



No waste in Universe- Nature recycle all the waste

T. M. Venugopalan¹, Jeena N. S.², E. K. Uma³

¹Plastic and paper recycling equipments, Mob: +91 9349830598

²ICAR, Central Marine Fisheries Research Institute, Kochi

³ICAR, Central Marine Fisheries Research Institute, Kochi, ekumamohan@gmail.com

Introduction

Since my father was a book binder, from my early days I got a chance to assist in the work around fifty years back. He has fabricated own equipments for the industry. Having completed my graduation in Botany from Maharaja`s college in 1969, I got a chance to study Pulp and Paper Technology, Saharanpur, U. P. donated by the Swedish Government for transfer of technology.

On completion of course having a duration for 3 years, by the help of family I have started own handmade paper industry at Thammanam for production of handmade paper and boards from the waste paper collected from own industry and nearby industries.

When M/s Hindustan Paper Corporation started the Newsprint Paper Production unit at Vellor, Kottayam District, joined as a senior operator in production paper machine in 1979. In Asia, this was the first paper mill having a capacity of 350 M Ton from wood, bamboo and Era. In the year 1993, 100 ton plant was started for production of pulp from used newspaper and paper wastes.

While I was in service, worked in various sections of production and in 2003, I was transferred to R and D for conducting research for converting around 15 M Ton waste generated to useful production for own use for packing the reels.

Here I got a chance to study how to handle the problems due to accumulation of solid waste like paper, plastic etc.



On retirement by 2005, again started my own micro unit, fabricating own designed equipment, almost all varieties of waste paper to value added products. While processing the plastic laminated waste, the disposal of plastic was a problem. By conducting experiments, made products from almost all plastic waste to various products. Till date, I am engaged in the conversion of almost all types waste to useful products.

Description of waste (solid)

1. In 2008, designed equipments for conversion of elephant dung to paper and paper boards at Konni Eco Tourism project, Konni, Pathanamthitta District under Forest Department.
2. The accident death of a deer at Athirappalli Waterfalls area by consuming the plastic waste in 2010. They implemented my recommendations for tackling the problem. Tried to make awareness of the problem from the bottom most labourer to topmost authorities, designed equipments, provided training, made the area clean from 2008 onwards till date and they are getting income from waste around 1-2 lakh per year.
3. Waste management at YNP Trust located at Mattanchery- conducted the study of waste generated while conducting the functions like marriages, seminars etc, trained the labourers for collection of various disposable items like biowaste. All required bins, trollies, bundling press were designed, fabricated and introduced there which yielded good results for waste handling very economically.
4. Last year at Mar Augun School, Kodanad, various programmes were conducted to collect plastic waste and last month they have employed a bundling unit which made them successful in waste handling.

How was it done

All the above problems were solved by the financial help from concerned authorities. At Athirappalli waste management was done with the cooperation of local people.



View of Athirappalli location after cleaning campaign

The Impact

Before introduction, they were all worried about waste disposal. Now, they have even some financial gains.

Adoption by others

Though approached modifications due to various problems beyond my control, has not gained good results.

Other Organizations such as Chavara Cultural Unit organized Workshop on 23.10.2004 in which talk was given by me on the subject "Plastic less Kochi".

Economic Aspects

All the projects were funded by the concerned heads of Institutes.

Conclusion

From my all previous experiences, now I am fully confident that having proper awareness from bottom to top authorities employing local technologies can be tackled to very great extent.