



19th WEDC Conference

ACCRA, Ghana 1993

WATER, SANITATION, ENVIRONMENT and DEVELOPMENT

The need for hygiene education

Susanne Niedrum



Introduction

One of the main objectives of community water projects is to reduce water and excreta related diseases. A vital linking water projects to this objective is hygiene education (HE). But despite the many documents and policy papers on HE, there is little evidence that it is being taken seriously. Is this because decision makers are usually engineers? To compound this, more comprehensive efforts have often not been evaluated nor experience shared. The aim of this paper is to underline the need for integrated HE and to share the experience of the CARE Water Project in Rwanda.

The CARE Water Project is in the 7th year of its 10 year programme working with the rural population of 4 communes in north eastern Rwanda. Its objectives are to increase access to potable water and to help reduce water and excreta related diseases. It has set up, trained and supported 3 water associations with a total of 257 functioning water point committees. One of the associations is now completely autonomous and the others are following more or less closely behind. By the end of 1995 the Project will have supplied 70,000 people with potable water by spring protection and gravity systems. It has 4 integrated components: Community Management, which helps people to identify their need for water, to choose the technology, to position the water points, to construct, to manage and maintain them. Construction, which provides technical assistance and supplies non-local materials. Technical Training, which provides appropriate training to local water technicians and HE. The last two components were introduced within the last 2 years.

Lessons learnt

Like many water projects of the 1980's, the Project started life concentrating on its first objective of increasing access to potable water, hoping that the second, that of disease reduction, would follow of its own accord. In Rwanda although often polluted, water is abundant. The dispersed nature of the population and the fact that people prefer to live on the peaks of the hilly terrain often made it impossible for simple systems to bring potable water closer than existing sources. Of course none of the communities refused a new water system, but the fact that it often brought them no obvious advantage and that they had not taken part in key decisions resulted in people returning to their sometimes closer, polluted sources rather than

paying the very low water fees. Neither did the new facilities lead to a reduction in disease as people continue to behave as they have always done. Water is contaminated before consumption, quantities have not increased and hygiene has not improved.

New approach

In the light of this experience, the Project has significantly modified its approach to concentrate on the objective of disease reduction. This approach is based on HE and on building up the capacities of the communities to analyse their own problems, to define their own priorities and take responsibility for planning, implementation and evaluation. For disease to be reduced, people must alter their behaviour and the water supply system must be sustainable. HE is paramount to both of these. Firstly, if people understand the relation between potable water, hygiene and disease, they are more likely to feel a need for potable water and its sustainability. If the community is thus the driving force behind construction and feels a sense of ownership and responsibility for the new system, problems with water fee payment should diminish. Secondly, HE can maximise the potential benefits of improved facilities by encouraging hygienic practices. The Project has high hopes that HE will also help to reduce Project extension costs spent on trying to resolve the water fee problem.

The HE staff will work in close collaboration with the community management staff with communities who already have water systems, with those who have systems under construction and with those who are yet unserved. In the latter case, water systems will not be constructed unless the community takes the lead.

This new approach necessitates a great flexibility with the Project. Construction has already slowed down significantly and in some cases may not take place as originally planned. Provision of water systems cannot be prerequisite to HE as it will not be possible for all those families who have participated in HE to be part of a construction scheme. In any case, HE alone, without improvement in water supply, should still be able to significantly reduce disease transmission. A great collaboration is required between the Project components, its partners and the community. To achieve this, regular meetings, workshops and training sessions are held at all levels.

Despite agreeing wholeheartedly with the philosophy, and despite the pressure on them from the other components

and the Project manager, the engineers of the construction component still find it difficult to accept that they can no longer take the lead.

Staffing

The Project recruited a manager for the new HE component in January 1992. The post was open to men and women of technical, social and health backgrounds. The chosen candidate was a woman with a degree in community social work and 7 years experience with similar responsibilities. She works closely with her counterpart from the HF division of the Regional Health Authority. Shortly afterwards, 3 extensionists (2 men and a woman) were recruited. These people have completed A-level type studies in social work and have 3 to 5 years experience. The extensionists spent their first familiarising themselves with the community and undergoing training in the modes of transmission of water and excreta related diseases and how to avoid them. As the programme progressed they received training in educational skills, in training of trainers, in the design of educational materials and in the various participative information gathering techniques. Training continues as a regular part of the programme.

Data collection

Work started with a participative data collection phase to help identify needs and objectives. The first step was to hold an introductory workshop in each commune, the purpose of which was to explain the objectives of the component and to begin the participatory design process. Participants included the local authorities, representatives of the population and of the local institutions.

After this, data collection began in earnest. The following techniques were used: Visits to institutions including participative evaluation of any existing HE; population based survey of Knowledge, Attitudes and Practices (KAP) involving different members of the family and including observation; focus group discussions (FGD) with different social groups (men, women, adolescents, teachers, health workers); visits to all water points and discussions with users; household visits.

