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***Project "The Role of Communities in the management of
improved rural water supplies in developing countries"
Project no. WW041401***

**PROJECT PROGRESS AND RESULTS
APRIL 1997 - OCTOBER 1997**

Seventh Six-monthly Progress Report

IRC International Water and Sanitation Centre

30 November 1997

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Introduction

During the period covered by this progress report the communities involved in the project are carrying-out the agenda's for experimentation in order to improve the performance of their water supply schemes. In all countries various problem solving strategies are tried out, using implementation plans developed by the communities and monitoring indicators. However, the activities carried out by the research teams with the communities focused not only on work towards experimentation with possible problem solving strategies, but also towards building problem solving capacity at the community level.

In this respect the role of the community research teams continues to be crucial. Building upon lessons learned during the diagnosis phase and spelled out during the International Exchange Workshop, their role in the research process continues to be explored.

Some mayor limitations related to funding have hampered the smooth implementation of the annual workplans. Especially field visits, meetings with National Reference Groups and other activities which are important for institutionalising of the approach used on community management have been reduced and will need full attention during the dissemination phase.

At the same time during this period IRC had discussions with DGIS to take into account the mayor lessons learned from the mid-term review carried out by ETC Foundation. An important event, the World Congress on Participatory Action Research, brought coordinators from all the seven teams together in Cartagena for a joint presentation. The participative nature of the theatre presentation was very much appreciated by the attending public and was useful for the trust building of the team in these type of more creative performances. The gathering together in Colombia for the World Congress also allowed for a interchange in Cali with our colleges from CINARA.

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After a relative long period of decision making within DGIS, mainly due to the organisational changes in DGIS itself, IRC finally got the contract for the dissemination phase of the project funded as of 1997. Most teams have been developing workplans for the dissemination of research findings.

As is the case in long term projects also some of the teams were not spared by institutional turmoil, but efforts have been undertaken to stabilise these situations. In the situation of Guatemala, the IRC coordinator had to look for more radical solutions by ending the agreement with Aqua del Pueblo and start an agreement with SER, because the whole PAR team had moved to this organisation.

This report provides some details about the above, highlights the major learning points and maps out some strategic issues, where improvements are needed and how they could be incorporated in the plan for the year 1998.

This report is based on field reports as well as the progress reports written by the country teams and the information exchange during the Cartagena World Congress.

2. Work with the communities

2.1. Development of agenda for experimentation by action research communities

The research teams, in close cooperation with men and women in the communities concerned, have developed strategies, methods and tools to address managerial problems and monitor the effect on service performance. They are documenting the initial results. The aim is to develop experimental designs that are reliable as well as manageable and which can be evaluated by the community members themselves. Another aim is to strengthen local capacity (skills, self-confidence, organization) in order to be able to plan and design experiments independently. The basic idea is to improve, reinforce, enhance and add to existing experimental practice. It includes also the actual capacity to implement and monitor experiments (skill development, group building, strengthening exchange and supportive linkages with other communities or community members).

Some of the possible activities developed during this period are:

- review of existing experimental practices (see also annex I), analysis of certain innovations
- planning and designing of selected experiment (who will participate, criteria for selection, inputs required?)
- defining criteria for the evaluation of the experiment (when is it a success or a failure?)
- development of adequate monitoring and evaluation methods (what do we need to observe, measure, record?, when and how will that information be gathered?)
- establishment and management of experiments
- monitoring by community research teams and by facilitating outsiders
- group meeting to observe, measure, exchange experiences, discuss and evaluate

- visit to similar experiments in other areas, receiving interested community members

In **Pakistan** inappropriate designs of the systems and unequal distribution of water has been identified by the PAR communities as the main technical problems with their water supply systems. They suggested also improvement of the storage reservoir, transmission lines and extension of the distribution network as most preferred solutions of improving performance of their water supply schemes.

To give follow up to these solutions a high amount of money was required for the purchase of pipes and cement. Most of the solutions mentioned are thus of a technical nature and communities and PAR team have put a lot of efforts into the related funding problems. In the progress report little emphasis is put on the relation to managerial solutions and it is not clear if managerial problems have been identified as important by the communities.

Technical improvements in Pakistan

The community of Pakora installed pipes between the water source and the water storage reservoir but failed to over-come the freezing problem in the channel. The implemented strategy was evaluated by a joint team of the community, engineers and PAR team. At the same time community tried to resolve few other problems of the water supply scheme, they repaired sedimentation tank and storage reservoir and they are in the process of resolving the problem of water freezing and leakages in the pipe crossing the Pakora nallah (big stream).

The community of Hasis successfully carried-out the implementation of the first strategy by changing site of the storage reservoir and installing additional transmission line. During evaluation of the strategy the water freezing problem between the new reservoir and the water source (nallah) was identified. The community developed an agenda to resolve this problem and now people are in the process of implementing the developed agenda. The report on evaluation of the strategy is ready for distribution.

The community of Ghaziabad completed the implementation of the first selected strategy by connecting their water supply scheme with a new source spring, located above the inhabited area. They have developed plans to resolve the problems of the distribution network of the scheme. The implemented strategy was evaluated by the community in village meetings and the report of the evaluation is in progress.

The water supply scheme in Hoto was non functional for about nine years. The social and technical diagnosis of the scheme identified few solutions for re-functioning of the scheme and implementation of these solutions required 15000 US dollars. The community tried to get financial or material assistance from other organizations but did not succeed to get the funds and they lost several months. Finally the community decided to use the small amount of funds available in the PAR project to construct the water reservoir and to use some of the irrigation pipes available in the village to connect the water reservoir with the existing pipe network.

In September 1997, the community started construction of water storage reservoir and installing pipe between water source and reservoir. The construction of water reservoir has completed and the work of digging trenches to install the pipe is in progress.

Pakistani team commented the following lessons learned:

Ø It is true that there are underlying social and economical causes for the technical problems. However, some technical problems (such as: inappropriate designs, partial coverage and unequal distribution of water benefits) contribute to create social problems, resulting in dis-unity and lack of ownership.

Ø It is worthwhile to make agreements (either written or verbal) with the whole community, but particularly with those who will be affected by physical improvement work of the scheme. Usually, without getting prior permission of digging of their agricultural fields, cutting trees and demolishing walls during installation of pipelines makes owners annoyed, which causes delay in the work.

Ø The quality of the external material should be ensured when constructing or improving the water supply scheme. A technical and experienced person (engineer) can ensure the quality of pipes and purchasing the material on normal rates. This activity should be done by the agency. Communities are not used to dealing with the pipe dealers in big cities and judge the quality of pipes without experimenting it in the village.

Ø The equal distribution of benefits should be ensured by including problems of all community members particularly women and poor people when planning a communal activity. This will increase the unity and feeling of ownership within the communities about the project.

Ø Developing rules and regulation is always necessary to run a project, but the proper implementation of these rules in the community is crucial. This will contribute to the sustainable and efficient management of a water supply scheme.

In **Colombia** before starting the experimentation phase a reflection was done on how to go about it. Different possible ways of implementing were discussed: one comprising of solutions for a management problem like inefficient use of water, by experimenting with one different possible solution in each of the quarters ('barrios') of a community. After some time of monitoring the results could be compared and the best possible solutions could be selected and implemented in the whole community or in other communities. The other way of going about it would be experimenting with each of the possible solutions in the whole community. However, that would need much more time as an experiment will take at least three months.

Each community opted for a different way to go about experimenting. La Sirena tried all possible solutions during a certain time starting with the first most viable. An example was the development of the articles of the association of members: first it was experimented to develop the articles by authorising each article through the assembly. When after two months this did not lead to a satisfactory result, they started experimenting with the next option: distribution of the articles in each sector of the community. The third option was discussion with sector representatives and the last option was to use existing organisations.

