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Linkages Between Poverty Alleviation and Environmental Degradation — Evidence and Policy Implications from a Northern Mountainous Province, Vietnam

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Abstract

Poverty and environmental degradation are acute problems in the upland regions of Vietnam. The link between poverty and environment in these areas is conventionally assumed as a “vicious circle” or “downward spiral”. In Vietnam, despite the growing literature on environmental deterioration, the poverty – environment linkages are still poorly understood. The availability of research on this topic has remained limited and does not provide Vietnamese policy-makers with appropriate guidance to achieve sustainable development in the country’s mountainous territories.

This paper aimed at providing a better understanding of the relationships between poverty and environment in 75 communes of Son La — a mountainous province located in Northwestern Vietnam, focusing on the economic transformation period (from 1989 to 2000). This could enable the decision-makers at various levels in formulating and implementing rational policy interventions as well as to avoid potential conflicts among development objectives in the upland regions.

Poverty is proxied by income and number of assets controlled by the poor, and is collected by using a structured questionnaire. The environment is instrumented by forest, soil quality and water availability variables. The aerial photographs and satellite images taken in 1989, 1994 and 2000 are interpreted to detect changes of forest resources. All data are geo-referenced and spatially analysed by using Geographical Information System (GIS) and statistical software.

The research results show that poverty alleviation and environmental deterioration are strongly linked together in the research region. However, strength of these linkages was dependent upon agro-ecological and social characteristics of the communes and periods of economic growth. The findings of the study suggest that there are some trade-offs and synergies between poverty reduction and environmental protection.

Keywords: Deforestation, environmental degradation, policy measure, poverty alleviation