THE INTERNATIONAL JOURNAL OF HUMANITIES & SOCIAL STUDIES

Compensation and Benefits for Affected People at the Son La Hydropower Project in Vietnam

Bui Thi Minh Hang

Faculty of Marketing, TNU University of Economics and Business Administration, Vietnam Nguyen Thi Thanh Huyen

Faculty of Economics, TNU University of Economics and Business Administration, Vietnam

Abstract:

Many studies on involuntary resettlement have shown that insufficient, delayed and under-compensation is one of core causes for failures in rehabilitating resettled people and maintaining their sustainable livelihoods. However, even when the government appropriately and adequately compensated for affected people, is it possible for them to avoid impoverishment, restore their income and livelihood after resettlement? Does it make sure that they received benefits derived from hydropower projects in a fair and equitable manner? The aim of this study is to analyze the principles of resettlement legislation and practice in the Son La Hydropower Project.

Keywords: Compensation, benefit, dam construction, resettlement

1. Introduction

Hydropower dams are constructed not only to meet mounting demand for energy of developing countries but also to make profit for projects' developers (Lebel et al., 2014). Together, dam construction result in involuntary resettlement which has been debated widely in recent literature. It not onlydisplaces people, disrupt social fabric, reduce human wellbeing, but also even lead to inadequate financing of resettlement (Cernea, 1997, 2007; McDonald-Wilmsen and Webber, 2010). In addition, involuntary resettlement may cause severe long-term repercussions on local communities and the environment, yet the World Bank (2004) has argued that well-designed and well-implemented resettlement can turn involuntary resettlement into a development opportunity. A successful resettlement program is conditioned by regulatory policy, legal frameworks, and effective institutions (Dwivedi, 2002). From a similar point of view when looking at forced displacement, Cernea (1999) argued that subjective errors in plans and a deficiency or absence of economic and financial analysis during the resettlement project stage can result in unsuccessful resettlement.

There are common measures of compensation for the people resettled from the hydropower project sites, including compensation in cash,or in kind such as land and houses. Cash compensation at replacement cost allows resettled people to restore their incomes and living standards. If excluding the cash compensation from the resettled households' income, there was a major reduction in their net income after resettlement (Bui and Schleiermacher's, 2011). For the second type, compensation in land is usually implemented in hydropower projects. As the actual amount of the compensation do not match the market price of the land, the resettlement will adversely affect those who owned a small field area (Akca et al., 2013). The third type of compensation is the combination of house and land. The compensation measures are usually a one-off package covered under the cost of the project financed by the developers. However, most literature shows that there is a need to balance between physical resettlement, compensation, and development activities. In reality, there are contradiction emerged from the insufficient amount of compensation to recover living costs as the outcomes of most involuntary resettlement programs are conflicting with their rationale, objectives and morality (Cernea, 2008).

Whatever types of compensation, it cannot be denied the roles of compensation. In this study, we aim to explore the roles of compensation in the process of restoration and improvement of livelihoods of resettled households affected by hydropower projects in Vietnam, with a focus on the Son La Hydropower Project. We also propose recommendations for the governments should be done to implement successfully compensation policies and guarantee restoration of livelihoods for resettled people.

1.1. Resettlement And Compensation Policies And Practice In Vietnam

Resettlement legal framework associated with hydropower development projects of Vietnam has seen significantly improvement in recent time. Prior to 1990, Vietnam did not have a resettlement program. Since the 1990s, Vietnam has been making more effort to improve legal framework on resettlement policies as well as the implementation processes of

156 Vol 6 Issue 2 February, 2018

compensation and resettlement. There have been a number of reasons for the shift in terms of its policies, planning and implementation with respect to dam-induced resettlements. First, the country's policies on resettlement have been adjusted to come into line with a series of laws related to resource management (the Law on Land, the Law on Environmental Protection and the Water Law), those promulgated in support of the development process (Dao, 2010). Second, since the 1986 adoption of the economic reform package known as doi moi, Vietnam has become member of almost all regional and international organizations. Under the process of deep integration into the world economy, Vietnam has also received increasing amounts of multilateral and bilateral aid. Many projects have been implemented with the help and participation of international investors and development institutions. However, it is required that Vietnam's policies are in compliance with international standards as well as the policies of donors, and that its projects are implemented with accountability and transparency taken into account. In addition, its increased openness to the outside world and the high speed of communications development has made access to information to as well as from the country much easier. The dissemination of development banks' policies and guidelines (such as the World Bank and ADB) have given Vietnamese people the opportunity to compare national policies with international standards and practices, and they now require a greater say in the design and implementation of resettlement options, creating pressure on the government to make improvements (Dao, 2010). Third, the social pressures resulting from past resettlement program failures have induced the government to amend its policies and pay more attention to the implementation of projects.