In Ceylan the community opted for the first way of experimenting: they tried one solution in one quarter, another in another quarter etc. However, because of the forthcoming political elections in the country the agenda of experimentation was partially stopped as certain conflicting groups started to interfere for political reasons. Still technical solutions could successfully be tested.

The team of CINARA together with another NGO (Fundacion Carvajal) also conducted training activities focusing on proper administrative management, including procedures, bookkeeping, legal and administrative tools. Apart from the three communities in the PAR project other administrative bodies were invited.

The experimentation phase in **Nepal** is again taking a slightly different road. Identified strategies are being as wide as technical improvements of supply system for the equal distribution of water; implementation of monthly tariff system for operation and maintenance; fund raising; preparation of constitution and registration of water users committees. In order to monitor the outcomes the PAR team from Nepal has been visiting and attending sharing sessions with the four communities. The team has also organised various trainings and community workshops to enhance the capacity of the members.

Changes noted in Nepali research communities

Mr. Rameswor Lamichane can now keep his financial records up to date. He commented: "This bookkeeping system is an achievement of the training". In Lele Mr. Rajenura Silwal introduced receipt and a voucher system. Whereas Lele and Gajedi water users committee used the sample constitution provided during training to draft their own. They have initiated the registration process to legalise the committees.

In Gajedi, Ram Bahadur Thapa has been selected as secretary of the committee in a mass meeting. This has been a result of a decision to reform the committee. Since a long time Mr. Shiv Paudel was both chairperson and secretary. During a training he realised the importance of leadership development and work division. At the same time a women has been selected as treasurer, because "women are more loyal and honest than the men", as Mr. Paudel commented.

In Rangapur a PAR volunteer carries around his pictorial handouts in the meeting and shows related pictures to his colleagues during discussions.

Whereas management is abstract, physical improvements are tangible and thus attract immediate affinity. According to the PAR team of **Kenya**, its role is to enhance the image of management so that "the Management" oversees and guides physical improvements despite the fact that management came into being as a result of the physical development in most of the communities.

One of the main problems identified and prioritised for experimentation, includes:
- poor record keeping: the hypothesis being that improved record keeping (in terms of financial records, management records, minutes of other meetings, discussion notes with person visiting the projects, records on materials supplied, bought and used) will enhance the confidence of the general members thus creating commitment to ownership and desire for proper management of the improved water facility.

Experimenting with record keeping

During the period under review in Yanthooko, the treasurer has gained confidence in issues related to financial management. She keeps her records up to date and shares these with members on a regular basis, at least once monthly. The resultant effect has been increased confidence among members who have in turn been giving their financial contributions on time. In the same community, minutes of meetings are being kept intact, and are helping reduce repeated deliberations on the same issue, this has meant reduced time for meetings, which has greatly improved the attendance and frequency of meetings.

In Sigomere records on water production and sale have revealed huge losses in revenue in the past. Steps are in place to compact this mismanagement. Further stores ledgers have been similarly scrutinised and found wanting. Improvements are being made.

In Kiveetyo, the treasurer kept her financial books haphazardly. This was causing ripples in the management, but the PAR team has taken time to sit and discuss with the management committee in order to sustain accountability of the whole management committee to the general membership. In Nyakerato, the scrutinising of records has ascertained the contributions from each of the sub communities and each credited with their respective contributions and advised to open separate bank accounts.

Another problem identified was inadequate information sharing among the various organs of the community, i.e. the management committee providing scanty information to the community as a whole. This arose as a result of a misconception that management information should be guarded as confidential. The hypothesis is that improved communication defines the roles, responsibilities, obligations of each of the partners involved in the improved water system. The components necessary to achieve this include the need for a clear understanding of what constitutes “the community”, “the members” and “the users”.

The other component necessary for improved communication and information sharing are the management guidelines, these include but are not limited to:

- the 'Group' Constitution detailing membership criteria, management structures and reporting schedules, obligations and responsibilities of each of the organs.
- rules and regulations
- staff recruitment, remuneration, job description etc.
- legal status e.g. of self help groups or a society and the inherent strengths and weaknesses.

During the period under review the PAR team assisted the 4 communities developing and reviewing their existing management tools especially the Constitution.

Another result of exchange visits

The PAR team requested the Sigomere management team to allow one person each from Kiveetyo, Yanthooko and Nyakerato to attend the Annual General Meeting of Sigomere, as they were highly impressed by the large turn out of the Sigomere community. Further the adherence to the constitution served as an impetus for the other communities to develop and finalise their own constitutions.

In Sigomere the constitution has been reviewed and was planned for adaptation by the Annual General Meeting, which went on successfully. NETWAS was represented by its two PAR team members and one person from Kiveetyo and Yanthooko attended in this meeting. Due to a heavy agenda, some items were deferred to a Special General Meeting to be convened later by the new Management Committee which was elected at the annual meeting. The community appreciated the guidance received from the PAR team in the adherence to the laid down constitution as this enhances fair and free participation as "Kwa Mjibu Wa Sheria" (rule of the Law).

In Kiveetyo the management committee has redrafted its constitution, which will be reviewed in the near future by the general membership. In Yanthooko, the constitution was redrafted and is awaiting endorsement by the general membership.

In the Nyakerato community the roles, responsibilities, obligations of each of the partners involved in the improved water system were defined. This resulted in the identification of three sub communities: Nyakerato 'A' Gravity - to serve lower Kiagware Sub location; Nyakerato 'C' to serve lower Sengera Sub location; and Nyakerato 'B' - shallow well to serve upper Kiagware and upper Sengera.

Each of the two upper sub communities are now provided with one shallow well. The three sub communities have each elected a management committee, from which central management committee members are elected. Each of three sub communities have mandated their respective committees to draft their respective constitutions. This now clearly defines who is a 'member', who is a 'community' and who is a 'user' in each of the three sub-communities, giving rise to increased accountability. This will then be harmonised with the Central Management constitution. Emphasis is on the sub communities as this is where ownership of the systems is vested. The Central management committee will do the overall coordination. The whole process has been a major breakthrough in the understanding by the Nyakerato community on 'who is who' with respect to the water supply improvement within their own community.

The next important problem that was addressed is resources management. The hypothesis is that improved resource management enhances the optimal utilisation of resources thus reducing the burden on the members (users/consumers) of the improved water systems.

Resources management includes the harnessing of water from the water sources, and accounting for the water produced, as well as internal resource mobilisation, staffing and the maintenance of the improved facilities.

Resources management to be revisited

In Kiveetyo where they get water from the hills which belong to another community, there is evidence for "conflict" thus calling of conflict management and resolution strategies. In Nyakerato the sharing of water between Nyakerato 'A' and 'C' needs to be worked out, as evidence of reduced spring yields at source is increasing.

In Sigomere the distribution system requires enhanced understanding as demand is surely overtaking supply.

Sigomere has a borehole with submersible pump having a metered distribution network including kiosk (communal water points) and individual metered connections. The PAR Project has donated a master meter to record the total amount of water produced in order to compare it to the total amount of water sold/consumed. This has led to accounting for water produced and has contributed significantly to revenue collection and reduced water losses due to leakages and inappropriate accounting by staff.

In Yanthooko, the women group has instituted measures where sales of water are accounted for at the end of each day where in the past this was done monthly. This has led to increased revenue collection.

