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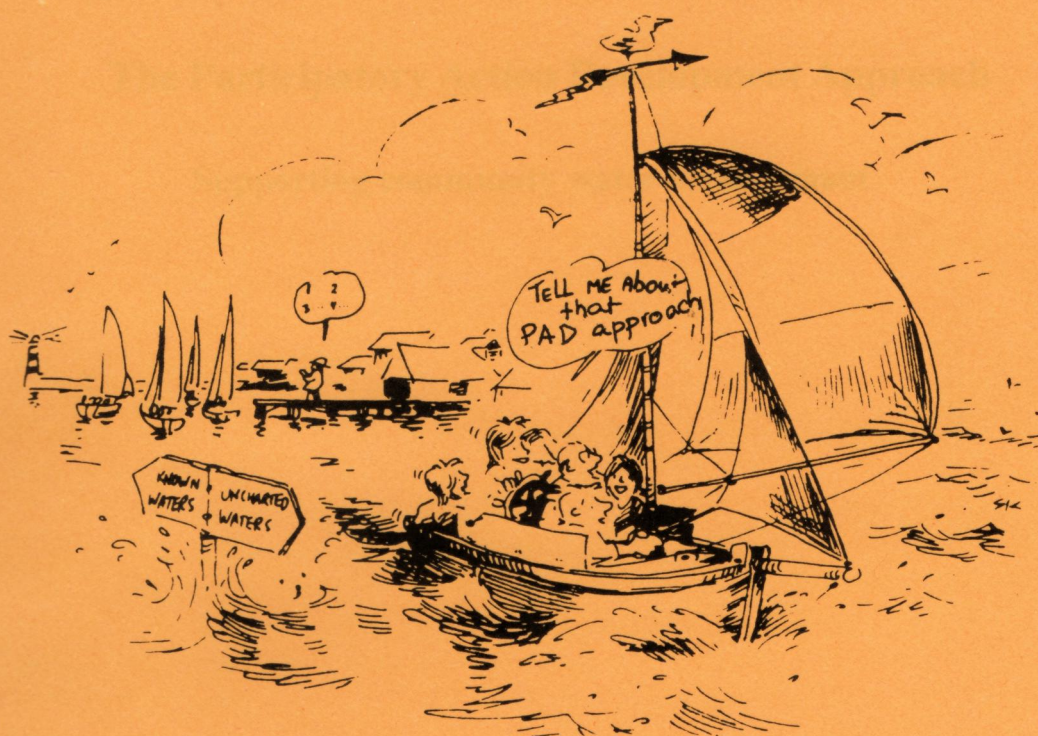
International Water and Sanitation Centre

The Participatory Action Development Approach

Supporting community water management

Community Managers for Tomorrow

Document no. **3**

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PAN AFRICAN INSTITUTE FOR
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Preface

This series of five documents, together entitled *Community Water Managers for Tomorrow: Partnerships for water management in rural communities*, has been developed by IRC in collaboration with teams from partner organizations in six countries. At the heart of these documents are the experiences of the local research teams at the community level, who have made enormous contributions to the adoption of this approach to community water supply.

Each of the five documents in this series has a different focus, but are all based on the same experience – a four-year participatory action research project to improve the management performance of rural communities of water supply systems in developing countries, called the PAR-Manage project.

The first two documents explain what happened during this four-year research project. Document 1, *Putting Community Management in Place: Four years of experience in improving water management,* describes the research process and presents the results and conclusions of the PAR-Manage project from the perspective of the support agencies and IRC. It explains how the participatory research was done, the tools that were used, what happened in the process, and what it demanded from the agencies and communities involved. More importantly, it documents the experiences of researchers in the communities themselves – their progress and setbacks, negotiations and discussions in community meetings, exchange visits and experiments.

Document 2, *Learning in the Field: How 22 communities improved their water management,* presents case studies of each of the 22 communities that have been involved in the project. These case studies permit a better understanding of the project from the perspective and focus of the men, women and children in these 22 communities. The case studies illustrate the main problems faced by rural communities, their efforts to improve the situation, and their achievements in terms of their improved ability to manage their water.

The next three documents contain what project team now call the Participatory Action Development approach to community water management – in short, the **PAD approach**. Document 3, *The Participatory Action Development Approach: Supporting Community Water Management,* is based on the process of action research that was developed and tested throughout the project, to arrive at an approach for supporting communities in managing their water supply systems. Around this approach, the teams developed methods and tools that are now available for wider use. Most of the material in this document is intended to help readers understand community management and the ideas behind the approach. Practitioners can adapt the approach to suit local circumstances, developing a critical awareness when putting the approach into practice.

Document 4, *Facilitating community discovery: Getting to know about water management,* gives a brief introduction to the PAD methodology, which consists of three phases – Diagnosing, Experimenting and Sustaining. The manual explores the Diagnosing phase of the PAD process in detail and describes the methods and tools that can be used during implementation. The document explores what factors need to be taken into account, the pitfalls to avoid, and the tools or set of tools that can be used in each step in the process.

Finally, document 5, *Experimenting with the Community: Identifying sustainable solutions,* again gives a brief introduction to the methodology, and then explores the Experimenting and Sustaining phases of the PAD process, together with the methods and tools that can be used.

These last three documents have been produced separately because they will be easier to use in the field than one large bulky volume. However, each part belongs together with the other parts. Documents 4 and 5 have been written mainly for practitioners, explaining how to put theory into practice. The main aim is to provide a set of tools that can be used by support workers to help communities to shape their own lives. These two documents therefore try to combine both reflection and action.

All of the methods and tools described here have been used effectively in the communities in Africa, Asia and Latin America over the past four years. However, they should not be seen as a blueprint for community management. The project team concluded halfway through the research project: 'Each situation, each culture, each place, each experience, and each community requires its own approach, although general principles can be applied'. Sensitivity to the needs of communities, and quick judgements on what would be most helpful at a particular time or during a particular process can only be developed through constant practice, complete openness to feedback from the villagers, critical reflective analysis, and years of experience.

In the near future these documents will be complemented with: (i) videos (one general video and six country-specific videos) on the experiences with the community management support approach; (ii) a manual, *Training for Trainers,* for the staff of support organizations who wish to use the approach in their field of action; and (iii) an Internet website to support all the initiatives to bring to life the PAD approach. In the project countries themselves, 'Information Focal Points' will also be established to provide background material to enhance the activities, and to enable exchanges of information at the national and regional levels.

About this document

It is hoped that the underlying document no. 3 will help others to develop improved strategies for community water management. It is not intended as a blueprint, but as an approach that will allow organizations and fieldworkers to make the necessary adjustments to provide effective support for community management. It can only be validated by implementing the principles behind this approach in a creative way by practitioners on different levels and policy makers related to the subject of community management of rural water supply. In general, the guideline document offers material that is intended to help readers understand and study the approach, or to design their own.

The material in some of the chapters in document no. 3 has been adapted from other texts and materials. Sections 1.1 and 1.2 and Chapter 3 have been adapted from the introduction to the book by M.P. Lammerink and I. Wolffers (1994) *Some Selected Examples of Participatory Research.* The latter material has been developed as support to a number of broad-based and location-specific multi-annual, multidisciplinary research programmes (MMRPs), which are being implemented in a number of developing countries, supported by Neda. This book has now also been published in French, Spanish and Vietnamese.

Sections 1.3–1.5 and Chapter 2 are largely based on and adapted from an unpublished IRC paper by P. Evans (1992) *Community Management of Improved Water Supply Systems: A preliminary*

review, which was prepared as a background paper for the first submission of the action research proposal for phase 1 of the project 'Community Management of Water Supplies' (WW/91/875). That paper presents some of the findings of a review of the literature on community management of improved water supply systems in developing countries.

Dr Phil Evans (social anthropologist) worked at IRC from 1990 to 1992, and was particularly involved in the development of the preliminary phases of the PAR-Manage project. He organized an international workshop on community management at IRC in November 1992, the proceedings of which were published as an occasional paper (Evans and Appleton, 1993).

The approach developed in Chapter 5 was largely inspired by material developed by FMD Consultants for support approaches in the forestry sector, entitled 'A stepwise approach for social forestry' (FMD, 1994, *Participatory Learning Techniques: Some examples*, Haarlem, The Netherlands). This material was developed by FMD as part of its mandate to develop participatory methodologies for training and research. FMD Consultants main objective is to encourage and support local initiatives that aim to build sustainable development. The emphasis is on natural resource management projects, where local knowledge and skills are the building blocks for development initiatives. Apart from applied research and advisory activities, FMD also provides training for the staff of forestry organizations in new forestry approaches.

This document is intended as an introduction for professionals working in the areas of health, community development and environmental studies. Building the capacity of communities to take responsibility for local management is seen by many as a major task for support organizations. In providing this support, many water organizations have created new forms of local organization to manage their water supply systems. It is therefor important that these new organizations have a full understanding of community management capacities, and that they have a good idea of the support requirements.

This broad target group may be divided into those who are already convinced of the need for community management and are actively working on its development, those who are struggling with it due to lack of experience ('the supporters'), and those who have yet to understand the potential.

A distinction can be made between professional staff working at agency level, guiding other staff to carry out community work, and the staff directly involved at the community level. Both will recognize the need for different support requirements and participatory approaches, and apply them in their work. They also will be aware that it pays off to encourage community management and to move away from an emphasis on physical construction targets.

Without doubt, the PAD approach will sometimes require changes in attitude, to see the community members as equals, and to enable them to become effective facilitators and communicators with an open mind to recognize community problems and solutions. To be able to identify the most effective approaches to strengthen community management capacity represents a major challenge. This challenge includes the need to foster new capabilities within support organizations so that they can adapt approaches to local conditions, in collaboration with the communities themselves.

