

Polythene spares neither living nor dead

Indiscriminate use of polythene has taken a deadly toll on our environment. **Shanika Sriyananda Liyanage** investigates its morbid effects, and talks to those who are trying to combat them.

Cheap... handy... convient... water proof ... easily accessible... and durable... - shopping bags - became a 'saviour' since they can be used for multiple purposes.

Step-by-step many environmental- friendly traditional wrappers such as 'habarala' leaves, paper bags made out of cement bags and newspapers, 'pan malu', cane baskets and many other ways of carrying day-to-day house hold items were replaced by this alien attractive carrier.

This, 'god sent carrier', which became a fashion in 1980s, subsequently turned to be a 'monster', which withered the cottage industry, where large number of village folk earned a living.

However, this has now become a menace not only for the living but also for the dead. And it is the right time to find a solution, most probably a 'BAN'.

"Polythene has invaded the people's last resting place", says Chanaka Perera, caretaker of the cemetery, who laments that a ban should be imposed on using polythene in the interior of coffins and dressing corpses with polythene during embalming.

This practice prevents the natural decaying process, and has resulted in a large number of dead bodies being in a non-decomposed state inside their coffins.

"This is a huge hassle for me. I have a limited number of labourers and when we discover non-decomposed bodies we bury them together", he said.

The dead need to go to their final rest with dignity. Though they are buried as individuals, many years later they are buried together in a common eight feet burial ground once again without any religious rituals or kith and kin around them. The cemetery officials do not have any other alternative than this, because of the non-decomposed state of the corpse.

"This has been happening in the past few years because a majority of funeral parlours use polythene inside coffins and corpses are dressed from knee to ankle length - with polythene preventing the natural decaying process", Perera pointed out.

According to Perera there are over 30 funeral parlours within the city and a majority of them use polythene in coffins because polythene is cheaper than cotton which was used earlier. "The normal procedure is to use cotton to cushion the coffin and dress corpse with cotton cloth to quicken decay", he added.

Today the cemetery labourers 'discover' the skeletons of corpses buried almost three years ago and have not decomposed.

However, following a decision taken at the Colombo Municipal Council (CMC) now it is prohibited to use polythene for decorations in the cemetery. According to Perera three months have been given to all funeral parlours to stop the use of polythene in coffins.

Gamini Jayaratne, Chairman, Jayaratne Funeral Parlour, one of the biggest coffin suppliers of the country, said they had stopped the use of polythene and use only cotton.

Meanwhile, Dr. Ajantha Perera, Chairwoman of the National Program of Recycling of solid waste, who pioneered the recycling program, which developed in 1995, is now ready to bring the officials of the Ministry of Environment and Natural Resources before the court for giving 'broken promises' on banning polythene.

"The Ministry has to implement laws for banning before the end of the April", she said.



Impact of polythene

On human health: Since there is no proper disposal system for this hazardous waste mostly it is burnt in open dumps. The noxious fumes that emit from burning of polythene would lead to male impotency and womb related ailments in women, warn medical experts.

Clogged with shopping bags and lunch sheets majority of drainage lines have become breeding spots of deadly mosquitos.

On animals: According to vets, when the animals swallow garbage mixed with polythene, especially the thin tissue - lunch sheets, it blocks their digestive systems. But, shopping bags and lunch sheets would be death traps for deer, cats and birds. According to latest reports sea turtles are the innocent victims of polythene. The fishermen and divers found carcasses of sea turtles, recently and investigations revealed that it was due to shopping bags. When they see shopping bags bumping in the sea they come and gulp them thinking it is another animal and the material blocks in their digestive systems. There were several incidents where deer in the National Zoological Gardens died due to polythene. Deer roaming the city of Trincomalee and feed on garbage is fast disappearing due to the 'silent killer' polythene.

On environment: Plastic materials buried in the soil lead to soil infertility. Farmers complain that their paddy lands are totally infertile because there are lots of shopping bags under the mud.

Historical places that are under the threat of polythene: Almost all places that became tourists attractions, are at risk while Sripada, Mihintale, Sigiriya, Anuradhapura and Hummanaya are more vulnerable to pollution due to excessive use of polythene. Environmentalists warn of the disappearance of the blow-hole, Hummanaya at Kudawella, one of the natural wonders of Sri Lanka. Divers recently discovered thousands of mango seeds wrapped in shopping bags thrown into the blow-hole. They say that the specific gravity of water that comes out keeps on reducing because of the clogged shopping bags and lunch sheets.