With respect to internal resource mobilisation Nyakerato 'A' instituted a member contribution of Kshs. 300/= per member to extend the distribution network. In Kiveetyo the community approached Christian Children Fund (CCF) who assisted Kiveetyo with materials to build a large storage tank. In Yanthooko, the women endorsed a member contribution of Kshs. 20 per member per month which enabled them to purchase a plot on which they intend to construct and install a posho mill, while at the same time they have plans to construct a second shallow well to increase the amount of water available for use.

In Sigomere, the community realised that the submersible pump is operating under what they call "Injury time", a phrase they have borrowed from soccer giving the message that the useful life of the submersible pump is already expired. They have instituted a renewal fund from internal resources and are approaching external donors seeking assistance to replace the submersible pump.

In **Guatemala** after a long period of uncertainty about the continuity of the team the process has been strongly taken up again during the last six months. In Aguacatan the committee of APAGUA prepared an action plan for improvements of the system. Some priorities were technical by nature others administrative, like the regulations for the uses of water. Others related to capacity building, like interchanging of experiences by the plumbers from different communities on problems and solutions. During the interchange meetings, the plumbers also got to know about basics of rural hydraulics, like how to interpret plans, understanding material specifications, inventories of materials and the like.

The committee of APAGUA also negotiated a contract with a regional development corporation to start a program on reforestation both for water conservation purposes and for reduction of the erosion. Coordination activities between different water systems in the area is maybe one of the biggest successes.

Expected outcomes of the activities in the different communities in the coming period are:

- incorporation of local people in the process strengthened
- better understanding of the process by participating community members
- well planned community experiments
- improved skills to design
- monitoring and evaluation methods manageable by community members
- well organized process of experimentation
- experiments are monitored and implemented systematically
- practical skills of involved community members are enhanced and strengthened
- intensified sharing and cooperation between participating community members
- growing active support of outside institutions

2.2. Local Research Teams/PAR-volunteers

In **Pakistan** during April and May regional exchange visits were organised in which Community Research Teams of Pakora and Hasis visited Skardu and Skardu visited Ghizer and vice versa. During these visits briefing sessions, observation walks of the water supply systems, discussions and community chats took place. Villagers often talked far beyond the water supply system about their cultures, traditions, agriculture, livestock and horticulture.

Several suggestions were given for example on how to deal with the owner of the tank land or how to handle problems with water leakages and freezing of the pipes. Guests mostly stayed at night in the community and were impressed by the hospitality. Also different agricultural activities were of interest. Some took varieties of vegetables back to their villages. After returning all CRT's had briefing sessions in their villages and a video was produced.

During the mid-term evaluation three members of CRT's were included in the team in order to support their views and gain experience in such activities. The CRT's play a mayor role during the implementation of the agenda for experimentation when dealing with technical improvements, supervising the work at the construction site. They presented their experiences to outsiders during meetings.

In **Nepal** in order to further consolidate the PAR volunteers system a two days training workshop was organised in Kathmandu. Twenty-five participants including seven women from all four research sites participated. To make the training more effective various participatory training methods were used. Also a five days workshop was conducted on 'Group management, leadership and accounting'. During the training of Tarai communities the participants developed action plans for experimentation.

PAR volunteers in Nepal in action

In Gajedi, the volunteers realised that monitoring of the activities are not properly done. They decided to form a monitoring committee of three members including one women.

In Lele the committee realised that the users were losing interest in the PAR activities. Therefore they organised a mass meeting to explain about the process, activities carried out so far and guidance received. This provided transparency to the users and helped to revive their interest in the improvement of management of their water supply.

2.3. Monitoring the process and output in the communities

Monitoring instruments are being implemented or developed around three issues: there are the ones related to water quality and quantity. Others are related to monitoring the managerial aspect, and the last one is monitoring the PAR process at all levels. All three have different stakeholders and need different monitoring techniques and reports.

In order to make the monitoring and evaluation methods manageable by community members in Nepal various tools were introduced. One is the spider web, a model developed by CARE Nepal¹.

Community organisation as a spider web

The spider model is a tool for assessing the capacities of community groups within the areas of organisation, management, linkages/networking, fund mobilization and participation/representation. It aims at building the groups' self awareness by high participation and aims at action planning.

The tool was first developed in Thailand with community groups. The five main strands of the spider web can symbolize the important characteristics of a self-reliant and sustainable community organisation. If some pillars are lacking or are very weak the organisation may not sustain or function effectively. The pillars need to be strengthened to make the overall organisation stronger and more self-reliant.

The main technique of the spider web is scoring or ranking of a groups' capacities according to certain indicators or characteristics, referring to the five key dimensions of a community organisation: Organisation; Management; Fund mobilization; Linkage/networking and Participation/representation.

In **Colombia** monitoring on quality and quantity is in its initial stage. The water operators monitors the pH value of the water and walks regularly through the community asking people about the water quality.

In **Kenya** the village committee has now an external audit of their funds, which is reported to the community once a year.

¹'The spider model manual, A trainers guide to monitoring community organisations capacities', CARE Nepal, 1997

In **Pakistan** six months after the visits the team asked what the community thought should be changed. The community members told that the behaviour of the PAR team was not different from other outside agents, they also commented that community meetings organised in the mosque or other religious places made it difficult for certain groups to participate. So the team understood they had to improve their behaviour and to call for meetings in a accessible and neutral place.

3. Mid-term review discussion

The mid-term review, as conducted by Mr. Haverkort of ETC, was an interesting experience of a participatory review in line with the objectives of the research project. In some countries, which could not be visited during the review, the process was continued. The review helped IRC together with its partners to look back critically at what has happened, what is happening in the communities involved and with the partner organisations. By describing processes, results achieved and issues needing reinforcement, the mid-term review gives an overview of the state of the art of the Participatory Action Research.

Discussions were held with those responsible for the programme at DGIS on strategies for improvements focusing on the following:

1. Better institutional embedding to allow for better learning processes and sustained impact;
2. Increased reflection on and systematization and documentation of experiences.
3. Investigation of the demand for additional project activities;

Ad 1

Institutional embedding at IRC

Discussions have taken place in IRC related to the concern voiced related to the lack of integration within IRC and this being an obstacle to project sustainability. On the one hand the learning potential of the project (in particular with regard to the research methodology) within IRC has till now been insufficiently used. On the other hand insufficient “use” has been made of experiences and expertise of colleagues in order to jointly work on challenges the project poses. Assuming that a learning demand exists, it is foreseen that more efforts will go in using and creating opportunities for institutional learning through increasing the understanding about the project among colleagues by making project materials available and by the organisation of small thematic workshops for exchange and development of new ideas.

Institutional embedding of the research at partner institutes

Also in some of the participating countries the learning potential of the project is insufficiently explored and utilized. This may have various reasons. In some countries the organisational structure is too complex, leading to the members of the research teams not really knowing where to go for sharing. In other countries the teams may not feel they have sufficient to share. The latter may be resulting from too little time taken to reflect, systematize and document experiences, thus failing to see that they have a lot of experiences worthwhile sharing.

IRC-staff has been putting more attention now on supporting the reflection, systematization and documentation process of the PAR-teams and will put emphasis on the other hand on assisting the teams in the development of strategies to create a learning demand in their organisation.

Ad 2 Increasing reflection, systematization and documentation

Too little systematic attention has gone into the process of reflection, systematization and documentation. More methodological support to the teams (related to research process) was needed than anticipated, resulting in too little attention to content development of the research.

Unexpectedly the need for skills training, in particular for documentation, has been identified. As most of the partner organisations and teams did not have a research background and miss the required skills for documenting research results, they will need support to improve their writing skills.

This will be provided through visits of IRC staff in the end of 1997 and early 1998.

