# Environmental Degeneration – Medical Wastes

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## Introduction

International environmental issues like deforestation and temperature change caused by non-sustainable extraction of wood from forests and fuel combustion, has semiconductor diode to the belief of the necessity to explore economical and various environmentally sound energy choices. native environmental issues like air, water, soil pollution, and land degradation have additionally contributed to the necessity for assessing environmentally sound energy choices. during this chapter, the environmental effects of energy from biomass and municipal waste square measure mentioned.

Firstly, the environmental effects of current patterns of biomass use for energy and municipal waste management square measure given. this can be followed by a discussion on a number of the environmentally sound technological alternatives for energy from biomass and municipal waste and their environmental effects.

Biomass contributes to regarding V-day (930 MtOE) of the world energy offer, conducive the next quantity than that of coal (816 MtOE) (IEA 1998). within the majority of the developing countries, biomass is that the dominant supply of energy significantly within the rural sector, with adverse environmental and social implications. Biomass use for energy is essentially for domestic activities (such as cooking), wherever it's less with efficiency used.

Human activities equally generate huge wastes (domestic associate degreed industrial solid waste and to an extent sludge), that square measure drop in open land or in land excavated for minerals and different resources. The perishable fraction of municipal wastes offers a possible supply of energy.

The extraction, conversion, and utilization of varied kinds of these energy sources supported biomass and municipal wastes have but, environmental implications—both positive and

negative—depending upon the character of the energy supply and therefore the extent of its use and therefore the form of technology enforced for conversion. Biomass moreover as municipal waste management technologies provides the chance for mitigating native and environmental issues (see Environmental Impacts of Current Use of Biomass and Municipal Wastes.)

**Environmental Impacts of Current Uses of Biomass and Municipal Wastes**

**Traditional Biomass**

Use as Energy the present extraction and consumption pattern of biomass has semiconductor diode to forest degradation and deforestation, loss of diverseness, soil degradation, atmospherical pollution from emissions of greenhouse gases (GHG) throughout the combustion of wood (with its implications for climate change), and indoor pollution resulting in domestic health hazards (particularly for girls throughout cooking); and loss of nutrients as a result of combustion of oxen dung and crop residues.

**Deforestation and Land Degradation**

Biomass comprising ancient fuels constitutes regarding five hundredth of energy consumption in developing countries. within the case of some countries like People's Republic of Bangladesh, Ethiopia, state, Malawi, Tanzania, and Republic of Uganda (Kaale, 1990), it's calculable to be as high as ninetieth.

Deforestation resulting in eating away, risks of floods, geological process on account of clearing of forests and woodlands for agriculture and eutherian, and so on, square measure the common issues of environmentalists at macro levels. At a microlevel, the issues vary from non-suitability of forest soils for agricultural functions, health issues as a result of smoke caused by burning of fuelwood, loss in soil fertility as a result of use of agricultural residues so on. Even a shift towards non-wood biomass fuels creates direct competition with animals that depend on crop residue and therefore the shrubs for fodder (Kaale, 1990).

The world fuelwood consumption is calculable to be regarding one.3 X 109 money supply (during 1990) and is additional projected to treble by 2020 (FAO, 1993). the most sources of fuelwood square measure forests, village trees, and forest residues.

Fuelwood is essentially used as domestic fuel in developing countries and in some countries (such as Brazil) it's used as a supply of warmth in industries (steel industry). There square measure divergent views on the contribution of fuelwood extraction to deforestation starting

from a marginal (such as in India) to a big issue (for charcoal production in Africa for domestic use and as industrial fuel in Brazil).

Studies (Ravindranath and Hall, 1995) have finished that fuelwood extraction contributes at variable degrees to loss of trees (in villages and forests), forest degradation and ultimately to deforestation. Imbalance between the demand and production of fuelwood is reported to be one in all the first factors to blame for forest depletion (Ravindranath and Hall, 1995). The increasing use of fuelwood for meeting the domestic and industrial wants of each rural and concrete areas has contributed to forest decline. The environmental impacts of urban fuelwood consumption are severe as a result of industrial exploitation of fuelwood for charcoal production. The demand for charcoal in urban areas has unfold deforestation, that begins at the encompassing areas of urban centres and moving outward.

**Loss of Soil Nutrients**

Agricultural residues represent a crucial supply of energy in rural areas of developing countries once left on fields improves the fertility of the soil. the utilization of agricultural residues for energy would so be a difficulty if it reduces the fertility of the soil. it's necessary to notice that every one residues don't have a similar result on the soil.