Part of the challenge in any discussion of community management is to develop new ways of working so that policy makers, water and sanitation sector staff, and the users, can work together to reach common goals. Many people in the water sector are now convinced that community management is a necessary approach to ensure that water and sanitation programmes are effective. They also recognize that the effective use of improved water supplies and latrines must be based on participation and understanding, but do not always have sufficient information or ideas to make this happen. We believe this and the other documents in this series can provide information and answers to such questions.

IRC staff, the International Water and Sanitation Centre in The Hague, and the teams from the partner organizations who have developed the PAD approach, have built up a wide range of experience in facilitating or co-facilitating planning workshops, as well organizing follow-up support. They can act as facilitators, advisers and resource persons in a 'learning by doing' process, giving specific attention and guidance to support teams if required.

The book consists of five chapters. Chapter 1 provides a broad overview of some of the interpretations of the terms participation, community and the roles of communities in management. The chapter starts with a brief historical overview of new development paradigms related to participation.

Chapter 2 presents some key findings from a literature review on community management of rural water supplies. It explores recent experiences in community management of improved water supply systems in developing countries, and identifies general trends and directions for further development.

Chapter 3 focuses on the consequences of the participatory support approach in terms of the differences in insights into concepts and developments. Participatory support comes in many shapes and sizes: it may be action-oriented and initiated by the community, or it may be an outside support agency that initiates contact with the community in order to facilitate a community project. The chapter describes the steps of the support approach, highlighting the important characteristic differences between the two approaches.

Chapter 4 elaborates on the focus and rationale behind the Participatory Action Development Approach for Community Water Management, before giving broad descriptions of the different phases and activities: Diagnosing, Experimenting and Sustaining.

Chapter 5 builds on the experiences in the various projects both within and beyond the water sector. It explains in more detail the steps and activities in the Participatory Action Development Approach for Community Water Management.

Chapter 6 describes how this approach has worked in practice in the participatory action research projects in communities in six countries: Cameroon, Colombia, Guatemala, Kenya, Nepal, and Pakistan.

Acknowledgements

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These documents have also built on the experiences of a large number of researchers and trainers working in the water and rural development sector. Although they are not mentioned here by name, all of them have enabled us to develop this material.

This series of documents aims to help others to develop strategies to assist communities to improve the management of their own water supply systems. It is not intended to be used as a blueprint, but as an approach that will allow organizations and fieldworkers to make the necessary adjustments to provide effective support for community management. The contents of these documents can only be validated by practitioners creatively implementing the principles behind this approach at various levels, and by the policy makers involved in community management of rural water supplies.

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Introduction

Since the International Drinking Water Supply and Sanitation Decade (1981–90), experiences in many developing countries have shown that even the best-run water organizations cannot successfully implement, operate and maintain a network of widely dispersed water systems without the full involvement and commitment of the users. Despite the best endeavours of centralized organizations, the staff, transport and budgets inevitably become overstretched, leading to water supply systems that are not repaired and eventually break down, and to dissatisfied consumers and demoralized agency personnel.

At the same time, evidence is accumulating that properly supported communities are both able and willing to manage their own water systems (Evans and Appleton, 1993). Organizations that make the transition from being providers to facilitators could divert many of the resources that are currently swallowed up in the provision and maintenance of inefficient services, and use them to bring about greater cost-effectiveness and more widespread and sustainable benefits. Reducing the need for reconstruction or rehabilitation of broken down systems would mean that attention could be given to more satisfying and more productive work on new schemes. Indeed, one of the guiding principles of Chapter 18 of *Agenda 21*, which was endorsed at the Earth Summit in Rio de Janeiro in June 1992, is 'Community management of services, backed by measures to strengthen local institutions in implementing and sustaining water and sanitation programmes' (UNCED, 1992).

Previously, it was believed that community management of water supply and sanitation systems should be a fundamental part of national programmes for sustainable development in the future. Today, however, it is even more widely believed that community management can be more successful in achieving a broader, more sustainable coverage than the top-down approaches that have proved so difficult to bring about sustainable systems in the past.

In the 1990s there has been a growing trend in most countries in the South to encourage rural communities to manage their own water supply schemes. External support agencies also promote decentralization and greater community involvement in decision making and management. As a result, many governments are placing more emphasis on water supply system management at the lowest appropriate level. This decentralization, however, requires more support for the users, and greater interactions among users, non-governmental organizations (NGOs), the private sector and local government. Decentralization and stronger user involvement still face many constraints within both organizations and communities. Within organizations there is a strong traditional focus on constructing water supply systems, with little emphasis on enhancing the local management capacity due to the lack of experiences and strategies. Within communities, on the other hand, there is often a lack of experience in managing water supply systems, as well as in the use of the tools to cope with their operation.

Although community-managed water supplies can still be improved, experiences have shown that there is significant potential within user communities to take up management roles. Supporting a more prominent role for communities as managers of improved water supply systems has several advantages: it can lead to greater efficiency in system performance, and the prospects for the long-term sustainability of water supply systems are greater, perhaps leading to improved cost-effectiveness for both communities and organizations (Lammerink *et al.*, 1995).

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Based on a full understanding of the weaknesses and gaps in community management, agency support is needed so that communities can benefit fully from their water supply systems. Such support needs to focus on resolving the most common problems, such as the lack of managerial capacity, the partial coverage of user populations, the lack of effective and equitable financing systems, the absence of suitable management tools, the continuing environmental degradation of watersheds, and the absence of a proper gender balance in planning for, contributions to and control over established water services.

Community management does not mean that communities must take care of everything, or pay the full costs. The idea of partnership allows scope for the support organizations and communities to share responsibilities. The functions to be performed by local management organizations can therefore vary considerably, depending upon the division of responsibility between the support organization and the community (although many organizations and communities are struggling to decide on the most suitable division).

A history of the development of PAD

IRC and its partners, supported by the Netherlands Development Assistance (Neda), have developed a flexible approach to community-managed water supply systems that can be used by various support organizations. The approach is geared to using a participatory methodology for bringing about sustainable water supply system management, called Participatory Action Development (PAD), which can be easily adjusted to suit local circumstances.

This approach has been tested during a participatory action research programme that was begun in 1994 by IRC together with six partner organizations in Cameroon, Kenya, Nepal, Pakistan, Colombia and Guatemala. The programme deals with community management and developed approaches, methods and tools to enhance the capacity of rural communities to manage their own water supply systems with appropriate backup support and guidance. The research projects have been executed by organizations dealing with support and capacity building for community-managed rural water supply systems at the country or regional level. The IRC, which deals with community-managed water supply at the international level, provided the overall coordination, training and support for the research teams.

Between 1994 and 1998 the approach was tested in 24 communities with a wide variety of water supply systems and service levels. The projects have been implemented through various approaches representing a range of environmental, socio-economic and cultural conditions, as well as variations in managerial performance. The programme is now at the stage of disseminating its experiences by means of publications, more active sharing and capacity building until the end of 2001. Based on the programme experiences, valuable lessons have been learned about improved strategies, innovative methods and tools for building management capacity within communities. Many of the teams involved have identified the need for capacity development in their respective organizations, and for strategies and tools that could help them to implement a participatory methodology for improving water supply system management that flexible enough to adjust to different local circumstances.

Before explaining in more detail what the PAD methodology entails, Chapter 1 gives an overview of some of the interpretations of the terms participation, community, and the roles of communities in management.

1. Features of community participation and management

Before discussing community management of water supplies it is first necessary to give an historical overview of the development of various concepts related to participation.

1.1 The history of community participation

Efforts to encourage community participation began in the 1930s, but they were strengthened after World War II, when it became clear that the differences between rural and urban communities, between ethnic and regional groups, and between peoples with different lifestyles and values could only be overcome if they were able to influence the services offered to them (e.g. health, water, education, agriculture, etc.). It also became apparent that all of these services represent investments in people and not in systems, so that these people should to play a role.

The debate on development paradigms began in the mid to late 1970s, when it was asked whether participation – whether of people in general, women, or of communities – is a critical variable in attempts to raise their levels of development. The debate received a significant impetus from the reports of emerging failures of top-down, expert-designed development projects and programmes. In advocating participation as a central concept in development, it is now a fundamental tenet that the knowledge and skills of those who are to the participants and central actors should be fully involved in the development process (Chambers, 1983; Oakley, 1991).

It became evident that much development work simply cannot be effective if the people concerned do not participate. Their participation has advantages for both the community and the support agency, but it does not necessarily mean that action objectives are part of the process of knowing. The spread of the participatory approach in development work has been extraordinarily rapid since the 1980s. A wide range of methodologies have emerged to identify the problems faced by communities, most of which share strong conceptual and methodological similarities. They include participatory appraisal, farming systems research, participatory research, rapid assessment procedures, participatory action research, and participatory technology development.

1.2 Community participation

The term 'community participation' is often abused and runs the risk of becoming ambiguous. A community is a group of people living in the same village or neighbourhood, organized into a municipal and social entity. Participation is the process of people being involved in, and sharing, a variety of activities with a communal goal. This definition may seem obvious, but one can immediately ask 'whose communal goal'? Such confusion why there are so many different interpretations.

Although people live in the same community they do not always share the same interests, and maybe do not even get along (Werner and Bower, 1982). Most communities are not homogeneous; each community is often a small, local reflection of the larger society or country. It will have similar differences between the weak and the strong, similar patterns of

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justice and injustice, similar problems and power struggles, and similar elements of harmony and shared interests, as well as conflicts. The idea that people work well together simply because they live together is a myth. Thus, a community consists of people who do not necessarily share the same interests and values. Often there are conflicts of interest both within the community and between the community and the outsiders.