A start of Systematization

A synthesis workshop was held at Kenya College of Communication Technology (KCCT) between April 29 - May 4, 1997, facilitated by Mr. Stephen Ngigi.

The principal objective of the workshop was to synthesis the experiences of the PAR by reflecting back on the activities up to date with the view of documenting the process, tools used and outcomes.

This was attended by the PAR team and representatives from the four communities. With the aim of getting an analytical overview from the collaborating communities and additional careful analysis of the requirements for the synthesis, the PAR team selected participants who were capable of contributing to achieving the expected goal. Aspects such as community selection process, problem identification, diagnosis and prioritization capacity strengthening and experiences/community responses and impacts of the PAR project were discussed and documented during the workshop.

Similar workshops have been held in Nepal.

Ad 3 Investigation of the demand for additional project activities.

Thoughts about investigation of this demand have been triggered by the recommendation of the mid-term reviewer to also document experiences with community management that takes place before the "handing over" of a water supply system; i.e. starting community processes from the very beginning of an intervention in order to start as a community managed project.

This would require research work in villages where water supply is about to be improved. However, for various reasons the focus of the project has always been on looking into "after handing over management", whereby "implementation history" is taken into account (see inception report).

Some of the country teams have identified the need for research among sector agencies on necessary conditions for starting such a research project and are preparing research proposals. The above also caters for the required attendance to country specific differences as brought forward by the review.

4. National Reference Group

The national reference groups are formed to create a platform for acceptance and discussion and to ensure that problems by national organizations are also addressed. Activities related to the National Reference Groups continued in the period covered. However, in most countries activities have been slowed down, because of the budget constraints. Thus, in most of the participating countries the National Reference Group (NRG) met only once during this period. In general the objectives of the meetings focus on exchange of experiences and on getting feed-back.

In the second week of July the fourth NRG meeting was held in Islamabad, **Pakistan**. The team briefed the NRG about the findings of the mid-term evaluation held in Pakistan and about developments at the international level. A visit was scheduled for the NRG members to the PAR communities in September with nine members from different parts of the country. All arrived due at Islamabad, but their visit had to be cancelled because due to bad weather no flights nor road transport was available.

The fifth NRG meeting of NEWAH was scheduled early September in **Katmandu (Nepal)**. The participants in the meeting were updated and had an exchange on different approaches and tools for sustainable management of rural water supply, applied by the organisations present, which focused on processes for: need identification; project selection; project planning and implementation; community management and operation and maintenance and preparation; linkages with government departments and other agencies concerned; support activities at community and institution level. The meeting identified various issues that needed in-depth discussion by concerned agencies. WaterAid Nepal expressed its willingness to sponsor such experience sharing events in future.

5. World Congress on Participatory Action Research

The 8th Congress on Action Research, Action Learning and Process management was held in Cartagena, Colombia from May 31st - June 5th, 1997. The main objective of this Congress was to eventually find common denominators for the different concepts and practices that have been used by practitioners in rural development as well as other development workers. Basically these concepts include PRA that was mainly developed in the North and used in South and the PAR that was developed in the South and used there.

It was in this context that the IRC Coordinated PAR Project submitted their proposal to present different papers and convene a workshop in the 'Garden of proposals'. The project was represented at the Congress by one participant (the team coordinators) from each of the countries. Only Colombia, being the host country, was represented by two participants as the host country.

Most workshops at the Congress followed basically a traditional format of oral presentations of about fifteen minutes with some discussion. In most workshops no open discussion followed on communalities nor on experiences of other participants

(non-presenters). Most workshops were in Spanish as main language and had insufficient translation into English.

During the first workshop day (Monday) both the coordinator from IRC and from CINARA had presentations in different working groups. Both prepared a paper in advance (Cecilia Gomez, 'La IAP un enfoque para el fortalecimiento de la Gestión comunitaria de los servicios publicos', en Marc P. Lammerink, 'Learning together - Experiences with participatory action research and popular education'). The Pakistan team prepared two summaries ('Role of local organisation in transforming private property into communal use' and 'Community research teams: the local research and management systems'). Although they did not receive feedback of acceptance from the convenor of their workshop, their summaries were published in the conference document.

Despite the rather traditional overall congress format, some very interesting papers and panels were conducted. Outstanding was Rodolfo Stavenhagen on 'On seven mistaken theses on Latin America, 32 years later'. Robert Chambers convened a workshop, named 'On whose reality counts? Converging on Frontiers for Innovation and Change', which was interesting in its simplicity. During the introductory remarks of the congress some impressive comments were made on the situation in Colombia.

Agnes Heller discussed the topic of 'On temporality and historicity from a Postmodern Perspective'; the famous Chilean economist Manfred Max-Neef had a very revealing presentation on globalisation of the economy. Different panels touched upon the convergence between different approaches which were developed in the past in separate disciplines and streams. Also Fals Borda had in different occasions key notes of much interest, from the point of view of action research and social change.

Carlos Brennes, Timi Tillmann and Maruja Salas gave an example of a more coherent workshop format based on popular education, which allowed to discuss in two and a half hour the topic of 'environment', effects of deteriorating environment, causes, actions to be taken on short term (in congress) and on longer term. The workshop allowed for a lot of joint action afterwards at the congress plenaries.

For the workshop on Wednesday in the Garden of Proposal our challenge was to prepare a workshop format in line with the theory of action research and action learning. This should allow for interventions and dialogue with the public. In advance a preliminary paper was prepared by the IRC team ('Participatory action research on Community Management of Rural Water Supply - experiences from Kenya, Cameroon, Nepal, Pakistan, Guatemala, Colombia). The group of team coordinators present started the joint preparation two days before the congress in Cartagena. Quite some time was needed to get to common grounds. The language barrier still hampered smooth enrolment and sometimes the different cultural background still produced misunderstanding and sometimes shocked as a result of different perceptions of time and work agreements. This common base for frustration among the IRC facilitators now became more understood by the different coordinators.

Nevertheless, after delivering the workshop all were very satisfied (see also annex II).

Cartagena World Congress Presentation

The country representatives met in Cartagena two days before the opening of the Congress to prepare a common presentation as was previously agreed at an exchange meeting one year before. During the two days, the team had brainstorming sessions on what to prepare and how to present the information. Following the discussions of the first day, they agreed on the following points:

- the contributions to the Congress should specify techniques and methods applied;
- the presentation should include an evaluation of results of the work in the six countries;
- the presentation for the Congress should be done in an inter-disciplinary and converging manner;
- the presentation should be participatory .

Following these agreements the topics were also identified for the presentation which were:

- From divergence to convergence during the research project
- Methods and techniques
- Changes in the community: what are their experiences?
- Lessons learnt from the experiences in the countries.

At this point the sub topics were assigned to subgroups of two participants to prepare and the next two days were spent on the preparations by the subgroups and rehearsal of the presentation in the team. Apart from the plenary session which took place during the opening of the Congress, there were also plenary sessions at the end of each day to draw some major conclusions based on main topics discussed during the day.

The presentation itself was mostly participatory using various participatory tools and using all the time the two languages (Spanish and English). The session started with an ice-breaker whereby we asked those who were present in the hall to form subgroups of four and come up with a small sketch to illustrate what the word 'water' means to them. It was very interesting and relaxing as the various sketches produced made people laugh. Some performed the sea, paddling a canoe, rain, bathing and a woman carrying water a bucket of water and walking home. This provided a smooth transition into the main interdisciplinary presentation by the team made of the country representatives.

Leading to the introduction was a vivid self-introduction by the team members whereby each one talked in her or his native language. The objective was to demonstrate the divergence and cultural differences that exist between country teams as well as within a country team. Following this, one team member presented through overhead transparencies the divergence to convergence within the project, its background and objectives, the countries and organizations participating, the phases and the organizations providing technical back-stopping.

