

ORIGINAL ARTICLE

DOCUMENTATION OF THE NATIVE DOMINANT MANGROVE VEGETATION AND THE DOMINANT INVASIVE SPECIES FROM JHARKHALI: IMPORTANCE AND IMPLICATIONS

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Abstract: Sundarbans is the largest mangrove forest in the world, a UNESCO World Heritage Site, and is known for its unique ecosystem and rich biodiversity. Jharkhali is a village of the South 24 Parganas district in the Indian state of West Bengal and serves as one of the many gateways to the deltaic region of Sundarban area. The objective of the study deals with the documentation of the native mangrove vegetation as well as the dominating invasive species of the study area. A field study was conducted in Jharkhali in June-July, 2023 from the Department of Botany, Gurudas College, Kolkata. The vegetation was comprised of six key mangrove species (e.g., *Heritiera fomes*, *Excoecaria agallocha*, etc.), three associated species (e.g., *Aegiceros corniculatum*, *Nypa fruticans*, *Phoenix paludosa*) and three halophytes (e.g., *Suaeda maritima*, *Salicornia*, etc.). *Avicennia*, *Rhizophora* and *Sonneratia* were found to be the present key genera, playing important role in ecology and socio-economic base of the study area, which are being challenged by climate change and anthropogenic activities. It was observed that invasive species like *Eichhornia*, *Mikania*, *Parthenium hysterophorus*, *Lantana camara*, etc outcompetes the native plant community causing negative effect to biodiversity, environment and natural resources. The observation in present survey may provide valuable insight on environmental protection, biodiversity conservation and socio-economic development as a whole.

Key words: Mangrove vegetation, Sundarbans, native and invasive species, biodiversity, environment.