of weeks the people from the community who came to the clinic for service asked me for medical advice. I kept telling them “I am sorry. I am not a doctor, I am here to support the CHC.” I was being introduced to the teachers at the school and to the people of the community as the new doctor. I was starting to panic, so one day I asked the health promoter for a talk. She said, “Sure Doc, lets go to the doctor’s office, she’s not here right now”. We went in and I said, “I am very worried

that many people think I am a medical doctor and I am not. I swear that if they bring me a patient to care for I am going to have a heart attack before I can do anything. I need your help." She laughed and asked, "So what do we call you?" I said, "Murielle would be fine." "You must have a title", she replied. After explaining my education, she said "O.K. Lic., don't worry" (Lic. is the abbreviation for *licenciada* - the title used in many Latin American countries for people who have an undergraduate university degree). I had a similar conversation with the members of the CHC. They also called me "Lic.". They said they did not feel comfortable calling me by my first name. I always used Don (Mr.) or Señora (Mrs.) or Doctor to address them, except for the nurses and the health promoter. After our conversation though, when I was introduced to people of the community or at the municipality, I was still the Doctor who was working with them. Although I knew that titles were important in Latin America, I had never had anything like this happen before. This proved how important the figure of the medical doctor was for the community.

The CHC had scheduled the last Friday of every month for tidying up the garden (it was not always done), and the day I participated in this activity we had a social event afterwards. For the traditional Christmas *posada*,<sup>1</sup> the children of the CHC members and of the health staff, joined us for the celebration, and we had *piñatas* (which I did not know were stuffed with fruits of the season and peanuts, as well as candy), *ponche* (hot fruit drink) and we interchanged presents. The day of the Three Wise King is celebrated with the cutting of the *rosca* (large, donut-shaped sweet bread). The tradition is that each person cuts his/her own piece of the *rosca* and whoever gets a small plastic figure of a baby or a king, takes *tamales* to a celebration on February second that celebrates the *Day of the Candelaria*.<sup>2</sup> I got one of the kings but unfortunately I left Mexico before this celebration.

The female members of the CHC cooked several times, other times we bought roasted chicken, usually spicy; tortillas, or *gorditas* - stuffed corn tortillas - from the local stores. The CHC and health staff prepared a farewell party for me that was

---

<sup>1</sup>Religious celebration that lasts nine days -from the 16 to the 24 of December- commemorating Joseph and Mary requesting lodging (posada) before Jesus was born.

<sup>2</sup>This day the baby Jesus' from people's Nativity scenes are dressed and taken to church for blessing and prayers.

memorable. The chicken with *mole* (a chocolate-based sauce) and *tamales* were made from the basic ingredients. It was both a very happy and a very sad day.

I must say I did not have any major problems conducting my fieldwork, although sometimes progress was slow. My fieldwork experience in Mexico was very fulfilling and in many ways an “eye-opener” (enlightening). It made me see the hardships communities go through for appropriate health services, and the shortcomings of the services provided. Reality is much different from what is written in policies, rules and regulations. These documents describe a different world. I had “the fieldwork blues” several times, because I felt that as researcher I had lived in a world surrounded by crystal walls - a world distant from the reality of local communities in developing countries. My hope as a researcher is that my work in Alpuyeca made a small but lasting contribution.

## Bibliography

Ackoff, R.L. (1974). *Redesigning the future: a systems approach to societal problems*. New York: John Wiley & Sons.

Ackoff, R.L. (1977). "National development planning revisited." *Operations Research*, 25(2): 207-218.

Ackoff, R.L. (1979a). "The future of operational research is past." *Journal of the Operational Research Society*, 30(2): 93-104.

Ackoff, R.L. (1979b). "Resurrecting the future of operational research." *Journal of the Operational Research Society*, 30(3): 189-199.

Ackoff, R.L. (1981). *Creating the corporate future: Plan or be planned for*. New York: John Wiley & Sons.

Abbott, J. (1996). *Sharing the city: Community participation in urban management*. London: Earthscan Publications.

Adriance, D. (1995). "PRA in health education, water and sanitation project in Kenya." *PLA Notes*, 22: 41-44.

Ajzner, J. (1994). "Some problems of rationality, understanding, and universalistic ethics in the context of Habermas's theory of communicative action." *Philosophy of the Social Sciences*, 24(4): 466-484.

Altieri, M.A. and Masera, O. (1993). "Sustainable rural development in Latin America: Building from the bottom-up." *Ecological Economics*, 7: 93-121.

Alvarez Gutiérrez, R. (1990). "Descentralización de los servicios de salud: estudio del caso de México." In: A. Mills, J. P. Vaughan, D. L. Smith et al. (eds.), *Descentralización de los sistemas de salud. Conceptos, aspectos y experiencias nacionales*, Ginebra: Organización Mundial de la Salud, pp. 78-84.

Annis, S. (1988). "Can small-scale development be large-scale policy?" In: S. Annis and P. Hakim (eds.), *Direct to the poor. Grassroots development in Latin America*, London: Lynne Rienner Publishers, pp. 209-218.

Annis, S. and Hakim, P. (Eds.). (1988). *Direct to the poor. Grassroots development in Latin America*. London: Lynne Rienner Publishers.

Armstrong, J. (1993). "Making community involvement in urban regeneration happen -- Lessons from the United Kingdom." *Community Development Journal*, 28(4): 355-361.

Arnstein, S.R. (1969). "A ladder of citizen participation." *AIP Journal*(July): 216-224.

Asthana, S. (1994). "Primary health care and selective PHC: Community participation in health and development." In: D. R. Phillips and Y. Verhasselt (eds.), *Health and development*, London: Routledge, pp. 182-196.

Ayerigg, M. (1998). "Participation and the World Bank: Successes, constraints and responses." Paper 29. Washington, D.C.: *World Bank*.

Bamberger, M. (1986). "The role of community participation in development planning and project management: report of the Economic Development Institute Workshop on Community Participation, Washington, September 22-25, 1986." An EDI Policy Seminar Report 13. Washington, D.C.: *The International Bank for Reconstruction and Development/The World Bank*.

Baynes, K. (1995). "Democracy and the *Rechtsstaat*: Habermas's *Faktizität und Geltung*." In: S. K. White (ed.) *The Cambridge companion to Habermas*, Cambridge: Cambridge University Press, pp. 201-232.

Bebbington, A., Thiele, G., Davies, P. et al. (1993). *Non-governmental organizations and the state in Latin America: Rethinking roles in sustainable agricultural development*. London: Routledge.

Bennett, P. (1985). "On linking approaches to decision-aiding: Issues and prospects." *Journal of the Operational Research Society*, 36: 659-670.

Bennett, P., Cropper, S. and Huxham, C. (1989a). "Modelling interactive decisions: the hypergame focus." In: J. Rosenhead (ed.) *Rational analysis for a problematic world*, Chichester: John Wiley & Sons, pp. 283-314.

Bennett, P., Cropper, S. and Huxham, C. (1989b). "Using the hypergame perspective: A case study." In: J. Rosenhead (ed.) *Rational analysis for a problematic world*, Chichester: John Wiley & Sons, pp. 315-340.

Bennett, P. and Howard, N. (1994). "Rationality, emotion and preference change: Drama-theoretic models of choice." *Paper prepared for EURO XIII/ OR36 Conference* Strathclyde University

Bentley, M.E., Pelto, G.H., Straus, W.L. et al. (1988). "Rapid Ethnographic Assessment: Applications in a diarrhea management program." *Social Science and Medicine*, 27(1): 107-116.

Beresford, P. and Croft, S. (1993). *Citizen involvement: a practical guide for change*. Practical Social Work. London: The Macmillan Press.

Bergdall, T.D. (1993). *Methods for Active Participation, experiences in rural development from East and Central Africa*. Nairobi: Oxford University Press.

Berger, P.L. and Neuhaus, R.J. (1996). "Mediating structures and the dilemmas of the welfare state." In: M. Novak (ed.) *To empower people: from state to civil society*, Washington, D.C.: The AEI Press, pp. 157-164.

Berle, A.A. (1969). *Power*. New York: Harcourt, Brace & World.

Bermejo, A. and Bekui, A. (1993). "Community participation in disease control." *Social Science and Medicine*, 36: 1145-1150.

Bernstein, E., Wallerstein, N., Braithwaite, R. et al. (1994). "Empowerment forum: A dialogue between guest editorial board members." *Health Education Quarterly*, 21(3): 281-294.

Best, G., Parston, G. and Rosenhead, J. (1986). "Robustness in practice: The regional planning of health services." *Journal of the Operational Research Society*, 37(5): 463-478.

Bhatnagar, B. and Williams, A.C. (Eds.). (1992). *Participatory Development and the World Bank*. Washington, D.C.: The World Bank.

Black, J. (1997). *Dictionary of economics*. Oxford: Oxford University Press.

Blau, P.M. (1974). *On the nature of organizations*. Chichester: John Wiley & Sons.

Bobbio, N. (1987). *Estado, gobierno, sociedad. Contribución a una teoría general de la política*. Barcelona: Plaza & Janés Editores.

Bordenave, J.D. (1976). "Communication of agricultural innovations in Latin America: The need for new models." *Communication Research*, 3(2): 135-154.

