



Soil erosion under a modified form of shifting cultivation system in the monsoonal climate of the Meghalaya Plateau (India)

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The soil erosion rates were studied, in a small catchment under a modified form of shifting cultivation on the hilly Meghalaya Plateau, using the ^{137}Cs and ^{210}Pb techniques. Those methods allow assessing mid-term soil erosion for the last 50-150 years. The mass balance models were applied to calculate soil erosion for both radioisotopes. The estimated annual soil loss from cultivated fields and degraded grassland reached up to 79 t/ha/year and 0.5 t/ha/year respectively. Soil erosion and deposition patterns are much influenced by land use. Within the same land use category, soil erosion rates are strongly related to slope steepness. Both radioisotopes show similar deposition rates as well as similar maximum depth of deposition in the valley floor. This indicates acceleration of soil erosion in response to population growth in the last few decades.