The participation in the congress was overwhelming, especially many Colombian students came unexpectedly. In his personal talk on the last day Fals Borda stated that: twelve hundred participants attended against the expected five hundred. This caused some logistic problems in the beginning of reproducing programs and the like. It was good to see that there is such an amount of interest for Participatory Action Research.

After the Congress, the team coordinators from the six countries started a three day visit to the PAR project of Cinara in Colombia. During the first day the group visited the CINARA research centre, where they experiment different ways of water quality control by using different (sand) filtration systems. The groups also had an exchange

presentation at the university, where the seat of the project is formed. Together with four of the team coordinators two of the research communities, La Sirena and Ceylan, were visited together with members from other communities. During two evenings the team had a general and a country specific session with the IRC coordinator.

The exchange visit in Valle del Cauca

During the exchange visit the other PAR team members commented:

There are many similarities in problems faced by the communities across countries;

- Women are taking leading roles in issues and management of water supply, whereby the president of the committee was even a woman. Especially the Asian participants were astonished about the role of women in the communities;
- The PAR methodology is effective in enhancing management capacities as it is now also being applied in other aspects of life, e.g. in one case the community members were organizing the recycling of the water from their sewage system.

The community commented:

- PAR has enhanced our capacity to manage in terms of better organizing, in a sequential manner in order to prioritize activities. Women members of the local research team the women have acquired management skills and are now organising micro-enterprises.

In general it can be concluded that both the World Congress presentation and participation and the visit to the Colombian PAR team and CINARA provided the teams with an opportunity to have fruitful exchange experiences with different people working in both the area of participatory approaches and the area of community management of water supply.

6. Research team consolidation and institutionalization

In some of the partner organisations the teams are facing with 'institutional' problems, which are caused by a variety of reasons. The team members are mostly quite happy with their work and find ways of consolidating mutual support, understanding and trust. Also outside their organisation by means of the National Reference Groups they find a sounding board for their experiences. However, as became clear during the coordinators interchange meeting in Cali (Colombia), they feel that sometimes other people in the organisation, even bosses, are 'jealous', because of the frequent and intensive exposure of team members to international experiences. In another case their organisation is felt not to be very interested in the project results, or even worse, is only interested in the money the program provides.

For the team from IRC a lesson learned in this respect is, that in general in the beginning of a project sufficient attention has to be given to informing the management of the organisations about the implications of the research program for the organisation and for its future functioning. This lesson will be taken into account for the proper implementation of the dissemination phase.

Deliberately, a directors meeting has been proposed by the coordinators to initiate the dissemination phase in which there is ample opportunity for the directors to comment and to get to know each other and discuss the institutional consequences.

More specific in the case of **Cameroon** reorganisation was needed because communication and coordination became unclear. This was partly due to a restructuring program in the overall organisation and because of the sudden death of one member involved in the coordination of the project.

During the last year, the case of **Guatemala** has been extremely difficult. Mainly due to overall changes in the management of the organisation, the team became more and more dissatisfied about their possibilities to implement the research activities according to their planning. The team became disjointed from the rest of the organisation and the coordinator was exempted from his duties. Although different people from IRC tried to intervene so as to get to a common understanding and agreements, in the end all had to admit that further intervention was unproductive. Recently the agreement with Aqua del Pueblo was brought to an end and the original team is now functioning from the premises of a small consultancy company. Here they are able to consolidate the many interesting experiences that were already gained during the first two years of the research program. No decisions have been taken, as yet, about how to continue during the dissemination phase of the program.

Also changes have taken place in the composition of some of the research teams. In **Pakistan** the transformation of the Water Sanitation Hygiene and Health Studies Project (WSHHSP), which was supervising the PAR activities, into the Water and Sanitation Extension Programme (WASEP) offers good prospects for the future dissemination phase. However, the Aga Khan Health Service has refused to extend the contract of Dilferoz for further participation in the PAR project. She left the project in September and rejoined the AKHS. Two female members have since been added to the team, which only consisted of one remaining team member. This team member is now coordinator.

In **Nepal** the team still faces problems on its continuity, new staff has been recruited from NEWAH (hygiene specialist). As of January the actual team leader will probably leave the project. Still, during the annual meeting of the executive board of NEWAH the PAR team leader submitted a presentation on the activities, future plans and challenges. A lively discussion followed in which the maintenance sections of all regions shared issues and problems related to operation and maintenance. As related to the experience during the diagnosis phase from the PAR project some suggestions were adopted by the sector heads.

Lessons from PAR project for O&M by NEWAH

- Form project management committees at ward level rather than village level
- Provide advanced maintenance (mistri) training for caretakers in tubewell project areas
- Organise exchange visits for effective updating of skills and knowledge of project management committee members and caretakers
- Adapt PAR findings

The teams from **Kenya and Colombia** have been the most stable since the start of the research in 1994. In Colombia the special feature of two 'volunteers' from other institutes in the project could be continued. However, one member is now less active in the programme. During the backstopping meeting with the Colombian team in May, it became clear that a more promotional and outgoing approach was needed, as the team was still too 'shy' to present their interesting findings and did not work sufficiently on influencing the way institutes profiles itself. As a result the team presented its preliminary findings at the 'seminario de los lunes' to the other CINARA members, and they also presented the project to the Departmental Health Ministry in order to motivate this institution.

At **IRC**, the new team member Mr. Peter Bury took charge of his assignment to support the Cameroonian team, which he visited during September. In the African region, time involvement on supportive consultancy from IRC has been spread more over the years over 1996 and 1997, because of the late start in both countries. More input will be needed in 1998.

7. Reporting

All teams prepared two progress reports during 1997 covering activities and implementation experiences, the first progress report of Guatemala came too late to be included in the general progress report submitted to DGIS. The overall workplan for the period covering 1997 and beyond was submitted by the project coordinator only in May. This was caused by the actual delay in the submission of the country workplans for 1997 and the discussions that took place with DGIS on the modalities to continue the project, since in all countries it can be observed that time is exceeding.

In the process each team is adapting the general action research approach continuously to the local situation and context and this process of adaptation in the broad framework of the planned action research shows some interesting developments. The differences and similarities could already be presented at the Cartagena World Congress.

All teams have also been busy preparing their country specific guideline documents of methods and tools for participatory assessment, which a team member from IRC is now compiling into one general guideline manual. This is one of the five documents which are planned as outputs for the research (PAR) phase of the programme. Another document on the flexible support approach, geared towards a participatory methodology to water supply system management ('**Participatory Action Development for community management**' (PAD)), which will adjust easily to varying local conditions and can be used by agencies, is also in the process of writing. For the general guideline manual on the experimentation phase still insufficient information is available to finalise a draft.

In general, the final document on the support approach will offer material that is intended to help readers understand and study the PAD approach, or to design their own. The accompanying manuals will be guides to apply the Participatory Action and

Development Methodology. These manuals will shortly introduce the methodology and explore each of the three different phases (Designing, Experimenting and Sustaining) more in detail. They will also provide methods and tools which can be used while implementing the PAD methodology.

8. Dissemination

The **Cameroon** team is involved in an on-going preliminary dissemination, making use of radio, TV, articles in new papers, an article in PAID/WA Newsletter and stimulating participation in field activities by interested individuals and organisations (mainly staff members of Community Development departments in the regions).

