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COMMUNITY WATER SUPPLY AND SANITATION PROJECT MINISTRY OF HOUSING AND URBAN DEVELOPMENT SRI LANKA

CASE STUDY

NEW APPROACH TO SANITATION

W. Piyasena, Project Director Community Water Supply and Sanitation Project

GLOBAL OVERVIEW IN SANITATION

Inadequate sanitation and unhygienic drinking water are among the most serious problems facing poor people in every part of the World. Nearly two billion people do not have basic sanitation services and more than one billion people living in Peri-urban slums and rural areas lack adequate supply of water.

Each year, millions of people mostly children die from water and sanitation related diseases. Many of the world's poor suffer from ill health, lost wages, undue time spent collecting and hauling water and high prices for inferior services. Helping the poor obtain safe water and adequate sanitation is fundamental to achieving sustainable human development. Improved sanitation and water can help alleviate poverty, control the spread of diseases, and preserve the earth's fragile ecosystem.

Diarrhoeal diseases remain a leading cause of childhood morbidily and mortality and are major contributions to malnutrition throughout the developing world (WHO 1985). These diseases are frequently associated with poverty, malnutrition and infection (Weiss 1988). Field investigation estimates revealed the death toll from Diarrhoea related causes at 1.5 million per year or 4000 per day in India. (Govt. of India 1990). It is also largely attributed to, unsafe water supply, poor personal hygiene practices and insanitary involvement. (Feachan 1984 Esrey 1985, Serine 1989). Poor environmental sanitation and hygiene practices combined with limited use of safe water contribute to high Diarrhoeal incidence particularly among children. Diarrhoea related diseases are estimated to claim the lives of 3.3 million children each year (Bern 1992).

Safe water and sanitation facilities combined with Hygiene Education forms the key to the issue discussed above.

It looks at what people know, do and want and builds on positive values such as those attributed to cleanliness. Hygiene promotion develops attractive focused and feasible messages for defined populations.

SRI LANKA CONTEXT

GENERAL

Of the 1991 estimated Sri Lanka population of 17.2 million about 80% live in rural areas. The national population growth rate which has averaged 1.5% per annum between 1989-1997 is projected to grow at 1.1% per annum between 1990-2000. The ratio of rural and urban growth is not expected to change and the total population is projected to reach about 19.2 million in the year 2000 of which 15.4 million (80%) would be rural.

SYNOPSIS

The concept of "development" is not new to Sri Lanka but in practice it has taken many forms and produced uneven results. Over the last 40 years the Government of Sri Lanka (GOSL) has incorporated this concept in programmes such as community development, health care, rural development and poverty alleviation.

Sri Lanka has been historically a top performer in poverty alleviation reflected in unusually good social indicators a high standard of living relative to its levels of per capita income. The Government is currently addressing the broader issue of improving the standards of living of the disadvantaged in a sustainable manner amist resource constraints. Progress has also been made in developing and initiating implementation of an environmental action plan.

In terms of content most of these exploratory trials have focused on the economic sector, agriculture, forestry, productive infrastructure and income generation. Hardly any attention on the same scale has been given to sanitation and rural water supply sector.

Water is scarce for many people in the rural sector too. This is a special burden for the already over burdened women or girl-chid. In some parts a women spends three to four hours a day fetching water for her family. She may have to walk long distances carrying pot loads of water. In the areas of water supply sanitation & water resource protection emerging trends towards women's empowerment are a great expression of hope for women especially poor, disadvantaged rural women. More than poverty, more than national calamities, it is improper sanitation facilities or their absence which have contributed to the high degree of Diarrhoea malnutrition, and poor health in the country.

A large part of the rural population in Sri Lanka is still without access to safe and sufficient water for domestic purpose and also to proper sanitation facilities. A major portion of the overall financial resources allocated to water supply & sanitation services has been diverted to the Urban areas. As the Government of Sri Lanka is committed to provide adequate and safe water supply & sanitation facilities to all by the year 2010, steps are being taken to ensure that such facilities are provided to the rural population by focusing more attention on the needs of the rural sector.

Accordingly, the Ministry of Housing & Urban Development with a view to achieving the national goal has launched several comprehensive programmes to cover all segments of society.

A number of projects are being implemented to provide improved water supply services in the Greater Colombo area while an Island-wide programme has been launched to address the water supply & sanitation problems in medium and small towns. A nationwide programme will also be launched to address water supply & sanitation issues in rural areas on the experience gained by the Community Water Supply and Sanitation Project (CWSSP) which is being implemented now in selected three districts.

