



PANEL DISCUSSION ON CHALLENGES TO BIODIVERSITY OF RAJASTHAN FROM CLIMATE CHANGE

September 7, 2012 | 03:00 pm – 04:30 pm | Conference Hall, Department of Life Long Learning, University of Rajasthan

Background

India is hosting the 11th Meeting of the Conference of the Parties to the Convention on Biological Diversity in Hyderabad during 8-19 October, 2012. As the host for the CBD COP-11, India will act as one of the global leader of the biodiversity conservation movement from 2012 to 2014. One of the key agenda of the COP-11 is to review the programme of work by signatory nations on biodiversity and climate change related issues; particularly on the application of relevant safeguards for biodiversity with regard to reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of carbon stocks in the developing countries. As a run-up to the CBD COP-11, it is important for the nation to make its citizens understand what it has been done to address this important issue through creating the right kind of knowledge base and channelising to all cross sections of the society via innovative communication. The CMS Environment whose vision is to conduct path breaking Research, Advocacy and Capacity building to work towards a vision of Equitable Development & Responsive Governance is organizing 5th CMS VATAVARAN – Biodiversity Film Festival and Forum from July – December 2012. As part of this week-long festival, CMS Environment is organizing a one and half hour panel discussion forum in 4 cities of India i.e. Dehradun, Jaipur, Goa and Kolkata as a run-up to the host countries preparations to the CBD COP-11 and to enhance the awareness of its citizens. The topic of panel discussion forum in Jaipur on September 7, 2012 is: “Challenges to Biodiversity from Climate Change” wherein experts from the field: academics, policy making, biodiversity conservation and media will discuss the subject with an audience of students, faculty, researchers, senior citizens, environmentalists, media and film makers, civil society, women groups, representatives of government departments and interested citizens.

Climate Change and Biodiversity

It is now widely recognized that climate change and biodiversity are closely linked and changes in climate impacts biodiversity with negative consequences for human well being. Biodiversity along with the ecosystem through its services and goods makes important contribution to both climate change mitigation and adaptations. In this context, the parties of the CBD have pledged to conserve and sustainably manage biodiversity as a critical attempt in addressing climate change.

The present global biodiversity has been affected by fluctuating climate change related concentrations of atmospheric carbon dioxide, temperature, precipitation and has coped through evolutionary changes, as well as adoption of natural adaptive strategies. These climate changes, however, occurred over an extended period of time in a landscape scenario that was not as fragmented as it is today and with very little or no additional pressures from human activities. Habitat fragmentation has confined species complexes and guilds to relatively smaller areas than their previous distribution ranges resulting in reducing genetic variability. Warming far beyond the tolerance level will stress species and ecosystem and their future is unpredictable. Human activities such as increased green house gases emission and other pollutants have induced and will continue to affect biodiversity directly or in combination with other drivers of change.

A magnitude of evidence proves that climate affects biodiversity. The Millennium Ecosystem Assessment states that climate change is likely to become one of the most significant drivers of biodiversity loss by the end of the century. Indications of biodiversity adapting to climate change through shifting habitats, changing life cycles, or development of new physical traits and even coming close to extinction have been documented.

India in its 10 bio-geographic zones from the coasts, desert, rainforest to mountains is one of the major hotspot of biodiversity and therefore is subjected to the unpredictable vagaries of climate change whose impacts are yet to be systematically assessed and mitigatory measures and risk reductions prepared. The arid and semi arid north-western region of India where the state of Rajasthan is located is an unique region with a diversity of agro-climatic regimes. The Thar Desert, the world's highest biodiversity supporting desert system is in the state of Rajasthan. Rajasthan with 10.4% of India's geographic area and 5.5% of human population has only 1% of India's water resource. In spite of this limitation, Rajasthan in its 10 agro-climatic zones ranging from the western desert to the eastern flood prone plains support 4.69% of forest cover dominated by the dry deciduous forest types. Two of the world's oldest mountain range, the Vindhyas, and the Aravalli and the adjoining landscapes of the state support some 3000 known species of flora and fauna. In terms of threatened species the desert and the two hill ranges are known to support at least 100 threatened species of plants of which about 61 species are in the desert. The state supports 23 species of endemic plant and is known to harbour at least 35 species of wild relative of cultivated plants of the world, which is also one of the highest amongst any region. In this background and landscape, the climate change impact is expected to be very harsh, particularly in enhanced desertification and degradation. Rajasthan is a state which has prepared itself to face this challenge by developing a climate change adaptation plan and the people living in the state for centuries have evolved innovative wisdom of living with a harsh natural environment.



The Panel Discussion Forum

In this setting and background the panel discussion forum being organized by the CMS Environment aims to synthesize the latest knowledge on the subject of biodiversity and climate change. The discourse will be to assess the possible impacts of climate change on the biodiversity in the state of Rajasthan. It will also reflect on the possible measures of mitigation envisaged and implemented by the planners, policy makers, government departments and others.

Format

Several experts from the field of academics, policy making, biodiversity conservation planners and implementers, media and film makers, sociologists and civil society organisations will make presentations on topics related to biodiversity and climate change from their areas of expertise. The presentations will be followed by question answer sessions by chair and the audience.

Outcome

The deliberations of the panel discussion will be documented in a series of papers/publication to be presented at international conferences/summits. It will be widely circulated amongst conservationists, policy makers and academicians, amongst others.