Bornstein, C. and Castro Villela, P. (1990). "Warehouse location in a developing country: Problems in formulating the problem." *European Journal of Operational Research*, 49: 222-229.

Bornstein, C.T. and Rosenhead, J. (1990). "The role of Operational Research in less developed countries: A critical approach." *European Journal of Operational Research*, 49: 156-178.

Boulding, K.E. (1989). *Three faces of power*. Newbury Park: Sage Publications.

Bowen, K. (1994). "The indivisibility of OR." *Invited paper presented at 8th Young OR Conference York, March*.

Braithwaite, R.L. and Lythcott, N. (1989). "Community empowerment as a strategy for health promotion for black and other minority populations." *JAMA*, 261: 282-283.

Brent, R.J. (1998). *Cost-benefit analysis for developing countries*. Lyme: Edward Elgar Publishing.

Brown, D.L. and Ashman, D. (1996). "Participation, social capital, and intersectoral problem solving: African and Asian cases." *World Development*, 24(9): 1467-1479.

Brown, E.R. (1991). "Community action for health promotion: a strategy to empower individuals and communities." *International Journal of Health Services*, 21(3): 441-456.

## Bibliography

Brown, L.D. (1993). "Social change through collective reflection with Asian Non-Governmental Organizations." *Human Relations*, 46(2): 249-273.

Brownlea, A. (1987). "Participation: Myths, realities and prognosis." *Social Science and Medicine*, 25(6): 605-614.

Bryson, J.M. and Crosby, B.C. (1989). "The design and use of strategic planning arenas." *Planning Outlook*, 32(1): 5-13.

Bryson, J.M. and Crosby, B.C. (1992). *Leadership for the common good: Tackling public problems in a shared-power world*. San Francisco: Jossey-Bass.

Burns, D., Hambleton, R. and Hoggett, P. (1994). *The politics of decentralisation: Revitalising local democracy*. Public Policy and Politics. London: The Macmillan Press.

Cardozo Brum, M. (1995). "La política de descentralización de servicios de salud y la distribución de los recursos financieros." *Reunión Anual de la Sociedad Mexicana de Salud Pública* Oaxaca, Oaxaca, México, 6 al 9 de diciembre.

Castro Pérez, R. and Hernández Tezoquia, I. (1992). *Participación comunitaria y planificación familiar. Una exploración sobre el punto de vista de los usuarios*. Perspectivas en Salud Pública 15. Cuernavaca: Instituto Nacional de Salud Pública.

Cernea, M. (1992). *The building blocks of participation: Testing bottom up planning*. World Bank Discussion Papers 166. Washington, D.C: The World Bank.

Chadwick, B.A., Bahr, H.M. and Albrecht, S.L. (1984). *Social science research methods*. Englewood Cliffs: Prentice-Hall.

Chambers, R. (1981). "Rapid rural appraisal: rationale and repertoire." *Public Administration and Development*, 1: 95-106.

Chambers, R. (1983). *Rural development. Putting the last first*. Harlow: Longman Scientific & Technical.

Chambers, R. (1992). "Rural appraisal: Rapid, relaxed and participatory." Discussion Paper. 311. Sussex: *Institute of Development Studies*. October.

Chambers, R. (1994). "All power deceives." *IDS Bulletin*, 25(2): 14-26.

Chambers, R. (1994a). "The origins and practice of Participatory Rural Appraisal." *World Development*, 22(7): 953-969.

Chambers, R. (1994b). "Participatory Rural Appraisal (PRA): Analysis of experience." *World Development*, 22(9): 1253-1268.

Chambers, R. (1994c). "Participatory rural appraisal (PRA): Challenges, potentials and paradigm." *World Development*, 22(10): 1437-1454.

## Bibliography

Chambers, R. (1994d). "Paradigm shifts and the practice of participatory research and development. Working Paper 2." Working Paper 2. Sussex: *Institute of Development Studies*. April.

Chambers, R. (Ed.) (1997). *Whose reality counts? Putting the first last*. London: Intermediate Technology Publications.

Chambers, R. and Guijt, I. (1995). "PRA - Five years later: Where are we now?" *Forests, trees, and People Newsletter*, 26/27.

Chambers, S. (1995). "Discourse and democratic practices." In: S. K. White (ed.) *The Cambridge companion to Habermas*, Cambridge: Cambridge University Press, pp. 233-259.

Checkland, P. (1981). *Systems thinking, systems practice*. Chichester: John Wiley & Sons.

Checkland, P. and Scholes, J. (1990). *Soft systems methodology in action*. Vol. 34. Chichester: John Wiley & Sons.

Chisholm, R.F. and Elden, M. (1993). "Features of emerging action research." *Human Relations*, 46(2): 275-298.

Chowdhury, A. and Kirkpatrick, C. (1993). *Development policy and planning: An introduction to models and techniques*. London: Routledge.

Clark, A. and Banerjee, A. (1996). "India: Andhra Pradesh Forestry Project." In: T. W. Bank (ed.) *World Bank participation sourcebook*, Washington, D.C: The World Bank, pp. 53-59.

Clark, J. (1995). "The state, popular participation, and the voluntary sector." *World Development*, 23(4): 593-601.

Clegg, S. (1979). *The theory of power and organizations*. London: Routledge & Kegan Paul.

Cohen, J.M., Culagovski, G.A., Uphoff, N.T. et al. (1978). *Participation at the local level: a working bibliography*. Rural Development Bibliography Series No.1. Rural Development Committee Center for International Studies Cornell University.

Coles, R. (1995). "Identity and difference in the ethical positions of Adorno and Habermas." In: S. K. White (ed.) *The Cambridge companion to Habermas*, Cambridge: Cambridge University Press, pp. 19-45.

Collinson, M. (1981). "The exploratory survey: Content, methods and detailed guidelines for discussions with farmers." *CIMMYT Eastern Africa Economic Programme Farming Systems Newsletter*, April-June.

Conway, G. (1985). "Agroecosystem analysis." *Agricultural Administration*, 20: 31-55.

Conway, G. (1986). *Agroecosystem analysis for research and development*. Winrock International Institute for Agricultural Development.

## Bibliography

Conway, G. (1989). "Diagrams for farmers." In: R. Chambers, A. Pacey, and L. A. Thrupp (eds.), *Farmer first. Farmer innovation and agricultural research*, London: Intermediate Technology Publications, pp. 77-86.

Conway, G., Sajise, P. and Knowland, W. (1986). "Lake Buhi: Resolving conflicts in a Phillipines development project." *Ambio*, 18(2): 128-135.

Conyers, D. (1990). "Centralization and development planning: a comparative perspective." In: P. de Valk and K. H. Wekwete (eds.), *Decentralizing for participatory planning? Comparing the experiences of Zimbabwe and other Anglophone countries in Eastern and Southern Africa*, Hants: Gower Publishing Company, pp. 15-34.

Conyers, D. and Hill, P. (1984). *An introduction to development planning in the Third World*. Chichester: John Wiley & Sons.

Cornwall, A., Guijt, I. and Welbourn, A. (1993). "Acknowledging process: Challenges for agricultural research and extension methodology." IDS Discussion Paper 333. Brighton: *Institute of Development Studies*.

Cox, S. and Annis, S. (1988). "Community participation in rural water supply." In: S. Annis and P. Hakim (eds.), *Direct to the poor. Grassroots development in Latin America*, London: Lynne Rienner Publishers, pp. 65-72.

da Mota, C.N. (1992). "The flowers of Spring Garden: A study of primary health in Brazil using Rapid Assessment Procedures." Working Paper 234. *Michigan State University: Office of Women in International Development*.

Dahl, R. (1961). *Who governs? Democracy and power in an American city*. New Haven: Yale University Press.

Dahl, R. (1986). "Power as the control of behaviour." In: S. Lukes (ed.) *Power*, Oxford: Blackwell Publishers, pp. 37-58.

Dasgupta, A.K. and Pearce, D.W. (1972). *Cost-benefit analysis: Theory and Practice*. London: MacMillan.

Davies, S. (1994). "Introduction: Information, knowledge and power." *IDS Bulletin*, 25(2): 1-13.

de Kadt, E. (1982). "Community participation for health: the case of Latin America." *World Development*, 10(7): 573-584.

de la Madrid, M., Soberón Acevedo, G., Ruiz Massieu, J.F. et al. (1986). *La descentralización de los servicios de salud: el caso de México*. México, D.F.: Miguel Angel Porrúa.

de Valk, P. (1990a). "State, decentralization and participation." In: P. de Valk and K. H. Wekwete (eds.), *Decentralizing for participatory planning? Comparing the experiences of Zimbabwe and other Anglophone countries in Eastern and Southern Africa*, Hants: Gower Publishing Company, pp. 3-14.

de Valk, P. (1990b). "Who sets the rules for decentralization? Who wants to play the game?" In: P. de Valk and K. H. Wekwete (eds.), *Decentralizing for participatory planning? Comparing*

## Bibliography

*the experiences of Zimbabwe and other Anglophone countries in Eastern and Southern Africa*, Hants: Gower Publishing Company, pp. 255-268.

Departamento de Fomento a la Salud. (undated). "Instructivo para integrar comités de salud." Cuernavaca: *Secretaría de Salud y Bienestar Social del Estado de Morelos*.

Desai, M. (1994). "Poverty and capability: Toward an empirically implementable measure." *Frontera Norte, Especial: Pobreza*: 11-30.

