

## ABSTRACT

Waste collection and disposal is a serious issue in most of the urban areas in Sri Lanka. Waste generation increases with population expansion and economic growth. Improperly managed solid waste poses a risk to human health and the environment. Uncontrolled dumping and improper waste handling cause a variety of problems.

Local Government is the main statutory body for solid waste disposal. National level strategy on Solid Waste Management and provincial level policies are not adequately harmonized with the needs and capabilities of the Local Authorities (LAs). The current institutional approach of solid waste management system is more concern on collection and disposal, disregards on reuse and reduction.

Many development activities have been carried out for many years ago in Hambantota district based on Port, Airport and Highway Development. As a rapidly developing area, urban waste collected by the LAs are also increasing. But, proper Waste Management Plan for this urban waste has not been implemented for the District. IMSW management system, including composting for bio degradable waste and sanitary land filing for mixed waste could be suggested as a recommendation of this study.

This study has focused to find out total amount of urban solid waste collected daily by the LAs of the Hambantota district, and to analyse that what happen to this waste and the dumping sites for them and find out suitable solid waste management plan for the district. Existing twelve solid waste management sites operated by the LAs of the Hambantota district have been selected for the study. Average daily collected amount of each category of solid wastes were calculated for each waste management site in the Hambantota district and the total amount of each category of solid wastes collected daily by the district was calculated.

Sample analyzing using any obvious sampling method to determination of waste quantities collected by the whole LAs of the Hambantota District is impossible in this study. Therefore, method of using existing data at the LAs were used to estimate the quantities of waste collected by that LAs.

Statistical data of the amount of solid wastes disposal is absence or lack of data. Therefore, findings of this study also very useful to planning Waste Management. The total amount of solid waste collected by the LAs of the District is 52.587ton/day. Compostable organic materials 24.320ton/day, paper 0.815ton/day, cloths 0.487ton/day, plastic and polythene 4.545ton/day, rubber and leather 0.685ton/day, steel 0.439, glass 2.338ton/day, electronic waste 0.539ton/day, other mixed waste (could not be separated) 18.232ton/day.

Only 19.132% from the houses and Only 20.358% from the Total population of the Hambantota District has been facilitated by the waste collection facility.

This study is based only for the urban solid wastes collected by the Local Authorities. This is only a portion of solid waste generated within the District. A large portion of solid waste generated daily within the District is disposed without any attention and intervention of the LAs or may be illegally.