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**Community participation and education**  
**in sanitation programmes**

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The rapid increase in population and concentration of it in a few larger cities are causing degradation of the living environment. The urgency is not only for adequate shelter but also sanitary living conditions. In most of the developing countries, failure to identify and implement suitable solutions in this area has caused deterioration in the environmental condition and the consequent illhealth.

It is generally recognised that unsafe drinking water supply and improper sanitation are two major factors leading to high incidence of water borne diseases. While the provision of protected water supply in rural areas of India has made substantial headway in the last decade, the level of sanitation, particularly due to indiscriminate open defecation has not improved. The reasons for the slow progress in sanitation is due to combination of factors viz. lack of sense of hygiene, ignorance and ineffective education to break through cultural barriers and above all low priority to sanitation.

In many developing countries, water borne diseases are the most formidable public health problems, even though the number of deaths due to these diseases is not exactly known. However, surveys carried out have shown that all elements of sanitation are more or less lacking which has resulted in gastrointestinal and communicable diseases.

It has been constantly affirmed by Public Health experts that about 80% of the health problems of India could be prevented through simple public health measures such as improvement of environmental sanitation by involving communities, promoting health consciousness through mass media, extended health education and preventive measures like mass vaccination.

The statistics regarding excreta disposal are not sufficient in India, a vast country spread over 3.2 million square kilometers, with a density of 195 persons per Sq.Km. According to the 1981 census, the country's population was around 684 million with a percapita income equivalent to US\$ 180. With the control of epidemics and better living conditions, the life expectancy has risen to 61 years, even though much of the marginal population is undernourished with children and women remaining as the worst sufferers.

Provision of a sanitary excreta disposal system is listed by World Health Organisation expert Committee on "Environmental Sanitation" as the first basic step that should be taken towards ensuring a safe environment.

There is a vast disparity in the existing levels of excreta disposal within the country. Rural areas which have about 80% of the population are conspicuously deprived of this facility. Again, in urban areas these facilities are not available for economically weaker sections and slum dwellers.

In India, only about 217 out of 3,119 towns have sewerage system, most of them with partial coverage, although 2,092 towns have been provided with piped water supply.

As per National Sample Survey, only 20% of urban households in the country use toilets connected with the sewerage system, out of which only 7% have exclusive use of toilets and the rest either share with other households or make use of public toilets. 14% of the households have water borne latrines connected with septic tanks. Nearly 1/3 of the urban population is served by bucket

privies. Households having no toilets account for the remaining 1/3.

It is universally accepted that the best way for the disposal of human waste is the underground sewer system. But it is expensive. It is estimated if sewerage system were laid to cover entire population of 225 cities of India which have a population of over one lakh, it would cost about Rs.4,000 crores (Indian Currency) at current prices, a vast country like India and becomes a critical issue as the recovery of such an expenditure from the beneficiaries is doubtful.

Recognising the close relationship between water, its appropriate use for personal hygiene and sanitation, the United Nations launched in 1981 the "International Drinking Water Supply and Sanitation Decade" and World Health Organisation declaring "Health for all" by 2000 AD in order to challenge these two inter-related concepts. In response to the United Nations sponsored Water Supply and Sanitation decade, the Government of India has set targets for achieving 80% of coverage of the Urban and 20% coverage of rural population by 1990.

Although more than 19-20 designs like conventional sewerage systems, water borne options like septic tank, hand flush water seal pit privy, acque privy, borehole, dugwell, trench ... etc. are prevalent all over the world for the disposal of human waste, only three systems have been found technically fit for adoption on mass scale viz., sewerage system, septic tank and hand flush water seal pit privy.

The sewerage system is the most sophisticated and hygienic method, but it is the most expensive technology. More water is required for flushing which is both scarce and expensive.

The septic tank too is rather expensive. It also requires more space which is often not available in urban areas. The need for scavengers continues in septic tanks and clearing of tanks at regular intervals has to be done.

The water seal pit latrines (Leach pit) is found to be only workable solution cost wise at present in India and other developing countries. Sulabh Sauchalaya at Bihar and Research Cum Action Project toilets at Tamilnadu have been developed and are being implemented successfully for the past 25-30 years.

#### SLUM IMPROVEMENT

Recognising the need to improve housing conditions in slums of Madras City, Government of Tamilnadu in the 1971 launched Slum Clearance, Accelerated Slum Improvement Scheme (ASIS) and Environmental Improvement Schemes (EIS). However the realisation for the need for integrated programme resulted in the introduction of Integrated Slum Improvement programme under Madras Urban Development Project (MUDP).

It is a package programme which provides basic amenities like community toilets, baths, water supply, street lights and approach roads and also infrastructure for social inputs.

But in practice, this again has become another engineering exercise where funds were spent according to the allocations. In some of the slum areas, taking advantage of the available open space and low lying areas, toilets have been constructed. The results were not encouraging in these schemes as the emphasis is laid more on achieving physical and financial targets rather than human aspect involved in accepting and adopting the scheme. Realising the importance of people's involvement in the programme, a Community Development Wing was established to effect Community involvement in planning, execution and maintenance.

It would be worthwhile examining the efficacy of the existing system before evolving a strategy for improving the sanitation in slums.

Because of the enormous cost in extending the sewer system to slums, public toilets with septic tanks have been constructed. However,

the sanitary conditions have not improved.

1. Lack of continued water supply to the public convenience units resulted in non-utilisation of public convenience units.
2. Overflowing of septic tanks as dispersion trenches have not been provided and irregular cleaning of septic tanks.
3. Inadequate manpower and material with the maintenance agency.
4. Lack of inbuilt system to maintain the public convenience units till such time civic bodies take over.
5. Lack of proper coordination between the maintenance agencies.
6. Lack of comprehensive policy to guide the agencies.
7. Lack of will on the part of the people to keep the environment clean.

