

Chapter G-2

Non-Governmental Organisations and waste management

Most of this chapter is based on information collected by R P Pal, B B Uppal and V P Rao; section G-2.6 is based on the investigations of Jaiwanti Sheokand, S Chatterjee and A K Gurung

The purpose of this chapter is observe how a small number of non-governmental organisations developed their roles to include solid waste management. The aim is not to advertise or promote any particular organisation and so the names of the organisations will not be given. The abbreviation "NGO" will be used throughout to refer to the organisations under consideration, some of which might be more accurately referred to as community based organisations or voluntary agencies.

G-2.1 CASE 1 A WOMEN'S ORGANISATION IN AHMEDABAD

This organisation has been described as a trade union of retrenched women - women who had been working in the textile industry. It was started in 1972 and subsequently expanded its activities into the co-operative movement, promoting women-oriented entrepreneurship. It organised support services for self-employed women from amongst the rural and urban poor, in the fields of banking, social security, insurance, health care, legal aid, skills training, literacy and other aspects of awareness. The activities of the group spread to surrounding towns and even a neighbouring state. Membership was broad-based, including many from slum communities, mainly manual workers and hawkers. In 1993 there were 54,236 members.

This NGO had organised a hitherto unco-ordinated and exploited sector of poor women and children into an effective informal sector group. Together they had provided health education, and campaigned against exploitation by middlemen and for a higher degree of acceptance by the government, by society and by other service organisations.

The chairperson of this organisation was a member of the National Council of States. The NGO had an established office in the heart of the city, where both bureaucratic and field work were handled. It had been negotiating various issues directly with the highest executives of both the State and National Governments.

The **mission** of the organisation was

- a) to provide a labour union for unorganised women workers,
- b) to set up co-operatives for women workers, and
- c) to provide support services to them in banking, legal aid, health insurance, negotiation with Government etc.

In the field of solid waste management, the organisation had taken up the cause of rag-pickers, organising them into registered co-operative societies, in order

- ♦ to prevent their exploitation by middlemen,
- ♦ to bring them within the reach of labour laws, and
- ♦ to protect them from harassment by civic authorities.

They were seeking to oppose the public perception of rag-pickers as a nuisance, to give them some power over their own work and income, and to win for them recognition as a significant force in the local economy.

This NGO also has an environmental component to its mission because it was involved in promoting improvements in the sanitation and general environment of slum dwellers and other poor inhabitants.

Method of operation The organisation recruited rag-pickers through its existing workforce in the slums and poor localities. The advantages of joining the organisation were explained to potential

recruits by existing members. Rag-pickers who wished to join were then provided with large sacks, protective equipment and identity cards by the organisation. (The identity card helped to reduce police harassment.) They then would go to the roadside community bins as well as to the disposal sites to pick up recyclables. The rag-pickers took their wastes to godowns where their collections were weighed and kept for ultimate sale as feed stock to industries; in this way exploitation by middlemen was avoided. The rag-pickers were paid cash according to the weight of the material they had collected. Average daily earnings of rag-pickers in this system were said to be Rs 30 to 35 as compared to the Rs 12 to 15 that was commonly paid by middlemen.

Some of the organisation's rag-pickers had been deputed to households which were segregating their refuse into non-degradable recyclables and biodegradable components. They were also integrated with segregation schemes launched by other NGOs. This approach (household segregation) has liberated members from unhygienic manual sorting work at mixed garbage heaps and, at the same time, reduced their actual working hours dramatically. Rag-pickers involved with such schemes were now free to engage in additional alternative occupations to increase their income, and more opportunities are anticipated as more schemes for the source segregation of domestic waste take wings.

The NGO had been filling in tender forms on behalf of rag-pickers to enable them to bid for the disposal of used government stationery. It had been considering the setting up of a waste paper recycling plan similar to a scheme in Himachal Pradesh, such that it could be run by the rag-pickers' co-operatives.

Since 1981, sixty-five co-operatives of rag-pickers had been set up. Five thousand large collection bags had been distributed to member rag-pickers. (Each bag costs around one hundred rupees.) It was actively considering approaching institutions like banks and service organisations such as the local Rotarian and Lions clubs, to ask for sponsorship of more collection sacks for the rag-pickers.

