

SOUTHEAST ASIA REGIONAL ALUMNI CAPACITY BUILDING AND NETWORKING SEMINAR

Tools for actors-based management of conflicting interests
in the land-water-forest nexus in the Mekong region



PROGRAM INFORMATION

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ABSTRACT

Analyzing impacts of terrain to forest cover change in identification of priority areas for biodiversity conservation in Ngoc Son – Ngo Luong nature reserve

Tropical forest ecosystem has been known as high-value areas of biodiversity. It is a complex structure with valleys, mountains, swamps, and river systems. Forest cover is considered an essential factor of biodiversity because it directly affects the habitat of fauna and plants. Topographic factor has been shown as one of the significant factors indirectly linked to forest change.

This study was conducted to show the relationship between the terrain and the forest cover change in Vietnam's Ngoc Son – Ngo Luong nature reserve. The influences of topography were instead by the impacts of altitude and slope. The results initially showed that different-terrain areas in the study area have different-change levels in forest cover area. The change of forest areas is lower in the higher slope areas. Over 72% of the forest area has been found on slopes below 300. From 1986 to 2009, the lost forest area was located under the 600m-altitude area, with more than 80% of change located at 200m-500m altitude, the rest area tended to increase slightly. Particularly for the period from 2009 to 2021, the forest area across the whole region increases sharply. More than 68% of the added forest area is also found at 200m-500m altitude. It shows that the relationship between the terrain and the forest area change is quite clear. It correctly indicates the vulnerable areas that need to be protected for biodiversity conservation in Vietnam's Ngoc Son – Ngo Luong nature reserve.