Programme design

Once the data had been collected and analysed, a 3 day preliminary design workshop was held between the Project and its partners to share the findings and begin design of the programme. To develop messages, participants identified risk behaviours corresponding to prevalent diseases. Attention was paid to why people behave in a particular way and the barriers to changing behaviour. Message groups were then developed, which advocate behaviour changes, which are realistic and build on existing values and practices. As all messages cannot be promoted at once, the participants chose priorities which counter the most

harmful practices. For example, handwashing is considered to be one of the most important behaviours to encourage. The workshop then went on to outline relevant target groups, education methodology, canals used to pass the messages, the educational materials, training required and possible indicators.

Communication channels and methodologies

When asked with whom they would like to learn about hygiene, people said that they would prefer someone of the same sex but that they really did not mind, as long as the person had the necessary knowledge and understood their problems. Adult education is common and appreciated in Rwanda although under-resourced and organised in a rather adhoc fashion. The Project intends to use the existing channels of communication of churches, schools, adult education centres, health centres, water point committees and communal water technicians. They will be supported with training, supervision and logistics. Care was taken to look not only at people's formal responsibilities, but also the realities on the ground and their interests and motivation. Additional channels include community elected hygiene volunteers, the Project extensionists and other Project field staff, all of whom live in and often originate from the communities in which they work. The Project helped the communities to elect 2 volunteer extensionists per neighbourhood (a total of 480) and trained them in transmission routes of the disease, hygiene messages and in basic extension techniques. 88% of those elected participated in the training, which gives some idea of the enthusiasm for the topic. They will serve as a model to their neighbours, carry out limited extension work, and act as the "eyes" of the Project within the community. They are paid a per diem of US\$ 1.4 for monthly training days.

Education methodologies adopted include public meetings, educational discussions, programmed learning, household visits, demonstrations, role play and discussions around testimonies given by people ill with a water or excreta related disease.

Throughout the planning phase the community often asked about educational materials. They were familiar with posters and flashcards and were also interested in receiving leaflets which they could refer back to and show their neighbours. It seemed that such material increased peoples confidence in, and the credibility of, the extensionist. The community will be heavily involved in the development of the material to ensure that it is culturally acceptable, comprehensible and interesting. It will include blackboard and chalk, leaflets, slides, posters and flash cards depicting various messages. Competitions will be held to develop stories and songs. All educators will receive a guide explaining all the messages. Testing will be done on whether it is necessary to use incentives such as soap, certificates or flags given to families trying new practices.

Competitions will be held for the cleanest neighbourhood, the best water point and best constructed and clean latrine.

Pilot project

Unfortunately, just as the preliminary design stage had been completed (having taken one year), the war on the Uganda-Rwanda border flared up and progress was effectively stopped while the Project worked with the 200,000 displaced people who had arrived in the Project area. Now in June, the original work has resumed and the next steps are to go back to the population to present the results of the studies, to remodel the programme to their priorities, to develop programmes with the local institutions, to develop educational materials, to define targets and indicators and finally to produce a workplan. The Project will carry out continuous monitoring to provide immediate feedback on HE, on its integration with other components and the use of water supply systems. As it is always very difficult to accurately measure health improvements, the Project will focus on changes in behaviour for evaluation purposes.

A two year pilot programme will be run to enable various messages, education methodologies, channels and materials to be tested. This programme will be supervised in one commune by the Project and in the other three, by the HF division of the Regional Health Authority, with technical and logistic support from the Project.

Conclusion

The Project has learnt the hard way that if the Project is designed by an engineer and if the Project Manager is an engineer, construction is often prioritised. The omission of HE meant that people were neither informed about the dangers of non-potable water nor about the methods of reducing disease transmission routes. Water systems were built without full commitment from the community, which had serious repercussions for sustainability. In short, Project objectives were not reached.

The Project believes that HE and community empowerment are the inextricably linked steps towards making a sustainable success out of the Project, although they should not be looked upon as a miracle cure. This new approach requires the Project to be extremely flexible and highly integrated. Both HE and community empowerment are complex, sensitive and time consuming domains which require competent staff, sufficient time and sufficient resources. It is important to work within the existing structures and treat the community as a full partner in programme design and implementation.

Development of the HE programme has taken rather longer than expected, but some orientation and awareness-raising has been undertaken along the way and a sound participative base has been built for the implementation phase. It is encouraging that the communities have expressed such a strong desire to participate in HE.

Expenditure on HE during the first year design phase comes to just under US\$ 55,000, having covered a population of 180,000. This represents just over 10% of total annual Project expenditure. Community management and technical training together account for another 15%, leaving the construction component with 75%. Expenditure includes salaries, benefits and per diems., training office equipment and supplies, communications, vehicle operation and maintenance (a jeep and 3 motorbikes). Note, should perhaps be taken that the 25% of the Project budget spent on "software" will probably be a lot more cost effective in terms of progress towards Project objectives than the 75% spent on hardware.

Copies of the Project Document and the various studies will be available at the conference. Comments are very welcome. The results of the pilot study will be published in detail in autumn 1995.