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Causes of Climate Change

**Manufacturing and Construction**

Population has increased in the last few decades leading to an increase in human activities that have caused drastic changes in climate change. Climate has changed because of higher amount of emissions of carbon dioxide, and burning of fossil fuel by our industrial sector. Construction and manufacturing have a direct contribution to carbon dioxide emissions because many of factories burn fossil fuels, cement production, which requires high temperature, and Greenfield developments. In the United States, Carbon Dioxide emission increased to 44 percent, which was caused by construction companies, and it is stated that this is more than the emissions caused by transportation and industrial activities. Globally, construction and manufacturing of material goods by industries are held responsible for 40 percent of carbon emissions.

Construction and manufacturing industry is also responsible for dumping of waste products, and releasing chemicals into streams and rivers. Dumping of waste products when exposed to air causes emission of gases, which damages ozone layer, and it makes an impact on humans too. Uncontrollable pollution produced by manufacturing and construction industries is causing damage to environment, changing the patterns of natural cycles, and damages ozone layer, which results in ozone depletion. While, ozone depletion has negative effects resulting in damage of ozone layer and excessive emission of ultraviolet rays by ozone layer causes damages to species on the earth.

With an increase in construction and manufacturing, the demand for resource depletion has also increased. For example, demand for wood and timber has increased, therefore, to fulfill these demands, industries have started deforestation. Consumption of natural resources by construction and manufacturing industries is contributing to climate change, because it requires more transportation for supplies which results in greenhouse emissions. However, deforestation leads to changes in weather and climate conditions, and this increases the risks of floods, snow melting, and natural disasters.

**Food Systems**

Food systems are the processes which include complex activities of food production and feeding a population. These processes start from growing food products, harvesting, processing, transportation of these food products, its marketing in public, consumption by people, and its disposal. Food systems have changed from traditional to modern practices of farmers with change in time. Farmers traditionally used natural fertilizers for the growth of food products but now, with increased demand in food products, farmers have to increase the productions, therefore, they have started using chemical fertilizers. For the production of fertilizers, natural gas is used, and fossil burning is carried out for refrigeration of food products and electricity generation. Main source that is contributing in the emission of greenhouse gases is burning of fossil fuels.

Production of food, its transportation, and storage of wasted food products in open-air, produces greenhouse gas that is a factor contributing to climate change. Food that is produced has to be made accessible to people in the market and for that, food products have to be transported in market. Without vehicles, it is not possible to supply food products to market while vehicles consume fuels that contribute to carbon dioxide emission. Yet another considerable food production practice cannot be ignored, and it is the conversion of grassland, forests to agricultural lands. In particular, conversion of forests into agricultural land has contributed to atmospheric changes in last few decades. Conversions of forests have contributed to 6 percent of greenhouse gas emissions; it has also caused soil erosion, soil loss, coastal water pollution, ocean acidification, and intensive machine farming contributing to climate change. However, it is also important to supply food to people to fulfill their demands of food but these processes of food systems have to be changed because climate is changing drastically. There is a need of environmental friendly practices in both food systems, and construction and manufacturing because existing practices are contributing to climate change.