Pre-dissemination in Cameroon

A subdirector at Central level of Community Development Department was so impressed that he requested the training of all CD field staff (70 managers and 180 CD assistants) on the approach, which was approved by the Ministry of Agriculture. As he wrote in his official letter: 'Since the mission of the CD Department has been and continues to be to encourage community participation in all development endeavours, including thousands of water supply and sanitation projects that have management problems, the need to retrain our personnel in PAR approach would be of paramount importance to boosting our programme effectiveness and ensuring community project sustainability'.

The University of Dschang, who is participating in the NRG, invited the team to participate in a curriculum development workshop for a Mastercourse in Water Resources Management. Nationally, the approach has already been covered by different broad cast stations (Radio Bamenda, National news and TV station). A national newspaper (la Voix du Paysan) published an article on the approach and the NRG meeting in Bamenda.

At the level of the institution (PAID) there is a growing interest in the approach. PAID/WA has now included Action Oriented Research as a component in its Integrated Rural Development course.

Many ideas have been documented at the last NRG meeting for a sound dissemination phase of the project. A separate document has been received by IRC.

In **Colombia** the team prepared a 17 minutes video about the process followed in La Sirena one of the PAR communities. As a red thread they used the testimony of two women community leaders, that show the work realised over time. They also wrote an article on the PAR approach for the CINARA publication 'Rumor de aqua' (see annex III).

A team member in Gilgit (**Pakistan**) conducted a workshop on PRA for staff of the Building and Construction Programme and IUCN.

In September one member of the **Kenyan** team attended the 23rd WEDC Conference in Durban, South Africa and presented a paper "Understanding Community Management of Water Supplies". The paper was based on the findings of the PAR project and was received very well, as many participants sought individual meetings with the author after the presentation. The NETWAS PAR team member also participated in a two day workshop organised by the Participating Learning Network

(PALNET) in Nairobi. The team produces regular articles for the NETWAS Update and Water and Sanitation News. The same is true for the IRC coordinators with regular publication in IRC in brief and WaterNewsletter as well as presentations to conferences and workshops (for example during the IDS - workshop on 'Linking Participatory Methodologies with People's Realities - towards a common agenda').

9. Plan for the next period

Evaluation of the experiments did not wait until the end of the experimentation. In group meetings during the experimentation phase community members have exchanged views on various aspects of the experiments and started developing their opinions. However, there will still be a need to bring all observations together and systematically analyze the results.

If a certain experiment is also implemented in other villages the analysis may be made at both group and inter-village level. The analysis will include recognizing unintended consequences and the contribution this innovation makes to the solutions of other problems in a sustainable way.

The activities to document the research process, evaluation of problem solving strategies and tools and methods will be continued. The overall project results will have to be consolidated.

In general, the outcomes of the evaluation and follow-up activities to sustain the process during 1997 and 1998 should be a clear picture of both the results of the experimentation and the process followed. This should allow for a clear picture of the results of the experiments for a wide range of villages and the suitability of the tested management practices under various local conditions and clear guidelines on how to implement the tested ideas.

Other outcomes, which are part of the dissemination phase, should be enhanced diffusion of strategies, methods and tools; improved development of institutional linkages; establishment of system of training and communication; documented and operationalized approach for participatory action research as well as resource materials, which can also be used for other areas of interest and a more supportive environment for experimenting.

Emphasis will partly be on the locally realized **outcomes** (new management practices, use of indigenous trees for source protection,...) of community experimentation. However the main emphasis will be on the basic ideas and principles underlying these experiments and the diffusion of the **methodological aspects of the participatory action and development process**. So ideas about both promising 'solutions' to experiment as well as ideas and experiences about 'how to experiment': like innovative concepts, skills and organization.

The last part is extremely important because the participatory process should lead to self-management, aiming at leaving communities with an on-going capacity to implement an effective participatory process to find solutions for future/other

situations that need improvement. The PAR team thus will be concerned with the organizational development and the creation of other favourable conditions for on-going experimentation and development of sustainable community management of water supply systems as well as other areas.

Activities in this step include:

- exchange visits between different communities
- invitation of key persons to participate in planning/evaluation meetings in the villages
- field workshops
- community-to-community learning-by-doing training
- formation of diffusion teams
- development of community members 'manuals' and audiovisuals
- assistance to the group to consolidate by leadership training, stimulation of networking between communities
- consolidation of institutional support to local processes
- documentation of the process of development and the methods used for diagnosing, experimentation etc.
- evaluation of the impacts of new management practices
- phasing out by consciously shifting the style and role from the supporting PAR team: *from facilitator to external consultants and supporter*
- documentation and operationalization of PAD approach which can also be used for other areas of interest, as well as resource materials

These will comprise the main activities in the remaining of 1997 and 1998.

ANNEX I Indigenous knowledge and experimentation: experiences from the Cameroon team (see next page)

INDIGENOUS KNOWLEDGE AND EXPERIMENTATION

by Andrew Tayong

According to Webster's Dictionary, an experiment is "an operation carried out under controlled conditions in order to discover an unknown effect ... or test a hypothesis, ..."

You are not alone to wonder whether villagers do carry out experiments to prove a hypothesis. I never believed until after an activity called **Indigenous Knowledge and Experimentation** was conducted in a research project developed by IRC, The Netherlands and implemented by PAID for Cameroon.

This project titled *The Role of Communities in the Management of Improved Rural Water Supplies in Developing Countries*, an approach that allows for adaptation to local conditions and circumstances was chosen. This is one of the increasingly popular participatory approaches, termed Participatory Action Research abbreviated PAR.

The major characteristic of this approach is that it builds the bridges separating research, training and action. Therefore, any party involved in the approach must carry out a research, learn from the research through training and discovery learning, and apply the acquired knowledge in solving problems which make the Action part of the approach. More on the approach and its application in this project will be yours in future publications.

Before we get carried by this approach, let us return to our issue of Indigenous Knowledge and Experimentation. Webster's Dictionary again defines knowledge as "The fact of knowing something with familiarity gained through experience or association." I am therefore talking of experiments conducted by people who are not educated but have a lot of knowledge gained through experience and association with their environment and activities.

As a strategy to make villagers learn more consciously, we conducted an activity to know how community members solve their problems. Do they just accept solutions proposed to them by an outsider or do they try them before accepting? If they try, then how? The PAR researchers on this project needed this knowledge to build on the community members' experiences and knowledge in supporting and guiding them to solve their problems.

While carrying out this exercise, we came across many experiments scientifically conducted in the villages. There was one on pest control during planting which I wish to share with you now:

A farmer in NYEN village of the North West Province conducted this interesting experiment. Her experiment was well organised as follows:

Problem Statement: After planting groundnuts on her farm, this lady came back and

discovered that only a few seeds germinated despite the prevalence of all the necessary conditions for germination. "What happened?". She decided to trace the holes and verify if they were still there. They were there! "Why didn't they germinate Then?" She questioned herself. After observing these seeds she discovered that the embryo that bulged out of the seed coat had been eaten up. She also realised that there were some small red ants on the ridge where the seeds were planted. "Could these ants be the cause of this problem", she wondered, "and if they are, what could be done to eliminate or send them away?"

Hypothesis: From experience, the farmer knew that the small red ants usually feed on very sweet materials. She therefore thought that rendering the groundnut bitter might be a way to stop the ants from eating up the embryos and consequently the seeds will germinate.

Set-up of the Experiment: She put groundnuts in a calabash, ground some kola nuts and added little water then mixed the whole content in the calabash and stirred. This was kept for a night so that the seeds could absorb enough of the bitter fluid. These seeds were then planted only on two ridges of the farm.

