

BIODIVERSITY:

India is one of the 17 mega-diversity countries of the world, with a rich biodiversity that includes over 48,000 species of plants and over 1,00,000 species of animals[1]. The country harbors 7-8% of all recorded species in only 2.4% of the world's land area[1]. Biodiversity provides resources essential for our survival, social development, and economic growth[1]. India's National Biodiversity Action Plan (NBAP) provides the guiding framework for biodiversity management in the country[1].

India is also home to four of the 34 globally identified biodiversity hotspots: Himalaya, Indo-Burma, Western Ghats and Sri Lanka, and Sundaland[2]. The country possesses high rates of endemism, with 69 species of endemic birds, 156 species of endemic reptiles, and 110 species of endemic amphibians[2]. India is also recognized as one of the eight Vavilovian centres of origin and diversity of crop plants, with more than 300 wild ancestors and close relatives of cultivated plants still evolving under natural conditions[2].

Arid and semi-arid regions cover 38.8% of India's total geographical area, with the cold arid zone in the Trans-Himalayan region covering 5.62% of the country's area[2]. The country has a variety of wetland ecosystems ranging from high altitude cold desert wetlands to hot and humid wetlands[2]. India has six natural World Heritage Sites having 'Outstanding Universal Values', including Kaziranga National Park, Manas National Park, Keoladeo National Park, Nandadevi National Park (including Valley of Flowers), Sundarbans National Park, and Western Ghats serial site[2].

The Convention on Biological Diversity (CBD) was negotiated and signed by nations at the Earth Summit at Rio de Janeiro in Brazil on June 5, 1992, and came into force on December 29, 1993[3]. India became a party to the convention on February 18, 1994[3]. The convention has three main objectives: conservation of biological diversity, sustainable use of resources, and fair and equitable sharing of benefits arising out of the use of these resources and associated traditional knowledge[3].

The National Biodiversity Authority (NBA) was established by the Central Government in 2003 to implement India's Biological Diversity Act (2002)[4]. The NBA performs facilitative, regulatory, and advisory functions for the Government of India on issues of conservation, sustainable use of biological resources and fair and equitable sharing of benefits arising out of the use of biological resources[4].

However, recent amendments to the Biological Diversity Act in India could open doors to exploitation of the country's biodiversity and traditional knowledge[5]. Legal experts and environmental campaigners say the amendments streamline the approval processes for commercial use of India's plants and other biological resources, making it easier for companies to exploit the country's biodiversity and traditional knowledge[5]. The amendments also decriminalize violations of the act, which could limit even basic adherence to the law[5]. Environmental advocates worry that the amendments will result in a complete lack of transparency about how biodiversity is used in India, and provide an open path for pharmaceutical companies to exploit natural resources with no financial obligation to the communities that depend on those ecosystems[5].