Desai, V. (1996). "Access to power and participation." *Third World Planning Review*, 18(2): 217-242.

Development Dialogue. (1975). "What now: Another development (Special issue)." *Development Dialogue*, 1.

Devereux, S. and Hoddinott, J. (Eds.). (1992). *Fieldwork in developing countries*. Hemel Hempstead: Harvester Wheatsheaf.

Deweese, P. (1989). "Aerial photographs and household studies in Kenya." *RRA Notes*, 7: 9-12.

Doorman, F. (1991). "A framework for the rapid appraisal of factors that influence the adoption and impact of new agricultural technology." *Human Organization*, 50(3): 235-244.

Dowding, K. (1996). *Power*. Minneapolis: University of Minnesota Press.

Doyal, L. (1993). "Thinking about human need." *New Left Review*, 201: 113-128.

Doyal, L. and Gough, I. (1991). *A theory of human need*. London: Macmillan Education.

Dreze, J. and Sen, A. (1989). *Hunger and public action*. New York: Oxford University Press.

Dreze, J. and Sen, A. (1995). *India: Economic development and social opportunity*. Delhi: Oxford University Press.

Dreze, J. and Stern, N.H. (1985). *The theory of cost-benefit analysis. Taxation, incentives and the distribution of income*, 85. London: London School of Economics and Political Science.

Eberhard, A.A. (1984). *Dissemination of solar ovens in Lesotho: Problems and lessons. Proceedings of the Eighth Biennial Congress of the International Solar Energy Society*. New York: Pergamon Press.

Echaudemaison, C.D., Bazureau, F., Bosc, S. et al. (1996). *Diccionario de economía*. Barcelona: Larousse Planeta.

Eden, C. (1985). "Perish the thought!" *Journal of the Operational Research Society*, 36(9): 809-819.

Eden, C. (1988). "Cognitive mapping: a review." *European Journal of Operational Research*, 36: 1-13.

## Bibliography

Eden, C. (1989). "Strategic options development and analysis - SODA." In: J. Rosenhead (ed.) *Rational analysis for a problematic world*, Chichester: John Wiley & Sons, pp. 21-42.

Eden, C. (1990). "Mixing methods: Introduction." In: C. Eden and J. Radford (eds.), *Tackling strategic problems: the role of group decision support*, London: Sage Publications.

Eden, C. (1992). "A framework for thinking about group decision support systems (GDSS)." *Group Decision and Negotiation*, 1: 199-218.

Eden, C. (1995). "On evaluating the performance of 'wide-band' GDSS's." *European Journal of Operational Research*, 81: 302-311.

Eden, C. and Ackermann, F. (1994). "'Horses for courses' - a stakeholder view of the evaluation of GDSS's." Working Paper 94/12. *University of Strathclyde, Department of Management Science*.

Eden, C. and Ackermann, F. (1998). *Making strategy: The journey of strategic management*. London: Sage Publications.

Eden, C. and Huxham, C. (1996a). "Action research for the study of organizations." In: S. R. Clegg, C. Hardy, and W. R. Nord (eds.), *Handbook of organisation studies*, London: Sage Publications, pp. 526-542.

Eden, C. and Huxham, C. (1996b). "Action research for management research." *British Journal of Management*, 7: 75-86.

Edwards, A.D. and Jones, D.G. (1976). *Community and community development*. Studies in the Social Sciences. Mouton: New Babylon.

Elden, M. (1981). "Sharing the research work: Participative research and its role demands." In: P. Reason and J. Rowan (eds.), *Human Inquiry*, John Wiley & Sons, pp. 253-266.

Elden, M. and Chisholm, R.F. (1993). "Emerging varieties of action research: Introduction to the Special Issue." *Human Relations*, 46(2): 121- 141.

Eschborn, B.K. (1996). *Gender-sensitive participatory approaches in technical cooperation. Trainer's manual for local experts*. GTZ (Deutsche Gesellschaft für Technische Zusammenarbeit).

Esteva, G. (1992). "Development." In: W. Sachs (ed.) *The development dictionary: A guide to knowledge as power*, London: Zed Books, pp. 6-25.

European Bank for Reconstruction and Development. (1995). *Manual on public participation*. London: European Bank for Reconstruction and Development, Environmental Resources Management.

Evans, S.M. and Boyte, H.C. (1986). *Free spaces. The sources of democratic change in America*. New York: Harper & Row.

Eyben, R. and Ladbury, S. (1995). "Popular participation in aid-assisted projects: Why more in theory than practice?" In: N. Nelson and S. Wright (eds.), *Power and participatory*

## Bibliography

*development. Theory and practice*, London: Intermediate Technology Publications, pp. 192-200.

Fals-Borda, O. (1991). "Some basic ingredients." In: O. Fals-Borda and M. A. Rahman (eds.), *Action and knowledge. Breaking the monopoly with participatory action-research*, London: The Apex Press, pp. 3-12.

Fals-Borda, O. and Rahman, M.A. (Eds.). (1991). *Action and knowledge. Breaking the monopoly with participatory action-research*. London: The Apex Press.

Farrington, J. and Martin, A. (1988). *Farmer participation in agricultural research - a review of concepts and practices*. London: Overseas Development Institute.

Fassolo, B. (1997). "What is the scope for adding model-based participatory methods to the repertoire of development planners?" Required paper for the Master's course: Operational research in less developed countries. London: *London School of Economics and Political Science*. April.

Fernandez, M. (1988). "Towards a participatory system approach." *ILEIA*, 4(3): 15-17.

Field, B.G. and MacGregor, B.D. (1987). *Forecasting techniques for urban and regional planning*. London: Academic.

Filgueira, C. and Lombardi, M. (1995). "Social policy in Latin America." In: D. Morales Gómez and M. Torres (eds.), *Social policy in a global society. Parallels and lessons from the Canada-Latin America experience*, Ottawa: International Development Research Centre.

Finlay, P.N. (1998). "On evaluating the performance of GSS: Furthering the debate." *European Journal of Operational Research*, 107(1): 193-201.

Fitzsimmons, J.A. and Sullivan, R.S. (1982). *Service operations management*. New York: McGraw-Hill Book Company.

Flood, R. and Jackson, M. (1991). *Creative problem solving*. Chichester: John Wiley & Sons.

Freire, P. (1972). *Pedagogy of the oppressed*. Harmondsworth: Penguin.

Frenk, J. (1990). "The political economy of medical underemployment in Mexico: Corporatism, economic crisis and reform." *Health Policy*, 15: 143-162.

Frenk, J. (1994). *Hacia la reforma del sistema de salud: una propuesta estratégica*. Economía y Salud: Documentos para el Análisis y la Convergencia. México, D.F.: Fundación Mexicana para la Salud.

Frenk, J., Lozano, R., González-Block, M.A. et al. (1994a). *Economía y salud: propuestas para el avance del sistema de salud de México. Informe final*. México, D.F.: Fundación Mexicana para la Salud.

Frenk, J., Nigenda, G., Hernández Llamas, H. et al. (1994b). *Médicos, educación y empleo*. Guadalajara: Universidad de Guadalajara.

## Bibliography

Frenk, J., Robledo Vera, C., Nigenda López, G. et al. (1988). "Subempleo y desempleo entre los médicos de las áreas urbanas de México." *Salud Pública de México*, 30(5): 691-699.

Friedmann, J. (1987). *Planning in the public domain: From knowledge to action*. Princeton: Princeton University Press.

Friedmann, J. (1989). "Collective self-empowerment and social change. From social to political power." *IFDA Dossier*, 69: 3-14.

Friedmann, J. (1992). *Empowerment: the politics of alternative development*. Oxford: Blackwell Publishers.

Friend, J. (1984). "Strategic Choice in North-East Brazil: a report to the British Council." London: *Tavistock Institute*.

Friend, J. (1989). "The strategic choice approach." In: J. Rosenhead (ed.) *Rational analysis for a problematic world*, Chichester: John Wiley & Sons, pp. 121-157.

Friend, J. (1994). "Community involvement in health strategy in Tower Hamlets." In: C. Ritchie, A. Tacket, and J. Bryant (eds.), *Community works. 26 case studies showing Community Operational Research in action*, Sheffield: PAVIC Publications, pp. 137-145.

Friend, J. (1998). "Managing development projects and programmes: Fresh perspectives towards an action research agenda." Working Paper. 21. Lincoln: *Lincoln School of Management*.

Friend, J. and Hickling, A. (1987). *Planning under pressure: the Strategic Choice Approach*. Urban and regional planning series. Oxford: Pergamon Press.

Gains, A. and Rosenhead, J. (1993). "Problem structuring for medical quality assurance." Working Paper. LSEOR.93.8. London: *Department of Operational Research. London School of Economics*.

Galbraith, J.K. (1986). "Power and organization." In: S. Lukes (ed.) *Power*, Oxford: Blackwell Publishers, pp. 211-228.

Galjart, B. (1995). "Counter-development: Possibilities and constraints." In: G. Craig and M. Mayo (eds.), *Community empowerment: A reader in participation and development*, London: Zed Books, pp. 12-23.

Galston, W.A. (1996). "The view from the White House- individual and community empowerment." In: M. Novak (ed.) *To empower people: from state to civil society*, Washington, D.C.: The AEI Press, pp. 58-63.

