

IMPACT OF CLIMATE CHANGE

BIODIVERSITY & ENVIRONMENT

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Impact of Climate Change Biodiversity and Environment

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Preface

In twenty-first century, climate change is recognized as the greatest ecological, economic and social challenge globally. Climate is a very dynamic phenomenon and it is always changing through a natural cycle. The anthropogenic activities that are responsible for the generation of greenhouse gases and the alteration in biological stocks of carbon in terrestrial and marine system are majorly responsible for the increasing trend in climatic extremes such as floods and droughts. The other major consequences of climate change are green house effect, global warming, ozone depletion and epidemics which directly or indirectly affect the biological resources and life sustaining system of the nature. Consequently, it is affecting human health, ecological productivity, biodiversity, water supply and economy in a net negative manner. Climate change is both a cause and an effect of biodiversity change.

Kerala state has a fragile and closed ecosystem. There are both threats and opportunities for Kerala's sustainable development. The state is vulnerable to climate change and faces consequences in the form of disasters from the recent past with increased frequency. Realizing the severity of the impacts of climate change, there is a need to address the various anthropogenic activities and the steps to reduce their impact and associated hazards. However, it is pre-requisite to understand the scientific issues related to climate change before adapting the various mitigation measures.

This book entitled '*Impact of Climate Change Biodiversity and Environment*' is an outcome of studies presented in the National Seminar conducted at Department of Environmental Science, St. John's College, Anchal that addresses the major curses and burning issues of climate change and its impact on water resources, soil health and natural habitat. It also focuses on new insights related to update research and development.

The book is categorized into five sections and in total comprises of 33 chapters. First two chapters deals with the current scenario of climate change impact and the