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Interdisciplinary and Transnational Discussion on Multiple Impacts of Forestry and Landuse Change in Tropical Asia

Keynote Lecture 3

Hydrological impacts of forestry in tropical Asia: recent findings and management implications

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There is an increasing desire to improve the environmental sustainability of timber harvesting within tropical natural forests. These efforts are, however, hampered by the dearth of robust interpretations of the impacts of selective (non-clearfell) forms of tropical forestry on water, nutrient and sediment flows at meaningful, landscape-scales. This review seeks to assimilate the latest results of studies of selective forestry impacts on catchment-scale, eco-hydrological flows in tropical natural forests. The value of using data-based modelling techniques to quantify hydrological change is demonstrated as part of this review. Lastly, the link between these scientific findings and the needs of forestry management, particularly upstream practices compatible with forestry certification, is discussed.