



# PRAKRITI PROGRAM

# Lecture on "Biodiversity" and 'LiFE Mission' Organized by ICFRE- IFGTB

The "Prakriti" programme was conducted by the Extension Division of ICFRE-IFGTB, in order to create environmental awareness and conservation to school and college students. ICFRE-IFGTB has hosted offline knowledge series, as part of 'Prakriti - Student Connect Programme' of ICFRE (Indian Council of Forestry Research and Education) for the school and college students.

As part of MoEFCC, Gol's PRAKRITI Programme, Extension division of ICFRE-IFGTB organized a lecture on 'Biodiversity Conservation and Climate Change' was delivered by Dr. Mohammed Ali Noushad, Scientist, to students of Kendriya Vidyalaya, Coimbatore. Around 250 students and 6 staff members actively participated in the program. The lecture mainly focussed on sensitizing the students and teachers about biodiversity, its benefits and major threats with special focus on climate change.

### Summary of the Lecture

Biodiversity can be termed as the totality of the genes, species and ecosystems of a region which ranges from the primitive microbes to the advanced flora and fauna. Based on the three elements of biodiversity, that is, genes, species and ecosystems, biodiversity is considered to be of three types viz. Genetic diversity, Species diversity and Ecosystem or Community diversity. Genetic diversity can be understood as the diversity of genes within a particular species. Biodiversity is responsible for the various ecosystem services provided by nature. There are four types of ecosystem services namely, regulating services, provisioning services, cultural services, and supporting services.

Biodiversity all over the earth is going through a rapid change mostly fuelled by human activities. The soaring human population along with the rampant destruction of the earth's biomes are putting the biodiversity at huge risk. One of the primary causes of biodiversity loss is habitat loss and fragmentation. Overexploitation of species by humans for various reasons is also a major reason for the decline in biodiversity. Introduction of invasive species is the second most important reason for biodiversity loss in the modern world. Environmental pollution is another big factor contributing to biodiversity loss. Atmospheric and hydrologic pollution have far-reaching negative effects on biodiversity. Climate change is projected to become a progressively more significant threat to biodiversity in the coming decades. Carbon dioxide released from burning fossil fuels and biomass, deforestation, and agricultural practices contributes to greenhouse gases, which prevent heat from escaping the earth's surface. This rise in global temperature has devastating effects on the world's already threatened biodiversity. This could lead to changes in phenology of plants and animals. Scientists have observed permanent changes in animal behavior and morphology due to climate change. One of the severely affected ecosystems is the marine ecosystem such as coral. The rise in sea temperature has led to increased incidence of coral bleaching and as a consequence increased mortality. Climate change has also accelerated the spread of invasive species as more and more area become suitable for their survival. The rapid change in climate change is pushing animals and plants to the brink of extinction as the rate of change is much faster than the organism's ability to evolve. The Bramble Cay Melomys of Australia is considered as the first animal extinction caused by human induced climate change.

Climate change is an extremely complex problem and hence there is no easy solution to it. The way forward is difficult and will require some extremely tough decisions which can only be implemented if there is proper education and awareness among people.

## LiFE Mission Awareness Campaign at Kendriya Vidyalaya, Coimbatore as part of Prakriti Programme

#### Introduction:

As part of MoEFCC, Gol's PRAKRITI Programme, ICFRE-IFGTB conducted LiFE Mission Awareness Campaign on November 29, 2023 at Kendriya Vidyalaya, Coimbatore. The primary focus of the campaign was to foster environmental consciousness among students, highlighting essential topics including biodiversity, conservation, the LiFE mission, and sustainable practices.

#### Principal activities and event highlights:

- Interactive presentations on LiFE Mission and respective themes, importance of biodiversity and its conservation.
- Group discussions and Q&A sessions.
- LiFE Mission pledge.

### **Participants:**

A total of 250 students and 6 staff members from Kendriya Vidyalaya, Coimbatore actively participated in the campaign.

#### Outcome:

The Awareness Campaign successfully raised awareness about environmental issues, the importance of biodiversity conservation, and the themes of the LiFE Mission. It also instilled a strong sense of responsibility toward nature among the students. The interactive activities played a pivotal role in creating a positive impact, motivating students to adopt an environmentally conscious mindset.

#### Conclusion:

The LiFE Mission Awareness Campaign conducted at Kendriya Vidyalaya, Coimbatore, successfully advanced environmental education and motivated students to actively contribute to the conservation of our natural resources.