The prevailing ignorance regarding the link between hygiene and environmental sanitation has compelled governmental and other organizations to view sanitation in a new light altogether, not merely as something to do with the construction and maintenance of latrine but as a fully integrated support system to sustain practices related to hygiene, and environment.

Hygiene, for most rural & urban inhabitants is confined to the boundaries of their houses. It has very often little relevance to their surroundings.

In the country, substantial number of households do not have sanitary facilities. This is mainly due to the facts that they lack finance resources as well as the understanding of importance of having a sanitary latrines.

It is recognized that the provision of improved water supply and sanitation facilities does not, in itself, guarantee a better level of health or improved standard of living. The intended beneficiaries must also adopt new attitudes more conducive to the maintenance of clean water sources, a more healthy environmental and effective personal hygiene. Such changes have to be motivated by an improved understanding of the causes of ill health and by incubating a desire to attend these causes by effective action.

Based on the foregoing consideration a fundamental change eliciting is envisaged in the rural water supply and sanitation policy, with the aim of active community participation in planning, design, funding construction and operation and maintenance of RWSS services. Furthermore this new approach will ensure that the users are responsible for choosing the types of facilities they require, the location of those facilities, the type and amount of their contribution.

By this means, it is expected that the sanitation facilities provided to rural communities will be more acceptable, more relevant, more sustainable and more cost effective. A key factor will be that the people will perceive such facilities as belonging to them and that they will develop a real sense of ownership.

COMMUNITY WATER SUPPLY & SANITATION PROJECT (CWSSP) Concept and Methodology

The Community Water Supply & Sanitation Project (CWSSP) is an innovative and people centered first ever effort in the rural water supply and sanitation sector implemented by the Ministry of Housing and Urban Development as a joint initiative of the Government of Sri Lanka and the World Bank 1993 aimed at providing water supply and sanitation facilities initially to a rural population of 650000 people in Badulla, Matara and Ratnapura districts.

The CWSSP attempts to develop a community based, bottom up approach and establish a methodology of implementation that will ensure effective use, sustainable maintenance and replicability of improved water & sanitation facilities at community level, assisted by Partner Organizations.

CWSSP believes in people's ability and resourcefulness to take control over their development activities through collective and organized efforts. Lack of sustainable operation and maintenance in water supply and sanitation is therefore attributed, in a broader sense to people's inability to consider critically their common interests for collective action. promotion of people into collective decision making and action through strong community based organizations (CBO) is considered to be the basic condition to ensure sustainable operation and maintenance of improved facilities.

Ownership of the facilities and of the process that proceeds it, is a further condition for the establishment of a community managed, sustainable scheme.

To meet these implicit challenges CWSSP attempts an interactive community mobilization and learning process the essence of which is a trust partnership among CBOs, Partner Organizations (POs) and CWSSP.

Project Objectives:

- a. Develop systems and Institutional arrangements for community based planning, implementation, operation and maintenance of cost-effective and sustainable water supply & sanitation.:
- b. Implement community based water supply schemes and sanitation programmes in rural areas, and small towns of Badulla, Matara and Ratnapura District; and
- c. Prepare a follow-up project which would apply the community based approach tested and modified on the experience gained during this project implementation to be reflected in the rest of the country.

Area Served.

Population : The 1991 estimated population of the three project districts namely, Badulla, Matara & Ratnapura were 7.9, 7.1 and 9.6 millions respectively for a total population of 2,458000. About 75% of the total population is classified as rural; another 14% lives on estates: and 13% is urban. Population growth rate 1.01% for Badulla 1.04% for Matara 1.10% for Ratnapura are projected giving a total projected population in the year 2000 of 2.8 million. The distribution of population according to ethnicity show that 92% are Sinhalese 2% are Indian Tamils (living mainly on estates) 3% are Sri Lankan Tamils and 3% are Muslims. (living mainly in the towns as they are largely engaged in commercial activities).

Although the three project Districts are contiguous, there are wide variations in their geology and water resources. Badulla's eastern and, northern areas are in the dry zone while the Western and Southern are in the mountain and highland plateau regions, with elevations over 1500 meters.

The average annual rainfall is about 2000 mm. Its ground and surface water resource potential is good. The district of Matara extends from the southwest coastline of Sri Lanka north to elevations about 600 meters. Water in the coastal belt becomes brackish, while in the north, surface water becomes scares during the dry season. The average annual rainfall is about 2400 mm. In Ratnapura, the central mountain range in the north of the district, with elevations over 1500 meters, provide many streams, springs and waterfalls. With the annual average rainfall of 2800 mm. Ratnapura is the most water abundant of the three districts.

Economic Situation of Three Districts.

The three project districts are predominantly agricultural. The estates are an important part of the economy and there are also large areas of paddy, coconut and spices under cultivation. There are a few industries. The predominant occupation in the towns is the public service, followed by small business.

