

## 12

## Sparkling ideas in Campoalegre, Colombia: managing the watershed to sustain the water supply

**Cecilia Gomez B. and Alfonso Rojas P.**

### • Introduction

Community participation is an essential process for the development of public property as ‘it has an educational function, it develops a neighbourhood civic consciousness, it strengthens the ties of solidarity and makes the ideas of general interest, more understandable and acceptable’ (Borda, 1986).

If the community, by means of its participation, understands the problems facing it and the causes of these problems, this may help to support the administration of the water system. From the role of simple users or clients, they become co-managers of the water system. Their involvement includes:

- collaborating in the planning and construction of the projects;
- being more receptive to the educational programmes designed to stimulate the good use of water in the home;
- caring for system installations, reporting breakdowns in the different parts of the system; and,
- being involved in the administration of the water supply.

This thinking was central to the work done by the PAR team from CINARA (Centro Inter-Regional de Abastecimiento y Remocion de Agua) in the village of Campoalegre, Colombia to address serious problems with the water supply system. The village of Campoalegre, is situated in land that once belonged to the Chavez and Guerrero families. It was founded in the 1950s, when these families divided up the property and sold off some plots. The village population has grown

substantially, because of migration, recent catastrophes on the Pacific Coast, and the agrarian crisis. In 1988, when the existing water system was built, there were 120 users registered from the community and in 1996 there were 336 users, with a population of 1,344 inhabitants. This means that in eight years, the user population has almost tripled, but there have not been any improvements to, or major extensions of, the water system.

### A system in crisis

The water in this area comes from the river ‘La Quebrada El Chocho’ and is pumped up to a storage tank. This has resulted in the continuous development of new settlements near Campoalegre and thus great social pressure on water access. This, in turn, has led to unauthorised connections to the water system. In Campoalegre, there are 150 illegal connections which supply water to families in neighbouring Golondrinas, Las Palmas, Piamonte, Limones, and La Paz.

### Innovative solutions

The PAR team held discussions with the community about these problems, and what could be done to solve them (see Box 1). Various proposals emerged and were tried. One of the more holistic solutions to the problem was the proposal of the President of the Campoalegre’s Water System Administration Board, Juan Carlos González, to create an Association of Users of the river ‘Quebrada El Chocho’. He suggested that this association should buy the land around the water basin area, reforest it and preserve it in an integrated manner.

## BOX 1

**COMMUNITY MEMBERS IDENTIFY THE PROBLEMS AND REVIEW THE PROCESS**

*'It was in February 1996 when we all met up, the leaders of Campoalegre, the CINARA Group and the other institutions of Departmental Health and Public Works (EMCALI) in Mr Juan Carlos Gonzalez' house. He was the president of the water system and we began by playing a game called Tingo Tango where we all introduced ourselves, laughing and showing interest. Then, we concentrated on the water problem, since then we have advanced a lot.'* Edgar Guevara, community leader of Campoalegre.

This is how Mr Arnulfo Morera, a local researcher, described the problems of the Campoalegre water supply to the rest of the community. This happened in a participatory workshop, after the community research team had assisted the community to examine the whole water system, during the diagnostic phase of the PAR project: *'We are here in 'Quebrada los Ataudes'. We went behind Mr Carlos' house and noticed a problem in the water tank, which has no cover. There is also a problem in one of the pipes, which has lost its supports. From here we went on to Tranquilandia where we found another problem, because they take out an inch and a half of water, which they use for a swimming pool and we haven't been able to get them to return the water. Then, there is a piece which goes up which we call a viaduct... then we come to the mines. We have had to strengthen the aqueduct water pipes. In any case, we still have a problem when this breaks down. We will come to disturb these people whenever it breaks down. We went on to Montebello and found another problem, as there were a lot of leaks. So the water is not getting through as it used to do. What we call leaks are really unauthorised connections, from Piamonte to Tranquilandia people steal a lot of water from the system.'*

*'Within the village there is the problem that people get connected without registering, or other people get water. They sell land and with the same registration they transfer water',* Nivis Hernandez, a local Village Health Official added.

*'The lack of control of the water sources is a serious problem. Before we had water 24 hours a day and there were seven water sources in the high part of the stream. At the moment we only have water for two hours a day and there are three or four sources in the private property of Mr. Alcides Salamanca, who is not interested in reforesting. Recently, we had a reforestation day in 'La Quebrada El Chcho' and the next day, they cut down all the trees. The man wants to develop the property, not reforest it'* Juan Carol González complained.

To contribute to the conservation of the water resource, the Community Researchers Team of the PAR project suggested developing a communal nursery as the start of a reforestation programme. Although this led to the participation of the community, the problem continued, because the water basin was in private property.

