



**10th WEDC Conference**  
**Water and sanitation in Asia and**  
**the Pacific : Singapore : 1984**

## **Environmental improvement in slums through community participation**

**Dr P R Thomas and Dr K N Ramamurthy**

### INTRODUCTION

Slums exist in every country mostly due to migration of the underprivileged from rural areas to urban centres, increased population growth and acute shortage of housing. Slums can be analysed from two view points. One is the traditional approach that views slums as 'eye sores' and illegitimate settlements which do not conform to the urban norms. The other is the present view that considers slums as communities of the urban poor which have risen in response to the acute shortage of low income housing. The latter concept is derived from an understanding of the needs of the urban poor and an appreciation of their creativity to satisfy their needs through self-reliance. These attitudes are not merely two ways of looking upon slum settlements; they give rise to two distinct analytical frameworks and policy approaches. One leads to bulldozing type solutions and evokes stringent regulatory measures and the other calls for thorough understanding of the functional role of these communities and requires public policies which would mobilise peoples' inventiveness and self-reliance.

### CHARACTERISTICS OF SLUMS AND SQUATTER SETTLEMENTS

In general, the squatter settlements are formed near the sources of water irrespective of its quality. Rivers, streams, lakes and canals initially provide best conditions for drinking, bathing and washing clothes until they become polluted, and thereafter they become sources of waterborne diseases "(ref.1)". Slum settlements also appear in the vicinity of garbage dumps and sometimes literally on top of them. In India, Sri-Lanka and some of the South East Asian Countries, the sorting and resale of waste-paper from the garbage has become an important 'informal' industry. In many slums and squatter settlements, cramped housing is often shared with cows, goats, pigs, chicken etc. Where there is a central drinking water source such as well or stand-pipe, the water is more often used also for bathing, washing clothes and for various other purposes causing communal fighting due to over-crowding, and other waste and drainage problems.

The communal latrines provided in the slum areas present a major health problem due to improper maintenance and lack of individual responsibility. Furthermore in most cases the communal latrines are not properly lit and have no proper access.

Essentially the water supply and sanitation facilities must go hand in hand with any slum improvement programme. It is necessary to make the community realise the importance of protection of local environment, and proper use and maintenance of sanitary facilities. One of the ways of achieving this is to involve the community while deciding about the allocation of such facilities and their maintenance. To achieve even a minimum standard of hygiene, strict control and constant attendance of cleaners are required in addition to the realisation of the responsibility of the user in the environmental improvement. Before envisaging any environmental improvement programme, it is necessary to collect the background information on the level of awareness of the people regarding the health and sanitation.

### COMMUNITY PARTICIPATION IN ENVIRONMENTAL IMPROVEMENT

While promoting any environmental improvement programme, it is necessary to consider how the people want to live, how they live at present, the effect of environment on their lives, the social characteristics of the households etc. It is here that the citizen participation in planning will provide a favourable contribution in the management of such programmes.

Participatory planning is a method which allows citizens or users of an environment to take part in the decision making process of the matters concerning that environment "(ref.2)". It is to be realised that the user participation is not aimed at, to displace or override the responsibility of the planners or the government agencies involved in promoting the improvement programmes. It is to supplement and help the professional planners in providing additional information on the realistic needs, wants and special characteristics of the community.

Random choice on the location of stand-pipes with drainage facilities without the community or user participation may sometimes completely upset the implementation programme, since, while carrying out such improvement some relocation of the hutments may have to be made. Participating the community at the early decision making stages overcomes many such problems at the implementation stage due to the avoidance of feelings of alienation and powerlessness and results in an increase in cooperative interaction leading to a more united community "(ref.3)".

In Trinidad and Tobago, community participation is being encouraged by inviting proposals from the public in the form of posters with slogans on ways of effecting environmental improvement through design competition titled 'NAGS ON THE MOVE'. It is only when a whole community takes up the idea of sanitation, perhaps with the aim of cleaning up a squalid defecation ground, a real impact can be made on the improvement in the health situation.

#### SLUM UPGRADING PROGRAMME IN MADRAS CITY - A CASE STUDY

Growth of slums is a phenomenon found in all metropolitan cities in the world. Slums in Madras city, India cover 6 percent of the total area in the city and they contain more than 30 percent of the city population. Under the Slum Clearance Scheme (1971) the existing slums were demolished and multi-storeyed tenements were erected for the slum dwellers on the same site as alternate housing. However it was seen that the impact of the slum clearance scheme was that while planning such tenements, the technical, functional and social characteristics of the community were not considered which gave rise to community resistance to such projects. In many cases, huts used to reappear at the fringes of the tenements causing peripheral slums and were showing signs of rapid degradation.

The evolution of the slum housing programme in Madras can be presented in a conceptual form as shown in Figure 1 "(ref.4)". The first stage is the unimproved slum. This indicates a decaying situation. The second stage is the putting up of multistoreyed tenements which results in the formation of slums in the fringe zones which leads to environmental degradation. The third stage in the evolution process is the slum improvement programme which lacks community participation. The present phase in slum housing is upgrading with a complementary programme of sites and services. This represents a demand based housing solution encouraging the community participation in

environmental improvement. Slum upgrading programme seems to overcome many of the above problems. It is a means by which the poorest segment of the urban population are provided with low cost shelter and with low cost access to employment in addition to providing a means of retaining and improving the existing housing stocks. Zambia is one of the countries where slum upgrading was carried out to solve the problem of squatter housing. In these programmes careful planning and great care were exercised to secure the trust, approval and active cooperation of the residents. The main components of the project were the provision of water supply, roads, street lighting, schools and health centres.

