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Driving Factors of Land Use Changes in Chieng Khoi Catchment, Yen Chau District, Son La Province, Northwest Vietnam

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Abstract

In Northwest Vietnam, land use has been intensified over the last years. Additionally, shortening rainy events and increasing of intensive rains happens more frequently. This has negative impacts on crop productivity due to large amounts of nutrients lost by soil erosion, limitation of fertiliser use and market fluctuation. This study was carried out in order to identify the main factors influencing land use change in Chieng Khoi Catchment, Yen Chau district, Son La province, Northwest Vietnam. The research methods were field ground truth survey with key informants for land use history, household interviews and group discussions for identifying factors of land use changes in this area. 42 ground truthing points with key informants were collected, and 40 households were randomly selected for interview in April 2012. The results reveal that since the year 2000, land use intensified towards commercial production. Population pressure and policy implications are the main factors for land use changes. Local farmers are viewing high risks from soil erosion and land degradation, unfavourable climate, and unstable food security. Farmers introduced landcover changes mainly for commercial purposes. However, the benefits from a governmental project with forest plantation are still limited, which disappoints the farmers. Local farmers recognised the high risk related to the cultivation of cassava and maize, but they see no better opportunity to secure their livelihood. Local perception also changed the way of living. Thus, land use change is heading towards a rather unstable direction, while government policy and supports are lacking, which could control this. Urgent measures are needed to control the negative impacts of the driving factors and to enable a sustainable development in Chieng Khoi Catchment.

Keywords: Chieng Khoi Catchment, driving factors, land use change, Northwest Vietnam