A detailed look at the PAD approach
Marc P. Lammerink

Introduction

As explained in the previous article (see Lammerink et al), the PAD approach encompasses a number of steps, activities, methods and tools to encourage the full participation of men and women in improving the management of their water supply and sanitation systems.

The PAD approach involves various activities clustered into three phases: diagnosing, experimenting and sustaining. In this article, I address the process as a whole, and explain the logic and the sequence of steps within each phase. The sequence of these steps 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. In addition, some activities will be continuous throughout the process, such as:

- the taking of decisions by community members;
- the strengthening and empowering of community organisations;
- the development of understanding by community members of management principles and practices for the water supply; and,
- the encouragement of new ideas about a possible future.

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

First the support organisation assembles an interdisciplinary male/female project team of two to three people, representing technical and social expertise. Later local development teams at the community level will 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 organisations on their approaches, and assessing common problems from the points of view of the community and the organisation. Field visits to other community-managed projects may also be useful.

This step allows the support organisation to get a general overview of experiences and results with community management in their own country. It also 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.

Training

The team of professionals will need to develop appropriate attitudes and skills for participatory work. An important element in these preparations is team building. Smooth teamwork and effective collaboration will not happen automatically, but they are essential for the process. Teamwork also involves mutual trust and dialogue.

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 changes. 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 a more democratic society, then their own functioning and the methods they use must also be consistent with that aim. To learn to facilitate these participatory processes takes time and care. Depending on previous experiences in the team this can range from a few weeks to years of regular training and exchange (see Box 1).

Joint ‘planning and training’ workshops may be held during the preparatory phase, during which the project team from the support organisation 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.

From the outset, it is also important to discuss joint ideas for sustaining the process and for documenting and disseminating the approach. This will help to identify outlets for disseminating the experiences at the end of the process (see Figure 1).

**BOX 1**

**CAPACITY BUILDING FOR THE PAR RESEARCH TEAMS**

- Training and planning workshop (October–November 1994)
- First round of regional workshops on methods and tools (February–May 1995)
- Regional workshop on setting agendas for experimentation and developing problem solving strategies (February–May 1996)
- International exchange workshop (September 1996)
- World congress on participatory action research (June 1997)
- International writing and dissemination workshop (June-July 1998)
- International information focal point workshop (November-December 1998)
- Training of trainers workshop: supporting community managers of tomorrow (March 1999)

**Figure 1. Principles of mindmapping used to capture PAD experiences**

(Photoby M. Lammerink)
BOX 2

TRAINING RESOURCES FOR PAD

To allow for the proper and flexible development of the PAD approach, training, support and backstopping for development workers in developing and executing this type of participatory work is needed, which can be given by support organisations and fieldworkers with experience in applying the methodology. In addition, the field staff of support organisations 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 are based on experiences in participatory action research projects to improve community management. The tools can be used by institutions and communities to develop their own, local problem-solving methods and tools. Draft manuals developed by IRC and its partners contain a wide selection of methods and tools for PAD and are now in the process of testing. The manuals, all part of the Community Water Managers for Tomorrow Series, will be published early next year, and are listed below.

- Putting community management in place: four years of experience in improving water management
- Learning in the Field: How 22 communities improved their water management
- The Participatory Action Development Approach: supporting community water management
- Facilitating community discovery: getting to know about water management
- Experimenting with the community: Identifying sustainable solutions
- Training of Trainers manual

Such planning and training workshops can be facilitated by members of organisations that have already experienced the PAD approach and have developed training facilities (see Box 2). Such organisations already exist in at least seven countries, and their number is likely to grow in the future (see the Editorial, Box 1, this issue).

Selecting communities

Following the workshop, work may begin on selecting communities. 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 organisation. 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 analysing secondary information, and building a relationship with the people in order to reach a basic agreement. Events like parties, community walks (see Box 3) or just having fun together can help build trust and establish good communication.