Gandhi, S. (1996). "Morocco: Enhancing the participation of women in development." In: T. W. Bank (ed.) *World Bank participation sourcebook*, Washington, D.C: The World Bank, pp. 75-81.

Gibson, T. (1993). "Danger: Opportunity." A Report to the Joseph Rowntree Foundation on Meadowell Community Development. Telford: *Neighbourhood Initiatives Foundation*. August.

## Bibliography

Giddens, A. (1985). *El capitalismo y la moderna teoría social*. Second Ed. Barcelona: Editorial Labor.

Goldman, A.I. (1986). "Toward a theory of social power." In: S. Lukes (ed.) *Power*, Oxford: Blackwell Publishers, pp. 156-202.

González Block, M.A. (1989). "Economía política de las relaciones centro-locales en las instituciones de salud de México." Doctoral thesis. México, D.F.: Centro de Estudios Sociológicos, El Colegio de México.

González Block, M.A., Janovsky, K., Leyva, R. et al. (1994). *Descentralización de los servicios de salud. El desafío de la diversidad*. Cuadernos de Salud. México, D.F.: Secretaría de Salud.

González Rossetti, A., Soberón Acevedo, G., Frenk Mora, J. et al. (1995). *La dimensión política en los procesos de reforma del sistema de salud*. Economía y Salud: Documentos para el Análisis y la Convergencia. México, D.F.: Fundación Mexicana para la Salud.

Gough, I. and Thomas, T. (1994). "Need satisfaction and welfare outcomes: Theory and explanations." *Social Policy and Administration*, 28(1): 33-56.

Goulet, D. (1989). "Participation: The road to equity in development." *Labour and Society*, 14(1): 1-21.

Gow, D. and Vasant, J. (1983). "Beyond the rhetoric of rural development participation: How can it be done?" *World Development*, 11(5): 427-446.

Green, A. (1992). *An introduction to health planning in developing countries*. Oxford: Oxford University Press.

Greenberger, M., Crenson, M.A. and Crissey, B.L. (1976). *Models in the policy process*. New York: Russell Sage.

Greenwood, D.J. and Levin, M. (1998). *Introduction to action research*. Thousand Oaks: Sage Publications.

Greenwood, D.J., Whyte, W.F. and Harkavy, I. (1993). "Participatory action research as a process and as a goal." *Human Relations*, 46(2): 175-192.

Griffin, K. (1989). *Alternative strategies for economic development*. London: The MacMillan Press in association with the OECD Development Centre.

Grindle, M.S. and Thomas, J.W. (1991). *Public choices and policy change: the political economy of reform in developing countries*. Baltimore: The Johns Hopkins University Press.

GTZ (Deutsche Gesellschaft für Technische Zusammenarbeit). (1994). *Participatory learning approaches. Rapid rural appraisal. Participatory appraisal. An introductory guide*. GTZ.

Gueye, B. and Schoonmaker-Freudenberger, K. (1991). *Introduction à la Méthode Accélérée de Recherche Participative (MARp). Quelques notes pour appuyer une formation pratique*. London: International Institute for Environment and Development.

## Bibliography

Guggenheim, S. (1996). "México: Hydroelectric project." In: T. W. Bank (ed.) *The World Bank Participation Sourcebook*, Washington, D.C: IBRD/ The World Bank, pp. 67-73.

Guijt, I. (1994). "Making a difference: Integrating gender analysis into PRA training." *RRA Notes*, 19: 49-55.

Guijt, I. and Neefjes, K. (1991). *Técnicas de comunicação para extensionistas: Relatório dum seminário em Diagnóstico Rural (Rápido) Participativo, Santo Antao, Cape Verde*. London: SARDEP and IIED.

Gurevitch, Z.D. (1990). "The dialogic connection and the ethics of dialogue." *BJS*, 41(2): 181-196.

Habermas, J. (1970). "Towards a theory of communicative competence." *Inquiry*, 13(4): 360-375.

Habermas, J. (1984). *Theory of communicative action, Vol. I*. London: Beacon Press.

Hadrige, P., Hodgson, T. and Thornton, S. (1995). "Tomorrow's World." *Health Service Journal*, 5 January: 18-20.

Hague, R., Harrop, M. and Breslin, S. (1992). *Comparative government and politics: An introduction*. Comparative government & politics. Third edition Ed. London: The MacMillan Press.

Hall, A. (1986). "Community participation and rural development." In: J. Midgley (ed.) *Community participation, social development and the state*, London: Methuen & Co., pp. 87-104.

Hamel, J., Dufour, S. and Fortin, D. (1994). *Case study methods*. London: Sage Publications.

Haque, W., Mehta, N., Rahman, A. et al. (1977). "Towards a theory of rural development." *Development Dialogue*, 2.

Harding, F. (1987). "Theatre for development." In: *African futures: Proceedings of the 25th Conference of the Centre of African Studies*, Edinburgh: Centre for African Studies, University of Edinburgh.

Hart, E. and Bond, M. (1995). *Action research for health and social care: a guide to practice*. Ballmoor: Open University Press.

Hashemi, S.M., Schuler, S.R. and Riley, A.P. (1996). "Rural credit programs and women's empowerment in Bangladesh." *World Development*, 24(4): 635-653.

Haverkort, B., Kamp, J. and Waters-Bayer, A. (Eds.). (1991). *Joining farmers' experiments: Experiences in participatory technology development*. London: Intermediate Technology Publications.

Heal, G. (1997). *Valuing our future: Cost-benefit analysis and sustainability*. New York: United Nations Development Programme, Office of Development Studies.

## Bibliography

Hersch Martínez, P. (1992). "Participación social en salud: Espacios y actores determinantes en su impulso." *Salud Pública de México*, 34(6): 678-688.

Hettne, B. (1990). *Development theory and the three worlds*. Essex: Longman Scientific & Technical.

Hildebrand, P.E. (1981). "Combining disciplines in Rapid Appraisal: the Sondeo Approach." *Agricultural Administration*, 8(6): 423-432.

Hildebrand, P.E. (Ed.) (1986). *Perspectives on farming research and extension*. Boulder: L. Rienner.

Hillier, F.S. and Lieberman, G.J. (Eds.). (1995). *Introduction to operations research*. 6th Ed. New York: McGraw Hill.

Hindle, T., Checkland, P., Mumford, M. et al. (1995). "Developing a methodology for multidisciplinary action research: A case study." *Journal of the Operational Research Society*, 46(4): 453-464.

Hollnsteiner, M.R. (1977). "People power: Community participation in the planning of human settlements." *Carnets de L'Enfance*, 40: 11-47.

Holt, J. (1994). "Disarming defences. A mix and match approach to problem solving." *OR Insight*, 7(4): 19-26.

Hope, A. and Timmel, S. (1989). *Training for Transformation. Books 1, 2 and 3: A handbook for community workers*. Gweru, Zimbabwe: Mambo Press.

Horowitz, I.L. (1964). *Poder, política, pueblo*. México, D.F.: Fondo de Cultura Económica.

Howard, N. (1989a). "The manager as politician and general: the metagame approach to analysing cooperation and conflict." In: J. Rosenhead (ed.) *Rational analysis for a problematic world*, Chichester: John Wiley & Sons, pp. 239-261.

Howard, N. (1989b). "The CONAN play: A case study illustrating the process of metagame analysis." In: J. Rosenhead (ed.) *Rational analysis for a problematic world*, Chichester: John Wiley & Sons, pp. 263-282.

Howard, N., Bennett, P.G., Bryant, J.W. et al. (1992). "Manifesto for a Theory of Drama and Irrational Choice." *Journal of the Operational Research Society*, 44: 99-103.

Huizer, G. (1997). *Participatory action research and people's participation: Introduction and case studies*. Rome: Food and Agriculture Organisation, SD Dimensions.

Hulme, D. and Turner, M.M. (1990). *Sociology and development: Theories, policies and practices*. New York: Harvester Wheatsheaf.

Hunt, D. (1989). *Economic theories of development: an analysis of competing paradigms*. Hemel Hempstead: Harvester Wheatsheaf.

## Bibliography

ICORD '92. (1993). "Ahmedabad Declaration." *The O.R. for Developing Countries Newsletter (published by the Developing Countries Committee of IFORS)*, 3(2): 6-8.

IIED (International Institute for Environment and Development). (1992). "Special issue on applications for health." *RRA Notes*, 16.

IIED (International Institute for Environment and Development). (1994). "Special issue on participatory tools and methods in urban areas." *RRA Notes*, 21.

INEGI (Instituto Nacional de Estadística, Geografía e Información). (1990a). *XI Censo General de Población y Vivienda*. Aguascalientes: INEGI.

INEGI (Instituto Nacional de Estadística Geografía e Información). (1990b). *Morelos. Resultados definitivos. Datos por localidad (integración territorial)*. *XI Censo General de Población y Vivienda, 1990*. Aguascalientes: INEGI.

INEGI (Instituto Nacional de Estadística Geografía e Información). (1990c). *Morelos. Perfil sociodemográfico. XI Censo General de Población y Vivienda, 1990*. Aguascalientes: INEGI.

INEGI (Instituto Nacional de Estadística Geografía e Información). (1995). *Conteo de Población*. Aguascalientes: INEGI.

