

Slow Sand Filtration Project

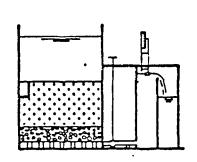
MEETING OF REPRESENTATIVES OF SSF-PROJECT COUNTRIES

NAGPUR, INDIA - SEPTEMBER 15-19, 1980



International Reference Centre for Community Water Supply and Sanitation

P.O. Box 5500 2280 HM RIJSWIJK The Netherlands



National Environmental Engineering Research Institute

Nehru Marg, NAGPUR - 440 020 India

STATUS REPORT ON

SLOW SAND FILTRATION PROJECT

IN KENYA

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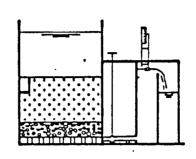
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1. INTRODUCTION

Slow sand filtration in rural areas has been unknown by the rural community. Although the community has been drawing water from sand rivers they did so without the due consideration of the biological effect. The slow sand water filtration plants which are scientific oriented are therefore new to these rural communities. It has been necessary therefore to educate them through the relevant channels of communication to understand the purpose and usefulness of slow sand filtration and enlist their effective participation.

Our experience is that no community will particiapte in a programme unless its benefits are discernible. While it may be easy for the community to appreciate the need to have water pumped from the river and supplied to their individual houses, the need to have the same water purified at extra cost especially if the community has been consuming such appure water for years may not be easy; and patience on the part of those introducing the innovation to the community is essential in guiding them towards acceptance.

For our project purposes we have used Community Health Education as an instrument to bring about understanding and appreciation for the need to introduce slow sand filters and to generate the necessary motivation for community participation in construction and future maintenance of the installations.

COMMUNITY HEALTH EDUCATION PROGRAMME

2:1 OBJECTIVES

Contamination of water is mainly a consequence of unhygienic human and animal activities. Our Health Education programmes emphasize quite specifically that the community is largely responsible for the contamination of its own

water sources through certain individual or communal bahaviour and seeks, through the various methods described later in this presentation, to enable the individual and the community to:-

- 2:1:1 Develop an understanding of the role of water as a vehicle for the transmission of diseases and the dangers posed by polluted or contaminated water within a given community.
- 2:1:2 Appreciate the need for water treatment (purification).
- 2:1:3 Develop an understanding of water borne diseases and the role played by slow sand filters in the prevention of such diseases.
- 2:1:4 Create an atmosphere conducive to the exchange of experiences among themselves and with the available technical personnel in order to solve their water pollution problems.
- 2:1:5 Develop a sense of appreciation and the necessary motivation to make the slow sand filtration plant a valued community asset.
- 2:1:6 Develop an atmosphere conducive to the continued active community participation and involvement.

2:2 COMMUNITY DIAGNOSIS

It was considered essential that the Health Education personnel carry out a systematic community diagnosis within the areas involved (Kisekini and Giathieko) in order to aquaint themselves with the water related and other general problems including cultural set ups and beliefs. This was to enable the Health Education personnel to prepare community health education programmes which are relevant and positively responsive to the health and socio-economic problems of the community.

3. THE PROJECT MANAGEMENT COMMITTEE

This Committee deals with policy and the general direction of the project. In view of the sectorial expertise of its various members and their influence over their counterpart personnel attached to the project at the village level, it was found necessary that they all become familiar with the Community Health Education strategies and programmes that had been designed. This process of educating the committee was incorporated in the deliberations of the Committee. Our community education component was therefore designed to cut through the entire hierarchy from the Project Management Committee, the Health and Engineering field workers and the Community.

The Health workers also learnt from the Engineers more of the technical aspects of slow sand filtration and increased their general understanding of the process. It is important to emphasize that our Community Education component covered the various aspects of the slow sand filtration process including the technical aspects and was not biased on health matters.

4. THE VILLAGE COMMITTEES

A Village Committee was established in each project area. The establishment of these committees was geared to ensuring full and popular participation in the process of preparation and construction of the slow sand filters. This was conside ed essential and very important in community education since it facilitates learning by doing and participation.

The village committees are drawn from the community within the project areas. The members to these committees were elected by the community in a general meeting. They have an observable popular influence and status in their respective communitie and considerable interest in community development particularly in the field of rural water supply. They include local politicians, councillors, teachers, farmers, women leaders, assistant chiefs and special group leaders. Technical (Health and Engineering) workers are incorporated in the committee as resource persons.

The Village Committee is a very important committee in our experience. It is this committee that the Extension workers influence and utilise to build up the appropriate community understanding, involvement and participation.

Discussions on the main purpose of the project were held and the Committees appreciated and expressed the wish to have the slow sand filters constructed in their respective areas. They also accepted to take over responsibility of maintenance after their completion. These discussions were important because similar programmes that have been implemented without the involvement of the community have been neglected. The abandonment comes because the community does not look at such a project as its own. Such projects to their opinion belong to those who constructed them. In our approach the community sees the Extension workers as people assisting them to improve their water supply.

5. COMMUNITY EDUCATION METHODOLOGY

The most important approach in our view was to <u>creat awareness</u> within the communities involved of the importance of clean water supply. It was thought that before the need for slow sand filtration could be appreciated by the community, it was necessary to highlight the importance of clean water in general and the dangers associated with contaminated water supply.

