


Professor M R Mujwahuzi
**Constraints to effective community participation
in rural water supply schemes**
INTRODUCTION

Participation of rural communities in the development of water supply schemes is regarded as an essential ingredient for the success of the whole rural water supply programme (ref. 1). It is strongly recommended that the intended beneficiaries of rural water supply schemes should be fully involved in the planning, construction, operation and maintenance of water schemes. In some countries it has been made more or less a condition that no rural water supply scheme is to be built if the beneficiaries are not prepared to share in the responsibilities of construction, operation and maintenance. So far no country can boast of having achieved full community participation in all phases of scheme development and this has been so due to organizational and technical constraints. Unless these constraints are solved one cannot expect to achieve full community participation in all the phases of water supply schemes.

Tanzania is one country in which the strategy of community participation in water supply schemes has been pursued vigorously for over a decade now. Using Tanzania experience as an example, this paper will attempt to highlight what appears to be the main constraints to community participation and to make some suggestions as to what may be done to improve on the performance of this strategy.

PLANNING

This is the first and crucial stage in the water supply development programme. It involves identification of the water problems confronting the community. The identification of the water problems involves such activities as the collection of data on the physical surroundings including the water resource base, habits of people and the resources they command, their likes and dislikes in so far as water uses is concerned and analysis of the data gathered so as to arrive at some conclusions concerning the prevailing conditions. After the identification of the problems, decisions on how to solve these problems have to be made taking into consideration the nature of the existing water resources and the available finances. The design of water schemes usually takes

place when the above steps have been made.

Collection of hydrological data, analysis of such data and the design of water schemes are activities which call for special skills which are always not available in our rural areas. That is why most water technicians and other experts regard this stage of scheme development to be beyond the reach of rural communities. Most experts do not believe that rural people can contribute effectively to the planning process. They tend to regard participation of village people at this stage of scheme development as a waste of time and the experts would prefer not to involve local people in the planning activities. Thus, besides the real technological constraints which tend to exclude the village people from participation, there is also the attitude of the experts towards the competence of local communities. Because of this preconceived notion that the village people have nothing to do with planning, the expert is usually not motivated to look into alternative ways in which he can get the local communities to be involved in planning.

If planning is interpreted as simply collection, analysis of hydrological data and design of water schemes, then we can agree with those who argue that rural communities should not participate in planning because they do not possess the necessary expertise. But if planning means something more than the above activities then there is great possibility for rural communities to participate and contribute effectively to the planning process of rural water schemes.

During the implementation of the Water Master Plans for the three regions of Iringa, Mbeya and Ruvuma in Tanzania, an attempt has been made to involve the beneficiaries of rural water schemes in the planning process. The involvement of local communities has taken a form of calling village meetings at which the schemes to be built are discussed between the representatives of the Water Department (MAJI), the donor agents (in this case the representatives of the Danish International Development Agency - DANIDA) and the village community (ref. 2). Such meetings contribute to the planning process by acting as a forum for the exchange of ideas and a very valuable source of important information which is

necessary for planning purposes. It has been observed from several villages that water schemes which have been designed after village meetings have taken place and local people have been given an opportunity to express their needs, wishes and to provide information about their environment, have resulted in water distribution systems which are more responsive to the needs of the community than schemes which have been designed without such village meetings.

To facilitate and improve on the participation of village communities in the planning process, villages which are earmarked for water supply are required to form Village Water Committees (VWC) which have to cooperate with MAJI in the development of water schemes. The limited experience we already have with these VWC is that they have been found to be very useful tools in planning. One of the planning activities which the VWCs are required to do is to suggest the location of Domestic Waterpoints (DPs). So far the distribution patterns of the DPs which are suggested by the VWC have been found to be satisfactory as no part of a village is left out which has sometimes been the case when the distribution pattern had been worked out without involving the village people. In addition to location of DPs, Village Water Committees have also proved to be successful in locating reliable sources of water for the schemes. It is evident from the information we already have that although village people cannot perform certain tasks which require special skills such as design of schemes, yet their involvement in some other aspects of planning is very crucial for the success of the planning process. It is imperative that if community participation in planning is to continue and succeed there is need of identifying those areas in which village people can participate effectively and abandon the idea that village people are ignorant and can therefore contribute nothing to planning.

CONSTRUCTION

Among all the phases of water scheme development, the construction phase is believed by many people to be the most suitable stage in the development process in which community participation can take place effectively. The belief is based on the assumption that the tasks which the village people would be required to perform do not require special skills. During this stage of scheme development village communities would be called upon to perform such tasks as site clearing for pipelines and construction camps, trench digging and filling them up after pipes have been laid, brick making, gathering of sand,

stones and other building materials and so on. Besides the fact that the above tasks require no special skills, they can be performed by all able bodied adults. It is therefore possible to involve all the adult population of any village.

During the implementation of the Water Master Plans for the regions of Iringa, Mbeya and Ruvuma village participation has been more prominent in the construction phase than in the other stages. The unskilled labour of both sexes has been successfully mobilized in all the villages where new schemes have been built or old ones rehabilitated. In spite of this general success in mobilizing village communities for construction work, there have been some constraints to full utilization of people's enthusiasm for participation in scheme development. The constraints have been mainly organizational although other problems such as the delay in procurement of necessary materials has sometimes slowed down the rate of construction. Let us examine briefly the main constraints.

In DANIDA sponsored water schemes, after the intended scheme has been explained to the villagers at a village meeting, the village government is required to sign an agreement with MAJI. The agreement is a contract which, among other things, requires the village community to participate in the construction, operation and maintenance of the particular water scheme. At the construction stage all able bodied people are required to participate in the tasks already mentioned above. The main problem in the performance of these tasks is how to mobilize and distribute work among the village people. Should all the village residents turn out for work on the same day? How should work be distributed among the villages which share the same scheme? How much work should each village resident do? etc.

