

Reduce, Reuse and Recycle

SOLID waste management programmes in Malaysia are beginning to gain momentum in recent times. From the campaign on the ban of plastic bag usage to the promotion of home composting, no effort has been spared to increase the public's awareness on the need to reduce, reuse and recycle. In a recent interview, Dato' Dr Nadzri bin Yahaya, Director-General of the National Solid Waste Management Department, talked about some of these programmes with JURUTERA.

He began by explaining that the Solid Waste and Public Cleansing Management Act 2007 (Act 672) is the parent legislation which provides all the enabling provision to manage solid waste and public cleansing in Malaysia. As such, for solid waste management programmes to achieve its respective targets, the details of the implementation must be spelt out in the regulations or by-laws enacted under the parent Act (Act 672).

Dato' Dr Nadzri bin Yahaya

Director-General of the National Solid Waste Management Department



He said, "The regulations or by-laws will be gradually formulated according to priorities. For instance, regulation to control the service providers must be put in place as soon as the Act comes into force. We also need the anti-litter, compounding, licensing and sorting at source regulations immediately. Without these regulations, the privatisation of solid waste management cannot be carried efficiently and the Act will be an empty shell."

Back in March 2011, it was reported that landed properties in the country would soon be provided with 120-litre bins to dispose their household garbage. However, so far, these bins have yet to be distributed to the local community. Dato' Dr Nadzri stated that this will only be done when the Government has decided to enforce the Solid Waste and Public Cleansing Management Act 2007 (Act 672) and implement the privatisation of solid waste collection. In this regard, the government has recently agreed to enforce Act 672 on 1 September 2011 in the Peninsula.

He said, "Under the Act, the government is planning to impose mandatory sorting at source. To support the implementation of the Act, the collection schedule under the new privatisation regime requires the concession company to collect the residual solid waste on different days from the collection of the recyclables." He added that the residual waste (food waste and other non-recyclables) would be deposited into bins which will be collected by a lorry with a bin lifter and not manually handled. Thus, all bins have to be standardised to ensure smooth collection of the waste.

According to experts, one of the major contributors to solid waste in Malaysia is plastic bags and goods which represent approximately 24% of the total waste. Society's consumption rate of plastic bags is now estimated at well over 500 billion plastic bags annually, or almost 1 million per minute. So has the recent drive to reduce the usage of plastic bags by charging shoppers made any difference? Judging by the encouraging response as reported in the mass media, as well as the strong support from merchants and retailers, it would seem so. However, Dato' Dr Nadzri feels that the issue should be viewed in a holistic manner.

He stated that although there has been an overall decrease in the usage of plastic bags, ultimately, it was more important to see a decrease in the amount of plastic waste that ends up in the landfills. Despite the programme's apparent success, he has encountered some mixed signals on the matter. While the number of plastic bags being issued to customers has decreased, ironically, the sale of plastic bags has actually increased.



COVER STORY



He said, "We did a quick survey on the attitude of some of these customers. Some bring their own bags each time they go shopping. Others just could not be bothered and would rather pay for the plastic bags. Some customers just put their goods into the trolley and push it to their cars. For those who stay near shopping complexes, some have admitted to pushing their trolleys as far as they can go, even all the way to their streets or homes."

To counter the increase in plastic bag sales, Dato' Dr Nadzri believes that more public awareness programmes must take place to educate the consumer. He said, "The important thing

is to ensure that these plastic bags do not end up in the landfill, or pollute the environment by clogging and choking up the river and drainage system." He stressed that a plastic bag must be used and reused as many times as possible. When it is no longer usable, it must be segregated from other recyclables and not be mixed up in the bin with other residual waste (food waste, etc).

Beside plastic waste, the National Solid Waste Management Department is also turning its focus on food waste. Dato' Dr Nadzri said, "At present, food waste constitutes the biggest portion in solid waste generation. Hence, we are going into high gear to address food waste. Although household composting is quite popular in many developed countries, the practice has not quite caught up with the Malaysian public in a big way especially in the urban areas."

He added that the department has continuously carried out awareness campaigns to get more households to take up composting. He said, "Back in 2008, we undertook a composting project under the DANIDA programme with the Centre For Environment, Technology And Development Malaysia (CETDEM) and the Petaling Jaya City Council (MBPJ) to promote home composting to 46 households." One of the findings of the project was that local authorities needed to carry out more outreach programmes since many people were still ignorant about the method.

To address this issue, he said, "We are now implementing programmes, either on our own or with the collaboration of NGOs, to educate more people to do home composting. We are working with the Ministry of Environment of Japan as well as the Ministry of Agriculture, Forestry and Fishery to launch a pilot project on composting as well as biomass town respectively. We are also undertaking a four-month study on food waste under the NKEA Initiative for Greater Kuala Lumpur or Klang Valley to address food waste issues in these two areas."

According to press reports, the government plans to open nine sanitary landfills this year to process 17,000 tonnes of



garbage a day in the country. These sanitary landfills are being built under the 9th Malaysia Plan and another two under the first rolling plan of the 10th Malaysia Plan. They will be located in Johor (Pagoh, Pekan Nanas and Bukit Payong), Melaka (Sg. Udang), Negri Sembilan (Ladang Tanah Merah, Port Dickson), Perak (Teluk Mengkudu, Manjung and Lahat, Ipoh), Perlis (Rimba Emas), Terengganu (Tertak Batu, Bukit Jemalang) and Pahang (Temerloh).

Dato' Dr Nadzri stated that, at present, there are about 166 landfills that are still operating, out of which only eight are sanitary landfills. He explained that the new landfills are not an addition to those that are currently operating, but will take over those landfills which will be closed soon because they have reached their full capacity and due to its unsuitable location.

However, the most important issue when it comes to opening a new sanitary landfill is the availability of a suitable site. Dato' Dr Nadzri pointed out that, since land is a state matter, it is crucial for the National Solid Waste Management Department to work with the local authorities and the state government on the selection of a site. He said, "Quite often, the site that is provided for the location of a landfill is situated in a sensitive area such as in catchment areas, near water in-take point and so forth. In other instances, when a suitable site is identified, there is no existing access road or the landfill is situated away from the existing road. Hence, the department has to negotiate with the landowner for access."

There were also instances when everything was in order, the department discovered that new development projects have been planned near the landfill site. In this case, the department has no choice but to withdraw the development's proposal.

Although there is still much to do, Dato' Dr Nadzri is confident that public awareness on solid waste management in Malaysia will catch up with those from developed countries in the next 10 or 20 years. He said, "We did a survey on the public's awareness on 3R. The result was amazing as about 90% of those surveyed were aware of it. Unfortunately, only about 50% to 60% of them practiced 3R activities. Among the reasons given was that there were no infrastructure for them to send their recyclable items. Hence, to encourage the public to recycle and practise good solid waste management, the infrastructure must be there besides the ongoing public awareness programmes." ■



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