It had also been distributing collection equipment to its member rag-pickers, some of which however was not favoured by the rag-pickers, due to its design. For example, after consultation with rag-pickers it was determined that one of the tools given out - a bamboo stick with a long pin at one end - would need modification.

At the time of the study this NGO had not yet launched any awareness programme amongst slum households for segregation of domestic refuse, nor had it approached the local bodies to promote a policy directive to households oblige them to segregate domestic waste for recycling. There had been no training programme for member rag-pickers to help them improve their work practices in terms of efficiency and hygiene.

Evaluation Two rag-pickers, who were registered members, were interviewed. They spoke well of the organisational support they received, and they appeared clean and conscientious. Two women from a slum spoke favourably about the organisational support they were receiving from the NGO. An official admitted that a lot more had still to be done regarding awareness programmes about solid waste management in the slum communities. Though the organisation had done considerable work in the fields of low cost sanitation, health care programmes and financing of self employment, there seemed to be more scope for strengthening the rag-pickers co-operatives in terms of better training, better equipment and better marketing of their products. The relationship between the NGO and the local Municipal Corporation was in need of positive joint efforts rather than the existing state of passive tolerance. The Corporation's scheme of assistance to private primary refuse collectors had not been taken up by the NGO for its rag-pickers.

Conclusions and future needs The organisation was broad-based and committed to assisting poor women in both urban and rural areas. It had not yet given high priority to programmes of solid waste management, but the involvement may increase as the role of the private sector is expanded. Its training and awareness inputs in connection with solid waste management had been low, as compared to other inputs on self employment, entrepreneurship and opposition to social evils. The management of domestic solid waste in slum households needed sustained training and education inputs - this organisation had a sufficient infrastructure to provide these inputs, but had yet to get seriously involved. It could move into a number of aspects of solid waste management, such as the private cleaning of slum roads and recreation zones, by dovetailing its own assistance with the efforts of the Corporation. (For example, some slum areas did not have community bins on the main roads. The NGO has good leverage with the local body and the Government, but its intervention on such small but crucial issues was found lacking.) Rag-pickers could be assisted by the NGO with, say,

tricycles for primary collection in localities where households were ready to make nominal contributions. This was in their plan, yet to be launched.

The rag-pickers from slums needed to organise collection of recyclables from the rich and medium-income localities of the city. The organisation had the standing to seek the support of the rich and high income colonies for the rag-pickers, and so it was suggested that it should launch an action programme towards this end, without delay.

G-2.2 CASE 2 A RELIGIOUS ORGANISATION IN AHMEDABAD

This particular NGO was linked to a minority religion; the same foundation was also running a school. It was receiving financial support from overseas, but none from the local Municipality.

The organisation had 27 committed members which included lawyers, teachers, doctors and health workers. It was reaching poor slum dwellers through facilitators drawn from the slum who were paid some compensation as a token of appreciation by the Society. There were 25 trained slum dwellers working as health workers. The volunteers were basically ex students of the associated school.

Objectives The organisation aimed to have a holistic approach to urban development of slum communities. Its work was segmented into four inter-related parts, as follows:

- a) Organisation To develop union associations, leadership and pressure groups.
- b) Education Non-formal classes, sewing classes, a legal aid service and public awareness-raising about rights and how to achieve them.
- c) Health and sanitation The Community Health Improvement Programme (CHIP) was both preventive and curative; public hygiene programmes were organised in slums and designed according to the habits and habitat. The importance of safe drinking water and toilet facilities were stressed. The residents were advised to contact the Municipal Corporation or a loan agency for funding for sanitary improvements. Doctors and nurses visited these sites for ante- and post-natal health care check-ups.
- d) Environment Slum dwellers were instructed about the use of smokeless chullahs (burners), cookers, sanitation, plantations and herbal medicine.

Solid Waste Management was not considered as a subject on its own, rather it was being promoted through informal education in sanitation, hygiene and environmental development. The NGO did not aim to do more since it considered that it did not have sufficient resources, in comparison with the Municipality. Anyone interested in household segregation of waste or recycling was advised to contact another NGO.