The 2003Land Law introduces 'land-for-land' or equal-value compensation policies and instructions related to resettlement implementation. More specifically, before issuing a decision on land recovery, competent state agencies shall notify land recovery, investigation, survey, measurement and inventory plans to the land users of the land recovery at least three months prior to the agricultural land recovery and six months prior to the non-agricultural one. Upon land recovery by the Government, land users will be considered for receiving financial support in addition to receiving compensation. The support must ensure impartiality, equality, publicity, timeliness and lawfulness. The 'land-for-land' policy has priority, but if sufficient land is not available, the user will be compensated in cash - an amount equal to the value of the land use rights. However, there are slight differences between Vietnam's and World Bank's resettlement policy in several criteria. In terms of land asset, World Bank's resettlement policy aims to improve, or at least restore in real terms to pre-resettlement levels, affected people's livelihoods. Hence, constructions located in planned projects shall be compensated at replacement cost despite their legal situation, while Vietnam's resettlement policy compensate to households and individuals having a certificate of land use rights, a certificate of ownership of houses and residential land use rights. In terms of compensation to loss of income sources or means of livelihood, World Bank's policy compensate to all of these loss, while according to Vietnam's Land Law 2013 households and individuals are entitled to support for vocational training, occupation change and job seeking in addition to receiving cash compensation.

Similar to dam projects implemented in other developing countries, resettlement-related issues and compensation for the resettled people were poorly conceived and implemented in previous dam projects in Vietnam. Before 1990, large dam projects, including the Da Nhim dam (1963), Thac Ba dam (1964), Hoa Binh dam (1979) and Tri An dam (1984), were implemented without detailed resettlement action plans being put in place and without efforts being made to reduce hazards and socioeconomic adverse impacts of the projects (Bui and Schreinemacher, 2011). Even the availability of land and other resources at the relocation sites was not considered before the move had to be made (Cao, 2003). A resettlement site was simply seen as a residential area - without the farmland and conditions in place needed for the resettled people to rebuild their livelihoods (Trang, 1995 - as cited in Dao, 2010). As a result, the majority of the affected people became impoverished after their relocation (Cao, 2003; Hirsch et al., 1992; VUSTA, 2006). The Hoa Binh project alone displaced more than 58,000 people to locations far from their homelands, and they were provided with little compensation and no support in terms of stabilizing and restoring their livelihoods (Hirsch et al., 1992). Although construction started in 1979, the compensation program was delayed until 1983 and took more than ten years to complete (Dao, 2010). Insufficient and late compensation payments led to resettled people selling their assets at low prices, just to build new houses and cover their daily expenses. Hirsch et al. (1992) reported that most of the displaced people received few benefits from the project - not even an electricity supply, and that many resettlement sites at this time lacked access to drinking water, electricity and other essential health and education services. Ten years after the move, 45% of the resettled households still faced a shortage of food for five months or more per year, with many facing extreme impoverishment (Cao, 2003). In some places at this time, resettlement caused conflicts and tension between the resettled and host people, due to competition over resources and a lack of compensation given to the hosts. Although after 1993 the government introduced several laws and decrees that became the legal basis for future resettlement programs, there was still a large gap between policy and practice. Inadequate compensation and mitigation measures, and agreements made with affected villagers but not implemented, continued to be chronic problems among large dam projects, and the availability of cultivatable land for those resettled was the most complicated among these. The Yali Falls Dam project provides a pertinent example of this, a project implemented over the period 1993 to 2002 and which displaced roughly 8,500 people from their homes and land. A lack of transparency within the compensation regime led to much confusion among the resettled people, and the villagers did not fully understand the types or amount of compensation they would receive (CRES, 2001). In spite of an improvement in some aspects - such as housing and basic infrastructure - when compared to previous dam projects, the project had an adverse impact upon the livelihoods of thousands of displaced people, as well as people living downstream in both Vietnam and Cambodia (Cao, 2003).

There has been a substantial improvement in dam project implementations in recent years, such as with the Tuyen Quang and Son La dam projects. Feasibility studies have been conducted to find the solution that minimizes the need for resettlement, and resettlement plans have been improved considerably – with the adverse impacts of resettlement programs mitigated as far as possible. However, resettlement is still a difficult issue in Vietnam, as people being worse off after resettlement continues to be the norm during dam projects which require involuntary resettlement, such as with the Ban Ve hydropower project. The main reasons for this are a scarcity of land - which makes the land-for-land policy inoperable, insufficient attention being paid to measures needed to help the affected people re-establish their livelihoods, and a lack of transparency during project implementation. Limited financial resources are also a key constraint which creates undue delays in terms of project implementation; for example, the Nam Pung hydropower project was delayed due to financial problems.

