ELSEVIER

Contents lists available at SciVerse ScienceDirect

Land Use Policy

journal homepage: www.elsevier.com/locate/landusepol



Hydropower development in Vietnam: Involuntary resettlement and factors enabling rehabilitation

Thi Minh Hang Bui*, Pepijn Schreinemachers, Thomas Berger

Department of Land Use Economics in the Tropics and Subtropics (490d), University of Hohenheim, 70593 Stuttgart, Germany

ARTICLE INFO

Article history: Received 15 November 2011 Received in revised form 24 August 2012 Accepted 26 August 2012

Keywords:
Adaptation
Resource scarcity
Son La Hydropower Project
Southeast Asia
Sustainable Livelihoods Framework

ABSTRACT

This paper examines the livelihood outcomes and adaptation strategies of households who have been involuntarily resettled from the project area of the Son La Hydropower Project in Vietnam to a remote mountain location with an intense scarcity of resources. We collected household data using a double recall, referring to the situation before and after resettlement, and for both the resettled and host households. The results show that resettled households lost income mainly because of a loss in crop output. In response, they tried to intensify crop production by using more fertilizers. The distribution of their farm output and income became less equal after resettlement although land had been distributed equally to all households. The host households had a greater number of opportunities to adapt and increased the cropping frequency of rice, intensified mineral fertilizer use and intensified livestock production, and as a result, their farm output and incomes increased. The livelihood adaptation of both the 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.

© 2012 Elsevier Ltd. All rights reserved.

Introduction

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). About 12 million people have been displaced due to reservoir construction projects in China since 1949 (Webber and McDonald, 2004) and 16–38 million people have been displaced in India for the same reason (WCD, 2000). Although large dams are controversial because of their disruptive effects on local communities and ecosystems, rapidly increasing energy demands have led to a new wave of large hydropower projects being planned and implemented, especially in Southeast Asia. In total 58 large dams are currently under construction in Cambodia, Laos, Myanmar and Vietnam, with a further 52 dams in the planning phase (Bui and Schreinemachers, 2011). Particularly controversial has been the plan to build 15 dams on the Mekong River in China, Laos and Vietnam.

A few studies have shown that resettled people can regain or even improve their living conditions after being resettled (Agnes et al., 2009; Nakayama et al., 1999), but the majority of studies have shown that resettlement can lead to a sharp deterioration in income and production levels, a reduction in living standards

E-mail address: hang_kttn@yahoo.com (T.M.H. Bui).

and an increase in poverty, especially in poorly managed relocation projects (Bartolome et al., 2000; Cernea, 2003; Scudder, 1997). In 2011 for instance, the government of China admitted that the Three Gorges Dam, which involved a carefully planned relocation of 1.4 million residents, had failed to raise the living standards of the relocated residents (Martina, 2011). Previous studies have shown that the adverse economic and social impacts of resettlement have been particularly severe for the more vulnerable groups such as the poor, women, children and ethnic minorities (Morvaridi, 2004; Tan et al., 2005).

The deterioration in living standards caused by these project results from a loss of productive assets, a lack of access to markets and employment opportunities, and a disruption of the social networks existing within communities (Cernea and Schmidt-Soltau, 2006: Webber and McDonald, 2004). These previous studies paid much attention to the observed impacts of resettlement projects in terms of land and other resources, food security, plus food production and income levels. Much less is known about how people, those whose livelihoods are affected by involuntary resettlement programs, 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 revealed the repeated failure of resettlement programs to focus on the economic and social development and rehabilitation of those people affected, instead focusing only on the physical relocation process (WCD, 2000). Therefore, one objective of this study is to explore the process of change and adaptation after resettlement, with a particular

 $^{^{\}ast}$ Corresponding author at: Universität Hohenheim (490d), 70593 Stuttgart, Germany. Tel.: +49 711 459 22645; fax: +49 711 459 24248.

focus on livelihood assets, strategies and outcomes, whilst another objective is to shed light on the general impact of resettlement programs in the late-socialist countries of East and Southeast Asia (Cambodia, China, Laos, Myanmar and Vietnam). These countries have been particularly active in developing their hydropower potential, but have given-out little information on the planning and implementation aspects of these projects or their impact on local communities, as this topic is sensitive and local authorities are reluctant to allow outside research projects in to investigate.

For this study, we collected interview-based survey data from the resettled and host households in a community near the Son La Hydropower Project in northwestern Vietnam. Using the Sustainable Livelihood Framework (DFID, 2001) as an analytical framework, we used an econometric approach to identify those changes in livelihood assets and strategies that helped households to rehabilitate their livelihoods after resettlement. The identification of these factors is important for the better planning of resettlement projects in the future and for identifying policy interventions that may help to reduce the adverse impacts of involuntary resettlement. The study builds on previous work in which we used a descriptive approach to compare the livelihood impacts of such projects on host and resettled households (Bui and Schreinemachers, 2011).

