# Household solid wastes

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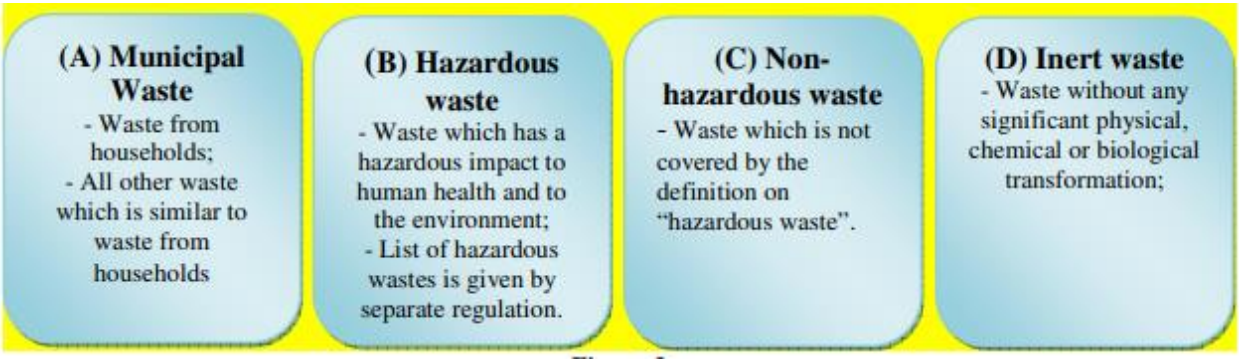
**Abstract:** At present, the generation of huge amount of solid wastes has become a growing case of concern in urban areas. A study was conducted to assess the seasonal variation in the quantity of generated municipal solid. It revealed that food and vegetable waste is generated in highest quantity in any city than other components of solid wastes. Variation occurs in the type, nature and quantity of municipal solid wastes generated at different period of time in a year depending upon the seasonal and environmental impacts. Moreover, the amount o f solid waste generation generally increases during festivals, fairs, social and family parties and other special occasions.

**Keywords:** Municipal solid waste, Monsoon, Seasonal variation, Recycle.

**Introduction:**

Solid waste comprising of garbage and rubbish (such as bottles, cans, clothing, compost, disposables, food packaging, food scraps, newspapers and magazines, and yard trimmings) that originates from private homes or apartments. It may also contain household hazardous waste[1]. There are various offices, companies, small and large scale industries, educational institutions etc. However, amongst these blessings, the gloom y condition o f environmental pollution has damped the ecology o f the city at present period o f time. Migration, overpopulation, non-clearance o f garbage, storm water and lack o f knowledge amongst the people about the environmental protection has made the busy and beautiful.

**Overview:** The discovering of oil in the states of Gulf Cooperation Council (GCC) in the early thirties has resulted in the fast development of the cultural, constructional and industrial aspects of the nations in the region. Also there was an increase in immigration to the region, which increased the pressure on the existing infrastructure quite rapidly. The rapid socio-economic global development have accelerated the generation rate of municipal solid waste[2][3] (MSW) and the management process poses a grave challenge[4] even in the modern societies.



**Waste Reduce:** It is clear that more needs to be done to reduce [5]the environmental impacts of our lifestyles. It would be overly simplistic to say that consumers must be encouraged to rein in their consumption, as the purchasing patterns which members of the general public display are now ingrained within the fabric of society. However, there is scope for providing consumers with more information about the sustainability of the products they purchase, so that they can make more informed decisions. Household wastes were anticipated to steadily rise due to an increase in population and economic[6] growth. But policies for controlling waste generation have led to a gradual reduction in the amount of waste generated. In order to manage of household wastes effectively, it is important to reduce waste generation and recycle [7]waste as much as possible**.**

**Waste Reuse:** Recently, under effect of the increasing consumption and the consequently decreasing of available natural resources it is very important to use alternative ways to reuse several types of household solid waste materials. The reusing of household waste is the next best option in the waste hierarchy. This option is an even better than recycling, because a substantial amount of energy is being saved in not remanufacturing the product. Despite increasing attention to the more integrated notion of wastes as resources, problems persist in analysis and implementation. The end-of-waste criteria help to alleviate prejudice related to waste labeling, and increase confidence of users, thus encouraging reuse by defining technical and environmental requirements. The reuse potential indicator provides information about the technical feasibility of reuse even before market conditions are assessed by addressing how development of a new technology alters the usefulness of waste materials.


**Waste Landfill:** To conserve resources, reduce reliance on landfills, and combat environmental problems associated with traditional waste handling methods, nations have turned to aggressive pursuit of recycling and other waste reduction policies. Some of the waste substances can be reused and can be a resource for an industry. Indeed waste management is one of the most important problems of our time as development and subsequent use of materials generates enormous quantity of wastes.

Municipal solid waste especially household waste is the second largest waste category by source. Waste in the Gulf states are mostly organic materials which also contain a valuable part of recyclables, e.g. glass, papers, metals and plastics. However, the method of waste disposal by landfill is still practiced widely. Arab countries are presently faced with problems such as increasing urbanization and demands for more food and shelter to sustain a standard life pattern. Currently the organizations for the waste management in the kingdom are working for the safe disposal of the waste only, and not for the energy recovery from it. The Saudi government is aware of the critical demand for waste management solutions, and is investing heavily in solving this problem and efforts are underway to deploy waste-to energy technologies in the Kingdom.

**Results and Discussion**: The solid waste is not always the same throughout the year. It often changes from place to place and time to time. Organic materials represent the huge amount of municipal solid waste (MSW) including food waste[8], paper and wood waste. Fruit and vegetable waste is generated in large quantities with their high biodegradability, in the main cities of the kingdom. Solid waste generation from food (meat, fruit, and vegetables etc) in the central sharing market of three largest Saudi cities exceeds 6 million tons per annum. Municipal solid waste generation has increased from 12 million ton per year to 15.2 million ton in five years. It is clearly found that, the compared increasing population ratio with the amount of generated waste is much higher, and hence the per capita rate per day was raised from 1.4 in the year 2007, to 2.25 by the year 2019.

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