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Limited soil erosion in smallholder farming systems in Sarawak, Malaysia

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- Evaluation of erosion and land degradation in shifting cultivation systems in Malaysia
- Comparison of hill rice, native forest and pepper plantations
- Soil samples along slopes to 90 cm depth
- Analysis of nutrients, soil quality parameters and ^{137}Cs

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- **Topsoil carbon content was affected by land use in, total soil carbon to 90 cm depth was not**
- **^{137}Cs content in topsoil was highest in native forest, intermediate in hill rice and lowest in pepper plantations indicating loss of 20 % of topsoil in hill rice and 35 % in pepper plantations**
- **Several cations had higher concentrations at foot of slopes than uphill in rice fields, indicating downward movement of nutrients**
- **Soil organic C, clay content, extractable P and CEC were not affected by position on slope, demonstrating no major erosion of topsoil on the slopes even after 3-10 cultivation cycles over the past 50 years**
- **Shifting cultivation of hill rice did not result in significant soil erosion and fertility loss, even after numerous clearing cycles, whereas more intensive plantations did give indications of more substantial losses of topsoil**