

Community Participation in the Water Supply Sector in Sri Lanka

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INTRODUCTION

THE BENEFICIAL role of community involvement in the planning and implementation of water and sanitation projects in the rural sector of less developed countries is now recognised. There are, however, considerable differences of opinion both as to what constitutes effective community participation and how to ensure that such participation can be integrated into the project development cycle without destroying the individuality of the community involvement. In this paper the authors outline the needs for a community participation approach linked to health education and institutional support, and describe a procedure currently being adopted in Sri Lanka in which a comprehensive community participation/institutional support approach is being used on a number of demonstration projects.

THE NEED FOR COMMUNITY PARTICIPATION

COMMUNITY PARTICIPATION is embodied as a key strategy in the UN International Drinking Water Supply and Sanitation Decade, from the initial project planning stage to final system operation and financial recovery. This emphasis was based on numerous examples of projects which had failed because the real needs of the community were not taken into account.

Typical adverse effects which result from non-community involvement are:

- Non-participating communities will usually agree to any project because it is seen as a step towards modernization.
- Non-participating communities will rarely criticize a proposed project because in so doing they may gain a reputation for being troublesome and thereby suffer withdrawals of assistance for other projects.
- Self-help in construction, operation and maintenance will not be forthcoming if the need for the project is not felt by the community.
- The community will be reluctant to contribute towards the costs of the project.
- Interest in maintenance will be minimal because there will be no sense of community ownership.
- Involvement restricted to community 'VIPs' often results in their needs being considered rather than the needs of the community, with schemes being suggested which will enhance their own status.

Experience in Sri Lanka is no different from that in many other less developed countries, with many examples illustrating how the absence of community participation in rural water supply projects often results in inappropriate systems and waste of resources. A survey of three Sri Lankan villages reported by Fernando (1985), for example, showed that only 12 to 14% of families in the villages benefitted from a new water supply scheme. In one village, the local VIPs

changed the layout of a piped scheme to benefit the more affluent members of the community. In the other villages new tubewells were drilled in locations where there was no water supply problem in order to attract more development assistance and to 'modernize' the village, rather than to provide water to the poorer sectors of the community.

One of the basic problems in implementing successful water sector projects in rural and low-income areas generally is to ensure a financial commitment from the community, at the very least for the costs of operations and maintenance. Unfortunately, too many projects are designed on the basis of some 'standard' ability-to-pay criterion based on income which more often than not has no relation to the willingness of the community to pay for the project. A detailed review of rural water supply projects funded by USAID, IDB and IBRD reported by Brisco and others (1986) showed that willingness to pay for a proposed project could only really be determined if the community became directly involved in the project planning and selection process.

Recent experience from Ghana has shown that despite the emphasis on VLOM (Village Level Operation and Maintenance) in a rural handpump project, a retroactively enforced tariff resulted in low collection rates and reduced community participation. The communities had not been involved at the planning stage and the later imposition of a tariff encouraged the attitude that the handpumps were government property and therefore should be maintained by government. Wood (1988). By comparison, experience with IRC-funded projects in Burkina Faso and Guatemala showed that water supply schemes were more likely to be technically appropriate and affordable if the communities were involved in the project development phase, particularly when supplementary hygiene education and sanitation programmes were also included, World Water (1986).

Experience from the Barangay Water Programme in the Philippines which incorporates community participation through the establishment of Rural Waterworks and Sanitation Associations (RWSAs) which are formed by the consumers to operate and eventually own the schemes, has also demonstrated that such community involvement can lead to acceptable and affordable rural water supply schemes, Bingham (1986).

IMPORTANCE OF HEALTH EDUCATION

THE IMPORTANCE of health education as an essential component of water supply/sanitation projects cannot be overemphasised since attitudes to water use, excreta disposal and hygiene are often inconsistent with project aims. In Sri Lanka, a behavioural study carried out by Karunadasa (1982) showed that it is commonly believed that wells should be kept open to permit sunlight to filter in, thereby preventing the water from becoming impure and also improving taste. Boiled water is not popular for drinking, in fact if sunlight falls

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on the water it is considered that boiling is not necessary. Attitudes to excreta disposal are equally conditioned by cultural beliefs. A more recent survey of five communities in Sri Lanka reported by Kariyawasam (1988) showed that 32% of the people believed that proper disposal of excreta was necessary only for aesthetic reasons and to avoid social embarrassment. In each community possession of a TV, motor cycle or refrigerator was considered to be a higher priority need than improved excreta disposal. Those families that did possess expensive fully plumbed bathrooms did so for status reasons, and despite the fact that such facilities represented almost 20% of the total house construction cost, almost 80% of the families preferred to use separate rudimentary facilities, reserving the status symbol for visitors.