However, it is not always so easy to ‘sell’ the PAD approach. Most communities are at first more interested in technical improvements (‘hardware’) and give less priority to ‘software issues’, such as good management. In such a situation the support team might have to do different activities to get to a common view. One example is from Guatemala, where the process of ‘selling’ the project to the communities started in two small workshops for the water committees, and one or two meetings with the whole community. The support team facilitated the meetings, using a variety of participatory techniques, such as mural newspapers and mapping exercises. Another example is from Colombia. Here the support team started a ‘sensitising’ phase, in which the communities and local authorities were invited to a presentation workshop to gain their commitment. It is important to establish as soon as possible a practical and clear basis for the proposed collaboration, which may result in 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 organisation and the community should together draft and agree upon the contract.
BOX 3
BEGINNING JOINT PROBLEM IDENTIFICATION: VILLAGE WALKS IN CAMEROON

The village walks in Nyen and Mbemi, in which the water committee members and officials from these and two neighbouring villages took part, were an excellent way to become acquainted with the community members, the different areas, and the problems and potentials in the villages. In Nyen, the group walked through all quarters of the village to note important features. The members of the group talked among themselves and occasionally stopped at a house to talk to the people of the compound. The villagers gave an overview of the water situation, and also the uses of the palm and raffia trees, the main sources of income. The processing of the palm and raffia demands a sizeable proportion of the community’s water. The three-hour walk aroused much interest among the population and the officials, and it facilitated a good understanding of the villagers.

The walk was a good starting point for the planned village mapping. While making the maps, the group of participants grew considerably, and this continued the next day. Some 30 community members participated in drawing a Venn diagram showing the key institutions and individuals, their relationships and importance in decision-making. A Venn diagram involves first identifying key institutions in a community and representing them by circles of different sizes. In discussions with the participants, the sizes of the circles and their arrangement, whether or not they overlap other circles, are amended until the representation is accurate.

At the end of the two-day visit, a meal was provided for the PAR team, and it was clear that the exercise had aroused much enthusiasm among both the villagers and the project team. The villages were now ready to begin identifying their problems.

At the end of this step, the team members should be ready to implement the PAD methodology. The communities should have been selected and agreements reached. There should be a preliminary understanding of the socio-cultural, physical and technical situation of each community. Team building efforts and training to develop facilitating and documentation skills should have started for community team members (see Box 4).

A core network of individuals and organisations that may contribute to strengthening and sustaining the process, and can use the outcomes, can also be identified at this stage. Earlier experiences with the 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 organised through existing sectoral co-ordinating bodies or by forming a national reference group. Such a 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 organisation can strengthen its collaborative links with government, national research institutions and members of other national support organisations involved in water sector development.

Identifying problems and possible solutions

In this step of the diagnosing phase, the support team helps the community to describe and analyse their water supply system, and to identify their problems and opportunities in community management. Important elements in this analysis include:

- a performance assessment to gain a preliminary understanding of local socio-cultural and water-related environmental conditions;
- a mapping exercise and surveys of general sanitary conditions;
- an assessment 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, and the effects of gender factors on the efficiency and use of the water supply;
- an exploration of environmental concerns such as water source protection and watershed management; and,
an assessment of 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 summarised 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 organisation can begin analysing the data, although the results should be continuously reviewed by the community in a series of return visits. During these visits the objectives will be to establish criteria for setting priorities (for example through ranking exercises), and to review potential solutions by assessing their advantages and disadvantages. Also, consensus should have been reached on the list of priority problems and on possible solutions to be tested (an agreed ‘research agenda’). This should formulate precisely what should be tested, and by whom. The last part can be done at a village meeting or other gathering.

**BOX 4**

START-UP TRAINING WORKSHOP FOR COMMUNITY RESEARCHERS IN CAMEROON

The participants of the four-day workshop in Bamenda had been selected during village meetings. On the first day, the participants introduced themselves by playing various games, like adjective naming and Zap, Zap, Zop (an ‘icebreaker’). ‘Rules for learning’ were then defined, followed by a presentation of PAD approach and the objectives of the workshop. Easy-to-use participatory tools, mainly emanating from PRA, were presented and discussed: e.g. secondary data reviews, direct observations with or without a checklist, village walks, transects, Venn diagrams, farm and household sketches, and semi-structured interviews. Later, the two teams were seen roaming through Bamenda practising some of the tools of direct observation, like transect and mapping.

The next day the participants carried out fieldwork in Nsei Bamessing community. They visited the village and its water scheme using direct observations, unstructured interviews and focus group discussions. The village walk permitted them to draw maps of a quarter of the community and the scheme, and to describe the water committee. During plenary discussions on the third day the field observations were discussed: insufficient distribution of water, the water committee was subordinate to the development committee, which controlled all funds, making it difficult to extend the project. They also noted that the areas around the standpipes were dirty, that the villagers were overburdened with traditional rules, and that the road and bridge in the village were poor condition.