Monitoring: Despite the fact that this farmer was illiterate, she knew that because she was experimenting all other factors had to be controlled. She erected a scare-crow on the farm. Regular visits were made there to ensure that the seeds were safe. During the visits she dug out some of the seeds to observe the development. Behold!, a few days later, she got to the farm and saw the two ridges covered with small green groundnut shoots. No ants were seen on and around these ridges.

Conclusion: By comparing the two replanted ridges with the rest of the farm, she observed that rate of germination was higher than the rest of the farm. This result went to confirm her hypothesis. Like many professionals, she did not keep it to herself. She disseminated to other farmers by inviting them to see the marvel. In their usual practice of trusting each other the other farmers believed her and are applying the method. In some cases, kola nuts are chewed and sprinkled on the farm. This method is now widely practiced in the community and beyond.

How many of us could have expected such an experiment from a farmer? Have we not, at some point, felt that villagers know very little? Whatever your impression, we must also listen to them when solving their problems, as in the Desiderata "... listen to others, even the dull and ignorant, they too have their own story". This is a lesson I will always remember and strive to practice. I hope you will also.

ANNEX II

Some of the lessons learned presented by team coordinators at the Cartagena World Congress

- Institutional change should be part and parcel right from the beginning
- Problem analysis serves as 'eye-opener' and automatically generated actions
- Mutual trust and respect are a fundamental basis for the success of PAR
- Community Research Teams are important for the implementing of research activities
- Women express their ideas better in separate meetings
- The dynamics of communities can not be adjusted to a fixed timetable, because time and space differ from the proposals of the institutions. Thus result can not expected at the short time
- Sufficient space and openness is needed so that communities can make the PAR process theirs. This allows to make the diagnostic process a common learning experience for community and community research teams
- It is possible to converge the technical/ scientific knowledge of institutional agents with the popular knowledge and their logic in order to construct new ways of converging of both entities looking for alternatives of development and community management to solve community problems
- Each situation, each culture, each place, each experience requires its own approach. Nevertheless, general PAR principles can be applied. Adapting the approach to each situation is depending on the experience of the research teams/practitioners
- The PAR research is showing that despite the extensive use of PRA tools, which allowed communities to articulate own needs and demands, institutions have continued with 'business as usual', without any apparent change in their approach to development to accommodate communities as partners of development
- The PAR project has helped communities to do a 'self-reflective' process, where it is dawning on these communities that there exists pockets of the unserved, poor persons who are neglected and whose voices are hardly heard
- Mutual selection process of partners institutions involved in such collaborate PAR research programmes should be done very carefully based on clear criteria, like commitment and others.

Cartagena, 4 May 1997

ANNEX III Article from the Colombian team

LA IAP UN ENFOQUE METODOLOGICO PARA LA GESTION COM

Por: Ing. Sanitario Alfonso Rojas

La IAP. Investigación Acción Participativa es un método de estudio y acción que busca obtener resultados confiables y útiles para mejorar situaciones colectivas sobre todo entre clases populares. Aspira a que el investigador base su observación en la convivencia con las comunidades, de las que también deriva conocimientos válidos.

La IAP como metodología tiene sus orígenes tras la crisis de Mayo del 68, cuando los académicos comenzaron a abandonar las universidades cuestionándose por la manera de asumir la ciencia. De esta forma, ya entrados los setenta, se conocieron las cosas poco habituales para la academia realizadas por algunos intelectuales del Tercer Mundo. En la India, el economista, G.V. da Silva acompañaba a los campesinos a recuperar sus tierras al estilo Gandhi; en Brasil, el pedagogo Paulo Freire, perseguido por las dictaduras, iba por los pueblos hablando de abandonar las jerarquías en la enseñanza (Educación Popular). Experiencias similares se vivían en México con Rodolfo Stavenhagen, en Colombia con el sociólogo Orlando Fals Borda y otros, (apoyando movimientos sociales populares), en Tanzania con la antropóloga finlandesa María Liisa Swantz y con cerca de un centenar de personas en el mundo.

La IAP propone como método: la participación más vivencial; una participación con compromiso; un replanteamiento de la relación sujeto-objeto; (por sujeto-sujeto), el reconocimiento de la ciencia popular; una forma colectiva de producción del conocimiento y la promoción de la organización popular. Es una propuesta con tres dimensiones constitutivas: la acción transformadora, la producción de conocimientos y la participación, es decir, está ligada al hacer, sentir y pensar.

En proyectos de desarrollo el enfoque de la IAP ha utilizado nuevas técnicas y métodos abreviados, entre los que figuran la evaluación o diagnóstico rural rápido (RRA por sus siglas en inglés Rapid Rural Appraisal). Estos métodos han sido muy utilizados especialmente en proyectos agrícolas. En agua y saneamiento básico, CINARA ha desarrollado un método de trabajo participativo retomando elementos de la IAP y con el proyecto "El Rol de las

Comunidades en la Gestión de los Sistemas Rurales de Abastecimiento de Agua en Países en Desarrollo", se crea un espacio para cualificar el trabajo de tres comunidades utilizando esta metodología.

El proyecto se ejecuta en tres localidades del Valle del Cauca, Corregimiento de Ceylán en el Municipio de Bugalagrande, barrio La Sirena y vereda Campoalegre en el Municipio de Santiago de Cali. Para su desarrollo estratégicamente se conformaron Equipos de Investigadores Comunitarios (EIC) y Equipo Investigador Inter-Institucional (EII), quienes con el enfoque del método de IAP, interactúan en el mismo. De un lado los EIC están conformados por líderes de las tres comunidades (10 personas por comunidad aproximadamente), quienes son representantes de diferentes organizaciones comunitarias, de la entidad administradora del acueducto, representación de género, de los diferentes sectores territoriales de la localidad, con capacidad para leer y escribir y con interés y tiempo para participar en el proyecto; y del otro lado el EII con representantes de EMCALI, Secretaría de Salud Departamental del Valle del Cauca y CINARA, quienes han conformado un solo equipo para el desarrollo del proyecto participativo.

Para generar conocimientos alrededor de la IAP en proyectos de agua, el Equipo definió la Investigación como el proceso en el cual se pretende conocer las características fundamentales de las variables que tienen mayor incidencia en la administración, operación y mantenimiento de los sistemas de abastecimiento de agua, a fin de construir los escenarios sobre los cuales los diferentes sujetos sociales (endógenos y exógenos) generen cambios de actitud a nivel individual, comunitarios e institucionales. La Acción entendida como a partir del conocimiento de la realidad donde se toman decisiones que permiten actuar sobre el sistema; en medidas administrativas para el manejo eficiente; en la resolución de conflictos de orden político, de liderazgo y de poder. La Participación entendida como el encuentro de sujetos sociales con capacidad de decidir sobre el sistema de abastecimiento de agua pero, con diferentes intereses, interpretaciones, visiones, representaciones e imaginarios sobre su

realidad. También como una forma de construir espacios y convergencias que permitan decidir sobre la vida colectiva y social de la comunidad, como opción de ser autónoma, de tener poder de negociación ante diferentes niveles, para satisfacer sus necesidades de bienestar.

Las experiencias adquiridas en las tres comunidades permiten hacer una aproximación para el desarrollo de este método aplicado en proyectos de abastecimiento de agua, los cuales mencionaremos a continuación:

A) ACERCA DE LA INVESTIGACIÓN

Cómo lograr que grupos comunitarios participen como investigadores en un Proyecto de Agua?

1) Es necesario tener claridad sobre cuál es el propósito central de la investigación, cuáles son los compromisos que adquieren las partes y cuáles son las motivaciones de los diferentes grupos.

