



Eraviperoor grama panchayath

Rajeev N¹, Vidya R²

¹Vice president, Kozhimala, Eraviperoor, Pattanamthitta, Pin-689541, 9847372872

²ICAR, CMFRI, KOCHI, vidya.panicker@gmail.com

Introduction

From 2012-13 onwards, many project related biodegradable and non biodegradable waste management are being carried out in this panchayath. Among this, plastic road is recognised as the most scientifically proven and ideal project. The mile stones in this project during this time line are detailed below.

Eraviperoor Grama Panchayath governing council decided to organize the Ecofriendly Grama Panchayath. They felt that along with the development projects, there should be awareness among the public regarding environment related issues, so as to conserve our inherited environmental values. Accordingly an Eco Gramasabha was organized by the Panchayath, in all 17 wards during 3rd -24th August 2013, where it was discussed on how to process the waste at their origin, analyse the functioning of Arogyasabha, dealing with health related projects and assessing the activities of 'Harithagrama' involving the agriculture related projects.

Recognitions and dignitary visits

A team of 20 delegates from International centre for local democracy, comprising of 11 foreign countries like Cambodia, Vietnam, Malasia etc who are studying on local governing bodies which has its head quarters at Sweden and representatives from four North Eastern states of India had visited the Grama Panchayth on 25th June 2014. The visit aimed to study on the plastic waste management and working of plastic recycling units in the panchayath. They had visited all the recycling units and their feedbacks were highly commendable and we consider it as a token of appreciation.

Description of the waste

The Panchayath focused mainly to manage the non degradable plastic wastes (bottles, covers etc.) within each ward of the panchayath. Issues on biowaste management was also taken care.

How was it done?

Awareness programme

In various Gramasabhas, experts in ecology and health related fields took classes (2012-2013) and based on these discussions different project proposals were formulated. Accordingly, as part of the yearly programmes of the Panchayath (2013-14), various projects like complete waste management, construction of biogas plants, vermicompost units, plastic recycling units, plastic roads, modern slaughter units cum fish markets were implemented.

Participatory waste management

With the increased concern in plastic waste management, participation of the people is ensured and with the guidance and support of the eco gramasabha, decisions were made for a proper plastic waste management practices and establishment of plastic recycling units.

Plastic waste collection

As a part of project, it was decided to keep dustbins at anganwadis, schools and public places and training given for plastic collection. For regular collection of the wastes. Haritha plastic unit was created which involved 5 Kudumbasree (self-help group) workers. A total of 51 dust bins (3 each/ward) were also kept in different centres for the collection of plastic wastes. Even when waste disposal bins were supplied, the question of proper disposal of plastic wastes remained as an issue. Strict decision was made to keep the plastic items which had become inevitable in modern day to day today life, in a clean and orderly way without throwing away aimlessly, and in cooperation with the plastic recycling unit of Panchayath.

Construction of Plastic roads

The initial thought was to produce products like plastic plates, garden pots, tarpaulin etc. from the collected plastic which was ground into fine grains. Since enough plastic won't be available from a small Panchayath like Eraviperoor to run a plant like this, on further brain storming discussion, it was decided to use plastic waste scientifically for road tarring availing the technical assistance of public works department (PWD). Information was also collected from the plastic road website.

For tarring the road in 100m length and 3m depth, there was a requirement of 675kg of bitumen. Since plastic was added to tar, a reduction of 8% in total bitumen requirement could be achieved. 54kg of plastic (8% of total required bitumen) and 621kg of bitumen could be used instead for the normal tar. Here, the plastic used for tarring is heated upto 165°C along with gravel and made into a mixture with tar and laid on road.

The Local Self Government Department (LSGD) certified that the experimental tarring with this mixture has higher quality compared to the normal tarring mixture. It may also be noted that the quality of the road constructed incorporating plastic is better especially in areas where chance of water logging is high.

Biowaste management

Successfully, 183 biogas plants, 52 vermicompost units, 3700 compost pits, construction of modern slaughter unit cum fish market were established.

The Impact

Eraviperoor is the first Grama Panchayath that has received the Prime Minister's Public administration award. Among the the projects discussed for this, plastic road was the most appreciated. Eraviperoor plastic road project was selected as the model project in the screening of model projects in Kerala state planning board in 2015. The government of Kerala has issued order to include the same model in each panchayath of Kerala state. Afterwards when PWD has constructed plastic road, the requirement of shredded plastics got increased which has become an additional source of income to Eraviperoor Panchayath.

Economic Aspects

Tender was invited from agencies having approval of 'Suchithwa mission 'and purchase of equipment for the recycling unit worth Rs 2.1 lakh was made. The income generated from this unit was Rs 60,650/-.



Adoption by others

The plastic road project of Eraviperoor Panchayath is being installed in nearly 14 states of India. The panchayath raj employees from these 14 states have visited 'Haritha plastic unit and the constructed plastic road. Also the 'Sansad Adarsh Grameena Yojana' of nation Rural development Ministry, the selected Eaviperoor model plastic road project as ideal.

Conclusion and future plan of work

The futute plans of the panchayath on waste management vision a Green Working Force (haritha Karma Sena) by 2018-19 to vigil the sustainability of the environment and establishing a cloth bag unit by 2018-19 to refuse the useof plastic bags inorder to reduce the plastic waste accumulation.

RMC is still aiming for an even better rank in near future. Rajkot has thus become a model city and the working of its municipality an example for other municipal corporations to follow and implement in