THE TEA PLANTATION LANDSCAPES OF ASSAM

Tea Growth

Tea is a rain-fed perennial crop and is one of the most important beverage crops in the world. India is the world’s largest and longest established producer of black tea. Tea is the primary crop of the north-east India ‘green-belt’ region of Assam. The ecophysiology of tea plants is closely linked to external environmental and climatic factors (e.g. elevation, precipitation, temperature, soil moisture etc.) and any adversity in these conditions can significantly impact yield, revenue and livelihood security.

The relationship between tea yield and climatic factors implies that long-term climate change will impact the key physiological and developmental processes that determine the yield of tea.

Climate Change

Climate risk is high in Assam, ranging from annual flooding of the Brahmaputra River, due to intense monsoon rains and soil waterlogging, to winter precipitation deficits with seasonal droughts. Changes in temperature and precipitation are thought to be impacting tea productivity.

Around 2 million labourers in Assam are dependent upon high tea yields, both in quality and quantity. Most tea workers have worked in the tea industry for more than three generations; it is their way of life.

Livelihoods

International trade in tea is among the largest in value among tropical and subtropical crops. Tea landscapes play a pivotal role in livelihood security at various global localities e.g. harvesting of tea crops needs a large labour force which provides employment opportunities.

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PLANTATION PRACTICES

Large-scale monoculture tea plantations (also called estates or gardens) generally supply commercial cultivation. Contrastingly, local-scale smallholder production is traditionally used to supplement subsistence agriculture. Approximately 75% of tea crops are cultivated in plantations and 25% through smallholder plots. There has been a steady increase in smallholder production for cash crop export.

Agricultural practices and landscape management approaches need to be adaptive and focus on moving agricultural system operations towards ‘safe spaces’. Such spaces exist where agricultural security and livelihoods are sustained without crossing critical environmental or social limits and the system is resilient to climatic changes.

Being Climate-Smart

Climate-smart agricultural practices and management approaches aim to ensure sustainable increases in productivity and income, enhance agro-ecosystem resilience to climatic change and mitigate agriculture’s contribution to climate change. Climate-smartening Assam’s tea plantation landscapes would deliver multiple simultaneous benefits to livelihoods and the environment whilst developing resilience to uncertain and negative climate change impacts.

For further information go to www.teaclimate.com