The average annual per capita income of the three districts is SLRs 4500. However, there are wide variations among them, and also between the rural and urban areas. The district with the highest per capita income is Ratnapura followed by Matara and lastly Badulla. There is also a significant variation between the unemployment rates in the three districts. While the national rate is 13.2% the rates for Badulla Matara and Ratnapura are 8.7% 17.5% and 10.8, respectively.

Health Status

The available health statistics are based on Govt. hospital in-patient records only. Therefore, the prevalence of diseases is much higher than reported, as it is estimated that between 50% and 60% of out patient service is provided by a private sector for which no data are available. However, the number of cases reported, number of deaths (in parenthesis) is a common feature in all three districts.

Among the three districts, Matara has the best health indices which are better than the national averages. In contrast, the health indicators for Badulla and Ratnapura show a poor standard of health compared to Sri Lanka as a whole, most notably the infant mortality rate which is approximately 40% higher than the national average. This could be attributed to the less than satisfactory health and sanitary conditions in the plantation sector as the proportion of plantation population is higher in Badulla and Ratnapura compared to Matara.

PROGRAMME DEVELOPMENT

1. Sanitation

The Project Provided funds for:

a.

(i) Improved sanitation facilities in the form of grants to eligible Community Based Organizations (CBOs) on the basis of sanitation proposals from Partner Organizations (POs) and CBOs. Project provided funds to meet the 75% of the demand for latrine construction as a grant to CBOs on the basis of Rs. 3000/- per latrine. The CBOs in turn using this grant as a revolving fund provided 75% (Rs. 2,250/-) as a grant and 25% as credit to the low income individual beneficiary household. Once they collected loan installments from the beneficiaries they utilized those funds to meet the balance 25% + demand of the country.

The average cost of a water seal pour flush lateral pit latrine is around Rs. 9,000/-

- b. New and urinals latrines for 750 rural schools in the projects districts.
- c. Demands for pre-schools and religious institutions.

Under the above sanitation programme it was targeted to construct 45000 latrines, in the district within the project period. This target was overshot before 6 months of ending the project with a total of 60,000 latrines. A further 30,000 is awaiting enrollment.

Hygiene Education

Among the hygiene education achievements in the project toilet construction has been the most outstanding.

The demand for more and more toilets have been the result of empowering 900 CBOs to take the hygiene message to the beneficiaries.

The schools hygiene education programme too have had its effect. School children have acted as high motivator of the peers.

Main characteristics of the methodologies of the hygiene education programme:

Awareness creating campaigns

- School programmes
- Village participatory activities
- Provision of educational materials and training equipments
- Conduct of seminars, workshops, exhibitions and surveys etc.

Those who have been trained as catalysts under this programme were community facilitators, CBO office bearer, Small group leaders, School teachers, Field Health Workers and project staff.

2. Procedure - Latrine Construction in District Office

CBO should apply to the CWSPU for approval of a grant for latrine construction after need assessment.

The CBO should provide a grants of Rs. 2250.00 and credit equal to Rs. 750/to those individuals in the community who need to construct their latrines. The maximum projected loan amount for a new latrine would represent about one third of the cost. A grant/loan provision for upto half of the cost has been made for upgrading of existing latrines.

After the completion of latrine construction component a substantial amount of money will remain in the CBO Bank Account. These funds can be utilized for other development activities in the community as decided by the CBO.

The Management of this sanitation programme is handled by the Sanitation Committee appointed by the CBO.

Monitoring & Evaluation.

Monitoring and evaluation being a important element to ensure efficient project implementation, achieving objectives and providing a basis for replicating project experience in subsequent operations. To that end agreement was obtained at negotiations that Government of Sri Lanka and World Bank (IDA) jointly conducted formal annual reviews of Government of Sri Lanka/CWSSP's project policies, criteria and implementation progress. Indicators for monitoring and evaluation were designed to:

- a. Track implementation.
- b. Identify bottlenecks and recommend changes.
- c. Provide Government of Sri Lanka and World Bank (IDA) with adequate information on project progress.
- d. Provide information for replanning the project implementation mechanism and policies of the project.

The above monitoring indicators were mainly focused on the rate of implementation, the extent to which benefits are being realised an assessment of the cost effectiveness of interventions and a review of the suitability of project policies and operational mechanism.

The Main Lessons Learnt through the Sanitation Programme.

The project found that people in rural communities are willing to pay for improved water and sanitation services provided that they are given opportunity to participant in the decision making process and adequate choices about technical options and service levels. The project should offer a wide range of technology options and affordable service levels. It should be flexible enough to introduce additional options as needed.