INEGI (Instituto Nacional de Estadística Geografía e Información). (1996). *Segundo Informe de Gobierno, Ernesto Zedillo Ponce de León. Anexo Estadístico*. Aguascalientes: INEGI.

Inglis, A.S. and Lussigneau, A. (1995). "Participation in Scotland: the Rural Development Forestry Programme." *PLA Notes*, 23: 31-36.

Inter-American Development Bank. (1997). "Resource book on participation. Building a framework for consultation and public participation." Washington, D.C.: *IADB, Sustainable Development Department*.

Israel, B.A., Checkoway, B., Schulz, A. et al. (1994). "Health education and community empowerment: Conceptualizing and measuring perceptions of individual, organizational, and community control." *Health Education Quarterly*, 21(2): 149-170.

Jackson, M. (1987). "Community Operational Research: Purpose, theory and practice." *Dragon*, 2(2): 47-73.

Jackson, M.C. (1988). "Some methodologies for community operational research." *Journal of the Operational Research Society*, 39(8): 715-74.

Jackson, M.C. and Keys, P. (1984). "Towards a system of systems methodologies." *Journal of the Operational Research Society*, 35(6): 473-486.

Johnston, M. (1990). "Mawas Diri: A tool to stimulate community participation." *Health Policy and Planning*, 5(2): 161-166.

Johnston, M. and Rifkin, S.B. (Eds.). (1987). *Health care together: Training exercises for health workers in community based programmes*. London: The Macmillan Press.

Jones, S. and Eden, C. (1981). "O.R. in the community." *Journal of the Operational Research Society*, 32(5): 335-345.

Joseph, S. (1992). "Participatory rural appraisal in identifying major illness, healthcare providers and costs." *RRA Notes*, 16: 53-56.

Kamp, J. and Schuthof, P. (1989). *Methods of participatory technology development: Theoretical and practical implications*. Leusden, Netherlands: ILEIA (The Information Centre for Low-External-Input and Sustainable Agriculture).

Keys, P. (1987). "Management and management support in community services agencies." *Dragon*, 2(2):19-46.

Kirby, M.W. and Capey, R. (1998). "The origins and diffusion of operational research in the United Kingdom." *Journal of the Operational Research Society*, 49(4): 307-326.

Kirkpatrick, C. and Weiss, J. (1996). *Cost-benefit analysis and project appraisal in developing countries*. Cheltenham: Edward Elgar Publishing.

Kitching, G. (1989). *Development and underdevelopment in historical perspective: Populism, nationalism and industrialization*. Revised Ed. London: Routledge.

Kleymeyer, C.D. (Ed.) (1994). *Cultural expression & grassroots development: Cases from Latin America and the Caribbean*. London: Lynne Rienner Publishers.

Kurtenbach, T. and Thompson, S. (1999). "Information technology adoption: Implications for agriculture." Urbana-Champaign: *University of Illinois*.

Kurup, B.K. (1991). "Participatory strategies in water, health and rural development programmes." *Waterlines*, 10(2): 2-5.

Labonte, R. (1989). "Community empowerment: The need for political analysis." *Canadian Journal of Public Health*, 80(March/April): 87-88.

Labonte, R. (1994). "Health promotion and empowerment: Reflections on professional practice." *Health Education Quarterly*, 21(2): 253-268.

Lane, J. (1995). "Non-governmental organizations and participatory development: the concept in theory versus the concept in practice." In: N. Nelson and S. Wright (eds.), *Power and participatory development. Theory and practice*, London: Intermediate Technology Publications, pp. 181-191.

Larraín, J. (1989). *Theories of development: Capitalism, colonialism and dependency*. Cambridge: Polity Press.

Lehaney, B. and Paul, R.J. (1996). "The use of soft systems methodology in the development of a simulation of out-patient services at Watford General Hospital." *Journal of the Operational Research Society*, 47(7): 864-870.

## Bibliography

Leitmann, J. (1994). *Rapid urban environmental assessment: Lessons from cities in the developing world*. Vol. I and II. Washington: World Bank, Urban Development Programme.

Levin, M. (1993). "Creating networks for rural economic development in Norway." *Human Relations*, 46(2): 193-218.

Lipset, S.M. (1981). *El hombre político. Las bases sociales de la política*. Madrid: Editorial Tecnos.

Loewenson, R. (1999). "Public participation in health: Making people matter." IDS Working Paper 84. Brighton: *Institute of Development Studies*. March.

Love, N.S. (1995). "What's left of Marx?" In: S. K. White (ed.) *The Cambridge companion to Habermas*, Cambridge: Cambridge University Press, pp. 44-66.

López Acuña, D. (1980). "Health services in Mexico." *Journal of Public Health Policy*, 1: 83-95.

Lukes, S. (1974). *Power. A radical view*. Studies in Sociology. London: The Macmillan Press.

Lukes, S. (Ed.) (1986). *Power*. Oxford: Blackwell Publishers.

Lupton, C., Buckland, S. and Moon, G. (1995). "Consumer involvement in health care purchasing: the role and influence of community health councils." *Health & Social Care in the Community*, 3(4): 215-226.

Macías-Chapula, C.A. (1995). "Un enfoque de sistemas en el análisis integral de las revistas mexicanas del área de la salud." *Revista de Investigación Clínica*, 47: 143-147.

MacPherson, S. and Midgley, J. (1987). *Comparative social policy and the Third World*. Studies in International Social Policy and Welfare. Brighton: Wheatsheaf Books.

Madan, T.N. (1987). "Community involvement in health policy: Socio-structural and dynamic aspects of health beliefs." *Social Science and Medicine*, 25(6): 615-620.

Mason, R.O. and Mitroff, I.I. (1981). *Challenging strategic planning assumptions: theory, cases and techniques*. New York: John Wiley & Sons.

Mathema, S.B. and Galt, D.L. (1989). "Appraisal by group trek." In: R. Chambers, A. Pacey, and L. A. Thrupp (eds.), *Farmer first. Farmer innovation and agricultural research*, London: Intermediate Technology Publications, pp. 68-73.

Maxwell, S.E. (1990). "Food security in developing countries." *IDS Bulletin*, 21(3).

McArthur, A.A. (1993). "Community partnership - a formula for neighbourhood regeneration in the 1990s." *Community Development Journal*, 28(4): 305-315.

McCracken, J.A. (1988). "A working framework for Rapid Rural Appraisal: Lessons from a Fiji Experience." *Agriculture Administration & Extension*, 29: 163-184.

## Bibliography

McCracken, J.A., Pretty, J.N. and Conway, G.R. (1988). *An introduction to Rapid Rural Appraisal for agricultural development*. London: International Institute for Environment and Development.

Mearns, R. (1989). "Aerial photographs in rapid land resource appraisal." *RRA Notes*, 7: 12-14.

Meenakshisundaram, S.S. (1994). *Decentralisation in developing countries*. New Delhi: Concept.

Meier, G.M. and Schultz, T.W. (1987). *Pioneers in development (Second series)*. New York: OUP for the World Bank.

Meier, G.M. and Seers, D. (Eds.). (1984). *Pioneers in development*. Washington: World Bank.

Melville, B. (1993). "Rapid rural appraisal: Its role in health planning in developing countries." *Tropical Doctor*, 23(2): 55-58.

Menike, K. (1993). "People's empowerment from the people's perspective." *Development in practice*, 3(3): 176-183.

Midgley, J. (1986). *Community participation, social development and the state*. London: Methuen & Co.

Mikkelsen, B. (1995). *Methods for development work and research*. New Delhi: Sage Publications.

Mills, A. (Ed.) (1990). *Descentralización de los sistemas de salud. Conceptos, aspectos y experiencias nacionales*. Ginebra: Organización Mundial de la Salud.

Mills, A., Vaughan, J.P., Smith, D.L. et al. (Eds.). (1990). *Descentralización de los sistemas de salud. Conceptos, aspectos y experiencias nacionales*. Ginebra: Organización Mundial de la Salud.

Mingers, J. (1997a). "Multi-paradigm multimethodology." In: J. Mingers and A. Gill (eds.), *Multimethodology: the theory and practice of combining management science methodologies*, West Sussex: John Wiley & Sons, pp. 1-20.

Mingers, J. (1997b). "Towards critical pluralism." In: J. Mingers and A. Gill (eds.), *Multimethodology: the theory and practice of combining management science methodologies*, Chichester: John Wiley & Sons.

Mingers, J. and Brocklesby, J. (1997). "Multimethodology: Towards a framework for mixing methodologies." *Omega*, 25(5): 489-509.

Mingers, J. and Gill, A. (Eds.). (1997). *Multimethodology: the theory and practice of combining management science methodologies*. Chichester: John Wiley & Sons.

Mingers, J. and Taylor, S. (1992). "The use of soft systems methodology in practice." *Journal of the Operational Research Society*, 43: 321-332.

Mitlin, D. and Thompson, J. (1994). "Addressing the gaps or dispelling the myths?: Participatory approaches in low-income urban communities." *RRA Notes*, 21: 3-12.

## Bibliography

Mitra, A. (1993). "Villagers blueprint their own development." *Down to Earth*, 15 May: 22-24.

Mitroff, I.I. and Emshoff, J.R. (1979). "On strategic assumption-making. A dialectical approach to policy and planning." *Academy of Management Review*, 4: 1-12.