A ban is imminent

Considering the environmental and health hazards involved the Environment and Natural Resources Minister Rukman Senanayake decided to ban and restrict polythene use.

A cabinet paper would be submitted before the end of this month and people have to say goodbye to shopping bags popularly known as 'sili sili' bags and lunch sheets. According to the Minister, polythene, which has the thickness below 20 micron will be banned under the first phase. 'Sili sili' bags, lunch sheets and other polythene varieties below 20 microns will come under this category and legislation to control other varieties which pollute the environment will also be introduced shortly.

A committee comprising officials of the Ministry, Central Environmental Authority and the polythene manufacturers have formed a forum to submit recommendations to reduce and ban certain categories of polythene.

There are over 168 polythene manufacturing factories, island-wide.

"It is a total disaster. Recently I visited Mannar, Trincomalee and Vavuniya. In these areas it's not the war that destroyed the environment but the shopping bags and the lunch sheets. People in the North and the East should be educated on the danger of the over-usage of polythene", she stressed.

She requested the Minister, Rukman Senanayake not to make this move another political statement, but to go ahead with the decision to ban polythene. "Polythene is the 'hidden seed' for many environmental and health hazards. At the moment the public is very happy with the Ministry's decision and they would support the Ministry" said Dr. Perera who launched an awareness campaign to support the banning of polythene bags and lunch sheets.

"We can do it in an organised manner if our people are disciplined but they are not. The need of the hour is a ban. Then somehow people will find an alternative", she said.

According to her within the Colombo district no school will use polythene for decorations and this campaign is expected to be launched island-wide soon. The environmental officers of the Colombo Divisional Secretariat would visit these schools and monitor whether they adhere to the move.

Dr. Perera blamed the major re-cycling industries for not coming up with a proper re-cycling program. "Since they want the material in clean form they buy the materials from the plastic industries in the form of cut pieces", she claimed.

Appreciating the Ministry's decision to ban polythene, Chamini Kodituwakku, Environmental

Scientist of the Environmental Foundation Ltd. (EFL) said that most of the developing countries were finding ways and means to reduce this menace.

She stressed the need for a proper recycling method for plastic waste, encouraging the reuse of plastic and reducing plastic consumption. "Biodegradable plastics are the best solution for this grave problem but due to certain limitations, such as high cost and the degradation possible under special conditions of exposure, it is difficult to introduce it here.

Mrs. Kodituwakku was of the view that the Board of Investment (BOI) should thoroughly consider the report prepared by the former Ministry of Transport, Environment and Women Affairs in 1997 on the 'Use and disposal of plastic - Environmental Impact and Recommendations' when approving recycling industries. In this report it clearly says that concessions should be given only for recycling of plastic waste generated in Sri Lanka and import of plastic waste from outside for recycling should not be permitted.

According to her, however, the BOI has ignored this and given the approval for a recycling project which is importing plastic waste. "This is one of the worst ventures that could be started in the country. This would likely lead to the infiltration of plastic waste of toxic origin and will be detrimental to the environment", she said.

Meanwhile, she requests the Ministry of Environment to be alert on the functioning of these industries since there is a possibility of recycling 'foreign' medical plastic waste which will be a serious threat to living organisms and vegetation.

What is plastic ?

- * A totally artificial petroleum product. Natural gas derivatives and resins of polymer are added to make plastic commonly called polythene.
- * To make the final plastic product more flexible, colourful and resist to microbes, a wide range of additives are used to plastic resin or polymer.
- * Plastic waste will include : polyvinyl chloride (PVC), polystyrene, polyacrylate, polycarbonate, polypropylene, polyethylene terephthalate, polyurethane.
- * Per capita consumption of plastic in 1980 was 2 kg but it has gone up rapidly over the past few years and now it is upto 4.5 kg.
- * The country that imposed a total ban on polythene is Bangladesh and the majority of developing countries, which are facing serious environmental threats due to the excessive use of polythene are in the process of 'discovering' alternatives.
- * In Sri Lanka, Super markets are the major users of shopping bags.

Daily waste collection (tonnes) in each local authority

* Colombo Municipal Council (MC)	680
* Dehiwela-Mt.Lavinia MC	150
* Moratuwa MC	135
* Bandarawela Urban Council (UC)	118
* Kandy MC	102
* Sri Jayawardenapura -Kotte MC	95
* Trincomalee UC	72
* Kays Pradeshiya Sabha (PS)	60
* Negombo MC	54

According to EFL sources of the total waste generation in all of these MCs, UCs and PS, total amount of polythene is over 500 tonnes daily. This includes mainly the non biodegradable hazardous plastic materials.