The need for health education in the context of boiling water is apparent from a case study in a rural village in Sri Lanka reported by Fernando (1986) who compared the incidence of diarrhoea and fever in families using boiled and unboiled water as follows:

Water Supply	Incidence (Per 100 families)
Separate well:	
Unboiled	98.8
Boiled	14.3
Shared well:	
Unboiled	52.1
Boiled	25.0

One of the reasons cited by Kariyawasam (1988) for the ineffectiveness of traditional education approaches is that in the low income groups people who are illiterate may also be visually illiterate, being unable to interpret large colour posters commonly used for health education purposes. He demonstrated this by asking the villagers to arrange pictures of every-day activities such as paddy planting and fishing in sequence. The results were as follows:

Picture Sequence	% Sample
Left to right	36
Right to left	14
Top to bottom	20
Bottom to top	30

The emphasis of the health education programme should be based on the community health problems which need to be resolved. This implies that a reliable health profile should be developed and an evaluation procedure set up to monitor, in public health terms, both the effectiveness of the water supply/sanitation project and the health education programme. Establishing a pre-project health status is difficult since most official records are incomplete and are not segregated on a project community basis. Questionnaire techniques are equally unreliable, studies in Bangladesh reported by Stanton and others (1987) showed that there were significant disagreements between 24-hour recall and knowledge — attitude — practice questionnaires compared to direct observation of sanitary practices. The current thinking on health status evaluation is that it can best be achieved by case-control studies based on diarrhoeal disease (Brisco and others, 1986).

THE NEED FOR INSTITUTIONAL SUPPORT

COMMUNITY PARTICIPATION alone will not ensure successful implementation of water/sanitation sector projects. For other than basic individual house latrines or shallow wells, a range of materials must be provided, funds made available, specialist assistance allocated for design and construction, and continued support pro-

vided for operations and maintenance. These inputs necessitate an institutional commitment.

The lack of success in a significant proportion of failed projects has not been the failure of the community participation process but a failure of the relevant institutions to support the projects. Typical examples are inappropriate project planning and design which ignore community preferences, delays in payment of subsidies which lower community morale, and, what is probably the most common, inadequate support to operations and maintenance. The importance of institutional support has been recognised by the international donor community and more emphasis is now being placed on institutional upgrading generally and on integrating community participation mechanisms with the water sector agency project procedures.

COMMUNITY PARTICIPATION METHODOLOGY

DESPITE THE many examples of projects involving various degrees of community participation, there are no clearly defined community participation procedures which will guarantee a successful project in every situation. The adoption of conventional pre-investment planning procedures which rely on full-scale engineering feasibility studies and preliminary designs for a range of alternatives, even when combined with a degree of community involvement, are not applicable to small urban and rural schemes where communities have limited financial means. Data from the Philippines show that such pre-investment planning for small urban schemes can represent half of the actual scheme construction cost. Watt (1986). Attempts to produce standard designs and standard levels of service may reduce such costs but they also severely limit the flexibility necessary to satisfy community requirements and to meet actual site conditions.

In order to ensure that a project does satisfy the needs of the community, both technically and financially, it is necessary to harmonise specialist project expertise and institutional support with community desires. This is a delicate and often time-consuming process. The six basic stages have been described by Chandler (1985) and can be summarised as follows:

- 1: Select/train project facilitators
- 2: Community education and participation (needs survey)
- 3: Harmonise needs with feasible scheme
- 4: Obtain community consensus/commitment
- 5: Implement scheme
- 6: Integrate with institutional support networks.

The pre-investment planning and community commitment phase is crucial to the success of the project. Construction should only commence when consensus has been reached. Experience has shown that optimising community needs with a technically/financially feasible scheme can take many months. Chandler (1985) suggests that this initial process typically takes six months, and experience with the Barangay Water Programme in the Philippines demonstrates that it takes considerably longer to create an effective RWSA than it does to design and construct the scheme. The ideal is to achieve a balance between the two opposing forces of expanding the technical evaluation process so that all aspects are covered in intricate detail, often to the detriment of the cost of many small rural projects, and concentrating too much on the community involvement process with the result that it tends to go on for ever without a definite agreement on basic needs or affordability ever being reached.

