

## ASSESSMENT OF SOLID WASTES IN DIFFERENT AREAS OF KHANYAN, HOOGHLY, WEST BENGAL, INDIA

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(Received 6 January, 2022; Accepted 24 February, 2022)

### ABSTRACT

The present study was aimed at the assessment of the stray waste available in different areas of Khanyan village highlighting the college campus. Observations of solid wastes in the three landmark areas station, roadside areas and college campus revealed the presence of at least 57 different types of wastes that varied in relative abundance and weight. Although linked to different origin and shape, the weight of the solid wastes varied to a considerable extent ranging from 0.06 to 209.3 g. The total solid wastes were divided into 6 major categories depending on their sources. The pollutants were again classified according to their origin. At present, no treatment is provided to these solid wastes in this village. More than 90% of the total wastes are directly disposed in an unsatisfactory manner without providing earth cover. This method of dumping can lead to soil as well as ground water pollution. The problem of pollution to some extent can be solved by awareness and with the help of the local people.

**KEY WORDS:** Solid waste, Rural waste management, Biodegradable waste, Non – biodegradable waste, Khanyan.

### INTRODUCTION

Solid wastes had been produced since the beginning of civilization. During the earliest periods, solid wastes were unremarkably disposed of in large open land spaces, as the density of the population was low it was not a major problem. However today one of the consequences of global urbanization is the increased amount of solid wastes everywhere. The state of the economy influences waste generation (Petts and Eduljee, 1994). Usually, greater economic prosperity and a larger urban population result in a larger amount of solid waste generation (Hoorweg and Laura, 1999), which is a common feature in developing countries. This tremendous increase in the amount of solid wastes generated is due to changing lifestyles, food habits and living standards of the urban population (Talyan *et al.*, 2008). This scenario is applicable for rural India also. Man-made wastes are becoming great threat to mankind. Improper disposal of waste has huge social costs due to the spread of communicable diseases and increased treatment costs for pollutants are issues of

increasing concern (Assmuth and Strandberg, 1993).

India is the second fastest growing economy and the second most populated country in the world. The population of India is expected to increase from 1029 million to 1400 million during the period from 2001 to 2026 (Talyan *et al.*, 2008). Until recently, environment was not an issue in a third world country like India and solid waste management was definitely not the prime concern of environmentalists and the government. But now this huge increase in population and economy causes increased amount of solid waste generation. In metropolitan cities like Kolkata (Chattopadhyay *et al.*, 2009; Hazra and Goel, 2009), Delhi (Talyan *et al.*, 2008) and others (Gupta *et al.*, 1998), various measurements are taken to clean the city. But in rural areas of India, the awareness about the solid waste disposal and post treatment is not worthy. Rural India lacks well formulated guidelines and policy structure regarding waste management services. Solid wastes have the potential to pollute all the vital components of living environment (i.e., air, land and water) at local and at global levels