

Let's keep the city clean: dispose your own waste

At a recent panel discussion organized by the Environment Committee of the SLAAS on barriers to proper disposal of solid waste in Sri Lanka, it was identified that the most practical and economical way of solving the solid waste problem is to entrust the responsibility of sorting and disposing of the biodegradable waste to the waste generator himself. It may be a housewife or a restaurant owner or a vegetable or a fish vendor. The panel felt that unsorted waste dumped in street corners or a central place after being collected from households and restaurants becomes a repulsive eyesore and a health hazard because of the presence of biodegradable matter and other organic matter in the waste, and this should be managed within the premises where it originated.

Food waste — the problem

Any leftover from food eaten with much relish whether at home or at star class buffets by all of us after paying a lot of money becomes an eyesore once it leaves the plates. Left over food, within hours, becomes putrid due to microbial activity emanating foul smells and attracting flies and mosquitoes. Efforts made over more than a decade to establish sanitary landfills failed after spending much money on feasibility and environment impact studies, because everyone felt that the location of projects containing such putrid waste should be not in my back yard — the NIMBY syndrome.

It was noted that whatever proposals made for disposal of solid waste by relevant authorities still depend on their disposal by a central body after their collection from households. The collected waste prior to processing has to lie somewhere and the biodegradable matter in it will create so much stench that it makes processing difficult and its handling a repulsive task. It is unfair to expect people to sift through rotten garbage looking for re-usable material to supplement their daily income. It was reported that almost all of the central composting sites operated by local bodies do not work satisfactorily. The proposals made by authorities for recycling or incineration do not work. It was felt that handing over waste collection to the private sector has also not really improved the situation either.

Compost Bins

Today, the creation of foul smelling garbage dumps could be easily avoided. There are several organizations manufacturing compost bins into which all the biodegradable refuse could be put. After the lapse of several months,

this material will turn into usable compost. The bin needs only a space of less than a quarter square meter, and can be used even in multi-story apartments. It does not emanate any unpleasant smell or cause any other problem if properly handled. A major part of the problem is solved if every household uses such bins to dispose their own kitchen waste and puts away only the dry waste for collection. It is worthwhile for the local bodies to make available these bins at a concessionary price as it would eliminate much of the burden they carry during the disposal of waste.

Since these bins produce compost, there has to be a mechanism to collect this material, in the event the house owner has no use for it. This could be a self employment avenue as compost has value as a fertilizer. Handling compost is not as repulsive as handling putrid food waste. The only practical way of implementing such a scheme is to make it mandatory by law and those not complying to be fined. Eating houses and restaurants that produce kitchen waste in large quantities should also be made responsible for the disposal of their waste. The discussion concluded that people should be made responsible to dispose own kitchen waste within their own premises.

Non-biodegradable waste:-

With regard to other dry waste, it was noted that there is a convenient mechanism available in urban areas to dispose dry waste such as packing material, paper, plastics, bottles and cans. In a household most of such waste are generated from goods purchased in shops. Today Super markets are found in most towns and they could come forward to serve as collection centers for such dry waste. People should take this waste generated from their previous purchases when they go marketing and deposit them in bins kept in the Supermarket premises. Here too there has to be a mechanism to clear the bins regularly. Owners of these institutions have an obligation to take back waste generated from their own sales and should cooperate to make such a scheme a success.

It was also observed that present policies do not encourage recycling of waste material, particularly old newspapers, are imported into the country with little duty and this is a disincentive for the sustenance of the local recycling industry. The policy makers, in this instance, have demonstrated a total lack of appreciation for the issue of environmental benefits that



A compost bin

could accrue through proper fiscal policies.

Social Responsibility and Coordination:-

There is a lack of social responsibility on the part of general public, who feel that the disposal of waste is the responsibility of the local bodies and not theirs. It was agreed that the waste disposal could be made less problematic, if the waste is properly sorted at the household level before it is collected, and that this should be the responsibility of each household. Concurrently, the local body should arrange for the collection of sorted waste separately for disposal in an appropriate manner, including re-use and recycling. It was noted that only a handful of households make use of garbage bins to dispose of their kitchen waste, though they are now available freely in the market.

At a time when the country is spending valuable foreign exchange in importing fuel to generate energy, it was noted that the possibility of making use of waste to generate energy has not been properly exploited, as incineration and anaerobic digestion could generate significant amount of energy from waste. It was revealed that there was a lack of coordination among local bodies and organizations who have volunteered projects for disposal of waste in an environmental friendly manner. It was alleged that certain local bodies do not cooperate with such organizations unless the decision makers themselves benefit. It was also reported

that often investors are turned away unless the authorities are granted financial considerations for acceptance of the project.

The representatives of the Western Provincial Council and the Ministry of Environment described their programmes planned for better disposal of solid waste collected by local bodies and for the removal of current barriers. It was mentioned that the local bodies in the Western Province would be clustered into several zones and the principal local body in each zone would be entrusted with the responsibility of disposing waste generated from the zone. It was highlighted that laws would be brought soon to make it an offence to allow waste to lie in public places without proper and prompt disposal with a view to streamlining the disposal process, and to implement the "polluter pay" principle.

The Barriers:-

During the discussion, the following were identified as the main barriers for implementing past proposals for solid waste disposal.

- Lack of commitment and interest on the part of the local bodies to keep their cities clean, free of garbage.
- Lack of social responsibility and commitment on the part of the general public to dispose of their kitchen waste within their premises.
- Lack of encouragement and motivation by the government for the private sector to undertake recycling projects.
- Lack of a mechanism for collecting sorted waste at

household level for recycling.

- Lack of civic consciousness among authorities in local bodies in demanding financial considerations for acceptance of projects to clear waste.

Recommendations:-

*The panel recommended that the following course of action needs to be taken to keep the disposal of solid waste at a manageable level and urged the government to provide concessions and incentives to local bodies and to the private sector who volunteer to undertake the proposed activities.

- Make it mandatory by law for every household and restaurant to dispose their waste into compost bins kept within their own premises.

• Make available compost bins to every household at a concessionary rate that would minimize the amount of biodegradable waste generated for collection. • Until such time that every household possesses a compost bin, insist that they keep sorted waste for collection and arrange collection of degradable and non-degradable waste separately, the former daily and the latter on alternate days.

- Make it obligatory for every supermarket and shopping mall to keep separate bins for collecting sorted waste and arrange for their disposal through recycling and other environmentally friendly means.

• Encourage organizations including local bodies and the private sector to make use of technologies developed by R & D institutions for proper disposal of waste including energy generation.

- Encourage the private sector to collect compost generated at household and market levels for sale as fertilizer as a viable project.

• Launch a public awareness campaign to impress upon people and decision makers the importance of managing waste at the point of origin, without passing the responsibility to others which would make the waste disposal an unmanageable task.

The panel comprised of eminent speakers including Dr. Sumith Pilapitiya, Eng. Tissa deSilva, Dr Ajantha Perera, Dr Ajith de Aiwis, Eng. Lalith Wickrernaratne, Priyantha Samarakkody and Eng. Padmini Batuwitige. The programme was well attended by representatives of organizations and institutes having a stake in the problem.

(Compiled by Dr Janaka Ratnasiri on behalf of the Environment Committee of the Sri Lanka Association for the Advancement of Science)