There are many views on these conflicts (Huizer, 1971; Werner and Bower, 1982). On the one hand, the more conventional view sees community participation as a way to improve the delivery of basic services. By getting local people to carry out predefined activities, all kinds of services will be better accepted and eventually can be easily extended. Participation is seen as a way of controlling people. Social activists, on the other hand, see community participation as a process in which the poor work together to overcome problems, and thus gain more control over their lives. The former view focuses on shared values and cooperation between people at all levels of society, and assumes there are common interests. The latter view recognizes the conflicts of interest, in that dialogue and participatory research are used to enhance people's awareness and confidence, and to reinforce their actions. This view owes much to the early work of Paulo Freire (1968) in the adult education movement, and other Latin American social scientists such as Fals Borda (1981).

The experiences gained in the course of these activities are valuable, including for those who are not interested in social actions, but who agree that development is a process of change. Community participation and community management are not neutral concepts, and this has consequences with regard to definitions, interpretations, discussions, and, last but not least, the methodology of participation.

Oakley (1989) gives examples of the wide variety of interpretations of the term participation:

1. Participation means, in its broadest sense, to sensitize people and thus to increase the receptivity and ability of rural people to respond to development programmes, as well as to encourage local initiatives.
2. With regard to development, participation includes people's involvement in decision-making processes, implementing programmes, their sharing in the benefits of development programmes, and their involvement in efforts to evaluate such programmes.
3. Participation involves organized efforts to increase control over resources and regulative institutions in given social situations, on the part of groups and movements of those hitherto excluded from such control.'

Rifkin (1990) argues that we cannot just take a concept like participation for granted. Only by asking some basic questions (why participation?; who should participate? and how do people participate?) can one determine what is meant by participation.

McCall (1987) distinguishes three levels of participation: as a means to facilitate the implementation of an external intervention; as a means to mediate in the decision-making and policy formulation of external interventions; and as an end in itself, the empowerment of social groups to gain and control over resources and decision making. In the latter, participation is a goal rather than a means in itself, and implies an acceptance that people can to a large extent identify and modify their own solutions to their needs. This means that

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development workers support local people to increase their capacity to manage changes in their environment.

Different levels of participation are influenced by the role of the state, the position of professionals, the culture of leadership and experience with democratic politics. One general misunderstanding about participation is that some people active in this kind of work have stereotypical idealized concepts of participation. The best results in a project or in research will be achieved when all members of the community participate wholeheartedly. However, it is unrealistic to think that full participation by all community members at all stages of the participation process is possible. No community is homogeneous, as we have noted. Of course, differences in insight have consequences for the approach of participatory support work. Different forms of participation imply different programmes and different methodologies.

1.3   From community participation to community management

Since the mid-1980s there has been an increasingly apparent shift in terminology from community participation to community management in the water and sanitation sector. By the end of the decade, community management was firmly on the agenda as one of four guiding principles for sector development in the 1990s, as outlined in the New Delhi Statement (UNDP, 1990).

The International Water and Sanitation Decade (1981–90) led to important advances, with lessons learned from both successes and failures. As more improved systems have been built, it has become increasingly difficult for governments to maintain them. Estimates suggest that 30–40% of water systems in developing countries may not be working at any one time. For individual countries and systems, percentages as high as 60–70% have been reported. If water supply systems can not be kept in good working order, the benefits to be gained from building and using them will be hard to obtain.

An enhanced management role for user communities is seen as a way of increasing cost-effectiveness, improving reliability, and ensuring sustainability, by placing a larger share of the responsibility for operating and maintaining water and sanitation systems in the hands of the users themselves. It may also provide solutions to broader problems, such as the lack of adequate health care, the inequitable distribution of improved systems, the excessive costs, insufficiently prominent roles for women, low levels of self-reliance, and inappropriate choices of technology and of service levels that do not match community demand.

Community management is a potential vehicle for achieving a broad range of development goals, which should lead to more efficient, sustainable, and cost effective water supply development (see Box).

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The goals of community management

* *to improve system reliability.*
* *to improve the attainment of health and other benefits.*
* *to promote greater democracy and equity in the development process.*
* *to promote a more prominent role for women in development.*
* *to ensure more appropriate choices of technology and service level.*
* *to reduce the costs to agencies of improvements by making better use of local resources, skills and knowledge.*
* *to build community confidence and capacity to undertake further development activities.*

Sources: Cox and Annis (1982); Dworkin (1982); Whyte (1984); van Wijk and Visscher (1987); UNDP/ World Bank (1988); McCommon et al. (1990); UNDP (1990b); Narayan-Parker (1990); Franceys (1991); Indonesia-Australia Development Cooperation Programme (1991); Renard (1991).

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McCommon *et al.* (1990) defined the three basic components of community management as follows:

Responsibility: The community takes on the ownership and attendant obligations of the system.

Authority: The community has the legitimate right to make decisions regarding the system on behalf of the users.

Control: The community is able to determine the outcome and to carry out its decisions.

The basic characteristics of community management are summarized in the next Box.

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Characteristics of community management

The community decides on:
* *technology choice*
* *service level*
* *form of local organization*
* *usage regulations*
* *financing mechanisms*

The community is responsible for:
* *maintenance and repairs*
* *regulating usage*
* *the local management organization*
* *financing*

The community owns the system.

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1.4 Building capacity for community management

Capacity building for community management at its most basic, refers to the transfer of skills to communities to enable them to perform management tasks. This includes the provision of technical training for performing routine operation and maintenance tasks, book-keeping and financial control, guidance on how to develop and implement community monitoring and evaluation systems, etc. Although basic, this level of capacity building is extremely important. All communities do have considerable skills, such basic support to community managers is essential. As van Wijk (1989) noted: '... when change is limited to shifting responsibilities to local authorities and users, without working methods and means to match, community management will make little or no difference to sustained functioning, use and hygiene'.

However, the growing emphasis on management, rather than participation, has led to the development of innovative and more participatory capacity building methodologies that emphasize developing learning and problem-solving abilities rather than simply transferring technical skills. The PAD approach, which will be further explained in Chapters 4–6, build on such participatory methodologies.

1.5 Preconditions

The broader level at which capacity building works can be identified by examining a basic set of preconditions for successful community management (see Box). This list underlines the importance of responsibility, financing and control. It also shows that community management does not necessarily mean a diminished role for the support organizations. Community management capacity needs to be improved, and adequate support provided to prepare communities for management roles. Organizations may not therefore have less to do than before, but they will need to concentrate on new and different inputs than in the past. In this sense, they will have to build new capacities of their own, as well as assisting in building and supporting capacity in communities.

Preconditions for community management

* *There must be community demand for an improved system.*
* *The information required to make informed decisions must be available to the community.*
* *Technologies and levels of service must be commensurate with the community's needs and capacity to finance, manage and maintain them.*
* *The community must understand its options and be willing to take responsibility for the system.*
* *The community must be willing to invest in capital and recurrent costs.*
* *The community must be empowered to make decisions to control the system.*
* *The community should have the institutional capacity to manage the development and operation of the system.*
* *The community should have the human resources to run these institutions.*
* *There should be a policy framework to permit and support community management.*
* *Effective external support services must be available from governments, donors, and the private sector (training, technical advice, credit, construction, contractors).*

From the various field studies and experiences, a number of key lessons have emerged, which show that community management (IRC, 1997):

- goes beyond community participation, and equips communities to take charge of their own water supply improvements;
- involves long-term and changing partnership between communities and support agencies, strengthening the capacity of each partner and enabling their combined resources to be used more effectively;
- can mean more widespread implementation of sustainable water supply systems;
- means a new role for support organizations as facilitators rather than providers, demanding new skills and offering greater opportunities;
- means that agencies have to adapt their pace of work to that of the community;
- means that agencies have to make an effort to understand communities, their vision, their logic, their ways of learning; their ways of decision making, etc.;
- brings benefits which can extend its scope beyond water into other development activities; and
- extends its scope beyond rural to peri-urban water supplies.

The shift from community participation to community management is indicative of an important and challenging transformation of perspective in the water sector. Rather than simply being a form of 'super-participation', community management may instead be seen as a major vehicle for transforming the basis of basic service provision from a top-down to a partnership approach.

2. Community management of rural water supplies

This chapter presents some key findings of the 1992 review of literature on community management of improved water supply systems in developing countries, which formed the basis for the PAR project (Evans and Appleton, 1993). These findings are still relevant for recent experiences and provide building blocks for further development in community-managed water supply.

2.1 What is community management?

Community management is 'more than participation', in that it 'emphasizes the community's own decision-making power over those water supplies or components for which they hold or share responsibility' (van Wijk, 1989). While it is possible for a community to participate in a water supply improvement programme designed and controlled by an outside organization, it is not possible for it to manage the system unless it has significant autonomy and decision-making powers.

Although empowerment and greater self-reliance are given as reasons for encouraging community management, community involvement in water supply programmes is often seen as a means of recovering or reducing costs. Thus a strong link is made between community management and community financing. For some, this relationship is indispensable, and is closely linked to the ownership of improved water supply systems by communities themselves. However, communities may not always perceive themselves to be the owners of systems since they have no legal ownership rights. Even when communities do acknowledge ownership of the water supply system, they may not always feel that they are in control of it.

In practice, community management can range from low-cost management of simple wells and boreholes, through more complex systems taking care of piped schemes, to relatively sophisticated local water associations in rural areas. Whether or not a community is really managing its water supply system is easier to see in practice. Many communities play important roles in the performance of basic operation, maintenance and other tasks. However, if the elements of decision-making, contributions to covering costs, and acknowledged responsibility are missing, they are not truly managing the system on their own behalf. The distinctive features of community management are that the community has direct management and decision-making control; it is committed to contributing towards covering costs; and it accepts responsibility for running the system. These are also seen as central preconditions for a transformation from a supply-driven to a demand-driven approach to basic service provision. Community management thus means transferring greater authority and control to communities. This implies the development of a growing partnership between the support organizations and communities.