It has generally been found out that if all those who have to work on the scheme turn up for work on the same day, there are problems of control. It becomes very difficult to control the quality of work. There is also a problem of keeping proper records of who has attended and who has not done so. It also turns out that when the whole village reports for work on the same day, it becomes very difficult to monitor the time people spend on the scheme. There are always some elements in the community which tend to take advantage of the confusion and leave their place of work unnoticed. Furthermore, when so many people turn up for work at the same time, there is always shortage of working tools such as pick axes, shovels, etc. The end result is that some people do the work while others remain idle.

In trying to solve the above organizational problems, the approach which has been taken in DANIDA sponsored schemes is to distribute work among village people by using the existing political organization structure, at village level, of ten cell units. Each ten cell unit or a manageable group of two to three ten cell units are required to work on a particular task on a specific day. The advantage of using this system is that all members of those units know each other and therefore no one can abscond without being noticed. It is also easy to provide a limited group with working tools as well as to control the quality of work.

Economic status has in some villages (although not all) created some problems. There are cases where people who are financially better off have refused to work on the construction of water schemes. These are usually business people. Much of their time is spent on their business. There are cases where, because of their 'financial might', these business people have 'bought' their freedom from work from their ten cell leaders who are supposed to recruit them for communal work. The conspicuous absence of the 'rich' elements from communal works tends to create dissatisfaction among those who cannot 'buy' their freedom from work.

To deal with this unwanted absence, a system of penalizing absentees has been developed in many villages. Any person who absents himself/herself from work without valid reason is required to pay a fine of about 50.00 Tanzania shillings (£2.5) for every day he/she does not show up for work. In addition to paying the fine, the concerned person has still to do the job he /she was supposed to do before. This system of penalizing the defaulters seems to work well where it has been strictly adhered to.

Although the use of the ten cell unit system in mobilizing people for work has proved useful, yet there are cases where it has not been very successful. Poor performance has been observed in those villages where the ten cell unit leadership has been weak. Some weak ten cell leaders have failed to instil discipline among their people which has sometimes resulted in people not turning up for work when they are required to do so thereby delaying the completion of scheme construction.

Delay in procurement and delivery of construction materials such as pipes and fittings has as well had a negative impact on the spirit of community participation. Sometimes village people have been required to dig trenches for pipelines before pipes have been delivered. By the time pipes arrive, some

sections of the trenches are found to be filled up and village people are required to do the same job once more. People resent doing the job twice. One would prefer to ask people to dig trenches when all the necessary materials are on sight. Theoretically this arrangement would be acceptable although in practice it is not always possible.

Conflict of interest sometimes creates a problem in the mobilization of village people for communal work on village projects. In many areas of Tanzania digging of trench would best take place during the rainy season when the soil is soft and therefore easy to work on. Unfortunately this is the time when village people have to work on their farms. It has been noticed that people prefer to work on their farms during this period rather than working on digging trenches for pipelines although they are usually aware that this is the ideal time for trench digging.

OPERATION AND MAINTENANCE

One frequently comes across statements that good operation and maintenance by beneficiaries of water projects in developing countries are essential if new and existing schemes are to continue serving them. Several arguments are advanced to show the validity and the strength of the above statement. It is, for example, argued that the governments of developing countries do not have enough financial and human resources to take care of all the rural water schemes strewn throughout the countryside. Whereas if the people who benefit from the schemes take the responsibilities of operation and especially maintenance they would be able to generate enough resources locally for the maintenance of their schemes. Furthermore since village people are the users of the schemes, it would be easy for them to know immediately when the scheme falls out of use and it would therefore not take long before it is put back to order.

The arguments in support of village participation in operation and maintenance are convincing and attempts to get beneficiaries to operate and maintain their water schemes have already been made in some regions of Tanzania. Full participation of village communities in the maintenance of water schemes has however not been achieved due to lack of clear guidelines on how to deal with certain maintenance issues. The issues which have remained unanswered concern the availability of spareparts, the training of maintenance personnel and ownership of water schemes.

In almost all the villages of Tanzania where water schemes have been developed, the local community has been found to be willing to meet the costs of repair and maintenance of schemes. The problem has however been the availability of spareparts. So far this problem has not been solved. The village communities do not know where they can purchase the necessary spares for their scheme. MAJI is as well not clear on this issue. The result of this uncertainty is that village people have not been able to take full responsibility for the maintenance of schemes although they are willing to do so and they have the money to meet the costs involved. There is therefore a need of establishing centres where local communities can purchase spares needed for their water schemes.

It has also been suggested that a village should have one or two people from the village who should be in-charge of operating and maintaining the scheme. These maintenance people should be trained in the basic skills. The problem with this training is that there is no formal institution where such people can be trained. They are expected to acquire the skills during the construction phase. If after construction the trained personnel decides not to work on the scheme, the village in question is left without trained personnel and there are generally no facilities where other village people can be trained.

The question of formal ownership of the scheme has also affected operation and maintenance. There is no where in Tanzania where a rural scheme has been officially handed over to the beneficiaries. The existing schemes are regarded as government schemes. Consequently in some villages people are reluctant to incur the costs of operation and maintenance. They argue that they cannot pay for the maintenance of a government scheme. There is therefore a need of making it clear to the village communities that they are the owners of the scheme. Once this is done, I think this problem of not accepting maintenance responsibility would be solved.

CONCLUSION

From what has taken place in Tanzania, it is clear that great strides have been made in getting the beneficiaries involved in water schemes development. However, if full participation is to be achieved, there is need of solving the constraints mentioned above. It will definitely take time to solve them, but with village commitment and determination a solution to these constraints will be found before long.

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