

A STUDY OF FACTORS AFFECTING SUSTAIAABLE ENVIRONMENT

Manish Dhingra, Vaishali Dhingra,

Faculty of Commerce & Management, Rama University, Mandhana, Kanpur India

Abstract

The economic production process often creates a vastly larger mass of waste than useful product. United States and Canada are responsible for more than 90 percent of the 350 million metric tons of hazardous waste produced globally each year.

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In India, where huge percentage of food is being wasted, especially during festive occasions and events. In big fat Indian weddings itself, one-fifth of the food served is discarded while thousands of people sleep hungry on the streets.

One of the study concluded that household income is related to food wastage but in a non-linear manner. Some studies found a tendency for large-size families to waste more food than small-size families while others argued that in large-size families or families with small children, food wastage is not a concern.

Local authorities can engage in waste minimisation, collection and management and set waste reduction targets. It is important to promote energy-efficient technologies on the market and to raise consumers' awareness of the impacts of unnecessary energy consumption.

Key words : Consumerism, Waste product, Environment, Waste Management

Introduction:

The economic production process often creates a vastly larger mass of waste than useful product. The packaging, distribution, use, and consumption of the product produce still more waste. Waste becomes pollution when the level of contamination impairs the aesthetic quality or productive capacity of the atmosphere, water, soil, or landscape; that is, when ecosystems are significantly damaged. Wealthy industrial countries like the United States and Canada are responsible for more than 90 percent of the 350 million metric tons of hazardous waste produced globally each year. Approximately 65 percent of the world's economic production, consumption, and pollution is associated with cities in rich countries.

The World Resources Institute (WRI) analysis shows that, despite successful waste-reduction measures for some contaminants, significant improvements in the efficiency of material use and a slight reduction in resource throughput per unit of gross domestic product (GDP), both gross and per capita processed output (solid, liquid, and gaseous wastes) generally increased; the extraction and use of fossil energy resources dominated waste flows in all countries examined; and except in Germany, carbon dioxide emissions rose in both total and per capita terms in all countries studied (the data on Germany were distorted by unification and by that nation's one-time shift from coal to other more efficient hydrocarbon fuels).

According to Swedish Institute of Food & Biotechnology and Food & Agriculture Organisation (FAO) – the report said that consumers throw away about 222 millions of food in consumption condition in countries like North America and Europe. Meanwhile, the total food production of Sub-Saharan Africa is 230 millions tonnes per year. On one hand, poor countries and developing countries are crying out for food shortage and demanding for more food production whereas on the other hand, food is being wasted stubbornly, ignoring the grim impact on the world. Industrialised and developing countries waste roughly 670 millions of tonnes of food every year.

Whereas in medium and high income countries, a big chunk of food is wasted ignorantly, meaning even if the food is in consumable condition, it is still condemned to bins.

The deposit of natural resources are finite and may last for a few years if the exploitation is carried with the present speed for example petrol, gas and coal reserves may last for 50, 60, 400 years respectively. It must be noted that the energy resources utilized by human community in a year, the nature required about one million years to produce them.

The developed countries are using about three fourth of the natural resources where only one fourth of the world's population is increasing. America with 5% world's population utilizes 30% natural resources and 40 % of energy of the world. If the total world population can lead life equivalent to American people, the economy will shatter and the consumerism will ultimately lead to destruction.

Over Exploitation of Resources

Primitive men occupied a niche and assumed a role comparable to other animals and the environment maintain itself in a good and healthy condition. Up to the advent of civilized man the biosphere of the world consisted of complex pattern responsive to

a variety of environments. There after he has advanced his own ends by irritating a number of abrupt changes beyond the capacity of the ecosystem to adjust. The consumer oriented market dominance is the result of extraordinary evolution in man of intelligence, ingenuity and use of tools. The desire of a man to lead pleasant and comfortable life manufactured products which the environment cannot absorb resulting a general deterioration of the environment. Further he over exploited the natural resources carelessly. The natural resource used by man before 1700 was wood from forest. Thereafter abrupt use of other resources has considerably enhanced. A few examples - The use of iron in the form of steel has shown an increase by 22 thousand times; copper by 560 times and that of zinc by 7500 times. The deforestation has been done in the name of development. According to experts the forest should occupy 33 % land whereas it is at present only 25% .or even less area is under the forest cover. The green belt is decreasing at the rate of 1.7 crore hectares every year. The valuable vegetation and animals are disappearing fast with the declination of forests. According to a survey report about 4.6 thousands varieties of animals and vegetation .have disappeared which is greatest tragedy in the history of world after the dinosaur disappearance which took place 6-7 crores years before.

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Global Wastage :

A average European and North American consumer wastes 95kg-115kg food every year. Similarly, a South Asian or South-East Asian consumer wastes 6kg-11kg of food. American consumers blindly throw away 25% of food they purchase, while British people throw one-third of their purchased food. The main reason stated behind this waste is expiry of food and purchasing more than needed.