2.2 Communities as traditional managers of water supply systems

Communities have managed their own water supplies (even though they may not be 'modern' water systems) for thousands of years. Rules for regulating access to water sources, and agreements on appropriate uses for different sources, are commonplace. In many developing countries today, traditional water sources are subject to similar locally developed management rules that operate outside of, or alongside, the regulatory frameworks of national states. Water collection and use is seldom a free-for-all, and is often carefully thought out. Communities often come to explicit or implicit agreements that define uses (drinking water, livestock watering, washing, irrigation, etc.) for water from different sources (wells, springs, streams, rivers, dams, etc.), or at different locations at the same source (along a river bank or a lake shore). Many of these decisions are made by women, who have long played a crucial role in the management of water use.

However, new water supply systems imported from outside often make new demands on communities and require new approaches for successful community management. National socio-economic developments can also undermine pre-existing community-based management systems and reduce the appropriateness and effectiveness of these in new settings. New community management systems should as far as possible build on existing community traditions and institutions. Indigenous systems and traditional leadership in many cases retains considerable authority and continues to play an highly important role. Such leaders should be acknowledged in initial approaches to the community, but at the same time it must be recognized that traditional leaders do not necessarily represent the whole community.

Where traditional authority systems exist alongside modern institutions, they are always likely to make their presence felt to some degree. Development programmes ignore these traditional systems at their peril. Acknowledging their presence and, where possible, seeking ways to integrate them, rather than setting up new ones which may lead to conflict or resistance, is an important step in the development of effective local management organizations.

2.3 Local organization for community management

Although the significance of traditional management practices and local leadership are often acknowledged, the general trend is to assume that new water supply technologies require new forms of local organization to manage them. As noted above, community management can cover a broad range of options, from very local individual or household-level management, all the way to highly formal community water boards. The degree of autonomy of these local organizations can also vary considerably; some may be closely tied to formal local government institutions, whereas others may be much more independent. The level of organization (from the individual household upwards) can have an important influence on the success of community management.

The most common approach adopted by government and donor organizations is to require communities to establish committees to coordinate local management of new schemes. Such local management organizations can either be specifically established to run the water system alone, or the necessary management tasks can be undertaken by existing general development organizations. Which is more appropriate will depend on local circumstances, and, according to the principles implied by the community management concept, should be decided by the

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community itself. Multi-purpose community organizations have often proven to be highly effective.

An often unseen factor in the effectiveness of community management is the influence of charismatic individual leaders in mobilizing community enthusiasm and interest in undertaking management tasks. Community cohesion is an important factor that will contribute to the likelihood of successful community management. A dynamic leader can help to pull a community together and create a common purpose. However, that cohesion does not necessarily mean that communities always need to act in an harmonious and peaceful way. Arguments and disputes, if properly regulated and resolved, can actually serve to strengthen cohesion by providing an important source of validation for local management rules. Competition for water resources can be a positive force in a community in strengthening willingness to manage. This only works, however, when there is an adequate and legitimate legal and authority framework to provide clear boundaries within which disputes can be settled if and when they arise.

Most donor organizations prefer that community water organizations are democratically elected and represent all interests within the community (hence, for example, the insistence of many that women be included). Many communities, however, lack the democratic model of elected representation on which this insistence is based, and find it difficult to quickly adjust to such demands when they are made.

The functions to be performed by local management organizations can vary considerably, depending upon the agreed division of responsibility between the support organization and the community. The next Box gives a typical task description for a village water committee. The example list is brief, but even so the tasks described cover a broad range of skills. Such models require committee members to negotiate on the community's behalf, coordinate and administer technical and managerial tasks, keep accurate financial and administrative records, promote good use of the water system, and regularly communicate and report back to the community. Building the capacity of communities to undertake these responsibilities is seen as a major support task for organizations.

Task description for a community water committee

- to represent the community in contacts with the agency;
- to organize contributions by the community, in cash or kind, towards construction, and towards operations and maintenance;
- to organize proper operation and maintenance, including supervision of caretakers;
- to keep accurate records of all payments and expenditures;
- to promote hygienic and effective use of the new facilities;
- to hold regular committee meetings to discuss and decide on issues, procedures, and problems; and
- to inform the community regularly about decisions and to report on revenues and expenditures.

Source: IRC (1991).

Apart from an adequate skills base, local management organizations also require proper recognition and the legitimate authority to perform their functions. If governments want community-based organizations to take management responsibilities, they must back them with the force of law. While in Latin America community water boards can be found with very closely defined legal status, village water committees in Africa and Asia more often than not lack this official recognition and authority.

The clearest indicator of the success of community management is the extent to which water systems are kept in good working order by the users. A community management approach implies that far greater responsibility for operation and maintenance will fall on the shoulders of the users. In many cases, community roles in operation and maintenance are limited to simple care of water points, doing little more than undertake protective measures to minimize breakdowns. However, other cases indicate that communities are capable of much more. Women, as well as men, can play an important role in keeping systems in good working order, and often play decisive and indispensable roles in ensuring the success of water improvement programmes and in managing the water. Women are capable of taking responsibility for complex technologies, as well as managing basic care of water points.

The relationship between management authority and control over resources may help to further strengthen the role of women. However, in many societies, authority positions are reserved for men. If greater recognition is given to communities as managers, men may be more inclined to keep such positions for themselves. As community involvement grows a gender perspective is even more essential to prevent men from securing a dominant, managerial role and women a dependent role in an area where they formerly enjoyed considerable independence and responsibility.

As with other aspects of community management, adequate support is required to ensure that the full potential of communities is developed. This includes:
• an appropriate technical design to maximize the number of tasks that can be performed by community members themselves;
• proper training in the performance of technical tasks;
• ensuring the availability of spare parts and tools;
• ensuring a proper gender balance in the management process;
• the development of approaches which allow communities to strengthen their problem-solving skills and learn from experience; and
• the development of simple but effective monitoring tools to allow communities to assess and improve their own performance.

Community financing has been seen both as an indicator of the willingness and capacity of a community to take on management responsibilities, and as a precondition for success. On a practical level, the options for community-based financing are broad. Nevertheless, capacity building for communities is required so that they can develop effective financial management and accounting procedures. At the same time, communities themselves have a major role to play in identifying the most appropriate procedures.

The idea that community management should be based on a partnership suggests that limits are recognized. Although communities may be able to take on a very substantial share of management responsibility, the involvement of support organizations may always be required

to some degree. The principal role of these organizations in the future will probably be to facilitate management by communities. This can involve anything from establishing suitably supportive legal and policy frameworks, to providing skills training and ensuring that the necessary spare parts are locally obtainable, up to the development of support approaches.

Water management on a broader scale also means that governments will always have an overall responsibility to ensure that national resources are protected and properly used, and national public health standards maintained. Certain technical requirements, such as the maintenance of sophisticated water treatment works or the monitoring of water quality, may also be beyond the capacity of communities to perform. However, some communities have proven themselves able to carry out sophisticated technical tasks on their own behalf.

2.4 The effectiveness of community management

The effectiveness of community organizations in undertaking management tasks varies considerably. In Latin America, which has the longest experience in community water supply management, highly successful community water boards are often found. In Africa and Asia experience has been very mixed. It does not only depend upon the availability of skills. Where local water management has been successful, this has been attributed to many factors. These include that communities are paying for their supplies, the scarcity of (and hence the felt need for) water in the area, the growth of an active and central role for women in decision-making and control, the community's awareness that if they do not take care of their own water supplies nobody else is likely to, and the extent to which communities have an awareness and desire for the health and other benefits to be obtained.

The extent to which communities themselves determine the form of local management organizations can also have an important impact on their success. In Latin America those locally developed water committees are often more effective than those imposed from outside. At the same time, leaving communities entirely to their own devices may not always be the best way to protect the interests of less powerful members of the community and ensure equity.

The taking on of management tasks has cost implications (in terms of both time and resources) for communities that will affect both their willingness and ability to perform them. Communities may be unwilling to take on management responsibilities if they are unable to see in advance what the cost implications are likely to be (Evans, 1992).

Experiences clearly indicate that prescriptive approaches are not very appropriate, but suitable strategies and frameworks need to be developed which will allow supporting organizations to adapt and respond to local conditions. To be effective, it is important that such approaches are developed in close collaboration with communities, and through the organizations working most closely with communities themselves. Flexible strategies need to be devised which both support the strengthening of community management capacities and allow this to develop at an appropriate pace.

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3. Participatory support work and community management

Differences in insight on community participation and management have consequences for the approach of participatory support work. Different forms of support work can be identified, varying from participation as a first step towards major political change, to participation for obtaining reliable information from the community. Support work can therefore vary from sensitization to make people cooperate in a programme, to giving people more control over facilities and the processes to get the facilities in place.

Participatory support work comes in many shapes and sizes: it can be action-oriented and initiated by the community (or for them by an NGO or government agency that acts as a catalyst), where the community has set the priorities and remains involved throughout the whole process, including the analysis of data and the formulation of a plan of action. On the other hand, there is the more vertical form of participatory support work where an outside support organization takes the initiative to make contact with the community in order to facilitate their community project. Both forms of support initiatives have the right to be called participatory work, but it is obvious that there can be an important difference in their character.

3.1 Two methodologies: self-mobilization or community support programmes?

As discussed above, there are several interpretations of what is participatory support work, which may lead to different methodologies. A methodology of participatory support work may start from the emancipation process of the community, which demands facilities to be geared to their needs and priorities (the community takes the initiative); if a community wants to be involved and to have the possibility of being partners in discussions about decisions concerning the direction their lives will take, development institutes may also decide to cooperate with the population: to be at their service, to work on their priorities, to use their knowledge and wisdom, to involve them in the process of decision making for policies that may change their lives (the support organization takes the initiative).

