Historical Mapping And Preliminary Assessment Of Riparian Vegetation Along Bhavani River

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This paper considers the mapping and the impact of Kerala flood 2018 on the riparian vegetation along Bhavani river in the Attappady region. Riparian vegetation plays an important role in preventing soil erosion, flood, enhance fish diversity in the river, enhancing wildlife corridors & providing habitat for endemic species. But in the last year riparian vegetation were highly destroyed due to the flood. Hence this study is very significant in the sense that impact of flood should be assessed for taking measures to restore our biodiversity.

Google earth software is used for mapping the riparian vegetation. Historical mapping of riparian vegetation along Bhavani river from Chindaki to Chemmannur reveals that a considerable decrease in vegetation in the lapse of seven years.

Phytosociological analysis reveals that riparian vegetation is dominated by *Syzigium cumini, Madhuca indica, Homonoia riparia, Hopea parviflora, Pongamia pinnata., etc.* These plants are evergreen species that are well distributed in riparian habitat.

For assessing the impact of food, field survey is conducted and analyse the destroyed plant communities, survived ones and the present plants.Analysis of the riparian vegetation reaveals that it is highly degraded as the result of last year flood. About 0.66% of the study area is partially washed out and 0.33% is less impact area. Also the physical nature of the river gets altered by accumulating sand and slit in the river banks and the river get widened. Landslides were occurred in the bank of river due to the flood. Flood adversely affects the riparian vegetation. As a result the habitat of many endangerd species get destructed. Hence study on the impact of flood on riparian vegetation is significant in order to restore biodiversity.

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