

SECTION 2: Executive Summary of the Project

The methods of waste management used in all most all municipalities in Sri Lanka such as open burning, land filling (not technical) and open dumping of wastes are not considered as environmental friendly methods since it creates other environmental problems. Waste management can be practiced in micro level (in homes, institutions such as schools, offices, etc) or macro level (Urban councils or municipal councils). In this study we tried to find the ways or methods for reducing or management the wastes (solid or liquid) in the places where wastes are generated.

The Faculty of Agriculture houses about 1500 people including undergraduates. The objective of this research was to develop and evaluate a sustainable waste management strategy for the institutions. To achieve the objectives, several studies were performed in the Faculty of Agriculture, University of Ruhuna. At the beginning of the study, the views of the people in the Faculty of Agriculture including undergraduates and workers were taken through a questionnaire survey. The most of the respondents agreed to support the project and they more concerned about waste management and other environmental related activities. The quantity of waste generation, the composition of wastes, and their variation were determined at different sections of the Faculty over one year period. It was found that over 85% of waste generated was food wastes (organic waste). The several studies on technological improvements were conducted on domestic wastewater treatment. It was found that aquatic plants can easily be used for the treatment of domestic wastewater. A simple design for waste water treatment was tested and it was found that the treatment system could reasonably be used for the treatment of domestic wastewater. The studies on biogas utilization for the control of pests in paddy rice were conducted and enthusiastic results were noticed. Further, the abandoned biogas digester was repaired and produced biogas was delivered to cafeteria for the preparation of foods. The cost for energy (LPG) can easily be reduced by using of biogas. The poultry processing waste were tested for the preparation of poultry feeds. The results were quite satisfactory. The digested materials were evaluated as an organic fertilizer for the cultivation of curry chilies. The results indicated that biogas slurry can easily be used for the production of vegetables. The different compost bins which are used in domestic compost production were evaluated in terms of compost quality. The cylindrical shape concrete compost bins were found to be effective for the domestic composting over other composting bins. And residents of the Faculty of Agriculture were encouraged to use the compost bins for the management of their kitchen wastes while producing valuable organic fertilizer. Further, they were encouraged for the home gardening also. Several awareness programs were conducted to make aware the people in the Faculty about environmental issues pertaining to improper disposal of wastes.

Some components of the research project could not be completed due to financial problems. However, the findings of the project are very valuable. During the course of the project, the waste management in Faculty was satisfactory, and waste separations were also properly practiced. Even after the research project, some activities introduced by the project were practiced well. However, later, the attention for the project activities was less and then some activities were failed. The suggestions for the improvement of waste management systems of the Faculty were also reported.