NEW APPROACH TO COMMUNITY PARTICIPATION IN SRI LANKA

AN INTEGRATED approach to community participation is now being implemented in Sri Lanka, as a component of the Water Supply and Sanitation Sector Project being carried out under USAID/Government of Sri Lanka funding for the National Water Supply and Drainage Board (NWSDB). The procedure is being implemented in five communities which serve as demonstration projects for the application of integrated water supply/sanitation/health education inputs.

The populations in the project areas to be served by the planned water supply/sanitation facilities are as follows, all the schemes being based on rehabilitation of existing water supply facilities with the exception of Ahangama which currently has no formal water supply infrastructure.

Project	Population
Kakkapalliya	3800
Wennappuwa	6500
Kahawatte	5200
Eheliyagoda	9000
Ahangama	12,500

All the project areas have inadequate water supplies, the hours of supply of susceptible quality water varying from three to eight per day, primarily to public standposts. Alternative shallow well sources are brackish in the coastal communities of Kakkapalliya, Wennappuwa and Ahangama and are not suitable for drinking.

Excreta disposal facilities are generally inadequate, the proportion of the population having access to satisfactory latrines generally ranging from 25 to 60%. Parasite infestation rates are relatively high, the recorded incidences of diarrhoea are about double the national average of 969/100,000 population (hospital cases only).

The fundamental concept which is embodied in the new approach is that the community participation strategy must be in harmony with the day-to-day life of the community, it must agree with the community expectations and priorities. It is essential, therefore, to understand all the dimensions of community behaviour related not only to water and sanitation but also to participatory actions. The following prerequisites are considered essential in developing a successful strategy:

- Evaluation of previous projects in similar cultural/socio-economic settings in order to determine strengths and weaknesses of prior approaches.
- Detailed study of existing water and sanitation behaviour, health status and socio-economic level in order to design the long-term health education interventions necessary to influence behaviour patterns.
- Assessment of true community leadership. Experience in Sri Lanka has shown that apparent leaders do not necessarily have a high degree of community affiliation. Sociometric tests are necessary to determine the true dynamic leaders who are affiliated with the community and can be relied on to sustain community participation. In the Sri Lankan projects the sociometric tests defined over 100 key leaders for each project.
- Assessment of existing community participatory flows in everyday life (such as paddy cultivation, fishing) so that the bases for motivation and co-operation, perhaps through community cliques and groups, can be channelled to community participation in the water sector.
- Assessment of community capacity, both socio/

cultural and economic to sustain a long-term involvement in the proposed water supply project.

The basic procedure which has been developed on the five projects is considered suitable for rural, semi-urban and peri-urban areas (squatter, low income housing areas), and incorporates seven basic stages:

Stage 1: Basic Investigations

This consists of field visits to the proposed site by both sociologists and engineers. The visits serve to:

- Become acquainted with the people and local institutions.
- Study morbidity/mortality patterns of water-related diseases through discussions with formal health sector workers.
- Study the efficiency of the voluntary organisations and promote if found inefficient.
- Study water and sanitation related behaviour.
- Study socio-economic structure of the community and identify community leaders. These may be religious, occupation based, or voluntary.
- Carry out a preliminary assessment of existing water supply and excreta disposal facilities, inadequacies, alternative sources, etc.

The amount of time required for this first stage varies, depending on the extent of the existing data base and the size and receptivity of the community. The minimum field time for such pre-feasibility study data collection would be two days, whereas collection of data on community characteristics for a feasibility study for a community up to 10,000 population should not exceed one field month. The identification of community leaders is of vital importance, this process can take up to five days of careful interviewing in situations where the real leaders are not readily apparent.

Stage 2: Community Orientation and Preparation for Community Participation

In this stage a number of one-day orientation meetings are held in the community involving all the leaders and project facilitators drawn from the Ministry of Health and the NWSDB. The project objectives are presented and the interest of the community awakened through emphasis on improved facilities, benefits of improved health, sense of ownership, etc.

