



NGOs/CBOs in solid waste management in Hyderabad (India)

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POPULATION INCREASE AND migration into the cities have created some of the most serious environmental problems associated with what is often characterised as the 'brown agenda'. This agenda lists the main shortcomings, such as lack of adequate waste management, lack of safe water and minimal pollution control, often found in the most congested cities. Many of today's Third World cities are characterised by overcrowded housing, contaminated water, lack of proper sewage, drainage and waste collection, all of which contribute to unhealthy urban areas.

Lack of effective waste management services can lead to serious health-hazards for all inhabitants within cities. In more recent years there have been important changes in attitudes among stakeholders such as local government, NGOs/CBOs and citizens in the collection and processing of waste specifically in India.

The purpose of this following paper is therefore in light of the WEDC conference topic entitled 'Sanitation (Solid Waste Management) and Water for all' which should raise the question how do we provide effective and efficient solid waste management services to 'all'? This paper highlights one of the key actors in assisting to try to provide SWM services to 'all' namely Non-Government and Community-Based Organisations specifically within the context of India.

Non-Governmental and Community-Based Organisations in India

Overall, there is a vast amount of literature and research on numerous aspects of how NGOs and CBOs function in general. Various research projects have, for example, focused on the strategies used by NGOs and CBOs for community participation with respect to public services, including an array of developmental projects such as low income housing, health care training, and even voluntary waste disposal schemes.

In India, there are an estimated 10,000 NGOs which focus on environmental and development issues alone (World Resources, 1994). Forty-five of these organisations are concerned with some aspects of solid waste management (Furedy, 1987, 1990a, 1992; Raman, 1994). In Hyderabad itself, three major NGOs and CBOs are actively working on social and/or environmental issues related to solid waste management (Snel, 1993; Krishna and Sangeetha, 1994).

In order to better understand the role which NGOs play in India, and the functions they may perform with respect to solid waste management in Hyderabad (Refer to Snel, 1997 for a description of the waste disposal scheme in

Hyderabad, India), this paper provides a classification of the extent to which NGOs can be involved in development issues in general and waste management in particular. As such it gives a basis for a characterisation of the activities which NGOs in Hyderabad undertake with respect to solid waste management. It also provides a background for the discussion of strategic issues relating to how these organisations in Hyderabad can assist the local government in solving its waste management crisis.

The evolution of NGOs and CBOs

The development of NGOs can be placed within the context of historical evolutionary development so as to clarify their current position. Korten(1987) describes this development of NGOs in three phases or generations, beginning with a focus on relief and welfare, then moving towards local self-reliance and finally to sustainable systems development.

With reference to Table 1, the current trend of NGOs involved in environmental and development issues in Hyderabad could be placed in the second generation category based on small-scale and self-reliant local development projects. Although the development of this second type of NGO or CBO focuses on the critical 'empowerment' of citizens it does not specifically pursue the co-operation with either the public or private sector. As a result, some NGOs in Hyderabad therefore have realised that by acting too locally and on a small-scale, only a few communities are successful in achieving their goal(s).

As a result of this realisation, some NGOs involved in solid waste management in Hyderabad, such as the Society for Preservation of Environment and Quality of Life (SPEQL), have therefore moved towards a third phase of Non-Government development. This is based more on the involvement of the local and/or national government as well as of other international agencies and NGOs (Korten, 1987). This final stage of development however has only emerged in Hyderabad in the last few years, mainly through programmes such as the waste disposal scheme.

A typology of waste disposal schemes

Unfortunately, there is no standard methodology for analysing the extent to which NGOs and CBOs play a role in delivering effective solid waste management, for this remains a relatively new development. I would argue that this is partly due to a lack of adequate research in this area.

In general, NGOs and CBOs working on waste management issues can be broadly divided into two categories: those with a more labour-market/socially oriented agenda,

Table 1. Three generations of non-government organisational development

such as working with street children and women, and ones with a more environmental focus which are involved in education (Furedy, 1992, Raman, 1994). There are, however, also certain combinations of these types of NGOs and CBOs that exist, such as those involved in working with children waste pickers and at the same time in community-based schemes to solve the problems in waste collection.

The voluntary waste disposal schemes themselves can be further classified according to the extent to which they are involved in solid waste management issues as described in detail in Table 2. The focus of the schemes can be distinguished as follows: simple collection and disposal by the Municipal Corporation of Hyderabad (MCH), collection and recycling without separation of waste, and the collection and recycling with separation of waste.

In Hyderabad, most of these waste disposal schemes aim to operate according to the 'collection and recycling with separation of waste' model as cited in Table 2. However, in their day-to-day activities many still appear to be in the phase of focusing on the 'simple collection and disposal' by the Municipal Corporation of Hyderabad (MCH) although they are in the process of establishing the house-to-house collection and transport of waste to transfer points through their own employees, as well as separation of waste for their own compost production or for sale.