The Slum Upgrading programme initiated by the Madras Metropolitan Development Authority in Madras City is intended to benefit about 30,000 households. The improvements envisaged in the programme are the following:

- Drinking water supply with public stand-pipes (One for 10 houses)
- Community latrines (One for 10 houses)
- New and improved roads, footpaths and drainage
- Community facilities such as pre-schools (One for 200 houses), primary schools, clinics and cottage sheds (One for 400 houses)
- Vehicular access within easy reach of each hut.

An important feature of the scheme is the provision of land tenure to slum dwellers. Once they are assured of their land titles, the community takes great care in improving their shelter and environment.

While fixing up the priorities for the improvement, the views of the local inhabitants were given due consideration. The upgrading programme was successful mainly because it provided the residents - A share in decision making, The opportunity to build, and An experience of close cooperation with the city council and among themselves. Similar approach has been followed in the upgrading programmes in Bombay, India, wherein a comprehensive environmental improvement of slums was attempted. This approach has shown the possibility of solving the problem of unimproved slums in urban centres.

#### CONCLUSION

Environmental Improvement in slums is greatly governed by the integrated planning approach in the provision of shelter, infrastructure and services in the sequence appropriate to the local

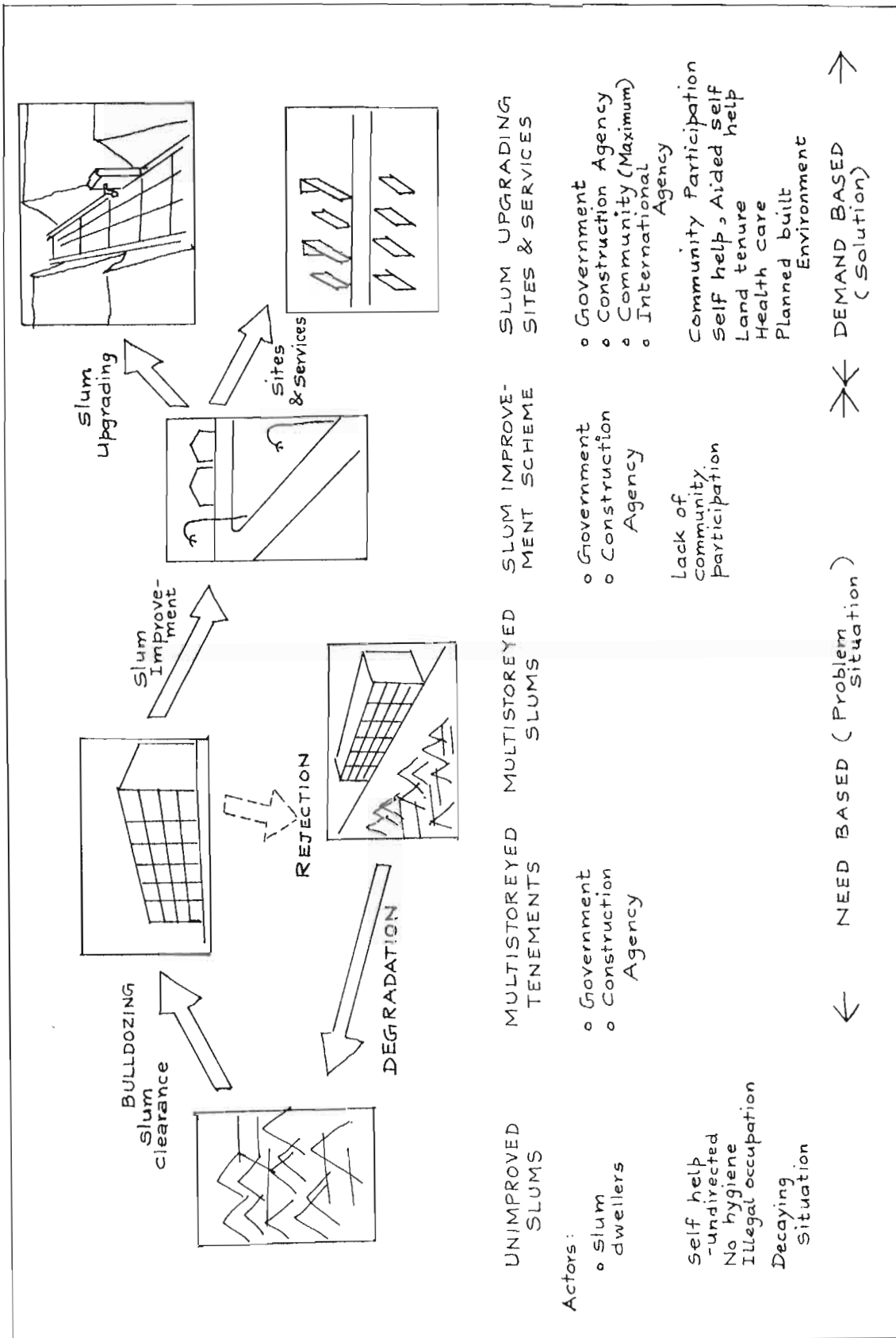


FIG. 1 - EVOLUTION CONCEPT-SLUM HOUSING

environment. Community participation is an indispensable element in the development of human settlements especially in the planning strategies and in their formulation, implementation, management and maintenance.

## REFERENCES

1. ETHELTON D. Water and Sanitation in Slums and Shanty Towns. UNICEF. New York, May 1980.
2. RAMAMURTHY K N. Housing Management for Developing Countries. World Congress on Housing. Miami Beach, Nov.1983.
3. WHITE Alastair. Community Participation in Water and Sanitation. WHO Technical Paper. Rijswijk. The Netherlands, June 1981.
4. RAMAMURTHY K N and MATHEWS M S. Slum Upgrading Programme in Madras City - A Case Study. PTRC Housing Conference. University of Warwick. United Kingdom, July 1979.