A total of 15 one-day duration programmes were conducted to 104 officers from the five Sri Lankan projects and 26 organised group discussions were conducted specifically for health officers. An intensive training course in interpersonal communications was given to the key leaders previously identified from the sociometric tests. A total of 96 formal meetings were held with key individual leaders but it is reasonable to assume that many more informal meetings took place on an ad-hoc basis. The main purpose of the meetings with the leaders and health officers was to clarify demarcation of authority and to avoid future conflicts.

Stage 3: Community Consultation, Education and Planning

This is perhaps the most critical stage of the whole process. It is based on a two-day consultation meeting held in the community at which all the leaders attend, together with representatives of ancillary workers in the community such as school teachers, midwives, public health inspectors, etc. Three working groups are set up to deal with water supply, sanitation and health education, and basic issues are discussed and outline programmes developed and agreed.

Since many of the participants are daily-paid workers and since it is vital that full community involvement is

secured, persons attending the two-day consultation meeting are provided with lunch and paid a daily attendance allowance of about 100 Sri Lankan Rupees (SL 57 equivalent to £1.00). It has been found in practice that such an incentive is necessary to generate the initial interest, partly to compensate for loss of earnings but also perhaps because in the past similar exhortations by Government-sponsored campaigns to take part in voluntary efforts sometimes failed to provide benefits to the community. In the experience of the demonstration projects, it has been found that interest becomes self-sustaining once the community realises that in this case it is being intimately involved in the whole project cycle, and as a result later community meetings do not need the payment incentive.

Essential components of the consultation process are:

- Members of the local authority must be involved from the inception in the participatory planning process, though not necessarily in a leadership role.
- All sections of the community must be represented through formal and informal community leaders, this ensures that the more affluent segments of the community do not monopolise decision making. On average, each project consultation session involved about 80 leaders.
- The group first elects hamlet sub-committees. Each project area comprises from five to eight hamlets, each hamlet containing from 50 to 100 houses. Each sub-committee comprises two to three representatives from the hamlet, one of whom is invariably one of the community leaders and a member of the Central Action Committee, health workers, Public Health Inspector and health volunteers. Each sub-committee nominates three to four members to sit on the Central Action Committee.
- The group then elects a Central Action Committee which typically consists of up to 40 members comprising elected community leaders, representatives of hamlet sub-committees, Public Health Inspectors, family health workers, Medical Officer of Health, local Member of Parliament, local authority representative and Grama Sevaka representative (Government sponsored rural/village development society). All government officers are ex-officio members of this committee.
- The health volunteers are selected by each sub-committee, one volunteer typically representing 15 to 20 families. The volunteers, who live in the hamlet represented by the sub-committee, should have at least 10 years of schooling and should be motivated by a desire to provide voluntary service to promote the health and well being of their community. In the Sri Lankan projects 368 volunteers, of which 75% are females, have been trained and are now carrying out health education activities.

Stage 4: Developing the Water Supply/Sanitation Programme with the Community

This stage represents community participation in action. Over a period of time which is typically at least six months, alternative water supply and sanitation upgrading strategies are formulated and evaluated and community consensus reached on the appropriate system. Community participation and health education strategies are also discussed and modified as necessary. The Central Action Committee and sub-committees meet monthly and discuss with officers from the NWSDB the status of the technical investigations. For specific problem solving the Central Action Committee

may approach the District Health Committee which is a relatively high-level body whose membership includes the District Minister, Regional Director Health Services, Government Agent and area MP. Care must be exercised to ensure that basic components such as source yield, capital funding, tentative budget allocation and resource mobilization are well defined before the community interest is activated too far, otherwise the community will lose interest and there will be an adverse affect not only on the initial project but also on later development efforts.

Key elements which are addressed during this stage are:

- Promotion of community awareness regarding payment for water and reduction of water wastage.
- Promoting the concept of community standposts rather than public standposts, thereby enhancing a feeling of responsibility and sense of ownership.
- Finalising the location of the standposts by the Central Action Committee in consultation with the families to be served by the standposts.
- Formation of user-consumer groups and caretakers for each community standpost. Recovery of water charges can be carried out through existing community organizations such as thrift societies, village councils, etc. The caretakers can report to these societies and any excess funds can be retained by the societies for the benefit of their members.
- Development of a legal agreement between NWSDB (the supplier of the water) and the local authority (representing the community) regarding revenue generation and level of service to be provided.
- Finalising locations of latrine pits by health staff and volunteers.
- Assuring that technical expertise and support materials are available.