Molnar, A. (1989). *Community forestry. Rapid Appraisal*. Rome: Food and Agriculture Organization of the United Nations.

Moreno Cueto, E., Miguel Viveros, J., Díaz de Sandi, M.A. et al. (1982). *Sociología histórica de las instituciones de salud en México*. México, D.F.: IMSS.

Morgan, L.M. (1993). *Community participation in health: the politics of primary care in Costa Rica*. Cambridge: Cambridge University Press.

Mosca, G. (1992). "La clase política." In: A. Battle (ed.) *Diez textos básicos de ciencia política*, Barcelona: Editorial Ariel, pp. 23-36.

Mosse, D. (1994). "Authority, gender and knowledge: Theoretical reflections on the practice of participatory rural appraisal." *Development and Change*, 25: 497-526.

Mostov, J. (1992). *Power, process and popular sovereignty*. Philadelphia: Temple University Press.

Moulin, M. (1991). "Getting planners to take notice." *OR Insight*, 4(1): 25-29.

Mucci, L., Ostanello, A. and Tsoukias, A. (1989). "A formal representation of interorganizational interactions for public decisions." In: M. C. Jackson, P. Keys, and S. A. Cropper (eds.), *Operational research and the social sciences*, New York: Plenum Press, pp. 525-530.

Mulder, M. (1982). "Power equalization through participation?" *Administrative Science Quarterly*, 16: 31-38.

Mullender, A. and Ward, D. (1991). *Self-directed groupwork: Users take action for empowerment*. London: Whiting & Birch.

Nas, T.F. (1996). *Cost-benefit analysis: Theory and application*. Thousand Oaks: Sage Publications.

National Academy of Medicine. The Mexican Commission for Health Research. (1992). *The North American Free Trade Agreement and medical services: Elements for analysis and negotiation*. Mexico, D.F.: National Academy of Medicine.

Navarro, J.C. (1994). *Community organizations in Latin America*. Washington, D.C.: Inter-American Development Bank.

Navarro, V. (1984). "A critique of the ideological and political positions of the Willy Brandt report and the WHO Alma Ata Declaration." *Social Sciences and Medicine*, 18(6): 467-474.

Nelson, N. and Wright, S. (1995). *Power and participatory development: Theory and practice*. London: Intermediate Technology Publications.

## Bibliography

Nichter, M. (1984). "Project community diagnosis: Participatory research as a first step toward community involvement in primary health care." *Social Science and Medicine*, 19(3): 237-252.

Nigenda López, G.H. (1995). "The medical profession, the state and health policy in México, 1917-1988." Doctoral thesis. London: Department of Social Policy and Administration, London School of Economics, University of London.

NORAD (Norwegian Agency for Development Co-operation). (1990). *The Logical Framework Approach (LFA). Handbook for Objectives-oriented Project Planning*. Oslo: NORAD.

Nozick, M. (1993). "Five principles of sustainable community development." In: E. Shragge (ed.) *Community economic development: in search of empowerment and alternatives*, Canada: Black Rose Books, pp. 18-43.

O'Neill, M. (1992). "Community participation in Quebec's health system: a strategy to curtail community empowerment." *International Journal of Health Services*, 22(2): 287-301.

OMS (Organización Mundial de la Salud). (1991). "La participación de la comunidad en el desarrollo de su salud: un desafío para los servicios de salud." Serie de Informes Técnicos. 809. Ginebra: *Organización Mundial de la Salud*.

Ong, B.N., Humphris, G., Annett, H. et al. (1991). "Rapid Appraisal in an urban setting, an example from the developed world." *Social Science and Medicine*, 32(8): 909-915.

Onyx, J. and Benton, P. (1995). "Empowerment and ageing: Toward honoured places for crones and sages." In: G. Craig and M. Mayo (eds.), *Community empowerment: a reader in participation and development*, London: Zed Books, pp. 46-58.

Ormerod, R. (1995). "Putting soft OR methods to work: Information systems strategy development at Sainsbury's." *Journal of the Operational Research Society*, 46(3): 277-293.

Ovrebo, B., Ryan, M., Jackson, K. et al. (1994). "The Homeless Prenatal Program: a model for empowering homeless pregnant women." *Health Education Quarterly*, 21(2): 187-198.

Parry, R. and Mingers, J. (1991). "Community Operational Research: Its context and its future." *OMEGA International Journal of Management Science*, 19(6): 577-586.

Pasquino, G. (1988). "Participación política, grupos y movimientos." In: G. Pasquino, S. Bartolini, M. Cotta et al. (eds.), *Manual de ciencia política*, Madrid: Alianza Editorial, pp. 179-215.

Paul, B.D. and Demarest, W.J. (1984). "Citizen participation overplanned: the case of a health project in the Guatemalan community of San Pedro La Laguna." *Social Science and Medicine*, 19(3): 185-192.

Phillips, D.R. and Verhasselt, Y. (1994). "Introduction: Health and development." In: D. R. Phillips and Y. Verhasselt (eds.), *Health and development*, London: Routledge, pp. 3-32.

## Bibliography

Pindyck, R.S. and Rubinfeld, D.L. (1998). *Econometric models and economic forecasts*. 4th Ed. New York: Irvin McGraw-Hill.

Poder Ejecutivo Federal. (1995). *Plan Nacional de Desarrollo 1995-2000*. México, D.F.: Secretaría de Hacienda y Crédito Público.

Pratt, B. and Loizos, P. (1992). *Choosing research methods. Data collection for development workers*. Development Guidelines No.7. Oxford: Oxfam.

Preece, R. (1994). *Starting research: an introduction to academic research and dissertation writing*. London: Pinter Publishers.

Pretty, J.N., McCracken, J.A., McCauley, D.S. et al. (1988). *Agroecosystem analysis training in Central and East Java, Indonesia*. London: International Institute for Environment and Development.

Purdey, A.F., Adhikari, G.B., Robinson, S.A. et al. (1994). "Participatory health development in rural Nepal: Clarifying the process of community empowerment." *Health Education Quarterly*, 21(3): 329-343.

Quade, E.S. (1980). "Pitfalls in formulation and modelling." In: G. Majone and E. S. Quade (eds.), *Pitfalls in analysis*, Chichester: John Wiley and Sons.

Ragsdell, G. (1994). "Empowerment by SSM? Soft Systems Methodology helps a voluntary service team reflect on its responsibilities." *OR Insight*, 8(1): 2-9.

Ragsdell, G. (1996). "SSM empowers." *OR Newsletter*, June(306): 30-34.

Rahman, M.A. (1990). "The case of the Third World: People's self-development." *Community Development Journal*, 25(4): 307-314.

Rahman, M.A. (1993). *People's self-development*. London: Zed Book.

Rahman, M.A. (1995). "Participatory development: Toward liberation or co-optation?" In: G. Craig and M. Mayo (eds.), *Community empowerment: a reader in participation and development*, London: Zed Books, pp. 24-32.

Rahnema, M. (1992). "Participation." In: W. Sachs (ed.) *The development dictionary. A guide to knowledge as power*, London: Zed Books, pp. 116-131.

Raintree, J. (1987). "The state of the art of agroforestry diagnosis and design. Special Issue on ICRAF's 10th Anniversary." *Agroforestry systems*.

Rappaport, J. (1985). "The power of empowerment language." *Social Policy*, Fall: 15-21.

Rappaport, J. (1987). "Terms of empowerment/exemplars of prevention: Towards a theory for community psychology." *American Journal of Community Psychology*, 15: 121-148.

Ravindran, A., Phillips, D.T. and Solberg, J.J. (1987). *Operations research: Principles and practice*. Second edition Ed. New York: John Wiley & Sons.

## Bibliography

Reinke, W.A. (1988). *Health planning for effective management*. Oxford: Oxford University Press.

Renn, O., Webler, T. and Wiedemann, P. (Eds.). (1995). *Fairness and competence in citizen participation: Evaluating models for environmental discourse*. Dordrecht: Kluwer Academic Publishers.

Reusen, R. and Johnson, J. (1994). "Linking government agents and local users: PUA for artisanal fishing port development." *RRA Notes*, 21: 57-69.

Rhoades, R.E. and Booth, R.H. (1982). "Farmer-back-to-farmer: A model for generating acceptable agricultural technology." *Agricultural Administration*, 11: 127-137.

Rifkin, S.B. (undated). "Rapid rural appraisal and participatory rural appraisal: The use and values for health programme planning and management." London: *Centre for Human Nutrition, London School of Hygiene and Tropical Medicine*.

Rifkin, S.B., Muller, F. and Bichmann, W. (1988). "Primary health care: On measuring participation." *Social Science and Medicine*, 26(9): 931-940.

Ritchie, C., Taket, A. and Bryant, J. (Eds.). (1994). *Community works. 26 case studies showing Community Operational Research in action*. Sheffield: PAVIC Publications.

Robbins, S.P. (1987). *Corportamiento organizacional*. 3era Ed. Mexico, D.F.: Prentice-Hall Hispanoamericano.

Robertson, A. and Minkler, M. (1994). "New health promotion movement: A critical examination." *Health Education Quarterly*, 21(3): 295-312.

Robertson, D. (1993). *The Penguin dictionary of politics*. 2nd Ed. London: Penguin Books.