This objective of awareness creation was achieved through showing sound films on clean water supplies. Films on water borne diseases such as Cholera, Bilharzia, Typhoid and other water related diseases e.g. Hookworm were also shown.

5:1 TOPICS

Having created the necessary awareness through films, the need for the improvement of their existing water supplies which the community had already identified as unsatisfactory was followed. The main topics selected and included in the community Education programme and communicated

through the various channels described later are:-

- 5:1:1 The importance of water supply in relation to personal hygiene.
- 5:1:2 Relationship between water contamination and water borne diseases e.g. Typhoid, Cholera, Bilharzia (Schistosomiasis) etc.
- 5:1:3 The importance of slow sand filtration in water supply purification.
- 5:1:4 The role of the village community in relation to the care for the project.
- 5:1:5 Simple slow sand filtration maintenance techniques.
- 5:1:6 General hygiene and homestead and immediate environment sanitation.

5:2 COMMUNICATION CHANNELS

In addition to the Mobile Cinema programme and the utilisation of the Village Committees the following channels were also used to communicate the topics selected and to facilitate the necessary exchange of knowledge and experiences between the community itself on one hand and the community and the Extension workers on the other.

5:2:1 BARAZAS

A "Baraza" is a community gathering where Government policies and other development projects and programmes are communicated and the communities' felt needs discussed.

Several "Barazas" were held and addressed both by the Health Educators and the Technical personnel covering the various topics relevant to the project. The Village Committee members and other community leaders were also active participants in these Barazas and were among the speakers. Their

participation ensured that the messages did not only come from the Government officials concerned with the project but also from the leaders from within the community. This enhances community confidence and commitment to the project.

5:2:2 COMMUNITY LEADERS GROUP

Since not all the leaders could be incorporated in the Village Committees, it was considered desirable for the extension workers to have some discussions with the other opinion leaders. All the known leaders within the community needed to be conversant with the project in order to give us support and assist us in disseminating information and clarifying points which the community was unable to follow in the Barazas.

5:2:3 WOMEN GROUPS

Discussions on the project were also he d with women groups. Women have a special role to play in water programmes in Kenya as they are responsible for fetching water from rivers and other sources and taking it home for comestic use. If the expected health benefits of purified water are to be realised, women's project support and their continued application of the appropriate water handling and storage methods is of paramount importance.

5:2:4 SCHOOLS

Health Education lectures and discussions on the project were given to the teachers and pupils in the schools situated within the project areas. Both teachers and pupils are in a better position to understand the biological processes of the slow sand filter and the relationship between water contamination and water borne diseases. They are also capable of influencing their families to support the project.

5:2:5 HANDOUTS AND POSTERS

Handouts on water borne diseases and general water supply were given to the community. The Health Education Unit is presently developing handouts and posters on slow sand filtration specifically for the project support.

5:2:6 FOLK SONGS

Traditional folk songs touching on the general development of the water projects and the importance of slow sand filters including their maintenance in the control of water borne diseases are to be composed in the respective communities and schools. These will be useful in readily reminding the community of the important aspects of the project.

5:2:7 PUBLIC MEDIA

We propose to introduce radio programme; and newspaper items during the constructional phase of the slow sand filters. This will provide prestige to the project and boost the morale of the community.

6. COMMUNITY PARTICIPATION

Through the spirit of "HARAMBEE", Kenyans have been able to develop and implement projects involving large amounts of money with little or no Government financial support. Harambee means pulling together and it is the National Motto for self-help. Self-help is therefore a house hold term in Kenya and is highly appreciated. Both Kisekini and Giathieko are Harambee water projects initiated and developed largely by the community.

Community participation should be seen as a process of a co-operative effort by the community to join hands and contribute in whatever form towards the development and implementation of programmes affecting its welfare and social well being. In the case of slow sand filtration project therefore, the community should be seen teaming up with the Government officials and

assisting in the implementation of the project.

Our Community Education component was therefore designed to guide the community to appreciate the need for slow sand filters and thereby generate the climate for their involvement and popular participation during construction and future maintenance of the installations. We have been very successful in this respect and are continuing to maintain the participation spirit through regular consultative meetings with the community. Motivation must be maintained at high level to ensure that competing forces of other programmes within the project areas do not take an upper hand. Participation is a consequence of motivation.

7. CONSTRAINTS

We have not had very major constraints, however, the National General Elections which took place towards the end of last year interfered with some of our scheduled community Health Education meetings and we had to re-schedule them after the elections. Shortage of some of the development materials in the Country and notably cement delayed the commencement of the filter construction thereby interfering with our project development schedule and undermining community expectations to some extent. The general inflationary trends have also affected our programmes particularly in the field of the development of health education printed materials which have become very expensive. We may be forced to produce fewer educational materials than we had originally planned.

8. EVALUATION

After the completion of the projects, an evaluation of each project based on the base-line data and information collected from the respective project area will be carried out. The purpose of the evaluation will be to determine how much of the knowledge provided has been retained and how much of it is being put into practice. The influence of the project on other developmental activities and to what extent the project is

valued by the community will also be evaluated.

9. CONCLUSION

In this short presentation, I have tried to highlight the major components of the Community Education and Participation programme in Kenya and our experiences in the approaches and the methods utilised as communication channels to the community. We are quite satisfied with the progress and the rapport we have established with the community and are determined to maintain this high morale.