Es posible que la comunidad entienda que la investigación tendrá como eje central el estudio y análisis de las distintas maneras para mejorar su capacidad de gestión frente a su sistema de agua, en vez de lograr de forma inmediata el mejoramiento básico de su sistema. En el caso de Ceylán la gente esperaba que detrás de la investigación vinieran otros proyectos relacionados con inversión para solucionar los problemas más apremiantes. "Esta investigación jalona otros proyectos" decía uno de sus líderes. "Con este proceso investigativo que iniciamos, estaremos formando nuevos líderes." afirmaba otro.

2) Hay que desmitificar el proceso investigativo. La investigación debe manejar conceptos sencillos, claros y de fácil entendimiento por los investigadores comunitarios por ejemplo, el enfoque de género es más fácil de entender si con el grupo comunitario se hace el ejercicio de Rutinas de Trabajo de hombres y mujeres y a partir de allí se discute y se construye el concepto. Igualmente el uso de las técnicas participativas

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RIA EN SISTEMAS DE ABASTECIMIENTO DE AGUA RURALES

ilia Gómez B.

debe ser un medio de motivación y estímulo para impulsar y mantener el proceso participativo, consciente y duradero del individuo y de su comunidad. Estas técnicas deben ser entendidas, manejadas, adoptadas o modificadas por los mismos EIC, y deben fomentar la iniciativa, provocar la reflexión analítica y conducir a la definición de acciones orientadas a obtener un cambio. El lenguaje y la comunicación entre las personas del equipo debe ser claro, preciso, valorando las percepciones y documentaciones que la comunidad hace de su realidad. Un Diagrama de Venn muestra que tan cercanas son las relaciones de comunicación y coordinación entre la junta administradora del acueducto con las otras organizaciones.

3) Hay que investigar acerca de los diferentes conflictos y juego de intereses que se tienen en la Comunidad. La problemática del acueducto y de la junta de servicios públicos del corregimiento de Ceylán gira en torno al problema del poder de los grupos políticos. Esta comunidad reconoce la importancia y el desarrollo de los servicios públicos alcanzado a través de la empresa local, pero también reconocen la falta de canales de comunicación entre la junta, los usuarios y las otras organizaciones comunitarias.

A pesar de los esfuerzos por buscar la concertación, esto no se logró debido a que cada grupo en el fondo quiere tener el control sobre las organizaciones formales del corregimiento.

B) ACERCA DE LA ACCIÓN

Cuáles son las líneas de acción que se derivan de este proceso investigativo?

La comunidad está permanentemente actuando, a veces sin un ordenamiento o una planificación según nuestra óptica técnica, pero con mucha lógica según la óptica de ellos. Es aquí donde para el desarrollo de la acción debemos hacer converger el ordenamiento técnico con la lógica comunitaria.

La Comunidad está en acción cuando identifica, registra, racionaliza, discute y decide que hacer con sus necesidades y problemas. Un punto alto de esta acción es cuando ella decide como se van a resolver los problemas que priorizó. Es en ese momento donde son relevantes

los planes de acción que las tres comunidades formularon, definiendo prioridades, actividades y responsables para cada problema.

Los puntos más alto de esa acción lo constituye en primer lugar, las experimentaciones o pruebas en terreno que ellos deciden realizar para las alternativas de solución de los problemas priorizados; a esto lo llamamos "AGENDA DE EXPERIMENTACION"; en segundo lugar, el seguimiento y control que la comunidad ejerce sobre las actividades de su Plan de Acción. Por ejemplo en La Sirena la comunidad identificó "el uso irracional del agua" como unos de sus problemas centrales. En su Plan de Acción se establecieron las alternativas de solución con las cuales se hará un trabajo experimental para escoger al final de este ejercicio la más adecuada.

La acción requiere de un seguimiento y control de manera que permita evaluar los resultados parciales y finales de la gestión de la comunidad. En este sentido, el grupo de investigadores comunitarios e institucionales están desarrollando un proceso de construcción de "indicadores" que representen las señales de aviso del cumplimiento de la experimentación y de los planes de acción.

C) ACERCA DE LA PARTICIPACIÓN

Quiénes y Cómo debe participar la comunidad?

La vía de entrada para lograr esa participación, la constituyeron las juntas administradoras de los sistemas, las juntas comunales existentes, los líderes de esas organizaciones y las personas de la comunidad con necesidades y problemas alrededor del agua. A través de ellos se logró adentrar en el conocimiento de la dinámica social de la comunidad.

La convocatoria debe ser amplia y abierta, dando la oportunidad para que todas las personas o grupos que quieran hacer parte del equipo lo manifiesten. Aunque también es utópico pensar que toda la población quiera participar, por ello hay que motivar a las personas que demuestren interés para vincularlas al proyecto. Esta situación obliga para que todos los resultados y acuerdos a los que se llegan en el Equipo de investigadores deba ser socializado y evaluado por el resto de la comunidad.

Siendo un proceso lento, es de esperar que algunos de los investigadores comunitarios se cansen y quieran retirarse del mismo. Es en estos momentos cuando el equipo debe desplegar toda su creatividad y compromiso de trabajo para avivar el sentido de la investigación, socializar los resultados alcanzados y vincular nuevos miembros al equipo.

En cuanto al cómo participar, se debe tener claro que si se está convocando a la comunidad para que investigue y actúe, se debe garantizar que su participación se lleve a cabo en todas las fases del proyecto y no como algo puntual, cuando necesitamos nos suministre información, avale unos resultados o realice alguna labor de veeduría.

En el proyecto las comunidades participan a través de los EIC en cada una de las fases desarrolladas definiendo áreas de trabajo, recogiendo y analizando información, priorizando y elaborando sus planes de acción.

Esta participación decisoria de la comunidad ha sido fomentada y respetada por el EIC, para quienes esto ha implicado una reflexión en torno a su papel como agentes institucionales y el cambio de actitud frente al trabajo con la comunidad. El desarrollo de este proceso generó discusiones para llegar a puntos de acuerdo y convergencia frente al manejo de los tiempos, la metodología, los saberes y los contenidos del proyecto.

A manera de conclusión podemos decir que utilizando el enfoque de IAP se vincula a la comunidad en la investigación y análisis de su realidad, lo que permite no sólo plantear acciones e iniciativas mas sostenibles para sus acueductos, sino, interactuar con otros agentes sociales - "intelectuales". Hoy el investigador está más atento e interesado en estar al lado de la comunidad que en precederle. La confesión de que no sabemos para dónde vamos pero que estamos ahí, hombro a hombro con los líderes, nos parece un paso irreversible. Ahora nuestra preocupación es la participación, por ello el trabajo conjunto tiene una mayor perspectiva para la construcción de modelos de desarrollo y de inserción en la sociedad que le permita a las comunidades una mayor expresión de sus potencialidades individuales y colectivas y de sus formas creativas.

ANNEX IV Letter from Sigomere

To the Programme Manager,

Mr. I.O. Oenga

P.O. Box 15614

NAIROBI

9/7/1997

Dear Sir,

May I thank you very much in advance for a Water Master Meter which I am looking forward to receiving. I am very sorry we have not been able to hold our Annual General Meeting because our books are not yet ready. We hope to get them ready soon.

As a result of your education we are now able to learn mistakes very quickly. As a result of that we have laid off some of the staff members and replaced them. Apart from Grace, Matthew Ogola is no longer with us. He was following the foot steps of Grace.

Through your training programme we are now able to run our society well and our Bank Account which was reading almost nil now has over Kenya shillings a hundred thousand.

May I request you to kindly continue with the programme because the new members who are going to be elected in have not attended any training and if possible extend it to other communities.

Yours sincerely,

Ephraim Onyango
SIGOMERE

P.O. Box 178