

Impacts of Municipal Solid Waste Management On Greenhouse Gas Emissions

Dr. Abdulshekur Ahmed

Researcher, Ethiopian Biotechnology Institute Environmental Biotechnology Directorate

Email: shukrikoo86@gmail.com

ABSTRACT

Climate change is the most important and dangerous, and certainly the most complex global environmental issue to date. Apart from direct threat to lives and the environment, climate change is a serious setback to sustainable development. Climate change is thought to be the culprit responsible for some of the recent environmental problems the world over, most prominent of which are severe flooding in parts of Asia and America, droughts in parts of Africa and the global food crises which gave rise to civil unrests in many parts of the world. Rising levels of greenhouse gases in the Earth's atmosphere are causing changes in our climate, and some of these changes can be traced to solid waste. The manufacture, distribution, and use of products-as well as management of the resulting waste-all result in greenhouse gas emissions. Waste prevention and recycling are real ways to help mitigate climate change. Waste management technologies, such as energy generation via landfill gas recovery, landfill bioreactors, aerobic composters, anaerobic digesters, incineration with energy recovery, refuse-derived fuel, and co-combustion in cement kilns, have been developed in several countries to curb GHG emissions in this sector. Policies such as the restriction of uncontrolled waste dumping sites in several developing countries; phase reduction of waste entering landfills in the ; incentives to generate energy via landfill gas recovery; and the requirement of landfill gas recovery at large landfill sites are also being introduced to achieve this goal. This review article briefly covers works done to solve the problems of Impacts of Municipal Solid Waste Management on Greenhouse Gas Emissions capacity and possible solution to this problem.

Key words: Climate change, Greenhouse gas emissions, Waste management, Global Warming.