At the beginning of the project, eligibility criteria was based primarily on need and technical feasibility. The outcome was those villages were often selected on the basis of factors other than demand for services. As a result, the project revised the criteria by introducing the requirement that the community must formally make a request to participate in the project. Communities must also show a willingness to pay the 66% of the total cost and the maintenance.

IMPACT

Background

"The Sri Lanka Community Water Supply and Sanitation Project is one of the few examples of a large scale World Bank supported project that has attempted to establish project rules and procedures that respond to community demand for improved services. It adopted a flexible implementation strategy by creating a learning culture within the project and by making adjustments to project rules and procedures as lessons emerged.

"It is hoped that the lessons and insights from the Sri Lanka experience will prove useful in other countries and will contribute to the global learning agenda on what works and does not work in large rural water supply and sanitation project". Brian Grover, Program Manager, UNDP/World Bank, Water & Sanitation Program.

• Hygiene education have opened the eyes of many people that the water they presently use gets contaminated in a routine and the highest contamination is with faecal matter.

When this fact is established beyond doubt in the minds of the young and the old alike, they seem to develop a sense of shame and repulsion. They then call for the hastening of project activity. Some even suggest taking short cuts to installing water and sanitation facilities.

- The participatory manner in which educational picture cards are used with people, help them to identify some of the gaps in their own routine behaviours. This is an effective means in helping people mix humour with reality. Their willingness to change is almost seen in their faces.
- Toilet building in the village set up appeared to be a fashionable thing. When one family takes the lead the other seems to catch on. No one wants to be left out.
- Those families who already use unhygienic pit latrines grab the opportunity to use the subsidy scheme to install water seal latrines. They want to graduate one step upwards.

8

CONCLUSION

The CWSSP experience has shown that learning efforts need to be more analytic and targeted. Although structured learning includes modifying rules and procedures to improve performance, the project need to go further in analyzing the reasons why a given set of rules has or has not worked. In particular, more needs to be learned about how financial policies and cost sharing rules can further guide investment towards demand for service.

CWSSP has undergone a number of changes since it began in 1993. This has been possible because of the flexibility provided to the project staff by the government and the World Bank. The results have been encouraging. The project has moved towards offering the community services that they have selected and are willing to pay for. The projects structured learning approach will continue to provide feedback needed to further define the appropriate roles of users, the public sector, and the private sector in the delivery of sustainable rural sanitation and water supply services.

WHY IS CWSSP SANITATION PROGRAMME TRULY UNIQUE

because;

CWSSP Sanitation Programme has adopted an integrated approach towards sanitation, centered around the following objectives.

- Reducing infant mortality and water borne diseases by providing hygiene education and introducing low-cost sanitation facilities.
- Making people aware of personal hygiene; safe handling of drinking water; excreta disposal; solid and liquid waste disposal; disease transmission and the relationship between safe water, sanitation and health.
- Promoting a better and safe living environment with the help of a total sanitation package.
- Introducing appropriate low-cost technology that is affordable by and acceptable to people in rural areas.
- Developing devices to test methodology and operational strategy so as to make the programme self-sustaining and self-expanding.
- Involving the community, especially local youth, clubs and women's group, in planning construction and maintenance stages of the sanitation programme.
- Establishing inter-sectoral linkages to help promote food hygiene, ORT, nutrition education, and income generation activities among women.

Owing to the efforts of all concerned there is now a perceptible change in the attitudes of the people towards sanitation facilities. Age old practices have given way to a new thinking, resulting in more household latrines being built. For the womenfolk too it has proved to be a blessing by providing them with privacy.

Apart from the other factors, sanitation is very closely linked to concentrated poverty. It is one of the causes that aggravate the destiny of the poor. Unfortunately, the rural folk do not realise this reality unless they are mobilized and motivated.

The promotion of sanitation programme of CWSSP has not only relieved them from their economic difficulties and hardships but also improved their social status and dignity.

Furthermore, providing a healthier living environment on the project area CWSSP has also had far reaching effects on the socio-economic conditions of the community. It has helped to generate resources and employment within these villages. Local skill is used to fabricate and install the various hardware components. Thus a major part of the investment made by the villages under the CWSSP project is re-circulated within the community itself, for overall development of the project area.

In a nut-shell, following are the vital components contributed towards the fulfillment of desired goals of "SANITATION"

- Safe handling of Drinking Water.
- Safe disposal of Waste Water.
- Safe disposal of Human Excreta.
- Safe disposal of Garbage and Animal Excreta.
- Home Sanitation and Food Hygiene.
- Personal Hygiene and
- Environmental Cleanliness.

TOTAL SANITATION.