

Hydropower development in Vietnam: Involuntary resettlement and factors enabling rehabilitation

Bui Thi Minh Hang, Pepijn Schreinemachers, Thomas Berger

Dept. of Land Use Economics in the Tropics and Subtropics (490d), University of Hohenheim, Stuttgart, Germany

Large dam projects are unrivalled by any other type of physical infrastructure project in terms of the scale of population resettlement they bring about (WCD, 2000). Most previous studies have shown that involuntary resettlement can lead to a sharp deterioration in income and production levels, a reduction in living standards and an increase in poverty of resettled people, especially in poorly managed relocation projects (Cernea, 2003; Scudder, 1997). Much less is known about how affected people adapt or try to adapt to their new location and what factors enable them to restore their livelihoods, or prevent them from doing so. This is important, as numerous studies have shown repeated failure of resettlement programs to rehabilitate livelihoods because they only focused on the physical relocation process but ignored the economic and social development of the affected people (WCD, 2000). The objective of this study is therefore to explore the process of change and adaptation after resettlement with a particular focus on livelihood assets, strategies and outcomes. Through this, the study also sheds light on the general impact of resettlement programs in the late-socialist countries of Southeast Asia, which have rapidly expanded their hydropower capacity in recent years (Bui and Schreinemachers, 2011).

For this study, we collected interview-based survey data from resettled

and host households in a community near the Son La Hydropower Project in northwestern Vietnam. A double recall method was applied to collect data from before and after the resettlement. Using the Sustainable Livelihood Framework (DFID, 2001) as an analytical framework, we used an econometric approach to identify what changes in livelihood assets and strategies contributed to the rehabilitation of households after resettlement. Ordinary Least Square regression was employed to quantify the strength of the relationships between livelihood outcomes and livelihood assets and their allocation across activities. We then used a decomposition analysis (Fields et al., 2003) to estimate the relative contribution of each determinant to livelihood outcomes.

The results show that resettled households lost income mainly because of a loss in crop output, which was mainly due to a reduction in the amount of arable land available to them. Households also tried to intensify crop production by using more fertilizers. Although land had been distributed equally to all households after the resettlement, the distribution of their farm output and income had become less equal. In comparison, host households had a greater number of opportunities to adapt. Their main strategy was to grow more rice crops per year; although they also intensified mineral fertilizer use and intensified livestock production, and as

a result, their farm output and incomes increased. They study shows that livelihood adaptation of host and resettled households was strongly conditioned by a lack of available livelihood assets

in this remote mountain location. It is therefore questionable whether households will be able to maintain their livelihood outcomes in the long run.

Reference

- Bui, T.M.H., Schreinemachers, P., 2011. Resettling Farm Households in Northwestern Vietnam: Livelihood Change and Adaptation. *International Journal of Water Resources Development* 27, 769-785.
- Cernea, M. M. 2003. For a new economics of resettlement: A sociological critique of the compensation principle. *International Social Science Journal* 55(175): 37-46.
- DFID. 2001. Sustainable livelihoods guidance sheets. London: Department for International Development.
- Fields, G. S., Cichello, P. L., Freije, S., Menéndez, M., Newhouse, D. 2003. Household income dynamics: A four-country story. *Journal of Development Studies* 40(2), 30-54.
- Scudder, T., 1997. Social impacts of large dam projects. In: Dorsey, T., Steiner, A., Acreman, M., Orlando, B. (eds) *Large Dams. Learning from the Past, Looking at the Future*. World Bank, Washington DC. 41-68.
- Webber, M., McDonald, B. 2004. Involuntary resettlement, production and income: Evidence from Xiaolangdi, PRC. *World Development* 32(4): 673-690.
- World Commission on Dams. 2000. *Dams and Development, A New Framework for Decision-making*. The Report of the World Commission on Dams. Earthscan Publications Ltd, London and Sterling, VA.