On the basis of this information we can see that the voluntary waste disposal schemes are therefore pursuing a type of labour-intensive strategy. A labour-intensive strategy in the context of the waste disposal schemes aims at finally obtaining more effective solid waste management services through the employment of waste pickers. This 'appropriate technology' approach is additionally applied to the recycling of waste, especially by establishing local compost production (Refer to Snel, 1997).

An 'appropriate technology' for waste management in developing countries reflects not only, as Furedy states, 'concern over the operation and cost of machines imported from developed countries' (Furedy, 1989b, p.56), but also entails the social and environmental goals of 'sustainable development' based on techniques appropriate to specific settings. Furedy (1989a, 1989b, 1990b); Ali, Coad and Cotton (1993, 1994), Huysman and Baud (1994), are some of the first, I believe, in this area of research to define this 'appropriate technology' movement in waste management, which within the context of developing countries favours small-scale production, recycling and low-impact technology.

The future of community participation in waste management services

The final key question that arises when reflecting on these schemes is: who is actually *responsible* for the future of solid waste management? Clearly the development of an effective municipal waste management policy lies in the hands of not only local government, but also in those of NGOs and CBOs and of citizens.

Nevertheless, it is up to local government to clearly stipulate its ultimate responsibility and to actively improve its standards and facilities relating to the provision of proper waste management services. Therefore, in the case of Hyderabad, the local government has to give due attention to the specific concerns of NGOs and CBOs.

The following are some of the main issues which the Municipal Corporation of Hyderabad should concentrate on at the present time:

- a clear delineation of the different roles in waste collection played by the formal SWM and/or private waste collection companies on the one hand, and waste

Table 2. Types of community waste disposal schemes

pickers hired by neighbourhood associations on the other, acknowledging that it is important for the 'sustainable development' of India to involve street waste pickers in the door to door collection of waste.

- the collection of waste from municipal bins located at transfer points at properly scheduled times, not on unannounced days or irregular hours, as is often heard in complaints by many residents.
- the separation of waste for recycling, either by the tricycle person or at the transfer points, as well as the completion of the decentralised compost plants.
- educational campaigns/courses with respect to recycling for example through written, oral and/or visual means, to ensure that the population understands the importance of source separation, as well as the importance of integrating street waste pickers.

Specific organisations, such as SPEQL for example, have published various articles and books as well as videos for schools and institutions on municipal waste management.

These educational campaigns are designed for different ages to clarify the economic, environmental and social benefits of recycling and employing waste pickers in waste disposal schemes.

The importance of 'Co-operation'

The future of solid waste management depends on the quality of the co-operation of the local government *with*

NGOs and CBOs and citizens themselves. This paper has therefore emphasised the development of NGOs and CBOs in their co-operative role with citizens and local government.

For waste management the development of waste disposal schemes which enhance the partnership between local government and NGOs and CBOs, however, still represents a relatively new era in India. Although researchers such as Furedy (1992), and others have looked at some of the developments in this area, they have not directly examined the significance of schemes established with the support of local governments, such as that found in Hyderabad. Although the waste disposal scheme is not yet fully developed, and the political mechanism for adequate interactions between the MCH and NGOs and CBOs is still to be improved. I would argue that the most viable option for solving the municipal waste management crisis as faced by many local governments in India is to go forward with a focus on these types of locally run government schemes in which all parties are involved. It remains to be seen whether or not the type of co-operation established in Hyderabad will emerge in other parts of India if similar types of schemes are to be implemented.

During my own fieldwork, I encountered a wide variety of attitudes towards the existing problems within the waste disposal scheme which ranged from pessimism to optimism, especially with respect to informal waste workers. The consensus, however, was that the fostering of co-operation between the local government and NGOs/CBOs-

therefore including citizens- represents the best basis for the design and the elaboration of a long term strategy towards a more effective integrated solid waste management approach.

Conclusion

In this paper I have tried to analyse the future viability of new developments in municipal waste management in India through an examination of NGOs and CBOs active in this line of work. It has been shown that NGOs and CBOs in solid waste management ought to be an essential component of new developments in this area. The future of municipal waste management depends not only on the effectiveness of local government, the operator of public services, but also on the attitude of citizens, and on the key role of NGOs and CBOs to shape and develop community participation, as the reality of formal waste management in India reflects a continuous struggle to provide basic collection services to communities.

This paper has therefore focused on an important shift in domestic waste management brought about by the current crisis, namely on a more decentralised approach which includes the assistance of NGOs and CBOs through local waste disposal schemes linking up with informal recycling activities.

The local government of Hyderabad has made available financial and human resource investments for the waste disposal scheme, and it represents one of a relatively few successful schemes around India. I would argue that as pressures for proper SWM continue to mount, greater research co-operation and collaboration between the public and private sector, and in particular with NGOs and CBOs, will be essential for the future of waste management in Hyderabad, as well as in many other cities in India. Without adequate assistance from these NGOs and CBOs, the whole new labour-intensive model towards waste management may be jeopardised.

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