Robson, C. (1993). *Real world research: a resource for social scientists and practitioner-researchers*. Oxford: Blackwell Publishers.

Rogers, E. (1995). *Diffusion of innovations*. 4th Ed. New York: The Free Press.

Rondinelli, D. (1984). *Decentralization in developing countries*. Staff Working Paper 581. Washington, D.C.: The International Bank for Reconstruction and Development / The World Bank.

Rosenhead, J. (1980). "Planning under uncertainty: II. A methodology for Robustness Analysis." *Journal of the Operational Research Society*, 31: 331-342.

Rosenhead, J. (Ed.) (1989a). *Rational analysis for a problematic world*. Chichester: John Wiley & Sons.

Rosenhead, J. (1989b). "Operational research at the crossroads: Cecil Gordon and the development of post-war OR." *Journal of the Operational Research Society*, 40: 3-28.

Rosenhead, J. (1991). "Swords into ploughshares: Cecil Gordon's role in the post-war transition of operational research to civilian uses." *Public Administration*, 69: 481-501.

## Bibliography

Rosenhead, J. (1992a). "Into the swamp: the analysis of social issues." *Journal of the Operational Research Society*, 43(4): 293-305.

Rosenhead, J. (1992b). "Planning under uncertainty: II. A methodology for Robustness Analysis." *Journal of the Operational Research Society*, 31: 331-342.

Rosenhead, J. (1993). "Enabling analysis: Across the developmental divide." *Systems Practice*, 6(2): 117-138.

Rosenhead, J. (1995a). "Top-level national policy - why is OR so unambitious?" *OR Newsletter*, March: 18-20.

Rosenhead, J. (1995b). "Liberty! Fraternity! Analytic capability!" In: E. Barker (ed.) *LSE on freedom*, London: LSE Books, pp. 308-320.

Rosenhead, J. (1996). "What's the problem? An introduction to problem structuring methods." *Interfaces*, 26(6): 117-131.

Rosenhead, J. and Tripathy, A. (Eds.). (1996). *Operational research for development*. New Delhi: New Age International (P).

Rosenhead, J. and White, L. (1996). "Nuclear fusion: Some linked case studies in Community Operational Research." *Journal of the Operational Research Society*, 47(4): 479-489.

Rosenstone, S.J. and Hansen, J.M. (1993). *Mobilization, participation, and democracy in America*. Needham Heights: Allyn and Bacon.

Ruiz de Chávez, M. (1988). "La jurisdicción de salud en México." In: Secretaría de Salud and OPS (eds.), *Fortalecimiento de los sistemas locales de salud: jurisdiccionales y municipales. Memoria del seminario celebrado en la ciudad de Tlaxcala, Tlaxcala, del 8 al 10 de octubre de 1987.*, México, D.F.: Secretaría de Salud, pp. 67-73.

Ruiz de Chávez, M. and Lara Ponte, R. (Eds.). (1988). *Descentralización de los servicios de salud. Avances y perspectivas del proceso*. México, D.F.: Secretaría de Salud, Gobierno del Estado de Guerrero, Organización Panamericana de la Salud.

Sachs, W. (Ed.) (1992). *The development dictionary. The guide to knowledge as power*. London: Zed Books.

Sagasti, F. (1988). "National development planning in turbulent times: New approaches and criteria for institutional design." *World Development*, 16(4): 431-448.

Sagasti, F. (1992). "Strategic planning and management for development in a fractured global order." *International Conference on Operational Research for Development* Ahmedabad, India, December 16.

Schuurman, F.J. (Ed.) (1993). *Beyond the impasse: New directions in development theory*. London: Zed Books.

## Bibliography

Schwarz, N. and Deruyttere, A. (1996). "Community consultation, sustainable development and the Inter-American Development Bank: A concept paper." *IADB: Social Programs and Sustainable Development Department, Indigenous Peoples and Community Development Unit*. March.

Scoones, I. and Thompson, J. (Eds.). (1994). *Beyond farmer first: Rural people's knowledge, agricultural research and extension practice*. London: Intermediate Technology Publications.

Scrimshaw, S. and Hurtado, E. (1987). *Rapid assessment procedures for nutrition and primary health care: Anthropological approaches for improving programme effectiveness*. Tokyo: United Nations University, Los Angeles: UNICEF/UN, UCLA Latin American Center.

Secretaría de Salud. (1984). *Programa Nacional de Salud, 1984-1988*. México, D.F.: Secretaría de Salud.

Secretaría de Salud. (1988). *Descentralización de los servicios de salud a población abierta: Avances y perspectivas*. Cuadernos de Descentralización. México, D.F.: Secretaría de Salud.

Secretaría de Salud. (1994). *Encuesta Nacional de Salud II*. México, D.F.: Secretaría de Salud.

Secretaría de Salud. (1995). *Guía práctica de servicios e infraestructura para la salud. Estado de Morelos*. México, D.F.: Oficialía Mayor.

Secretaría de Salud. (1996). "Programa de Reforma del Sector Salud: 1995-2000." México, D.F.: Monday, 11 March.

Secretaría de Salud and OPS (Organización Panamericana de la Salud). (1988). *Fortalecimiento de los sistemas locales de salud: jurisdiccionales y municipales. Memoria del seminario celebrado en la ciudad de Tlaxcala, Tlaxcala, del 8 al 10 de octubre de 1987*. México, D.F.: Secretaría de Salud.

Secretaría de Salud and OPS (Organización Panamericana de la Salud). (1994). *Guías metodológicas para operacionalizar los componentes del proyecto de desarrollo de las jurisdicciones sanitarias en México (sistemas locales de salud)*. México, D.F.: Secretaría de Salud.

Seers, D. (1972). "What are we trying to measure?" IDS Reprints 106. Brighton: *Institute of Development Studies*.

Seers, D. (1979). "The meaning of development, with a postscript." In: D. Lehmann (ed.) *Development theory: Four critical studies*, London: Frank Cass and Company, pp. 9-30.

Selwyn, B.J., Frerichs, S., Smith, G.S. et al. (1989). "Rapid epidemiologic assessment: the evolution of a new discipline-introduction." *International Journal of Epidemiology*, 18(4).

Sen, A. (1981). *Poverty and famines*. Oxford: Oxford University Press.

Sen, A. (1984). *Resources, values and development*. Oxford: Basil Blackwell Publisher.

Sen, A. (1985). *Commodities and capabilities*. Amsterdam: Elsevier Science Publishers B.V.

## Bibliography

Sen, A. (1986). *Food, economics and entitlements*. World Institute for Development Economics Research of the United Nations University.

Sen, A. (1987). *Hunger and entitlements*. World Institute for Development Economics Research of the United Nations University.

Sen, A. (1997). *Bienestar, justicia y mercado*. Barcelona: Ediciones Paidós Ibérica.

Sewell, D.W.R. and Coppock, J.T. (1977). "A perspective on public participation in planning." In: D. W. R. Sewell and J. T. Coppock (eds.), *Public participation in planning*, London: John Wiley & Sons, pp. 1-12.

Shanahan, P. and Ward, J. (1995). "The university and empowerment: the European Union, university adult education and community economic development with "excluded groups"." In: G. Craig and M. Mayo (eds.), *Community empowerment: a reader in participation and development*, London: Zed Books, pp. 70-85.

Shanner, W.W., Phillip, P.F. and Schmel, W.R. (1982). *Farming Systems Research and Development: Guidelines for developing countries*. Boulder: Westview Press.

Sherraden, M.S. (1989). "Social policy reform in Mexico: Rural primary health services." Doctoral thesis. Saint Louis: Department of Sociology, Washington University.

Sherraden, M.S. (1991). "Policy impacts of community participation: Health services in rural Mexico." *Human Organizations*, 50(3): 256-263.

Shragge, E. (1993). "The politics of community economic development." In: E. Shragge (ed.) *Community economic development: in search of empowerment and alternatives*, Montreal: Black Rose Books, pp. 1-17.

Sierra Bravo, R. (1983). *Técnicas de investigación social. Teoría y ejercicios*. 3era Ed. Madrid: Paraninfo.

Simmons, O.G. (1988). *Perspectives on development and population growth in the Third World*. New York: Plenum Press.

Singh, N. and Titi, V. (Eds.). (1995). *Empowerment for sustainable development: Toward operational strategies*. Halifax: Fernwood Publishing.

Skelcher, C. (1993). "Involvement and empowerment in local public services." *Public Money & Management*, July-September: 13-19.

Slocum, R., Wichhart, L., Rocheleau, D. et al. (Eds.). (1995). *Power, process and participation: Tools for change*. London: Intermediate Technology Publications.

Smail, D. (1994). "Community psychology and politics." *Journal of Community & Applied Social Psychology*, 42: 3-10.

Soen, D. (1981). "Citizen and community participation in urban renewal and rehabilitation - Comments on theory and practice." *Community Development Journal*, 16(2): 105-117.

## Bibliography

Ssembatya, J., Coghlan, A., Lumala, R. et al. (1995). "Using Participatory Rural Appraisal to assess community HIV risk factors: Experiences from rural Uganda." *PLA Notes*, 23: 62-65.

Stake, R.E. (1995). *The art of case study research*. Thousand Oaks: Sage Publications.

Staples, L. (1984). *Roots to power. A manual for grassroots organizing*. New York: Praeger Publishers.