Similar case is with India, where huge percentage of food is being wasted, especially during festive occasions and events. In big fat Indian weddings itself, one-fifth of the food served is discarded while thousands of people sleep hungry on the streets. In developing countries, 40% of food losses occur during post harvesting and processing levels, while in industrialised countries more than 40% of food loss occurs at retail and consumer level.

Humans affect their environment through the production of waste. Often people equate waste with litter and point the finger at styrofoam cups and excessive packaging. Municipalities develop waste management strategies to divert household waste from landfills via recycling and composting and contemplate proposals to ban plastic bags. While these initiatives are commendable, they fail to address the issue that waste is generated throughout every product's entire lifetime. It has been said that as little as 2% of the waste generated by human activity actually passes through our doors. In order for a consumer product to be available for purchase, raw resources are mined or otherwise procured, refined, and turned into a finished product, which is then packaged and shipped, often from long distances. By the time a product reaches the store shelf it has left behind it a legacy of waste. To make matters worse, many products are not built to last. The disposable nature of consumer goods is partially understandable since styles come and go, new gadgets constantly present themselves, waves of "creative destruction" continue to break, but our disposable world chews through massive amounts of resources and generates mountains of waste. Consumer electronics are often rendered obsolete within a couple years of purchase. "Consumer Reports says Americans threw away about 3 million tons of electronics in 2003. Some 700 million cell phones have already been thrown away worldwide, with 130 million disposed of in 2005 alone" (Elgin, 2007). Waste from home electronics, called e-waste, is so abundant that in 2007 there were numerous Earth Day campaigns specifically targeting it. Most of our waste reductions strategies are geared towards dealing with waste as it leaves people's homes but little attention is paid to the amount of waste generated in getting products to people's homes. In order make a substantial reduction on the amount of waste generated, there will have to be a corresponding reduction in the amount of goods produced because waste isn't just what you throw in the trash can.

Waste treatment and disposal cause many environmental impacts, especially air, water and soil pollution. Clearly, solving the problem of waste generation at the source implies greening the lifecycle of most products found on the market. This is, of course,

a very complex and slow process of economic restructuring. However, the increasing quantities of waste generated in Europe need to be managed and treated. Waste that cannot be re-used and recycled must be safely disposed. In its 6th Environmental Action Plan, the European Union has set incineration as a priority and considers land filling only as a last resort.

Waste Product Accumulation

The luxurious consumer products are being used on a large scale by a human society arising a serious problem due to collection of rubbish waste materials on the surface of earth and percolating in the atmosphere. The nature is not able to destroy the wastes produced even by the bio-organisms. The wastes of these luxurious goods are in large quantity and the chemicals used to destroy these wastes also affects the micro organisms of the soil. In addition, the plastic wastes remain unaffected in nature and are destroyed slowly in presence of sunlight that requires many years. The rubbish materials consists of colorful cardboard boxes, ribbons, fasteners, etc. are in very large quantity. The rubbish waste due to packing materials is about 32% in America, 33% in Germany, 21 % in Netherland.

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Measures to curb wastage

1. With huge amount of food being wasted, UNEP has come out with some suggestions that can address the global food waste issue. The report suggests that strengthening food supply chain in developing countries would eventually encourage farmers to organise and diversify their production and marketing.
2. Apart from this, major investment in infrastructure, transportation and packaging is also needed to revamp the food supply. Good communication and cooperation between farmers would reduce the over production of crop and avoid shortages.
3. The report stressed the need for both private and public sectors to join hands and improve food storage capacity. Poor storage capacity causes post-harvest food losses in developing and poor countries. Moreover, food chain operators

- need to have knowledge on how to produce safe food and supply it in better forms.
4. Bulk food producers in developing countries like India, need to pool resources and share centralised and better transportation facilities in order to safely reach their produce to the end consumer.
 5. Local authorities can engage in waste minimisation, collection and management and set waste reduction targets. Appropriate waste management options can help increase energy efficiency, as well as help reduce air pollution and climate change. As waste moves away from landfill, it will be channelled into a variety of options higher up the waste hierarchy, all of which will be better for the environment.
 6. It is important to promote energy-efficient technologies on the market and to raise consumers' awareness of the impacts of unnecessary energy consumption. Adequate information can effectively contribute to the greening of the market. In fact, consumer choice has the power to influence and to stimulate the environmental improvement of products.
 7. Heating, cooling, the use of lighting and electrical appliances such as office equipment and kitchen devices, represent a significant and ever-rising share of energy use. Here, local authorities can engage in activities to ensure a strong level of public awareness, understanding and support of energy saving. Local authorities can do much to promote energy efficiency and high performance technical solutions and low-cost installations in the transport sector, in buildings, in the lighting system and appliances and through co-operation with developing countries.
 8. The rubbish waste materials of consumer products are dumped on land surface affect the environment and human health. The nature is not able to destroy these wastes and the chemicals used destroy them also affect the biosphere.

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