Method of working Specialists were running training sessions. In some matters slum residents were encouraged to contact Corporation officers, or Corporation officials were invited to the slums. A variety of public awareness media had been used. Volunteers were trained at intensive training programmes (camps) and then these volunteers would organise late night meetings for slum dwellers.

Since the Municipality did not provide civic services in the particular slum, the NGO had arranged for sweepers to serve the community privately on payment of some amount on a weekly basis, and also in kind. However, the system was failing due to the absence of municipal bins for storage of waste at an identified site. Solid waste was being dumped in an open space along the road where children were playing and since it was not being removed by the municipality, this area was becoming just like an open dumping ground. The streets had not been swept, but soon after the arrival of the team of investigators municipal sweepers started to clean the area. (This may have been a special provision by the Municipality because of the visit of the investigators, or it may have signified that sweepers had been deputed to the area but that supervision was inadequate.)

An adjoining slum colony had no arrangement for waste disposal; in that area people were throwing their wastewater and refuse into a river. No social worker was visiting this area. In another area people were throwing solid waste into a public toilet. The Municipal Corporation was not providing a sufficient service, but the residents were also not doing what they could to help.

Evaluation The work of this NGO covered a much wider scope than solid waste management, and so should not be evaluated only on the basis of the impacts in this field. Clearly the benefits of its work relating to waste management were seriously reduced by the failure of the municipality to remove the waste that had been collected by the NGO's sweepers. There were other environmental and health problems in the area, particularly relating to the condition of the public toilets. The work of this NGO was evaluated periodically by the foreign organisations that provided some of its funding.

G-2.3 CASE 3 A GOOD MODEL BUT BAD POLITICS, AHMEDABAD

This is the case of an NGO that started well, made some good progress, but was killed by the opposition of a politician.

The organisation was registered in 1978 with 30 members from the local community and 20 professionals. It was concerned with both urban and rural communities, and with men, women and children.

Objectives This NGO aimed to operate at two levels to improve living conditions - (i) working in the slum communities, and (ii) planning and research to develop a model for finance generation and administration within the slums. It was concerned with sanitation, health care and housing improvements.

Method of working Slum communities were divided into units of 100 families. The approach was summarised by four features:

- S Supervision, done by women from the community (30 from each unit)
- I Incentive - a salary for sanitation workers, partly from a levy of Rs2/- per family per month
- T Training at a sanitation training school
- E Equipment - tools were provided to sanitation workers.

The responsibilities of the sanitation workers included toilet cleaning, solid waste collection, spreading of insecticide and maintenance of water supply taps. Half of the salaries of the sanitation workers was paid from the community levy, and half by the NGO. Later the municipal corporation adopted the scheme and paid the 50 % contribution for a second scheme.

Evaluation A criterion by which the programme was evaluated was the impact on children's health, and this indicator showed the work to be a success. The model for financial administration seemed to work well and the municipal corporation showed its support with a financial contribution.

The downfall The scheme was killed by opposition and accusations from the incumbent (sitting) political member. The first mistake by the NGO seems to have been an invitation to a senior political figure from a different faction of the incumbent's own party. The second seems to have been that a leading member of the NGO became too prominent within the community and was perceived as a threat to the incumbent member.

Postscript The history of this NGO may have been more complex than this brief treatment suggests - political power struggles often are very complex and screened, so that it is very difficult to find out exactly what happened. It is to be hoped that the lessons learned by the community from this particular NGO have lived longer than the NGO itself.

G-2.4 CASE 4 THE NGO WITH THE NAME OF A COMPANY, IN AHMEDABAD

This organisation was headed by a businessman and some non-resident Indians of USA, and was drawing on the skills of engineers and technocrats. It had been started less than a year before this survey was undertaken.

Objectives The group was a social service organisation providing a wide range of services to the community. It was involved in the following activities:

- ♦ Legal aid to the community against harassment by civic and taxation authorities.
- ♦ Water conservation through the use of wells for recharging underground aquifers. It was proposed to segregate domestic sullage from sanitary sewage and allow the sullage to infiltrate from pits. In addition to continuous recharging of groundwater this practice would also reduce the load on the sewerage systems.
- ♦ Segregation of refuse in primary collection. The segregation of wet and dry solid waste was being promoted at household level to reduce the volume and weight of domestic solid waste reaching the community bins and landfill sites. The aims were expressed as
 - ⇒ *Zero garbage on road* - all domestic waste collected house-to-house in plastic bags, and no street waste, and
 - ⇒ *Zero landfill operation* - all waste reused or recycled in some way so that there was no need for a landfill. This objective was seen as the way to minimise the environmental problems caused by solid waste and to provide an opportunity of income generation for the poor.