This paper is organized as follows. We begin by providing some background information about the study area and describe the analytical approach and methods used. We then describe how livelihood outcomes have been changed and what strategies the resettled and host households have applied in order to rehabilitate their livelihoods. Next, we discuss the implications of the results, after which we draw conclusions.

Materials and methods

Son La Hydropower Project

Son La is a province in the Northwest region of Vietnam – the poorest region of the country. Per capita income in the Northwest is only about 55% of the Vietnamese average, and although the poverty rate decreased from 46% in 2004 to 33% in 2010, it is still relatively high when compared to the country average of 11% (GSO, 2010).

Construction of Son La dam started in 2005 and when completed, as is planned for 2013, it will be the largest hydropower plant in Southeast Asia. The project is set to dam the Da River, creating a 224 km² reservoir which has already led to the largest involuntary resettlement in the history of Vietnam, with around 91,100 people from 248 villages across three provinces (Son La, Lai Chau and Dien Bien) relocated between 2005 and 2010. Son La has been the province most seriously affected, with 62,394 people displaced in 2004, accounting for around 6.3% of the province's population at that time. Of the area to be submerged, 7670 hectares (ha) is agricultural land and 3170 ha is forest land. The total estimated loss of assets and infrastructure was expected to be around 1788 billion Vietnamese dong (VND) (equivalent to 116 million USD in 2004), of which 59% was household and personal property (Decision No. 196/QD-TTg, 2004). Different to previous dam projects, displacement costs were included into the project balance sheet, a resettlement plan had been prepared before the construction of dam started, and the government adopted specific policies for the Son La dam project, covered by Decision No. 459/QD-TTg, Decision No. 196/2004/QD-TTg and Decision No. 02/2007/QD-TTg (Dao, 2010). Furthermore, the implementation process came under the supervision of the provincial people's committees and resettlement project management boards at the provincial, district and commune levels (Dao, 2010). Although the resettlement program

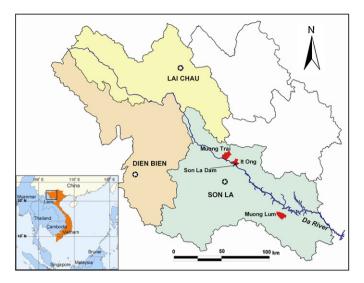


Fig. 1. Location of Son La Hydropower Project and the study villages.

was planned and implemented with considerable effort made to avoid the severe and adverse impacts of previous dam projects, it faced numerous challenges in rehabilitating the people it displaced (Bui and Schreinemachers, 2011; VUSTA, 2006). According to the resettlement plan, each resettled household should have received at least 1 ha of farmland at the resettlement site (Decision No. 02/2007/QD-TTg). Although a 'land for land' compensation policy was applied to both the resettled and the host communities, the host households only received cash compensation as there was just not enough land to distribute. The majority of the resettled people were therefore not provided with arable land or with sufficient production support required to restore their livelihoods. According to a 2006 study by the Vietnam Union of Science and Technology Association (VUSTA) on the impacts of the Son La resettlement project, the resettlement in Lai Chau province was delayed due to conflicts about land prices and a lack of infrastructure at the resettlement sites. In total, 500 households from the town of Lai Chau and from Chan Nua commune were supposed to move to the Pa So resettlement site in 2005, but only 27 households had been relocated to Pa So by 2006 (VUSTA, 2006). The same study showed that around 50% of the resettled people stated that their income had declined, while only 10% said it had increased; and around 29% had lost their jobs and became unemployed. The host communities were also affected by the resettlement, with 42% reporting that their income had reduced and only 5% that it had increased (VUSTA, 2006). In 2008, a follow-up study was carried out by VUSTA, its aim being to assess the impacts in terms of livelihoods, culture, health and the environment two years after the first survey (VUSTA, 2008). The study showed that several problems remained unsolved and that new problems had emerged. For example, the resettled people had not received adequate support in order to re-establish their livelihoods at their new location, land scarcity in the resettlement areas made it difficult for households to restore their income and livelihood, and this had induced some resettled households to return to their original homes to farm the land there, as it had not yet been inundated.

Study site and data collected

For this study we collected data from Muong Lum Commune, a remote mountainous community in Son La Province shown in Fig. 1. As a result of the dam's construction, 67 households belonging to the Black Thai ethnic group and living in Muong Trai Commune along the Da River, were relocated to ethnic Black Thai villages in

Download English Version:

https://daneshyari.com/en/article/93110

Download Persian Version:

https://daneshyari.com/article/93110

<u>Daneshyari.com</u>