This division is somewhat artificial, and most of the time one can speak of a combination of these two possibilities. However, seen from these two angles, it is clear that this may lead to two kinds of methodologies. The first one is self-mobilization, in which people take initiatives to change systems independently of external institutes (sometimes initiated by political organizations or local NGOs). They develop contacts and skills, and find their way through bureaucratic procedures to gain access to knowledge and information in order to be involved in decision making. The second methodology is one in which the support staff look for the best way to involve the people in community support programmes. The methodology described in the following chapters will usually be initiated by support organizations, although it does not exclude community initiatives.

In each phase of PAD (diagnosing, experimenting and sustaining), the participatory support work involves a number of steps, in which the choice of community-initiated or organization-initiated support can become apparent.

In the case of PAD for community water supply management, the questions and priorities should be based on the needs of the community as seen and formulated by the community members themselves. During the diagnosing phase, the first steps – setting goals and prioritizing objectives – are therefore the most important in the process. At this level it is possible to assess the degree of participation in the methodology as a whole. Some external support staff may come with two or three work proposals and consult the community to tell them what would be the most suitable to work on. Can that be called participatory support work? Alternatively, a community workshop is organized in which the community members set priorities on which to work, and ask the representatives of an institute to support them in order to produce possible solutions. This will only work if there is a common understanding from the outset between the community and the outsiders concerning the aims and forms of cooperation and expected roles of all the parties involved.

However, communications between the community and outsiders can face many pitfalls, and it becomes sometimes difficult to distinguish between these two approaches. NGOs and other support organizations are often initiators of the process of communication and often have difficulties in hiding their own agendas. Water engineers will probably not always be thrilled to hear that the priorities of the community concern economic or management issues, when they would like to work on the technical aspects of water supply.

3.2   Problem diagnosis

The next step in the support work is the actual diagnosis of problems and possible solutions in order to be able to set the agenda for the joint work to be done. Many conventional appraisal methods are inappropriate within a context of participatory support work, if the aim is to encourage community participation in problem diagnosis and increasing awareness and self-confidence in improving the situation. When aiming at maximum community participation, the methods chosen should be:

- relatively simple, using visual aids, so that they are controllable by insiders and stimulate participation;
- quick, to prevent frustration and loss of interest;
- aimed at knowing only what is really needed; and
- include intensive group sessions to enhance awareness and joint responsibility.

Formal assessments are not totally impossible, but they have to be based on the questions from the community (reflecting their priorities and using their vernacular). For instance, one can design an assessment procedure, do a pilot study with it and discuss with the community what were the good and negative points of the assessment method applied. Community members may carry out the observations. The same can apply to interviews.

An important focus in participatory support work is the difference in problem perception and analysis between outsiders with a professional background ('based on academic study') and the members of a community. Since support activities should be related to the perceived needs of community members, participatory diagnosis plays an essential role. It will also lay the foundation for subsequent community participation in other activities.

3.3   Data collection

The actual data collection can also be done in a participatory way. Information and data can be obtained from community members through surveys and questions, but they can also be collected with and by the community members. In this case, the community members are actually doing the diagnosis of the system and the surrounding social structure themselves, but this demands considerable commitment on their part. It is obvious that the appraisal design should be appropriate to answer to their questions. In diagnosis in which people are asked about their attitudes, local customs, knowledge and behaviour, good methodology involves these people in formulating the best questions and methods. This goes much further than just doing rapid appraisal to identify practical problems. Listening to community members becomes an important tool.

The analysis of the data obtained through the diagnosis is another field in which participation can be encouraged. Of course, the possibilities for this will vary with each support project, but it should be realized that the findings made by the outsiders in a more conventional setting will still have to be translated to the community. Findings obtained by the community members themselves do not need translation and will have much more impact. Some of the methods will in themselves guarantee the involvement of the community in this process.

Many examples of how this can be done are given in the second document in this series, *Facilitating Community Discovery: getting to know about water management.*

> ### The community situation analysis
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> *The community situation analysis carried out in some villages in north-west **Cameroon** is a good example. After a village walk through the outskirts of their villages, villagers jointly make a map of their villages and provide information on how water is used in different parts of the year, and by whom (in terms of amount, people, economic uses). While this information is being provided, what this means for the community can be analyzed at the same time.*

3.4   Reporting and communication

The way of reporting is another crucial difference between the more conventional and participatory support approaches. Outside support workers may often report just to their colleagues and the sponsors of the project. They are sometimes not trained in writing comprehensibly, so that their reports are difficult to read, and the use of professional terminology means that they are inaccessible to others. This in itself makes democratic discussions of the results of the work carried out rather difficult. At best, the results will be discussed among small, exclusive groups of professionals, and even the sponsors may depend on the professionals to interpret and explain. Participatory support approaches stand out as a form of support work in which the results are distributed in a way that enables people from outside the support organization, i.e. community members, to participate in the discussion. This may have little professional prestige, but will give a lot of satisfaction and provides a way of checking the validity and relevance of the results.

Participatory support approaches incorporate various styles and procedures for organizing new data and knowledge according to the level of political conscience and ability to understand written, verbal or visual messages by the participating communities and the public in general.

Three levels of communication are thus established, depending on whether the message and systematized information are addressed to local people (who may be pre-literate), leaders or professionals.

A good support worker oriented to improving the participation of community members should be able to address all three levels with the same message in different styles, using written, verbal or visual means to communicate the message, including images, sound, paintings, gestures, mime, photographs, radio programmes, popular theatre, videotapes, audio-visual materials, poetry, music, puppets or exhibitions. In the participatory support approach there is a strong emphasis on the duty to provide systematic feedback on the information gained to the communities and organizations, because they continue to be the owners. The owners may determine the priorities for its use, and authorize and establish the conditions for its further dissemination. This information should be disseminated in plain and understandable language, using common expressions, that is accessible to everyone. The arrogance and technical jargon that spring from professional practices in the water and other sectors should be avoided.

These different forms and levels of participation can be identified in each of the steps mentioned earlier. It may be obvious that there are many forms of participatory support approach, and that there are no standard rules for such approaches. There are, however, some basic principles that concern the process of participation, quality control and communication skills.

It may seem that full participation at all levels and stages will be the ideal form of PAD for community water management, but this is an illusion. In developing countries in particular, people will not always have the time and energy to be involved. If community members are to be used as interviewers, it should be remembered that their involvement prevents them from performing other economic activities, and thus sometimes you will have to pay for their work. Also, if the project lasts a long time, it may be difficult to keep their enthusiasm going, especially if the results of the project have no immediately visible benefits. On the other hand, if the advantages and possible results are clearly related to improvements in the prosperity of the community, long-lasting participation and involvement are likely to follow. If so, the support project might end up participating in the development endeavour of the community or region, rather than the reverse (Lammerink and Wolffers, 1994).

4 PAD: A methodology for supporting community water management

This chapter focuses on the rationale behind the PAD approach for community water management. It will contribute to better understanding the key features.

4.1 Concepts and definitions

The concepts approach, methodology, methods and tools are often used interchangeably and in confusing ways. Making a clear distinction between these concepts at the start will clarify what is meant when using one or the other concept – see Box .

Approach, methodology, methods and tools

*In our context, the concept of **approach** refers to a set of opinions on why and how. An approach is always based on a conscious (or unconscious) philosophy. An approach can lead to and will define the boundaries of a particular methodology.*

*A **methodology** is synonymous with '**strategy**' (a term first used in the martial arts). It is the plan that includes all the steps necessary to reach a general goal based on a certain well-defined approach.*

*A **method**, which is synonymous with '**tactic**', can be defined as a set of techniques or tools that are used in a logical order in order to achieve a specific objective or goal. A method makes use of these techniques in an optimal way in a certain context.*

*The concepts **tools** and **techniques** are different from methods. Each tool/technique has a purpose, which depends on the reason why it is being used. A technique or tool does not have a fixed purpose or objective, but can be adapted to each and every situation. Thus, before using a tool or technique, the objective first has to be clearly defined.*

A methodology can be distinguished from a method in the same way as a strategy can be distinguished from a tactic. Within a methodology a variety of methods can be used, depending on the context and the specific situation in which the methodology is to be implemented. There may be many ways to reach a particular goal depending on the situation and circumstances, but the path chosen should not affect the selected methodology.

Involving people in the analysis of problems that affect them and in the design of potential solutions is a good way to achieve sustainable development. Although more time-consuming than traditional development approaches that rely on 'blueprint' plans and development experts, participatory approaches generally lead to development efforts that are sustainable over the long term because the people themselves have an interest in their success.

This is precisely the focus and rationale behind PAD for community water management. The simplest description of 'participatory action development' is that it is a way of doing development work in which all those involved contribute both to the creative thinking that goes into the undertaking, and to the action which is the subject of the development work.

This methodology aims to respond to the expressed needs of a community related to their management tasks in relation to public services. It aims to find solutions to concrete problems and conflicts in the management of rural water supplies by communities, and also to enhance their problem-solving capacity.

4.2 Appraisal, training and action

By stressing the relationship between appraisal, training and action, the PAD approach is useful for:
- finding solutions to social problems,
- identifying the needs for change, and
- working out improved knowledge, technology and patterns of action in order to meet those needs.

This approach can bring benefits to everyone involved: support organizations working in communities can strengthen their own capacities and effectiveness, and thus cope with the increased demand for community management; and the community can enhance its capacity to solve its own problems. The approach is a learning process for all involved: learning from the experience of social action, learning both about the development process itself and the outcome, i.e. improved management. It is linked directly to the identification, development and testing of specific problem-solving strategies and tools together with men and women in the communities concerned (the 'action' element) (Lammerink, 1995).