Method of Operation To achieve the solid waste management objectives there were two approaches - a public awareness campaign and a pilot scheme to encourage segregation of recyclable materials at household level.

The awareness message was proclaimed from hoardings, posters, handbills and advertisements, and use was made of TV and children's painting competitions. Social gatherings of Rotary, Lions and other clubs were used to propagate the message.

Two types of plastic bags - one for the household and other for community storage of dry refuse - were distributed to the community for facilitating impersonal collection by a rag picker. The rag-pickers collected the recyclables from these bags and the green waste (or wet waste, including kitchen waste) was transferred to the community bins by the residents. This early removal of recyclables from the waste stream reduced the volume of waste, but also facilitated the work of rag-pickers, so that they could collect all the recyclables from a given area in a much shorter time than was needed when they had to separate these items from mixed waste. A further result was that their work became much cleaner, so that they claimed that incidences of sickness had reduced since the advent of the new system.

Around 20,000 bags had been sponsored by the State Bank of India Employees Association and other organisations out of which more than 5000 had been distributed at the time of the investigation. Both types of bags were intended to be reused till they were worn out. Though the bags had been distributed free of charge in the first instance, residents would be asked to pay Rs 5 or 6 for subsequent bags. Since system was appreciated by the public, institutions were coming forward to sponsor more and more bags and industries like BPL also offered support for the programme.

A number of study groups had been set up to investigate particular aspects of solid waste management and make recommendations for future programmes. The topics for the different groups were:

- ♦ Clinical waste
- ♦ Public awareness
- ♦ Trained volunteers
- ♦ Resources and fund raising
- ♦ Media development
- ♦ Co-ordination with the local body and other NGO's

Evaluation Discussions with a small number of residents and rag-pickers indicated satisfaction with the new arrangements. Two rag-pickers who were interviewed expressed their pleasure at the new procedures because they no longer needed to put their hands into dirty garbage. Both women showed their hands as a gesture to indicate that they were so clean. Their general cleanliness level had improved. The locations where the new bag system was in operation appeared clean. Very little recyclable material was seen around the community bins.

Other points to note

- ♦ The proposal to crush or macerate the green garbage and send it down the sewers was rejected as inappropriate in the Indian context as it would increase the load on wastewater treatment plants and perhaps cause blockages in sewers..
- ♦ Availability of funds was not seen as a constraint because of the large number of willing sponsors.

Anticipated developments The co-operation of another NGO in the same city was being sought for propagating the messages of this programme. This readiness to work with other NGOs and avoid duplication was seen as a very positive point.

Since this system had only been adopted amongst only a fraction of the total population in low, middle and high income sectors, and was still in the early stages, it would be a challenging task to introduce the same approach in the slums where more than 40% of the city's population was residing.

G-2.5 GENERAL OBSERVATIONS FROM AHMEDABAD

Observations concerning interviews for data collection Many slum residents do not give a true picture of conditions or needs or the services rendered by government. It would be appropriate to contact each group - men, women, children, politicians etc. - separately.

- ♦ Politicians have their own versions and interpretations - which may be very different from those of others;
- ♦ Men usually do not remain at home hence they may not give an accurate picture of some aspects of the life of the community;
- ♦ Women and children generally comment without bias. NGO workers may tend to exaggerate but housewives and children are less likely to do so. They may be prepared to speak the truth when alone, whereas if they are in group they may say something else.
- ♦ Generally slum dwellers appear to want everything from government. Even if they are prepared to participate, their leaders may not allow them to say so because the leaders want free services from government.