One of the keys to the success of the Sri Lankan projects has been the decentralized organization of the NWSDB, whereby the participation of technical field staff from the regional offices enhances accountability and is more conducive to timely performance.

Stage 5: Health Education

The health education process typically spans a longer period than the community development process. The fundamental concept of the health education process is that improvements in community health will be greater if the community is involved in the health education process, rather than relying solely on the formal health sector. Based on the initial socio-economic surveys the health educational materials are developed. These typically include slides and photographs reflecting local community behaviour, together with leaflets and folders related to water and sanitation.

The health education strategy developed on the Sri Lankan projects comprises two distinct components. The first component focusses on the immediate actions necessary to initiate the project and to promote and sustain community participation. This intervention is short-term and is targeted at those who already have favourable attitudes and some basic knowledge of health impacts and who will be active in promoting health education over the longer term. Organised orientation and discussion sessions are used to consolidate multi-sector co-ordination and to prepare and strengthen the institutional support. Target groups include Ministry of Health and NWSDB officers who are directly involved with the project, leaders of the NGO sector active in the area, other Government

department officers and local political leadership. The second health education component is long-term, comprising formal training programmes, orientations, consultations and discussions for community leaders and groups, teachers, health volunteers and central and hamlet level committees.

The selection of health volunteers from among the residents of each hamlet is the key to success. The volunteers are first trained, a typical programme comprising up to 30 training sessions with a total of 80 hours of lectures, demonstrations and visits. Subject areas include: disease causing micro-organisms; environmental sanitation; personal hygiene; communicable disease prevention programmes; maternal health; oral health; nutritional disorders; cultural behaviour as related to water and sanitation practices, water supply systems; excreta disposal systems; institutional aspects; problems of system operation and maintenance (financial difficulties); first aid; development of health education materials; field surveys; and maintenance of records. The training is conducted by professional health workers, officers of the NWSDB and project facilitators. Emphasis is placed on practical training and includes field visits to the project area to assess hygiene practices, sanitation status, etc. Training is also given in communication skills, particularly interviewing and counselling through role plays. In order to provide some element of status to the volunteers, a certificate of completion is awarded and travel expenses reimbursed. Trainers are paid and an acceptable payment adopted on the Sri Lankan demonstration projects is SL 50 to SL 100 per hour depending on the qualifications of the trainer. Although it is not intended that the volunteers will receive payment after training, it is desirable that their input be recognised and it is recommended that they be given credits for future employment opportunities, typically in the formal health sector such as midwives, ancillary health workers, dispensary workers, etc.

The time taken to 'educate' the community in improved health and hygiene practices covers the project planning, construction and implementation stages. Only when the community is using the upgraded facilities in the appropriate manner, taking due cognizance of basic hygiene practices, can the education process be assumed to be complete.

Stage 6: Project Implementation

Construction of the facilities can be carried out either by private contractor, water supply authority direct labour, volunteers or some combination of these. Experience in Sri Lanka has shown that if volunteers are used the construction is more sustainable if the volunteers are from the local community and if they are given some payment. Such payment can be either in the form of food or in cash equivalent to some agreed proportion of the market labour rate. The cash payment can be made to a local community society. Such payment should not be more than half the equivalent market rate, although skilled workers should preferably be paid on a full-time, market rate basis.

Construction of the water supply components of the demonstration projects has not yet commenced but construction of single — pit pour flush latrines is well advanced in all areas, with about 7500 latrines having been constructed to date. These are being built by voluntary labour, a subsidy being paid for each latrine, amounting to a maximum of SL 1500 where soil conditions necessitate lining the pit.

Two procedures are used for latrine construction. Where the householder can afford to make an initial contribution he/she can choose to construct the pit after which half of the total subsidy is paid, the final balance being paid upon completion of the superstructure. An alternative is to issue materials (cement and reinforcing bars to line the pit and construct the concrete plate, and the ceramic siphon) as the first half of the subsidy rather than cash. For those poorer householders who cannot afford to provide materials to line the pit, or who might be inclined to use a cash subsidy for basic needs such as food, the subsidy is allocated to the hamlet sub-committee which then arranges for the materials to be provided and the construction to be completed using community volunteers. The sub-committee retains responsibility for managing the subsidy and ensuring that the latrine is completed in accordance with the specifications.