*'The problem is not only a problem for Campoalegre, it involves seven other*

*communities that get water from 'El Chcho' and together we can negotiate',* says Juan Carlos González. Juan is responsible for the management and development of the water resource. He contributed to the establishment of a Managing Group, which set out to get the Users Association legalised and to have access to institutional support. In addition, the aim was to come to an agreement with the property owners about a programme that guarantees water production for human consumption. Currently, the Association is entitled to financial support from State institutions and NGOs for programmes to improve the water basin. Following a problem-cause analysis facilitated by the Community Researchers Team, Mr. Edgar Guevera, a traditional community leader, actively organised outside support for improvement of the water system in Campoalegre. He helped construct a water treatment plant, and is one of those responsible for this project

**Table 1. Experimentation agenda of La Sirena**

Problems	Possible solutions	Indicators	Time span	Responsible
A) Supervising construction of treatment plant pre-filters	Committees: -Community supervising -Board supervising -Operator supervising -Board prosecutor	Number of visits made Number of observations stated Number of observations solved by the constructor	3 months	EIC1 JAA2 Operative Monitor
B) There is no study on rates	Applying consumption rates vs. Rates with no measurement.	Consumption (m <sup>3</sup> ) Average payment per user	6 months	JAA
C) There is no record of water users	An inventory made by the community.	Number of CRT participants and community in general Number of water users vs. total population	2 months	EIC JAA Group of youngsters
D) Irrational use of water	Community education through: paging, wall journal, bulletins. Installation of water meters, and floaters	Number of leaking faucets vs. total number of faucets. Actual consumption vs. average consumption (m <sup>3</sup> )	6 months	JAA EIC
E) There are no by-laws or rules for users	Item by item assembly approval. Distribution of rules per sector. Delegates per sector. Through the existing organisations	Democratisation: number of participants in the entire process. Efficiency: time required approving by-laws.	3 months	JAA
F) Organisation of administration, independent of the aqueduct	Study alternatives of administration. To be preserved in the community board through the water committee. Independent management with community board representation. Completely independent.	Outcome indicator: Number of persons per alternative Process indicator: Number of meetings held	3 months	JAA EIC
G) Delinquency	Education; establishing several payment points; cutting the service; fines; using receipts in different colours; publishing a list of delinquent users	% delinquency Delinquency period	3 months	JAA

In Campoalegre the legal status of the administration was an important issue, so the community formulated rules and regulations, and mobilised community support to experiment with solutions. La Sirena is one of the other communities that participated in the PAR project. Table 1 shows the problems this

community prioritised with the help of the local Community Research Team, the solutions, the indicators, the time span and who would be responsible for the items.

1 EIC: Equipo de Investigacion Comunitaria, the Community Research Team (CRT).

2 JAA: Junta de Agua y Alcantarillado, a water committee

## • Broadening participation community

The PAR process in Campoalegre has inspired Fernando Rios, one of the new leaders and member of the CRT, as well as being both teacher and actor, to promote other areas of community work and to ensure that social participation runs through programmes such as reforestation using community nurseries; the promotion of education through a programme of night-time study; the carrying out of sports activities with young people and children; and the organisation of groups for senior citizens. He got the children involved in specific activities within the water project.

*'The water problem cannot be limited to the Water Board or to the leaders; it has to be opened up to everyone and children can develop a civic consciousness more easily than adults. We could say that community participation is the umbrella which covers other manifestations of participation,'* Fernando Rios said when he was adapting a workshop on 'Water-culture' for children.

The workshops with children were organised with the Secretariat of Municipal Health, which had the necessary experience and facilities to carry them out. Children and adolescents painted and made drawings of water uses, storage, where the water comes from, how to take care of it and its characteristics (see Figure 1). Then they went out to talk to the people in their houses, who were very surprised and grateful for their visits.

Another strategy developed during the community management project was to decentralise community meetings. These used to be held regularly in the Community Room in the upper part of the locality. However, people from the lower areas of the community found it difficult to get there. For this reason, it was agreed to have community management project meetings in each area, either in a house or in a shop, so that everyone would have the opportunity to know about it and to participate.

## • Evaluation

During the workshop on community exchange in which three community research teams evaluated the community management project process, Fernando Rios stated:

*'Apart from the importance of the research, this participative project has been useful to establish that there are other forms of water management. The participation of everyone during the diagnostic process in the establishing of problems and needs has made the group conscious of the need to change the ways of intervention which are out of date. We have also seen other ways of prioritising problems and of finding alternative solutions. The workshops telling the rest of the community about the progress of the research projects were successful, because they provided different ways of meeting up. Finally, with the training we noticed that there are other ways to establish contact and to get into contact with other people, both within the community, as well as with the water sector officials and with other communities who are developing similar experiences'.*

During the last two years the community in Campoalegre has been able to prioritise its problems in a participative democratic way. The solutions developed have been of great benefit to the whole community.

• **Cecilia Gomez B. and Alfonso Rojas P.,** Community Management Project, CINARA, Universidad del Valle, A.A. 25157, Cali, Colombia. Tel: +57 23 392345; Fax: +57 23 393289; E-mail: [cegomez@cinara.univalle.edu.co](mailto:cegomez@cinara.univalle.edu.co)

### REFERENCES

Borda, J. 1986. 'Participación para qué?'. In: *Revista Foro*, September 1986.