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Environmental Implications of Mismanagement of Municipal Solid Waste

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Solid waste disposal has become one of the major environmental threats of Indian cities, as large fraction of waste goes for open dumping in and around the city. Bangalore everyday generates around 3000-4000 t of waste. The total USW (Urban Solid Waste) generated in Bangalore and their per capita generation rate has increased in last three decades with increase in population and with change and development of lifestyle. City has quasi centralized collection facility with partial segregation of waste at house level. City waste management are in transition to change from centralized to decentralized waste management with increase of environmental awareness and unscientific waste disposal in centralized waste management. This paper presents a case study conducted in Bangalore to see how mismanagement of waste has caused environmental implications. Currently there are nine waste treatment and disposal sites are permitted from government, but 270 large open dump sites are present in outside the core city area and in the periphery of the city. These open dumps include plastics, organics, construction wastes, fresh indeterminate, old waste and rejects from recycling units. Waste quantity is determined based on visual estimation of area and average density of waste. A large part of it appears to be from the recycling units' rejects. A total of about 83557 t wastes is scattered around Bangalore city. This type of leakages and spillages in existing waste management leads to environmental problems such as GHG (Green House Gas) emission and blockages of drainage channels, which are discussed in the current study.

Key words: Environmental implications, Waste, Bangalore.