In the PAD approach, (some) community members actively participate with 'support workers' throughout the process, from the initial design of the support process, through data gathering and analysis, to the final presentation of results and discussion of their action implications (Whyte, 1991). The community is actively engaged in the quest for information and ideas to guide their future actions. These practitioners are involved as both subjects and local development workers. An important feature of PAD is the dialogue between development professionals from the support organization and people at the grassroots.

PAD offers an effective and powerful strategy for the type of interdisciplinary work that is needed to improve the community management of rural water supplies. (In this context interdisciplinary work refers to work that developed out of different scientific disciplines, which can contribute to the understanding of problems and to identifying opportunities).It also allows for a better understanding of the strengths and weaknesses of community management. It permits rapid adjustment to different local conditions in different countries in Africa, Asia and Latin America. In particular, by applying short feedback mechanisms, it can stay close to reality.

4.3 Common features of PAD projects

All projects based on PAD share common features, which according to Barton *et al.*, (1997) include three foci – local, action and process:

Local focus:

- An orientation towards the felt needs of local people and institutions. PAD deals with issues directly experienced and explicitly acknowledged as problems by local people and institutions.
- A strong link with locally generated initiatives. PAD aims at generating information and supporting decision-making processes useful for local aims and applicable to local initiatives.
- The involvement of non-local professionals as partners in a learning process. Non-local professionals contribute to PAD as facilitators or by providing technical/ management information, and via discussions and negotiations with local actors. Typically, they serve more as facilitators than as experts.

Action focus:

- A minimal time gap between data collection, analysis and feedback. The timeliness of analysis and rapidity of feedback are important, both to increase the cost-effectiveness of the support activities, and to promote the practical utility of the results.
- A direct feeding of analysis results into planning and action. PAD incorporates methods for translating the knowledge gained directly into practical decisions and/or feasible courses of action.

Process focus:

- An equal concern for process and results. PAD aims at making all participants aware of the implications of the issue (problem, situation, possible solutions, outcome of experiments) being analyzed and supporting them in undertaking relevant action.
- A built-in communication strategy. Final written reports are useful for institutional or training purposes of professionals, but meetings, posters, theatre, workshops are more important means of providing feedback to local institutions and the community at large.

The PAD methodology places strong emphasis on participatory and gender-sensitive appraisal and needs assessment methods. It uses both qualitative and quantitative data collection on system performance and service, such as distribution problems, breakdown rates, costings, and local organization.

4.4 The phases of PAD

In general, the description of the approach follows the three general phases of PAD: diagnosing, experimenting and sustaining.

For the diagnosis, a combination of methods and different tools are available, some of which emanate from the tradition of participatory research and participatory rural appraisal (PRA), such as semi-structured interviews, observations, participatory mapping, transects, seasonal and other diagrams of flows, causality, trends and local organizational relationships, ranking; brainstorming and portraits or case studies of experiments. For feedback, various visual and

communication tools can be used, such as village meetings, theatre, puppet shows, celebrations, games, posters, and other visual means.

Implementation follows a logical sequence, starting with the joint preparation by fieldworkers and project staff of a common framework for a support project and the selection of communities. This is followed by a participatory situation analysis, a needs assessment and problem identification, and recording past experiences and identifying possible solutions. All of these activities together form the *diagnosing* phase.

An interactive process will be established with the communities to define the management aspects to be explored and to discuss, jointly design and adapt possible solutions to the conditions and needs of the community. These solutions, which may include technical readjustments to the water system, can lead to the field testing and evaluation of these possible problem-solving strategies, comprising of methods and tools for improved management. These joint activities form the *experimenting* phase.

The third and final part of the approach, the *sustaining* phase, focuses on disseminating and sharing the findings, and planning and coordinating further work in order to sustain the process.

Over the years of experimenting with this methodology, we have been able to assess which organizational approaches and tools are most effective in helping both rural communities and their local water management organizations to obtain and preserve an effective water supply service. Chapter 5 addresses the process as a whole, in order to build an understanding of the logic and sequence of the three phases of the PAD approach.

5. Phases and activities of the PAD approach

5.1 Introduction

The PAD approach encompasses a number of steps, activities, methods and tools to encourage the full participation of men and women in improving the community management of their water supply and sanitation systems.

As noted in the previous chapter, the PAD approach involves various activities clustered into three phases: diagnosing, experimenting and sustaining. Specific aspects of each phase, and its activities, methods and tools are dealt with in other documents in this series. This chapter addresses the process as a whole, and explains the logic and the sequence of steps within each phase. The chapter describes briefly what each step encompasses, and explains the coherence between them. It is stressed that the sequence of these steps these should not be regarded as fixed; each actual process may differ, so that if necessary, some steps may be repeated or run in parallel. In some cases, one might even move back and forward, increasing the participants' understanding in the process.

It should be clear from the preceding chapters that a PAD approach to community management requires a methodology that is sufficiently flexible and compatible to enable rural communities and support organizations to share, analyze and enhance their understanding, and allow them to plan and implement problem-solving activities. To allow for the proper and flexible development of the PAD approach, training, support and backstopping in developing and executing this type of participatory work is needed, which can be given by support organizations and fieldworkers with experience in applying the methodology. In addition, the field staff of support organizations need access to problem-solving and gender-specific methods and tools in order to deal with the particular problems and issues that emerge from the studies. These tools, which are elaborated in the other documents in this series, are based on experiences in participatory action research projects to improve community management. These tools can be used by institutions and communities to develop their own, local problem-solving methods and tools. The manuals contain a wide selection of methods and tools for PAD.

The following section describes the steps in the diagnosing, experimenting and sustaining phases, and each of their activities and outcomes. Some activities will be continuous throughout the process, such as:
- community members will take all decisions at the local level;
- community organizations will be strengthened and empowered;
- community members will develop their understanding of management principles and practices for the water supply; and
- new ideas about a possible future will be encouraged.

5.2 The diagnosing phase

The steps in the diagnosing phase include: preparation, training for the support team, selecting the communities, and identifying problems and possible solutions.

Preparation

In this step of the diagnosing phase, the support organization might have to form an interdisciplinary male/female project team of two to three people, representing technical and social expertise, but local development teams at the community level can also be formed. New teams can prepare themselves by collecting and reviewing information on other examples of community management of water supplies in their country, holding discussions with other support organizations on their approaches, and assessing common problems from the points of view of the community and the organization. Field visits to other community-managed projects may also be useful.

This step allows the support organization to get a general overview of experiences and results with community management in their own country, and provides an opportunity for the support staff to orientate themselves in the field with respect to issues to which they may have paid little attention, such as gender and the environment (IRC, 1997).

Training

The team of professionals will need to develop appropriate attitudes and skills for participatory work, perhaps through training and capacity-building activities such as workshops on analysis and facilitation (Hope and Timmel, 1987). Attention should also be paid to enhancing the community's experimentation and documentation skills; the latter skills will be needed to record the outcomes of the support work and the process. Such records can be used to improve the support organization's methodology and to make the approach more sustainable.

An important element in these preparations is team building. Smooth teamwork and effective collaboration will not happen automatically, but they are essential for the learning process of all involved. Teamwork also involves mutual trust and dialogue. Dialogue can begin in small groups, in which team members can share their own perceptions of a problem, offer their opinions and ideas, and make recommendations or take decisions.

The need for the team to gain self-confidence is also often neglected. This will not happen quickly, but is mostly a matter of practice, and requires a genuine belief in the importance of each contribution in bringing about improvements and transformations. From the outset, a team should pay attention to all aspects of team building, including groupwork skills, as well as the ability to listen, observe and question, and to offer feedback. In many teams these skills are lacking.

Groupwork methods are meant to help structure the work time together, so that teams can learn ways to unite team efforts towards the support tasks. Groupwork skills can make team members more sensitive to how others see them, and can make them more realistic about the changes they are promoting. Teams should practice the participatory principles they promote – if they believe that the participation of people is essential for the transformation of society, then their own functioning and the methods they use must also be consistent with that aim.

Joint 'planning and training' workshops may be held during the preparatory phase, during which the project team from the support organization can

- exchange preliminary findings from their assessments,
- develop a common support approach and agree on an analytical framework,
- develop criteria for selecting project communities, and
- identify appropriate participatory and gender-specific methods and tools for carrying out the performance assessments with community members.

The team may also prepare support methodologies and implementation plans, and draft material to brief their own organization. Such briefs should include consideration of gender aspects. For example, do both women and men participate in initiating, planning and establishing a water supply system? In what capacity are men and women involved in the management of the system, and how does this affect service? Has the involvement of both men and women led to changes in gender relations? From the outset, it is also important to discuss joint ideas for sustaining the process, starting in the community, in order to explore for outlets for disseminating the results and details of the process.

Such planning and training workshops can be facilitated by members of organizations that have already experienced the PAD approach and have developed training facilities. Such organizations already exist in at least seven countries, and their number is likely to grow in the future.

Selecting communities

Following the workshop, work may begin on preparing a detailed workplan based on the set of criteria for selecting communities shown in the next Box. This selection can be based either on communities that have requested an intervention (this is the ideal starting situation), or on communities known to the support organization. If the latter is the case, efforts should be made to encourage more communities to enter the process.

The support team's work with the community can start with gathering and analyzing secondary information, and building a relationship with the people in order to reach a basic agreement. A mutual contract on how to work together can be part of such an agreement. A party and having fun together can help in the dialogue, but so also can a community walk.

Criteria for selecting communities

Two criteria for the final selection of communities are:
(a)   whether the community is aware of the direct and wider implications of a declining water resource base,
(b)   whether sufficient scope exists within the community to sustain the process, i.e. the leadership should be adequate, and there should be no opposing factions that may hamper action.

It is important to establish as soon as possible a practical and clear basis for the proposed collaboration, which may be a contract describing the proposed process, the role of the participants, the potential outcomes, and the proposed methods of working with the

community. The support organization and the community should together draft the contract and agreed upon.

