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GLOBAL EFFECT OF CLIMATE CHANGE ON ECO-SYSTEMS IN ENVIRONMENT

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ABSTRACT:

Climate change not only affect ecosystems and species directly, it also interacts with other human stressors such as development. Although some stressors cause only minor impacts when acting alone, their cumulative impact may lead to dramatics ecological change for instance, climate change my exacerbate the stress that land development places on fragile coastal areas. Additionally, recently logged forested area may become vulnerable to erosion if climate change leads to increase in heavy rain storms.

Key words: *- Environment, Ecology, Eco-system, Sustainable development.*

INTRODUCTION:

Climate is an important environmental influence on ecosystems. Climate changes and the impact on climate change affect Ecosystems in a variety of ways. For instance, warming could force species to migrate to higher latitudes or higher elevations where temperatures are more conductive to their survival. Similarly, as sea level rises, saltwater intrusion into a fresh water system may force some key species to relocate or die, thus removing predators or prey that were critical in the existing food chain.

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Biodiversity:

Climate change can have broad effects on biodiversity (the number and veriety of plant and animal species in particular location) Although species have adopted to environmental change for millions for years. a quickly changing climate could require adaptation on larger and faster scales than in the past. Those species that cannot adopt are at risk of extinction, Even the loss of single species can have cascading effect because organism are connected though food web and other interactions.

Forests:

Indian Forest may derive near-term benefits from an extended growing season, climate change is also expected to encourage wildfires by Extending the length of the summer fire season. Longer periods of hot weather could stress tree, and make them more sensitiveness to wildfires, insect damage and disease. Climate change has likely already increased the size and number of forest fires, insect out breaks and tree deaths, particularly in Alaska and the west, the area burned in western U.S. forests from 1987 to 2003 is almost seven time larger than the area burned

from 1970 to 1986. In the last 30 years, the length of the wild fire season in the west has increase by 78 days.

Habitat:

Most plants and animals prefer to live in a particular habitat with a specific temperature range and amount of precipitation, climate change will alter, and in some cases destroy, certain types of habitats for example melting sea ice is eliminating an important habitat for several Arctic species. Man groves and other coastal wetland, which are critical to may species, are at risk of disappearing because of sea level rise. Some species will be able to adopt to changing habitats for example by shifting their range north ward or to higher altitudes in order to abject to rising temperature. Other, however, might not be able to adapt fast enough to keep pace with the rate of climate change.

Invasive species A temperature, precipitation and other conditions changes, the species best suited to the new condition will thrive, often taking food and resources away from others, some of the species that thrive might be invasive (Not Native to a region) and could gradually drive out or even kill native species.

Atmosphere change and oceans:

The oceans and the atmosphere are constantly interacting exchanging heat, water, gases and particles. As the atmosphere warms, the ocean absorbs some of the heat. The amount of heat stored by the ocean affects the temperature of the ocean bath at the surface and at great depths. Warming of the Earth's oceans can affect and change the habitat and food supplies for many kind of marine life from plankton to polar bears. The oceans also absorb carbon dioxide reacts with sea water to form carbonic acid. As people put more carbon dioxide into the atmosphere, the ocean absorb some of this extra carbon dioxide, which leads to more carbonic acid. An increasingly acidic ocean can have negative effects on marine linfe, such as coral reefs.

Life cycle Events & Migration :

The timing of many natural events, such as flower blooms and animal migration is linked to climate factors, such as temperature, moisture availability and amount of day light change in weather patterns and extreme events associated with climate change can disrupt, the sea natural patterns. This disruption, in turn, can affect seasonal behavior and interaction among species. For example, if birds migrate and lay eggs too early, hatchlings might not have an adequate food supply. While some animals and plants will successfully adjust life-cycle patterns to changing weather pattern cues, others might not be so successful.

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