

IV.A.2. Optimum Recycling in Solid Waste Management Sector of Bangalore City

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In this paper, the integrated approach of waste management sector is applied to the city of Bangalore. The approach tends to incorporate social, economic and environmental aspects of solid waste management (SWM) problem and gives existing waste management configuration. It is used for analysing alternative waste management options and system arrangement. The potential role of economic incentive and environment regulatory instruments are also assessed, ultimately to achieve effective and sustainable waste management system by incorporating all agents, processes and commodities with respect to waste sector.

They are taken into account and activities are integrated such that all stakeholders both formal and informal, address this problem as their joint responsibilities to desire socio-economic and environmental benefits.

The preliminary results suggest trade off between economic, social and environmental goals. The selection of strategy would depend on the objective of decision-making authority; whether prime objective is to attain purely economically feasible goal or opt for suitable waste management that considers both socio-economic environmental goals. Depending on the objective, the approach suggests substitution in waste management configuration. In perspective, incorporation of more process options like waste to energy, bio-gas; technology advancement: internalising various instruments; ploughing back of revenue raised for infrastructure, education and skill improvement will further increase the scope for waste management with strong sustainability. Although various aspects of waste management were included in the model to arrive at economic and environmental policies decisions, Here we would concentrate mainly recycling activity in SWM. As recycling depends mainly on the differences between value added by the way of secondary material the way the primary raw material is utilised. Correlation studies and factor analysis have been performed to evaluate recycling impacts on solid waste generation in totality and also with their sectors of SWM. Economic and environmental aspects such as GWP, HTP etc have been studied if production of recycled products is increased/decreased. It has been shown that increasing recycling have positive spin off effects on other waste management sector such as less dumping & less pollution emission. As the necessity for environmental sustainability grows, reprocessing of their residues is indispensable. An attempt has been made to address a new perspective to waste minimisation and recycling scenarios by combining ecological and economic aspects with facts and trends of human ethnology.