Stevenson, O. and Parsloe, P. (1993). *Community care and empowerment*. Joseph Rowntree Foundation in association with Community Care.

Stewart, F. (1985). *Planning to meet basic needs*. London: The Macmillan Press.

Stiefel, M. and Wolfe, M. (1984). "The quest for participation." Mimeographed Preliminary Report. *United Nations Research Institute for Social Development*.

Stiefel, M. and Wolfe, M. (1994). *A voice for the excluded: popular participation in development: utopia or necessity?* London: Zed Books.

Stilwell, P. and Stilwell, J. (1995). "A locality focus on health for Wolverhampton." *Health & Social Care in the Community*, 3: 181-190.

Stocking, M. and Abel, N. (1981). "Ecological and environmental indicators for the rapid appraisal of natural resources." *Agricultural Administration*, 8(6): 473-484.

Stone, L. (1989). "Cultural crossroads of community participation in development: A case from Nepal." *Human Organization*, 48(3): 206-213.

Streeten, P. (1981). *First things first*. New York: Oxford University Press.

Strong, T.B. and Sposito, F.A. (1995). "Habermas's significant other." In: S. K. White (ed.) *The Cambridge companion to Habermas*, Cambridge: Cambridge University Press, pp. 263-288.

Susman, G.I. and Evered, R.D. (1978). "An assessment of the scientific merits of action research." *Administrative Science Quarterly*, 23: 582-603.

Szekely, E.M. (1984). *About some difficulties faced by "promotores" (field promoters) to support the advancement of deprived rural groups*. London: The Tavistock Institute of Human Relations.

Taket, A. (1994). "Undercover agency? - Ethics, responsibility and the practice of OR." *Journal of the Operational Research Society*, 45: 123-132.

Taket, A. and White, L. (1993). "Throwing the gauntlet. Continuing the soft OR debate." *OR Newsletter*, February: 18-19.

Testa, M. (1986). "Estrategia, coherencia y poder en las propuestas de salud." *Cuadernos Médicos Sociales*, 38: 3-24.

## Bibliography

Thunhurst, C. (1992). "Strengthening community participation: Lessons from developing countries. Background paper for a Training Workshop in Operational Research for Development." Ahmedabad, December, 11-16.

Thunhurst, C. (1996). "Can OR be neutral on issues of development?- Planning for health." In: J. Rosenhead and A. Tripathy (eds.), *Operational research for development*, New Delhi: New Age International (P), pp. 157-169.

Thunhurst, C. and Barker, C. (1999). "Using problem structuring methods in strategic planning." *Health Policy and Planning*, 14(2): 127-134.

Thunhurst, C. and Ritchie, C. (1992). "Housing in the Dearne Valley: Doing Community OR with the Thurnscoe Tenants Housing Co-operative Part 2 - An evaluation." *Journal of the Operational Research Society*, 43(7): 677-690.

Thunhurst, C., Ritchie, C., Friend, J. et al. (1992). "Housing in the Dearne Valley: Doing Community OR with the Thurnscoe Tenants Housing Co-operative Part 1 - The involvement of the Community OR Unit." *Journal of the Operational Research Society*, 43(2): 81-94.

Thunhurst, C. and Ruck, N. (1991). "A lesson in Southern comfort." *The Health Service Journal*, January 10: 24-25.

Todaro, M.P. (1994). *Economic development*. 5th Ed. White Plains: Longman.

Toye, J. (1993). *Dilemmas of development: Reflections on the counter-revolution in development economics*. 2nd Ed. Oxford: Blackwell Publishers.

Trefethen, F.N. (1954). "A history of operations research." In: J. F. McCloskey and F. N. Trefethen (eds.), *Operations research for management*, Baltimore: Johns Hopkins Press.

Ugalde, A. (1985). "Ideological dimensions of community participation in Latin American health programs." *Social Science and Medicine*, 21(1): 41-53.

Ulrich, W. (1983). *Critical heuristics of social planning*. Bern: Haupt.

UNDP (United Nations Development Programme). (1998). *Empowering people: A Guide to participation*. New York: UNDP, Civil Society Organisations and Participation Programme.

United Nations Non-Governmental Liaison Service. (1995). *Women and empowerment: Participation and decision-making*. London: Zed Books.

van Steenbergen, F. (1990). "The Strategic Choice Approach in regional development planning." *Third World Planning Review*, 12(3): 301-304.

Vanclay, R. and Lawrence, G. (1994). "Farmer rationality and the adoption of environmentally sound practices: a critique of the assumptions of traditional agricultural extension." *European Journal of Agricultural Education and Extension*, 1(1): 59-90.

Vargas, R. (1979). "Health policies in Latin America." *Social Science and Medicine*, 13C: 69-73.

## Bibliography

Wack, P. (1985). "Scenarios, uncharted waters ahead." *Harvard Business Review*(September-October): 73-89.

Walker, G. (1979). "Notes on rapid appraisal of the utilisation of rural health care services." *Conference on Rapid Rural Appraisal* Institute of Development Studies, University of Sussex, England, December 4-7.

Wallerstein, N. (1992). "Powerlessness, empowerment and health: Implications for health promotion programs." *American Journal for Health Promotion*, 6: 197-205.

Wallerstein, N. (1993). "Empowerment and health: The theory and practice of community change." *Community Development Journal*, 28(3): 218-227.

Wallerstein, N. and Bernstein, E. (1994). "Introduction to community empowerment, participatory education, and health." *Health Education Quarterly*, 21(2): 141-148.

Walt, G. (1994). *Health policy: an introduction to process and power*. London: Zed Books.

Walton, D. (1989). *Informal logic: A handbook for critical argumentation*. Cambridge: C.U.P.

Walton, D. (1992). "Dialogue." In: D. N. Walton (ed.) *Plausible argument in everyday conversation*, Albany: State University of New York Press.

Warren, M.E. (1995). "The self in discursive democracy." In: S. K. White (ed.) *The Cambridge companion to Habermas*, Cambridge: Cambridge University Press, pp. 167-200.

Webber, M.M. and Rittel, H.W.J. (1973). "Dilemmas in the general theory of planning." *Policy Sciences*, 4(2): 155-169.

Welbourn, A. (1992). "Rapid rural appraisal, gender and health alternative ways of listening to needs." *IDS Bulletin*, 23(1).

Weller, S.C. and Romney, A.K. (1980). *Systematic data collection*. Newbury Park, CA: Sage Publications.

West, D. (1990). *Authenticity and empowerment. A theory of liberation*. Hertfordshire: Harvester Wheatsheaf.

White, L. (1994). "Development options for a rural community in Belize - Alternative development and operational research." *International Transactions Operational Research*, 1(4): 453-462.

White, L. and Taket, A. (1997). "Beyond Appraisal: Participatory Appraisal of Needs and the Development of Action." *Omega*, 25(5): 523-534.

White, S.K. (Ed.) (1995). *The Cambridge companion to Habermas*. Cambridge: Cambridge University Press.

WHO (World Health Organisation). (1988). *Guidelines for rapid appraisal to assess community health needs. A focus on health improvements for low-income urban areas*. Geneva: World Health Organization.

## Bibliography

Whyte, W.F. (Ed.) (1991). *Participatory action research*. Beverly Hills: Sage.

Williams, T., Eden, C., Ackermann, F. et al. (1995). "The effects of design changes and delays on project costs." *Journal of the Operational Research Society*, 47(7): 809-818.

Wong, H.Y. and Rosenhead, J.V. (1996). "A rigorous definition of robustness analysis." Working Paper. LSEOR.96.22. London: *London School of Economics. Operational Research*. June.

Wong, N. and Mingers, J. (1994). "The nature of community OR." *Journal of the Operational Research Society*, 45(3): 245-254.

Woodhall, M. (1992). *Cost-benefit analysis in educational planning*. Paris: UNESCO, International Institute for Educational Planning.

World Bank. (1994). "The World Bank and participation. Report of the Learning Group on Participatory Development." Fourth Draft (revised). Washington, D.C.: *The World Bank*. May 10.

World Bank. (1996). *The World Bank participation sourcebook*. Washington, D.C.: IBRD/The World Bank.

Wratten, E. (1994). "Bottom-up planning for urban development: the development Planning for Real pilot project." *RRA Notes*, 21: 83-90.

Wright Mills, C. (1957). *La élite del poder*. México, D.F.: Fondo de Cultura Económica.

Wrong, D.H. (1995). *Power: its forms, bases, and uses*. New Brunswick: Transaction Publishers.

Yin, R.K. (1989). *Case study research: Design and methods*. Revised Ed. London: Sage Publications.

Yin, R.K. (1993). *Applications of case study research*. Newbury Park: Sage Publications.

Young, S. (1996). "Stepping stones to empowerment? Participation in the context of Local Agenda 21." *Local Government Policy Making*, 22(4): 25-31.

Zakus, D. (1988). "La participación comunitaria en el programa de APS en el Tercer Mundo." *Salud Pública de México*, 30(2): 151-174.

Zazueta, A. (1995). "Policy hits the ground: Participation and equity in environmental policy-making." *World Resources Institute*. September.

Zimmerman, M.A. and Rappaport, J. (1988). "Citizen participation, perceived control, and psychological empowerment." *American Journal of Community Psychology*, 16: 725-750.