Some residues like corncobs, rice husk, jute sticks, cotton stock, low prunings, and coconut shells don't decompose simply and have potential as energy sources. the selection of agricultural residues so has an impression on the atmosphere. oxen dung, similarly, although it's a fertiliser, loses its price as fertiliser if burnt or left underneath the sun for a number of days. Fuel shortages, if toughened, usually force the utilization of all offered energy sources regardless of their environmental values and so cause environmental damages. the 2 classes of residues from agriculture sector square measure crop residue and oxen dung.

The large-scale use of agriculture residue as fuel is peculiar to South Asia, in all probability as a result of high population density and lower space underneath forests. presently crop residue of cereals is essentially used as fodder and woody (woody) residues square measure used as fuel.

Burning of woody crop residue might not result in any vital loss of nutrients to soil. Burning of oxen dung as fuel ends up in loss of organic ma and different nutrients moving crop production. In India the loss of element as a result of use of dung as fuel is calculable to be regarding 3kg/ha/year (Ravindranath and Hall 1995). so the environmental impact of loss of nutrient price as a result of burning of crop residue and dung is marginal.

**GHG Emissions**

Combustion of fuelwood and different biomass fuels ends up in CO2 emissions, as nearly five hundredth of wood is carbon. If fuelwood is coming back from property modes of extraction, its combustion can result in no internet C emission. However, it's troublesome to estimate what share of fuelwood use is from non-sustainable supply. At a worldwide level, about 2.8% of CO2 emission is attributed to fuelwood combustion (Ahuja, 1990). additionally to CO2 emissions, combustion of fuelwood and agro-residues ends up in emission of merchandise of incomplete combustion. These merchandise square measure even a lot of powerful GHGs per gram in carbon emitted than CO2 (IPCC 1992). associate degree estimate of the world warming potential of non CO2 GHGs, such as CO, CH4 and non gas hydro-carbons, might be within the vary of 20-110% the maximum amount as that of CO2 itself, betting on the timeframe (Smith, 1991).

Health Hazards Smoke from use of biomass fuels in rural kitchens, wood fires, and therefore the associated pollution square measure a standard phenomena in most developing countries. cookery in smoke stuffed room is inconvenient and ends up in labor among ladies. in line with the planet Health Organization (WHO), smoke from quality biofuels like farm residues and animal wastes will cause acute respiratory disorder and respiratory disease among infants and ladies.

**Environmental Effects of Municipal Wastes**

Environmental Effects of Municipal Wastes an oversized amount of wastes—both solid and liquid—are generated by urban, municipal, and industrial sectors. These wastes square measure usually disposed in rivers, ponds, land, and so on, inflicting environmental impacts. the 2 major classes of wastes square measure the industrial and industrial wastes and therefore the municipal solid wastes from the domestic sector. industrial and industrial wastes usually endure processes within the waste treatment plants before they're disposed; whereas the municipal solid wastes constitutes of varied types variable from plastics to organics wastes, so creating its management a posh issue.

Waste disposal is turning into associate degree environmental issue. Reduced land handiness and gas emissions from solid waste disposal sites square measure major issues being featured in waste disposal. The apply of waste disposal to lowland sites has been usually favoured attributable to price advantage. However, there's a realization of the potential environmental impacts and issues on water, air quality, malady transmission, operational safety, and so on.

The approaches presently practiced to tackle the waste disposal drawback are: (a) recycling; (b) composting; (c) incineration; and (d) waste reduction. exercise and waste reduction addresses the necessity to scale back the quantum of wastes whereas composting and burning square measure the processes used for reducing emissions and meeting energy necessities. The digestible suspension from municipal and waste is believed to contain harmful components. as an example, a rise in serious metal content was found in soils wherever waste material sludge had been applied, in grass grownup on such soils, and within the tissues of animals feeding on it grass (Ellegars, 1990) and would so need acceptable treatment plants, waste material networks and observation of the composition of the sludge.

**Conclusion**

Environmental degradation is one of the ten threats officially cautioned by the High-level Panel on Threats, Challenges and Change of the United Nations. The United Nations International Strategy for Disaster Reduction defines environmental degradation as "the reduction of the capacity of the environment to meet social and ecological objectives, and needs".[4] Environmental degradation is of many types. When natural habitats are destroyedor natural resources are depleted, the environment is degraded. Efforts to counteract this problem include environmental protection and environmental resources management.

**Reference**

1. http://www.tropical-rainforest-animals.com/environmental-degradation.html
2. https://saferenvironment.wordpress.com/2008/08/18/effects-of-environmental-degradation/
3. http://www.voicesofyouth.org/en/posts/environmental-degradation--a-man-made-cataclysm