



WATER, ENVIRONMENT AND MANAGEMENT

Community participation in project management

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INTRODUCTION.

Rural water supply project technology in Nepal is well established. Amongst the main implementing agencies, both governmental and non-governmental, a large degree of standardisation has already been achieved and the resulting technologies have proven to be effective, simple to construct and simple to operate. As a result, few projects fail for technical reasons. That said, projects do still occasionally fail. UNICEF, for instance, recently reported that amongst the projects it has supported in Nepal, at any one time only ".60 to 70% are normally found in satisfactory working condition..." (UNICEF, 1992). Most other agencies, including our own, would probably find similar failure rates amongst their own past projects should they enquire. We feel that the majority of these failures are occasioned by a breakdown of the management systems required to maintain the projects in good working order and that therefore more attention needs to be paid to developing project management skills and fostering a sense of communal ownership of projects within the communities with which we work. WaterAid has been trying to develop working procedures to address these issues in the two programmes it is involved with in Nepal. Some of the procedures it has found to positively effect the situation are discussed below. The procedures are primarily concerned with the implementation of gravity flow piped water supplies, although in some cases they may be applicable elsewhere.

ENCOURAGING COMMUNITY PARTICIPATION IN MANAGEMENT.

Maintenance Agreements.

It is important to ensure that the community fully understands the responsibilities it will have towards maintaining and operating its water supply projects and that a methodology is set up to enable it to meet these

obligations before any construction work starts. To this end, on projects which WaterAid is involved, as part of the pre-construction procedure, the community is required to form a 'user group' to manage the project during construction and operate and maintain it on completion. The community also nominates a caretaker to be trained during construction in operation and maintenance skills. An agreement is then drawn up containing the caretaker's job description, the user group's responsibilities, and a statement as to the funds the user group will have to raise each month from the community to pay for spare parts and the caretaker's salary. The caretaker and the head of each household to benefit from the project must sign this agreement, stating how much they will contribute each month, before construction work can start. In addressing these issues formally, before any work has started, future misunderstandings over who is responsible for maintenance can be avoided. Furthermore, in developing the maintenance agreement and setting the level of a 'water tax' the community is being encouraged to act in an assertive manner rather than be simply a passive receiver of outside assistance.

Community Management Of Construction.

If communities manage the construction of their projects, rather than simply contribute labour during the process, they are more likely to feel responsible for the project on its completion. Furthermore, the managerial experience they gain is likely to be useful in operating and maintaining the systems later. To this end, WaterAid has adopted procedures which reduce the role of the project's technical staff to that of advisors to the community. Designs are developed after close consultation with the community during the feasibility and survey stages of the project. The project is then costed using government standard estimating norms and a percentage of the total cost (normally between 20 and 30%) allocated to the

community to be provided in the form of free labour. The remaining 70 to 80% of the project cost is provided by the project in the form of construction materials and a budget for skilled labour. A 'bill of quantities' is drawn up in Nepali showing each work item, the quantity of work, and the Rupee value per unit quantity of work completed for both paid and unpaid labour. Materials values are also summarised. This 'bill' then forms part of a standard agreement between the project and the community which has to be signed by members of the user committee formed by the community before work can start. The project provides a site-based technician whose job it is to interpret drawings, monitor quality, and provide training for local skilled labour in new construction techniques. An overseer or engineer also visits each project site on a regular basis and three or four times during construction, measures up the work completed to date and calculates its value according to the rates shown in the standard agreement. It is the responsibility of the community's user group to hire all skilled labour and to manage all unpaid labour with the advice of the site based technician. Furthermore, it is the user group that receives payment for work completed and it is the user group's responsibility to manage the payment of labour. This policy differs from the traditional approach, where paid labour is engaged directly by the implementing agency, and allows the community to exercise more control over the construction stage than would otherwise be possible.

Local Skills Development.

Skilled labour with experience of cement masonry and concreting work is often not available within the beneficiary group of a project. In such cases there is a tendency to bring skilled labour in from outside to do this work. The disadvantage this entails is that the cash earned by these labourers from the project does not stay within the village economy but goes with the labourers when they leave. WaterAid has found however that it is quite within the community's grasp to do all the skilled work itself if it so wishes, provided a skilled technician remains in attendance at all

times to demonstrate techniques and maintain quality control. Apart from the obvious financial advantage to the community this realises, it has been noted that there seems to be a greater sense of communal ownership on projects where the beneficiaries have carried out all the work with their own hands than where professional masons have been used. It has therefore become a policy, on projects with which WaterAid is involved, to encourage any community expressing interest to work in this way. Many of the communities who have elected to follow this route have gone on to use the money that would have otherwise gone out of the village to set up a maintenance fund for the project or put it towards another communal project.

Project Design.

A small project, serving a single village, is often more easy to operate and maintain than a larger one serving several villages, simply because there is a precedent for cooperation within the single village community (perhaps in planting and harvesting) that does not exist for cooperation between separate villages. Although the cost per capita of small projects is often higher than that of large ones, we feel that the implications for project maintenance often make the small projects the more favourable option in the long term.

PROGRAMME MANAGEMENT - SOME CONCLUSIONS.

In almost any water supply and sanitation programme the budget for project construction costs (materials, transportation, labour costs etc.) far exceeds the budgets required for health education and sanitation promotion work (which is mainly, by nature, staff overheads). As a result, water supply programmes are almost invariably headed by engineers rather than, say, a community development specialist or a health educationalist. The consequence of this is that projects tend to be viewed primarily from the engineering context, with health education, community motivation and community management tacked on as additional elements. But, as we said above,

particularly in fairly mature community water supply programmes such as Nepal's, the question of technology has largely already been settled and, in terms of the long term viability of projects, the engineer's role could be said to be of only secondary importance! The primary challenge, at least in Nepal, must surely be to address the sociological problems associated with getting communities to implement and manage their own projects with minimum outside assistance. Maybe it is time for engineers to move to more of a supporting role and for implementing agencies to put communications experts or community development specialists in charge of water supply programmes so that these issues might receive their due attention.

REFERENCES

UNICEF, 1992. UNICEF In Nepal.
UNICEF Kathmandu, Nepal.