G-2.6 NON-GOVERNMENTAL ORGANISATIONS IN MUMBAI

The problem of solid waste management is so big that all available help is needed, so the inputs of NGOs - however small - should not be despised. In 1995 it appeared that non-governmental organisations in Mumbai had not played a major role in solid waste management in that city, but the examples mentioned below indicate that they have made impacts in a number of different ways, helping small groups of people and initiating socially orientated pilot projects.

a) Examples of NGOs in Mumbai

1. One NGO that had been working in Mumbai for the previous twenty years had been concerned with slum dwellers living in inadequate housing near the main disposal site. Most of the inhabitants of these slums worked as rag-pickers. (It was estimated that there were about 50 000 rag-pickers in Mumbai, recycling 10% of the waste, with no formal link to the MCGM.) Rag-pickers are generally very poor, illiterate, and unaware of the risks posed by waste. This NGO encouraged them to form a group, organised health camps and provided some educational opportunities.
2. Another, sponsored by the Rotary Clubs of Mumbai and Toronto, was one year old at the time of the survey. Its basic objective was to train street children who were at least 14 years old in business skills. Rag-pickers were also encouraged to get a better deal from traders. In total thirty NGOs in Mumbai were involved in this project. They selected the children who would receive training. Rag-pickers can do little during four months of monsoon, so the NGO proposed that

MCGM should provide storage facilities to help rag-pickers during the monsoon period. There was also a plan to study the economics of recycling activities.

3. Another NGO, with a focus on youth, had been trying to promote recycling by encouraging residents of an affluent part of Mumbai to separate recyclables from wet waste, so that the recyclables could be collected separately from the wet waste (which would continue to be picked up by municipal vehicles in the normal way). At the time of the survey the scheme did not appear very successful because of the lack of co-operation of the residents. The organisation was considering trying to improve participation by running a summer environmental school for students from two prestigious local schools. The programme would seek to promote separation in the household as well as wider environmental issues, with a view to encouraging them to propagate these ideas. They also planned to use cable TV to motivate the public.
4. Another began work by organising the cleaning of a slum community, converting a dumping site into a playground and providing 160 toilets. The residents were involved in cleaning their surroundings. This work was stopped because of lack of funds. This same NGO switched its attention to cleaning up a very popular sea beach, where large numbers of people congregate every evening for recreational purposes. The Municipality was approached for financial assistance, and they suggested that the owners of the hotels alongside the beach might provide the necessary cash. Fifteen hotels agreed, and supported the work for four months. The beach was cleaned and maintained by 40 workers from slum communities, working two shifts. The Municipality provided tractors and trailers to transport the waste that was collected in this way. After four months, the support from the hotels began to dry up and the beach returned to its previous littered state. Under public pressure the NGO renewed its efforts to find funding, and obtained permission from the Municipality to generate some of the necessary finance from advertising hoardings. The success of this scheme led to the start of a similar operation at another beach not far away, this time with financial support from local residents. Since much of the waste is derived from hawkers and restaurants, the NGO is arguing that there should be effective legislation to ensure the provision of containers for waste and to punish traders who leave waste on the beaches.
5. Another organisation that was contacted was concerned to improve the appearance of the city by planting trees within the urban area and running environmental education programmes for teachers and schoolchildren.

b) Suggestions based on these investigations:

- ◆ The Municipality should be more proactive in encouraging the involvement of NGOs in solid waste management, and have clear policies regarding their attitudes to NGOs.
- ◆ Municipalities should co-ordinate the work of NGOs by organising periodical meetings and keeping up-to-date lists of contact persons and telephone numbers, and the field of activity of each NGO. Co-ordination between NGOs and Municipalities should be at the Ward level.
- ◆ The Municipality could seek to develop ways of improving recycling and provide back-up support (such as transport).
- ◆ NGOs need to have good links with both elected and official members of Municipal Corporations.
- ◆ Both NGOs and Municipalities need to be flexible and prepared to modify strategies according to experience.
- ◆ Citizens have a great inherent potential to improve their own situations; this potential should be recognised and encouraged.
- ◆ Municipalities and NGOs should co-operate in environmental education programmes.
- ◆ The good work done by NGOs should be publicly acknowledged, since appreciation is a great encourager.
- ◆ The experiences and fortunes of NGOs should be studied and recorded, so that current organisations can learn from successes and failures.