At the end of this step, the team members should be able to implement the PAD methodology. The communities should have been selected and agreements reached. There should be a preliminary understanding of its socio-cultural, physical and technical situation of each community. Team building efforts, and training to develop facilitating and documentation skills should have begun. A core network of individuals and organizations that may contribute to strengthening and sustaining the process, and can use the outcomes should be identified. Based on previous experiences, at IRC we have opted to establish so-called national reference groups (see Box).

National reflection

Earlier experiences with the PAD approach in the water sector have revealed that, because of the innovative nature of the participatory support work, it may be useful to set up a national or regional body with a mandate to reflect on the activities in the field. Such a body can be organized through existing sectoral coordinating bodies or by forming a national project reference group. This reference group can provide a forum for sharing information on activities, progress and results throughout project implementation, contributing to the development of effective community management of rural water supply systems throughout the country. At the same time, the support organization can strengthen its collaborative links with government, national research institutions and members of other national support organizations involved in water sector development.

Identifying problems and possible solutions

In this step of the diagnosing phase the support team helps each community to describe and analyze their water supply system, to identify their problems and opportunities in community management, clarifying exactly whose problems are being identified. Important parts elements in this analysis include a performance assessment to gain a preliminary understanding of local socio-cultural and water-related environmental conditions, as well as mapping exercises and surveys of general sanitary conditions. The process also includes assessments of gender issues related to the establishment and management of the water supply system, such as the roles of men and women in local management, the effects of gender factors on the efficiency and use of the water supply, environmental concerns such as water source protection and watershed management, and issues of cost recovery and community-based financial management.

During meetings, informal gatherings and interviews with key individuals, the team and community members can determine the range of topics of interest and concern related to the local water supply. The community members are encouraged to evaluate themselves, and to compare their findings and experiences with other communities through exchange visits.

The next part of this step involves a series of activities which can be summarized as developing the agenda for experimentation: gathering information for detailed analysis of priority problems and identifying promising solutions. The agenda may include screening

indigenous technical knowledge and past experimentation in the community, as well as gathering promising ideas from outside the community as options for further testing.

The staff of the support organization can begin analyzing the data, although the results should be continuously reviewed by the community in a series of return field visits. During these visits the objectives will be to establish criteria for setting priorities (for example, by asking a key individual in the community to rank them), to critically review potential solutions by assessing their advantages and disadvantages, to reach agreement on the agenda for experimentation, and to formulate precisely exactly what should be tested, and by whom. The last part can be done at a village meeting or other gathering.

At the end of this phase, it may useful to report the results and the process followed back to the national reference group, if one has been established.

Outcomes

The outcomes of this phase should be an overview of the community water supply system, and improved skills among the members of the community and the project team. They should now be able to identify problems, to understand existing cause–effect relationships, and to detect promising 'solutions' (based on indigenous knowledge as well as technical knowledge from outside). Also, consensus should have been reached on the list of priority problems and on possible solutions to be tested (an agreed 'research agenda'). Other outcomes include increased awareness, self-confidence, trust, appreciation, and increased rapport between outsiders and the community. The community should now have an effective organization that will provide a firm basis for experimentation.

5.3   The experimenting phase

The two steps in the experimenting phase involve the community members experimenting and evaluating possible solutions.

Community experiments

The overall aim of this phase is to design experiments that are reliable as well as manageable, and which can be monitored and evaluated by the community members themselves. To achieve this, the local capacities – i.e. skills, self-confidence and organization – need to be enhanced so that the community can independently plan and design its own experiments and can improve, reinforce, enhance and add to existing experimental practices. Capacity building also includes the ability to set up and monitor experiments, which will require skills training, team building, and efforts to strengthen exchange and supportive linkages with other communities or community members.

Activities to be developed during this phase include reviews of existing experimental practices, by exchange visits to relevant communities, and workshops for examining possible solutions. During these workshops the community can plan and design the selected experiments, and decide on their scale and layout, what inputs will be required, and who will participate.

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Evaluating possible solutions

It is also important to decide right from the start on the criteria that will be used to evaluate the success of an experiment. Adequate monitoring and evaluation methods will therefore have to be developed and decided upon, answering questions such as what should be observed, measured and/or recorded, and when and how should such information be gathered.

After these preparations, community members and by facilitating outsiders can begin to establish, manage and monitor. The experiments can be evaluated throughout the implementation phase, and group meetings can be held so that community members can discuss the results and begin to draw conclusions. However, the results of all observations need to be brought together and systematically analyzed. If the same experiment is also being carried out in other villages, the analysis may be conducted at both group and inter-village levels. The analysis will include recognizing unintended consequences, and how the innovation could contribute to solving other problems in a sustainable way.

Outcomes

The main outcomes of this step should be the greater involvement of all members of the community, armed with a better understanding of the process, and enhanced practical skills. If the experiments have been well planned and designed, they will allow the use of simple monitoring and evaluation methods. The process of experimenting and evaluation should lead to more sharing and cooperation among community members, as well the more active support of outside institutions.

From the feedback provided by the evaluations, a clear picture should emerge of both the experimental results and the process that has been followed. Preferably, this picture should be discernible to a wide range of community members other than the experimenters, but at least for all members of the water management committee. There should be a clear indication of the suitability of the various management practices under local conditions, and technical guidelines on how to implement the tested idea. Of course, the solutions accepted or rejected by the community should also be recorded. The process should serve to build the community's the confidence in its ability to solve problems, and to create a supportive environment for experimenting..

Some experiments may need further adaptations, or additional related experiments may need to be designed. Eventually, the community may conclude that the organization of the experiment could be improved, for example, the cooperation among groups, the set-up of the experiments, monitoring methods and contacts with outsiders.

Other outcomes of this step could include:
- the successful dissemination of strategies, methods and tools;
- the development of institutional linkages;
- the establishment of a system for training and communication;
- a well-documented and operational model of the PAD approach in the water sector; and
- a set of resource materials that can also be used in other areas of interest.

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5.4 The sustaining phase

The two steps in the sustaining phase of PAD are sharing and evaluating the results.

Sharing results

Many experiences have shown that good ideas diffuse spontaneously, as the experimenting communities share their results with neighbours, pass on management advice, or make use of the traditional inter-village 'grapevine'. These effects can be amplified by setting up a programme to share the results with others. An important component of such a programme is the mobilization of the networks developed during earlier phases, as channels for communication and dissemination.

Such a programme could focus on the outcomes (new management practices, the use of indigenous trees to protect water sources, etc.) of community experiments, while emphasizing the basic ideas and principles underlying the experiments, and the methodological aspects of the PAD process. The programme could also publicize the experiences of particular communities, together with ideas about promising 'solutions' that could be tested elsewhere, and tips on 'how to experiment', such as testing innovative concepts, acquiring skills, and the organization required.

This last phase of the PAD approach is important because the participatory process should lead to self-management. The aim is to leave communities with a greater capacity to implement effective participatory processes, and the ability to find solutions for future/other situations that need improvement. The key to sustainability is a support approach that addresses the priorities of the community (in this case with respect to improving the management of their water supply and sanitation systems), and which is fully compatible with local conditions and culture so that community members can build on it independently with further experimentation. Communities will sustain what meets their objectives and reject what does not.

Right from the start of the process, the PAD team has to be concerned with organizational development and the creation of other favourable (external) conditions, in order that the community will continue to experiment in other situations that need to be improved in the future, whether related to their water supply system or in other fields. Members of village committees might also develop new functions as PAD practitioners, fostering emerging organizational structures in the community.

Throughout the process, the role of the external support team gradually changes. They gradually 'wind up' and 'phase out' their support by consciously changing their role as providers of direct management support and facilitation, to that of an external consultant called in only at the request of the community. However, at the same time they maintain their interest in issues such as scaling up the experience to the regional or national level.

Evaluation

The sustaining phase continues with the evaluation of tested problem-solving strategies (the experiments) with the community, the further systematization of processes and results (at the level of the community and of local support organizations), and helping to ensure the sustainability of the process within the community.

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Activities during this phase may include inviting key individuals to attend planning/ evaluation meetings and organizing field workshops. It is also important to document details of the process of development and the methods used for diagnosing and experimenting. At the same time, community members can put together manuals and audio-visual materials, and continued leadership training may be needed. Special attention should be given to encouraging networking between community members and organizations in order to consolidate institutional support for local processes.

Outcomes

Possible outcomes of this final phase include:
- inter-community networks and/or linkages with support organizations;
- a well-documented and operational approach for designing and implementing experiments that can be used to improve water supply management as well as in other fields;
- a larger number of communities involved in processes of action and development for community management; and, eventually
- an established community-managed system of inter-community training and communication.

6 PAD in practice: knowledge more valuable than gifts

6.1 A case study

Villagers in Nkoundja, Cameroon visited the neighbouring village of Nyen to find out how people there were solving their problems in managing, operating, and maintaining their water systems. After the visit, one man said, 'The knowledge we gained from this is much more valuable than gifts. It is something we can keep for life'. The visit also had an immediate effect on Nkoundja's water caretaker who, after talking to his counterpart in Nyen, realized he had to change. 'We had discussed this over and over again, but his behaviour never changed', said Mr Issiaka Njankouo, one of the community research team members. 'Now his attitude has changed radically and he is working really well'.

Such 'exchange' visits have proven to be very useful components in this research project to test the PAD approach, which was conducted by IRC in six countries. In each case, an NGO has supported the people of four villages to build their capacities to manage their own water supply and sanitation systems.

The PAD teams from the six countries, together with elected men and women from rural communities, a national reference group in each country, and an international reference group, are now consolidating and sharing the lessons learned from their experiences in managing the maintenance, financing and use of their water supply systems, provided either by the government or through an NGO.