The two pronged strategy would be removing the anomalies to make the units functional on one hand and educating the people on the better use. Both are mutually complementary. It also require alternative sanitation system within the affordable limits and effective long term propositions.

#### URBAN COMMUNITY DEVELOPMENT PROJECT

Urban Community Development project assisted by UNICEF is being implemented by Tamilnadu Slum Clearance Board in improved areas. It covers a population of 50,000 households. The project seeks to establish a system on an infilling basis with the objective of maximising the utility of the assets provided through community involvement.

In order to ensure better sanitation in the area involving the community, it has been proposed to transfer some responsibilities to the community itself. The agency would provide part financial and administrative support. As a parallel activity to promote awareness on the need for better sanitation through individual and community practices, educational programmes and campaigns are being organised.

#### How to get community participation?

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Three basic premises should be considered in enlisting community participation in the programme.

- i. Programme should be need based.
- ii. The community should be consulted from the inception to the implementation of the programme. People identify deeply with the programme when they have contributed in the planning.
- iii. People involve themselves in the programme better when they are made to feel it is their programme. They help the authorities to overcome the hurdles faced during implementation if this feeling is instilled in them.

#### Importance of Health Education

The principle objective of health education in sanitation programme under Slum Improvement programme is to help people achieve good health through their own action and efforts. It is an educational approach ensuring maximum community participation.

#### Bridging the communication gap

The low literacy level of the people in India has lead to vast gap in the communication. A communication gap exists because basic needs of the people are often overlooked. Suitable mass education programmes like audio-visual aids should be promoted.

#### Health Education Camps

Health Education was conceived as a major component in the sanitation programme. It is being carried out in various stages. Community is helped to form welfare Associations and responsibility is entrusted with the members.

Health Education camps are being organised in Urban Community Development areas to acquaint them well with the need for sanitation, health and personal hygiene.

Other methods are individual and group contacts, contacts with the special groups like Mothers, youth, children ... etc. Experts from Government and voluntary organisations are invited to have a dialogue with the beneficiaries. Discussions along with the slides and film shows are being held between the groups and the

experts. Immediate results are seen in these problem areas in the form of campaigns organised by the youth after such special camps. Mass media like Radio, Television, Newspapers, Exhibitions and Workshops are effectively used for Health Education.

The need for community participation for successful improvement in sanitation programme is well known and increasingly accepted. But the importance of women's involvement as a part of community participation in order to achieve the objectives is less evident. By recognising the women as primary agents, acceptors and users of better sanitation programme, they have been involved in workshops, health education camps and weekly meetings under Urban Community Development project. The important topics covered are

- i. Better environmental sanitation
- ii. Health
- iii. Nutrition Education.

#### Development of a voluntary force in the community

Enlightened persons within the community have been enrolled as volunteers to act as effective link between the implementing agency and prospective beneficiaries. These people have been provided with one month training in the fields of health sanitation and nutrition. Their main task is to educate the community in the upkeep of the environment clean. Training is also imparted to the local masons, volunteers and leaders in the social, economic and technical aspects of the sanitary system i.e., individual leach pit.

#### Transfer of responsibility to the community

The problems that are faced by the maintenance agencies cannot be sorted easily, which requires revamping of the entire system and more resources made available. It would take a long time. It is proposed to vest certain responsibilities with the community for delivery of services. However the maintenance of systems would continue to be the responsibility of the agencies.

Though it is desirable that community takes over the maintenance of public toilets, it is recognised that nothing would be better than individual toilets as the responsibility of maintenance would be vested with individual house owner and thus

simplifies entire process of management. As the sewer system is costly to provide, under Urban Community Development project, people are encouraged to install Research Cum Action Project water seal pit privies by providing 1/3 subsidy of the total cost.

#### SUGGESTIONS

1. Sanitation programme should be considered as an integrated approach in Slum Improvement project. EX: Improving sanitation alone in an area where the water supply remains inadequate is unlikely to receive much popular support or to achieve substantial health benefits.
2. There should be cultural revolution as such. It is recommended that sanitation should be introduced from the preschool stages itself. The type design of the children's toilets should be modified and used. Health and sanitation should form a part of school curriculum.
3. Sanitation should be linked to community needs and activities.
4. Involvement of voluntary organisations

The Government's efforts to reach the poor in its welfare activities can become success only if the voluntary organisations are given proper recognition and adequate support sought by them. EX: Sulabh Sauchalaya, a voluntary organisation was successful in implementation of about 80,000 leach pit toilets due to the recognition and financial support provided by the Government of Bihar.

5. Government and international support is desirable. However, planning, implementation and maintenance should be handled by small groups from the local communities with necessary support from the administration.

6. The Government should encourage innovative schemes and there should be free exchange of schemes. EX: Sulabh Sauchalaya (Bihar) should be adopted in other states also.
7. Technical institutions like Indian Institutes of Technology should play an important role in invention and promotion of low cost sanitary system.
8. Pay and use latrines found to be successful in Metropolitan cities. The same should be promoted.
9. The problem of sanitation calls for reformation of the existing of different civic bodies. All these functions should be streamlined and brought under a separate Department.

10. Strict enforcement of law in metropolitan areas to penalise open defecation.

The existing manpower and resources should be utilised in the programme. There should be a stress on the motivated field staff who form link between the organisation and the people. The success of the programme lies on the rapport developed between the community and the field staff.

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