G-2.7 CONCLUSIONS

General conclusions

The size of the sample of NGOs and the shortness of the investigation period does not allow the drawing of firm conclusions, but some tentative conclusions are suggested. It would be useful to bear these observations in mind when conducting further investigations or making plans for NGO involvement.

- a) Solid waste management is a new area for some organisations, so it cannot be expected that a well tried and tested programme of waste collection or recycling will be found wherever an NGO is working. Some schemes may be at a very rudimentary stage.
- b) It is likely that there is a need for information dissemination amongst NGOs in India. Many organisations may be setting out to do similar things in different slum communities and in different cities, and making mistakes and learning as they go, unaware of others that have already gone through the same processes and who would be able to help by sharing the benefits of their experience. It is not known what channels of communication exist between NGOs throughout India, but it is likely that there is a need for better communication and sharing of ideas and experiences.
- c) NGOs cannot do everything themselves, but they can form a very useful interface with the outside world, helping where literacy is lacking, liaising with the municipal authorities, and making financial and contractual arrangements.
- d) Care should be taken when replacing a well-tried component in business arrangements, such as the scrap middleman (or dealer in recyclable material). These middlemen are usually characterised as greedy, taking excessive profits, but in some cases they do exercise considerable expertise in finding markets and knowing what quality of material and what degree of sorting and processing of scrap (or recycled) material is necessary to get the best price. If an NGO takes over their trade, one must expect some opposition and obstruction from displaced middlemen as they try to win back their business. Finally, the trading arrangements that replace the middleman should be sustainable - if the system only works with the aid of considerable external resources supplied by the NGO, there may be serious problems if the NGO removes its support or changes its emphasis.
- e) Political factors must always be kept in mind. Some individuals may get involved in NGO development work to win a following and ensure a grateful block of voters when elections come. Others who do not have political ambitions may be opposed by those who do, if the would-be politicians fear that the affections of the voters are being won by the NGO staff.
- f) As slum-dwellers become accustomed to NGOs providing for some of their needs, they may tend to develop a helpless or passive mentality, and stop trying to do things for themselves, waiting instead for an outside agency to meet their needs. They may also try to make the strongest impression on NGO and municipality staff by adjusting their story and their facts according to who is listening, so sometimes a little scepticism and cross-checking are required when interviewing potential recipients.
- g) As in almost every activity and endeavour, it is worthwhile to consider the motivation of all involved. The motivation of leaders of NGOs is no exception. Whilst there is often an altruistic motive - wanting to help those who are less privileged, to make a contribution to society, to use one's talents and training for the benefit of others - other motivations may also be present from the start, or may creep in as the work continues and grows. In addition, one should be aware of others looking in from outside who may be asking what motivates a leader, and be wise to prevent them from arriving at a wrong conclusion. Some, as has already been shown, may be accused of using NGO involvement to seek political power. Others may be accused of seeking self-promotion or publicity. Some may seem to be involved with an NGO for financial gain or in order to obtain a privilege from the municipality, such as the right to use a piece of land, or a favourable decision from a municipal body.

G-2.8 WHAT SHOULD BE THE ROLE OF AN NGO?

The following roles are suggested:

- ◆ Public awareness
- ◆ Model preparation/experimentation/research
- ◆ Bridging between government and society, organising residents as pressure groups
- ◆ Acting as a buffer zone between the community and the municipal authorities

G-2.9 DOs AND DON'Ts FOR NGOs

The authors realise that they are not experts in the subject of non-governmental organisations, but as a result of this brief investigation of the experiences of a few NGOs, the following suggestions are offered in the hope that some of them may be of some benefit:

- ◆ Do keep away from political activity
- ◆ Do consider carefully what can be done with available resources. Though an NGO may like to take a holistic approach, at the same time it should not spread itself too thinly in many directions since it will lose control and effectiveness.
- ◆ Do try to evolve a system of self-help rather than depending on the municipal corporation.
- ◆ Do aim at co-operation rather than confrontation with the municipalities.
- ◆ Do keep in contact with other NGO's in the area to avoid duplication of work.
- ◆ Do encourage the target groups to focus more on their duties and less on their rights.
- ◆ Don't arouse too many expectations otherwise failure to fulfil them all may lead to withdrawal or disappointment.