



Plan@Earth- NGO for turning waste as a resource

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Introduction

Plan@Earth is a Voluntary organisation registered as a charitable trust under the Travancore-Cochin Literary, Scientific and Charitable Societies Act (Reg No ER-313/09). It works in the area of environment conservation by offering solutions for waste management. Plan@Earth believes that “waste is not a trash but a resource” and proper waste management is the vital part for sustainable development of society. The activities of Plan@Earth are directed towards the 6 Rs namely, Reduce, Reuse, Refuse, Restructure, Remove and Recycle. The first 3 Rs are achieved through awareness classes, campaigns, street-plays. The other 3 Rs are achieved by training the community to segregate waste at source followed by door to door collection of waste from over 20000 households using push carts and directing clean and dry waste collected for recycling. The dry waste that cannot be recycled are washed and made into bags, file-folders, items of home décor using the method of up-cycling. With the help of the mechanical engineering dept of SNGCE College, Kolenchery, Plan@Earth has also developed a machine to make “Eco-Bricks” using discarded plastic packaging and sand. Every year Plan@Earth carries out nearly 200 awareness classes and uses mimes, skits, street plays and dramas performed by student volunteers to get the message across to the public. Each project in this NGO can support 20-25 women from poorer backgrounds as means for poverty alleviation.

Description of solid waste

Non-degradable wastes are handled. Monthly 50, 000 kilos of dry waste mostly plastic gets collected, sorted, graded, and recycled through door to door collection of over 20000 households and shops. The waste is then manually sorted into 62 grades. 38 grades are sent for recycling to respective recyclers located in different parts of south India. The dry waste that cannot be recycled are washed and made into bags, file-folders, items of home décor using the method of up-cycling. Plan@Earth has operations in 4 municipalities and 4 panchayaths (Aluva, N. Paravoor, Angamaly, Chalakudy, Kodakara,

Karumalloor, Kadungaloor and Edathala). Last year 600000 kilos of plastic and other dry waste was sent for recycling through the efforts of Plan@Earth.

Mode of collection/transportation/processing

Door to door collection of waste from > 20000 households (Suchitwa Sevanam) of 4 municipalities and 4 Panchayaths (Aluva, North Paravoor, Angamaly, Chalakudy, Kodakara, Karumalloor, Kadungaloor and Edathala) are done using push carts.

The waste collected mostly belonged to plastic in nature. After collection, the waste are weighed and documented, and then brought to decentralised hubs. The waste is then manually sorted into 62 grades, of which 38 grades are sent for recycling to respective recyclers located in different parts of south India. The dry waste that cannot be recycled are washed and made into bags, file-folders, items of home décor using the method of up-cycling. A workforce has been trained and retained to carry out the skilled work of sewing and weaving to convert waste plastic into bags. Over 120 workers are employed at various levels of waste collection and processing. With the help of the mechanical engineering dept of SNGCE College, Kolenchery, Plan@Earth has also developed a machine to make "Eco-Bricks" using discarded plastic packaging and sand.

Impact

There was no system for plastic waste disposal in the working areas before they have started. Plan@Earth initiated a waste management culture which made the people in these premises to carry out the waste management in much more systematic way.

In terms of carbon saved, 50000 kilos of plastic that is collected and recycled can be accounted as 50000 kilos of carbon dioxide saved from burning, landfills or ending up in the ocean. In order to convey the message of reducing the use of plastics, nearly 5000 cotton bags and paper bags are distributed among a chosen community. Members of the community are also trained to make their own carry bags from old rags.

Adoption of this method by others

There was no system for plastic waste disposal in the working areas (4 municipalities and 4 panchayaths of Ernakulam District) before they have started. Plan@Earth initiated a waste management culture which made the people in these premises to carry out the waste management in much more systematic way.

Economic aspects

The waste removal projects are made sustainable by collecting a monthly service fee of Rs. 30-50 per household, as well as using the CSR funds of companies (like Apollo Tyre's Foundation). The cash received from the sale of recyclables also contributes to make this project run in a sustainable manner. Each project can support 20-25 women from

poorer backgrounds and is a means for poverty alleviation. In terms of carbon saved, 50000 kilos of plastic that is collected and recycled can be accounted as 50000 kilos of carbon dioxide saved from burning, landfills or ending up in the ocean.

Conclusion

Every year thousands of tons of solid wastes are getting dumped in landfills or burnt up in black smoke. Plan@Earth tries to save the waste from getting charred or buried. Our aim is to work towards a waste-free future where reutilization becomes the norm. Considering the success of this small start up in local bodies in Ernakulam district, we plan to extend our projects to all over Kerala for a better and cleaner environment in future.