In 1994, the partner organizations (all NGOs) established national PAD teams. Each PAD team usually comprises two or three men and women with relevant technical and social science experience. The PAD teams began work later in the year to prepare a situation analysis of the local management of rural water supply systems in each country. The team reviewed the relevant documents, and interviewed the staff of organizations working in the water sector, asking them about their policies and strategies for improving the local management of the water systems after their work is completed. Each team also carried out an in-depth case study of the attempts of a rural community to manage its improved water supply system. The results are quite revealing (see Box).

These country studies provided the basis for a planning and training workshop at which the researchers together developed the design for the PAD process for selecting communities, forming local PAD teams, for assessing local management practices and analyzing the results.

Following three regional workshops on skills development, each team then facilitated the selection of four 'partner' communities, based on their interest in becoming partners in the proposed action research, on whether they were representative of the level of water management skills and socio-economic situation in their country. Building rapport with the local people and community organizations by means of village walks and exploratory meetings was an important aspect of the first visits.

Situation analysis of community management in six countries

• *in each of the six countries, community management of completed rural water supply systems is accepted national policy, but implementation is not universal and each agency has its own procedures;*

• *so far, no government treats communities as future managers who can make their own choices from a range of options. None trains communities in all aspects of community management. Training focuses on technical tasks and book-keeping, and is mostly given to men;*

• *experiences with existing community-managed water supply systems vary. In Cameroon, for example, such schemes show very low breakdown rates, whereas many other schemes built without community involvement are no longer operational. Others report that many community-managed systems do not function well, partly for technical and/or environmental reasons, and partly due to poor administration and lack of management training and support.*

• *some community members are not served because of poor water distribution and poor network management. Several of them contributed (in cash or in kind) to the construction of the system, but have not reaped the benefits;*

• *the problems in existing systems may be technical, managerial and/or socio-economic, but the communities first mention only technical problems, and the other problems surface only after further probing and discussion;*

• *records of financial transactions and agreements made during meetings are rarely kept, and this erodes the confidence of the community members. Communications are poor and information is rarely shared by the local leadership;*

• *many external support agencies stipulate preconditions for future management, usually the formation of a water committee with some women representation. However, little is done to develop management tools or training.*

In each participating village, local PAD team members were elected from among community water management organizations and water users. The teams were given training in analyzing the water situation and, in particular, in identifying problems and appropriate solutions. In a second round of regional training workshops involving the national PAD teams, the preliminary findings were assessed to determine how the local teams would be involved in the next phase of community experimentation. The participants discussed the role of the teams in field-testing, and the skills that would be necessary. The local PAD teams then drew up schedules for experimenting with and field testing the problem-solving strategies, methods and tools, as well as for monitoring and evaluation.

6.2   Community selection

Not surprisingly, given that PAD projects do not promise poor communities tangible rewards such as new water supply systems or latrines, gauging their 'interest' in the project poses a real challenge. How does one 'sell' community management capacity to a group of villagers? Is it realistic to try to interest them in an abstract idea such as a participatory process to enhance community management capacity?

Dealing with these questions called for intensive negotiations between the staff of the organization and community representatives. In Colombia and Guatemala, the members of the

national team 'sold' the process using established participatory techniques, such as mapping and pinning newspapers on walls, in order to initiate discussions of the local water situation and what the people regarded as their most important requirements. In Nepal, the national team used a poster of a chicken hatching an egg to explain that, although the hen (the support team) provides warmth and protection, it is the chick's (the community's) responsibility to hatch and grow.

In most communities the people were enthusiastic about improving their management capabilities, and met the selection criterion 'a genuinely interested community', but most country support teams added their own criteria. In Colombia, for example, the team looked at the level of poverty, while in Kenya and Cameroon they tried to reflect the cultural diversity of the communities, which has a major bearing on how local water supplies are managed. In Nepal, the team was particularly anxious to bring on board a variety of implementing organizations.

6.3   The creation of local PAD teams

To work towards capacity building at the community level, each community selected a local PAD team. The creation and role of these teams was much more than a 'methodological step' to ensure community involvement; they can be viewed (justifiably) as indispensable actors and agents of change, both in implementing the PAD approach, and in putting the findings and recommendations into practice.

In La Sirena, a village in the hills near the Colombian city of Cali, local team members were chosen for their experience in and aptitude for community work. For the villagers of Ceylan in Valle District, which is famous for its coffee plantations and agro-industries, the most important factors in the selection were appropriate training and clear leadership potential. Eventually, they picked a 16-year old student who they felt already possessed the right qualities to become an effective community leader.

In the Quiche zone of Guatemala, where educational standards are low, the community put the bonus on an individual's willingness to participate. A large number of older, illiterate people are actively involved in the team, helping to give the local PAD teams the image of reliability. A gender-specific approach was needed in Pakistan, so separate teams of men and women were established. Overall, there was broad agreement among the communities in all three continents that, to be an effective team member, an aptitude for community work, leadership skills, and some knowledge of local history are more important than education qualifications.

Once elected, the local PAD team members received training in diagnosis and appraisal techniques. The 10 women and 13 men of the Cali team attended a two-day workshop where they were able to talk about what they understood by the terms 'participation', 'community organization', 'gender', 'indigenous knowledge' and 'community diagnosis'. The participants felt that standard participatory techniques left a lot to be desired, and modified them to suit local circumstances. After the workshop, the local team prepared an illustrated report that provided useful guidelines for planning the next stage – the community diagnosis – which the team now felt they could carry out. They were proud to be known as 'the water and sanitation PAD members'.

6.4   Diagnosing the problems

In the village of Belen in Guatemala, the community identified their water-related problems and possible short-term solutions, and then proceeded to a more general community diagnosis.

In Nepal, the teams began their appraisal by organizing exchange visits between villages. The Rangapur team spent two days with their neighbours in Gajedi to assess the villagers' needs and to make some suggestions. After a briefing on water supply and sanitation schemes, the Rangapur team members visited all the village standposts, where they talked to the users and their families. Later, at an open meeting they discussed their findings with the villagers and made some suggestions for change. Soon after, it was the turn of the Gajedi group to visit Rangapur.

A 'village walk' launched the diagnosis in the neighbouring villages of Nyen and Mbemi, in Cameroon's English-speaking western province. The national PAD team, together with members of the village water committee and district officials, spent three hours walking around the two villages. They noted particular features, evaluated the performance of the water supply system, listened to people's complaints about the service and learned more about the local palm and raffia tree industry which, although it is the community's main source of income (producing oil, wine, baskets and bags), it also swallows up a sizeable amount of its water.

The village walk helped to establish contact with the villagers, and it also acted as a launch pad for the village mapping. According to Mr Amouye of the Cameroon PAD team, 'In the afternoon when we were making the two maps, the group of participants gradually grew. This continued the next day when [the villagers] drew a Venn diagram to show the key individuals and institutional relationships for water supply decision making'.

Community diagnosis is designed and planned by project teams in collaboration with local research teams. They select a specific set of PRA techniques to facilitate the collection and the sharing of qualitative and quantitative information. Diagnosis deals with the socio-economic, technical, managerial, hygiene and other practical aspects of the local water supply and sanitation facilities. During the diagnosis, women and men may express their feelings, interest and viewpoints using drawings, maps and matrices.

All of this information takes into account the different roles and expectations of women and men in relation to water supplies, water resource management, water use or local management. The depth of the diagnosis depends on the individual community. The experiences of the six countries so far suggest that diagnosis is a continuous process – the communities will continue to identify new problems, as well as resources and the social changes that will be necessary to resolve them, irrespective of the stage reached by the project.

6.5   Problem-solving strategies

The communities then started to develop their own strategies, methods and tools to address managerial problems, and to monitor the effects of any reforms on service performance. Next, they put these problem-solving strategies to the test.

The country PAD teams continue to play a supporting role, helping to strengthen local capacity in areas such as skills development, team building, confidence building for women and men, and in forging links with other communities or organizations. They also help to improve maintenance, to ensure that payment systems work, and to protect water sources. In some cases, their small budgets even allow them to fund some technical improvements to the community water supply system itself.

One of the main management skills to be strengthened is the effective monitoring of both the research process and its impacts. On the basis of the results from close, continuous monitoring, adjustments may be made to the strategies, methods and tools, in accordance with local requirements. Monitoring approaches are developed jointly by the partner organizations and the communities to ensure that they provide the best possible learning opportunities for all concerned. After some time the teams carry out a final evaluation of the process, and of its achievements. These findings are then analyzed jointly by the communities and the organizations.

The PAD teams from the NGOs in representative communities have strengthened their own capacities and have become more effective. The PAD approach has also enhanced the problem-solving abilities of both the community and the support organization, and the role of the support worker has clearly changed to that of convenor, colleague, catalyst and sometimes consultant, bringing new ideas or experiences to the grassroots organization.

Training during the PAD process became a dynamic and creative educational process, not only leading to skills development, but also building up the critical consciousness of community members, sometimes examining their values and attitudes. The external teams turned PAD into an educational experience for people at the grassroots in their search for creative solutions and to understand the process of participatory action development. PAD became a learning process for all involved and is linked directly to the identification, development and testing of specific problem-solving activities and tools together with men and women in the communities concerned.

The early experiences of this project reinforce the argument that PAD methodologies can enhance management capacity in the water and sanitation sector. The participating communities in Cameroon, Colombia, Guatemala, Kenya, Nepal and Pakistan are now far more involved in making important decisions, while at the same time, the support organizations are learning to facilitate and empower communities.

The various phases in the Participatory Action Development approach identified in this document will hopefully help to ensure that the PAD approach for community-managed water programmes can be replicated in other communities. The challenge for all of us is how to support such a continuous process, knowing that each place, each situation, and each experience needs its own specific approach.

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The Participatory Action Development Approach

Supporting community water management

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