

## **TOWARDS SUSTAINABLE SOLID WASTE MANAGEMENT: REVENUE GENERATION POTENTIAL IN HAYATABAD, PESHAWAR**

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### **Abstract**

The increase in municipal solid waste due to increase in population and rapid urbanization is becoming a major burden on municipalities owing to shortage of landfills. No formal revenue generation from the municipal solid waste exists in most municipalities across Pakistan. The solid waste collected is dumped in the landfills without any processing or material recovery resulting in wastage of possible financial resources besides causing serious deterioration to the environment. This study aims at estimating the potential of possible revenue generation, both directly and indirectly, in terms of environmental, economic and social impacts, from the municipal solid waste generated in Hayatabad, a township in the northern city, Peshawar. Waste was collected from different collection points in the study area and its composition was determined using the ASTM D 5231 – 92. A cost-benefit analysis was carried out to estimate the revenue generation by recovery of the recyclable and re-usable items. The average waste composition of the samples consist of organic waste-(24.94%), recyclable and saleable products-(48.70%) and other waste-(26.37%). These results show that a considerable potential exists for revenue generation from the municipal solid waste generated in Hayatabad, Peshawar, by selling the valuable items recovered from this waste to the respective industries. Furthermore, it will also lead to a sustainable waste management as a very small fraction of the total waste will go to the landfills, which will increase the service life of the existing landfills and also prevent the environment from further deterioration.