

Study of Water Hyacinth Occurs During Climate Change

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Abstract: As We know that Water hyacinth is one of the most free floating invasive plant which is widely spread over River side . As it is observed that Rate of growth of water hyacinth is also increases day by day. There are different factors which affects on growth of water hyacinth and impact on surrounding also. The performance of water hyacinth with respect to climate change is also changes now a days. As there are number of factors which leads to change in climate.

Keywords: climate change, evaporation, temperature, water hyacinth.

I. Introduction

The water hyacinth, *Eichhornia crassipes* is an invasive plant that is native of the Amazon basin and whose capacity for growth and propagation causes major conservation problems with considerable socioeconomic repercussion. Most of the problems associated with *E. crassipes* are due to its rapid growth rate, its ability to successfully compete with other aquatic plants, and its ease of propagation. These characteristics give rise to enormous amounts of biomass that cover the water surface of a great variety of habitats often interfering with the use and management of water resources. Some of the principal problems are its interference with navigation, water flow, and the recreational use of aquatic systems, as well as the risk it poses of mechanical damage to hydroelectric systems. It is also responsible for drastic changes in the plant and animal communities of freshwater environments and acts as an agent for the spread of serious diseases in tropical countries. The impact of *E. crassipes* on the physico-chemical characteristics of the water in general are Declines in temperature, pH, biological oxygen demand (organic load), and nutrient levels.

II. Problem Statement

Water hyacinth has become a growing problem across India and the Middle East . Infestations of this weed are reaching crisis proportions in important freshwater bodies of the region. This is causing environmental, economic, and social problems and accumulated damages that can easily be valued in the order of billions of dollars. It directly affects not only the riparian communities but also all those people who in one way or another depend on environmental services or production from the affected water bodies. Researchers have been focusing on water hyacinth from various angles of its control and use, and it is apparent that significant knowledge is already available but not used in managing the weed. Water hyacinth (*Eichhornia crassipes*) is an alien, floating water weed that has spread throughout vital freshwater bodies and wetlands of India and the Middle East since the late. It poses serious socioeconomic and environmental problems for millions of people in riparian communities. The weed obstructs electricity generation, irrigation, navigation, and fishing; increases water loss resulting from evapo transpiration; and facilitates proliferation of such diseases as. However, these centers, together with affected communities, governments, and support organizations, have usually failed to mobilize efforts in time to prevent the weed from spreading to crisis levels. Serious difficulties arise in making the pragmatic decisions needed to mobilize and support people who are able to control the weed, even when financial resources are available. However, water hyacinth infestation keeps getting worse in such major water bodies as Lake.

III. Methodology

Climate change is sometimes also called global warming, refers to the rise in average surface temperatures on Earth. An overwhelming scientific consensus maintains that climate change is due primarily to the human use of fossil fuels, which releases carbon dioxide and other greenhouse gases into the air. The gases trap heat within the atmosphere, which can have a range of effects on ecosystems, including rising sea levels, severe weather events, and droughts that render landscapes more susceptible to wildfires. As we know that there

are different parameters that affect on environment and lead to change climate. As per studied it is observed that rising temperature leads to it's rapid growth.

IV. Conclusion

Now days it is big challenge to minimize the gas emission and which affect on environment also. Its leads to climate change and affect different parameters on environment also. Water hyacinth is one of the rapidly growing aquatic plant & its control in most difficult. Due to increase in rate growth of water hyacinth it affect on environment.

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