Experience with the demonstration projects has shown that it is essential to organise institutional support such as stocking local co-operatives with siphons and building materials and training community workers in administrative aspects of subsidy payment prior to mobilising the community to commence latrine construction.

Stage 7: Monitoring/Evaluation

An important element of any project designed with the intention of improving the health status of the community is continuing monitoring and evaluation of the community. In the demonstration projects this is being achieved through the health volunteers who live among the community. Visits are made to each family at least once a week and basic records maintained on health problems and evidence of changes in hygiene habits. Of course, since the volunteers are living in the community, information is available more frequently on an informal basis through day-to-day contact.

Since the water supply facilities are not yet complete and only about 50% of the target latrines have been constructed so far, comprehensive project monitoring is not possible. However, significant improvements in hygiene practices are already being recorded even in those households which do not yet have access to latrines. As a result of the health education programme mothers are now taking advantage of immunization campaigns, young children are being taken for routine check ups in local clinics and breast feeding of babies is being encouraged. These spin-off benefits were not primary objectives of the project but they demonstrate the success of involving the community in the health education process.

Institutional Aspects

The Sri Lankan projects are being used not only to develop a workable procedure for community participation but also to institutionalise the concept within the NWSDB and the Ministry of Health. In this way it is intended that the procedures will be replicated in other projects and the benefits of the comprehensive approach to water supply/sanitation/health education appreciated by those responsible for project development.

The institutionalisation process is based on the establishment of a Community Support and Sanitation Section (CSSS) within the NWSDB. The CSSS is staffed by sociologists and by engineers who have received postgraduate training in public health. The task of the CSSS is to work alongside project development teams, to actively promote community involve-

ment and to ensure continuous liaison and collaboration with the formal health workers in the field. In addition, the CSSS serves to ensure that community financial commitments necessary to meet NWSDB cost recovery goals are safeguarded without stifling the community participation initiative. Eventually it is the intention to locate a full-time CSSS officer in each of the decentralised NWSDB regional offices so that continuous support can be given to project development.

Experience with the demonstration projects has shown that community interest tends to fluctuate, even when the community is aware that the completed project will be of benefit to it. This is perhaps understandable since the livelihood of a rural community is often dependent on fluctuating circumstances such as changes in supply and demand for fish or crops. In the case of Kakkapalliya and Wennappuwa for example, the most successful latrine construction periods are during the fishing seasons when the fishing communities have money to spend on materials.

In order to sustain community interest it is necessary to provide a project facilitator. Although it is believed in many projects that this person should ideally be a member of the community, it has been found in the Sri Lankan demonstration projects that it is preferable if the facilitator is an outsider who can devote considerable time and energy to catalysing the community participation but not become so close to the community that his/her objectivity and energy are adversely affected by fluctuations in community interest, or are influenced by community pressure and self-interest groups. The ideal facilitator in this case has proven to be the CSSS officer who has a social science training and a professional interest in implementing a successful project. It is interesting to note that a similar conclusion was reached by Chauhan and others (1983) from a study of community participation in eight projects (two in South America and three each in Africa and Asia) in which they found that in each case the driving force for successful community participation was a dedicated professional, rather than an unpaid volunteer from the community.

CONCLUSIONS

THERE IS NO DOUBT that involvement of the community in the development of a water supply project is highly desirable. Because of variations in community characteristics, project size and degree of significance of the project need, there can be no uniform procedure for ensuring effective community participation. Strategies adopted from elsewhere will rarely yield tangible benefits. It is necessary to design the community participation approach to suit the local conditions, a process which demands a prior knowledge of com-

munity behavioural patterns, priorities and expectations.

A procedure being field tested on five demonstration projects in Sri Lanka appears to be successful in sustaining community interest and ensuring congruent development of linkages between water supply, sanitation and health education. The procedure emphasises commitment to health education using community members and the setting up of community-based formalized management committees to plan, develop and monitor all aspects of project implementation. Dedicated institutional support from the national water supply agency and the Ministry of Health is recognised as an essential component, through providing professional project facilitators and ensuring that the project development institutions are continually aware of the need to address community participation issues. The establishment of a specialised unit within the water supply agency to focus on community participation and water supply/sanitation/health linkages is a key institutional support mechanism.

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