Finally, the participants drew up a team contract containing a list of attitudes needed to carry out the participatory action development, like humility, attentiveness, support, commitment to the team, respect for other peoples’ views, and the willingness to listen and learn rather than to talk.
• 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, skills, self-confidence and organisation, need to be enhanced so that the community can independently plan and design their 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. Attention should also be paid to enhancing the community’s experimentation and documentation skills; these will be needed to record the outcomes of the support work and the process. Such records can be used to improve the support organisation’s methodology and to make the approach more sustainable.

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. It is also important to decide right from the start on the criteria that will be used to evaluate the success of an experiment.

Evaluating possible solutions

After these preparations, community members and external facilitators can begin to establish, manage and monitor the experiments. Simple monitoring and evaluation methods can be used throughout the implementation phase. Group meetings can be held to discuss the results and begin to draw conclusions. However, the results of all observations need to be brought together and systematically analysed. The process should lead to more sharing and co-operation among community members, as well the more active support of outside institutions.

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 recognising unintended consequences, and how the innovation could contribute to solving other problems in a sustainable way.

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 wider range of community members 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 confidence in its ability to solve problems, and to create a supportive environment for experimenting.

• The sustaining phase

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 or 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 organisational development and the creation of other favourable (external) conditions, so 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 organisational 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 external consultants 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. Two important steps in the sustaining phase of PAD are sharing and evaluating the results of the experiments.

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 mobilisation 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 emphasising the basic ideas and principles underlying the experiments, and the methodological aspects of the PAD process. The programme could also publicise 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 organisation required.

Exchange visits have proved to be a strong ingredient in the sharing process. Exchange visits between communities or between water committees can push the process of enhancing management capacities one step further. When visiting other communities, people often make wise and valid comments and observations because they are involved in the same process. It is often surprising to see how communities are willing to welcome neighbours to assemblies and meetings to discuss their water systems. Exchange visits have sometimes radically changed the course of development processes (see Box 5). Exchanges between facilitators and project teams are also important, cognitively and emotionally, to learn from each other’s approaches, to learn of the sometimes surprising tools the teams have used, and to share their successes and the failures. Room for exchange and learning should therefore be created both within and between the support agencies involved in water at the community level.

Evaluation

The sustaining phase continues with the evaluation of tested problem-solving strategies (the experiments) with the community, the further systematisation of processes and results (at the level of the community and of local support organisations), and helping to ensure the sustainability of the process within the community.
LESSONS LEARNED FROM THE COMMUNITY EXCHANGE VISITS IN KENYA

The participants welcomed the exchange visits as they provided opportunities for them to reflect on their own problems by seeing the problems of others. After visiting Sigomere, the participants concluded that pumping systems are expensive to operate and maintain, and that the cheaper alternatives that are available would be more appropriate for them.

During a visit to Nyakerato, the Kiveetyo chairman saw a broken tap which had been running for several weeks. He said in a public meeting: ‘People how do you let water flow to waste all this while, apparently you do not understand how precious water can be’. He asked the whole Nyakerato community to allow him to buy a replacement tap costing Ksh.120, since they seemed to be unable to contribute even one shilling for the replacement. The challenge was taken and not only was the tap repaired, but funds were also raised to extend the pipeline.

The most important insight from these exchange visits was that interest groups exist in all communities. In Sigomere, for example, the committee includes the area chief, assistant chiefs, religious leader, traders and other interest groups, but they had not explored sufficiently the provision of water to the poor in the community. By visiting the other water systems, it became clear that the committee needed to take steps to rectify this. The chiefs from the other areas promised to work closely with their own water committees in order to avoid a situation where they are far removed from the management of the local water system and are only involved when disputes occur. The senior chief from the Sigomere Water Project noted that for any project to succeed, one must work hand in hand with the administration, although this is rare, especially in Kiveetyo/Kathyoli. The senior chief and chief of Mbiuni were both present, and after being informed of the experiences of the Sigomere Water Project they realised that they could follow this example in other projects.

Activities during this phase may include inviting key individuals to attend planning/evaluation meetings and organising 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 organisations in order to consolidate institutional support for local processes.

Marc P. Lammerink (Global Project Coordinator), IRC International Water and Sanitation Centre, P.O. Box 2869, 2601 CW Delft, The Netherlands. Tel: +31 +31 15-219 2961; Fax: +31 15 219 2939; Email: lammerink@irc.nl, fmd.nl@wxs.nl