2. Materials and Methods

2.1. The Son La Hydropower Project and Its Resettlement Program

After ten years of construction, the Son La Hydropower Plant was completed in 2015 with an installed capacity of 2,400 MW and a yearly generation capacity of 10,246 million kWh (Decision No. 668/QD-TTg, 2012). According to the Vietnam Electricity (EVN), the project brings about national macro-economic benefits, that is, about 500 million USD annually in revenue, saving more than five million tons of coal to generate the same quantity of electricity. Other main reasons for building this dam are to retain water for human consumption, irrigation and industry, and to control the incidence of floods.

Apart from the economic benefits, however, this project has brought about observed social and environmental impacts. The displacement of around 100,000 people in three mountainous provinces (Son La, Lai Chau, and Dien Bien) is the most controversial issue. The government of Vietnam paid considerable attention to the resettlement of people due to the magnitude of the project. The Prime Minister approved the master plan for resettlement program in 2004 (Decision No. 196/QD-TTg, 2004) and then amended in 2010 (Decision No. 801/QD-TTg, 2010) and 2013 (Decision No. 2009/QD-TTg, 2013), and issued documents on compensation, assistance and support after resettlement (Decision No. 459/QD-TTg, 2004; Decision No. 02/2007/QD-TTg; Decision No. 31/QD-TTg, 2008).

The total investment capital of the project is over 60,000 billion,² and nearly 34% of this has been allocated for compensation payments and resettlement costs (Decision No. 668/QD-TTg, 2012).

According to these government documents, cash or/and 'land for land' compensation policy/compensation principle is applied to the affected people who lost their land. Decision No. 02/2007/QD-TTg specifies that each household will receive at least 1 ha of farmland at the resettlement site. According to Son La Province's Decision 01/2005/QD-UB, a single-person household should be allocated 0.3 ha of farmland and one ha for a two-to-four-member household. Above four members, each household should receive an extra 0.2 ha per member. The 'land for land' policy has priority, but if land is not available, the user will be compensated in cash - an amount equal to the value of the land use rights. The compensation price is valuated based on the land price framework constructed and issued by the Provincial People's Committee which is often lower than market price.

To avoid past resettlement program failures, the Vietnamese government adjusted the legal documents related to resettlement policy and implementation for the SLHP. Apart from compensation payments for expropriated assets, the legal documents pay attention to conditions at the resettlement site and financial supports for rehabilitation. The resettlement site is required to be equipped with irrigation and drinking water supply, road system, electricity, graveyard, kindergarten and primary schools, health clinic and community house (Decision No. 459/QD-TTg, 2004; Decision No. 02/2007/QD-TTg; Decision No. 31/QD-TTg, 2008). These decisions also stipulate that resettled people shall receive supports for food, basic services, stabilization of production and establishing new occupations. For each type of supports, these legal documents specify the amount the resettled households will receive and all of them are in the form of cash payments.

2.2. Data and Methods

The focus of this study is host and resettled Black Thai households living in Muong Lum commune, a relatively remote mountainous area of Yen Chau district, Son La province. The commune is characterized by low incomes and the practice of traditional farming methods. In addition, markets for goods and services are not well developed in this area due to the remoteness and isolation of the commune and low purchasing power of its residents.

As a result of the Son La Hydropower Project, 67 households (284 people) of the Black Thai ethnic minority were moved 150 kilometres from the Da river valley to Muong Lum in 2008. These households were moved to a "mixed site" where a host community already existed (called *di xen* in Vietnamese). The survey wasconducted in 2009 and in 2013, one year and five years after the resettlement had taken place. Data was collected regarding crucial issues of resettlement, including compensation and support payments, livelihoods outcomes and mental health across 108 randomly selected households, including 56 resettled and 52 host households.

158 Vol 6 Issue 2 February, 2018

¹ http://sonlahpc.com.vn/thuy-dien-son-la-noi-ket-tinh-tri-va-luc-viet-nam_t221c297n259.

² One million VND was equal to USD 49.95 at the time.

This study did not gather data about the food security and mental health situation before the resettlement, as these elements were too difficult for the villagers to recall. We only measured the mental status of the household head right after resettlement. To measure the mental health of the household head, a self-reporting questionnaire was used as recommended by WHO - to identify who was suffering from a mental disorder. The questionnaire consists of twenty questions which ask about the presence or otherwise of symptoms, and each item is scored as 1 (yes) or 0 (no). Depending on the specific case, a cut-off point is chosen to define whether a respondent is 'not a case' (< cut-off point) or a 'case' (> cut-off point). The cut-off point used was 7/8 - the most commonly used value in developing countries – one validated in Vietnam by Tuan *et al.* (2004). We measured food security situation of the households right after and five years after resettlement using two indicators which were calculated in line with Hoddinott (1999) and USAID (2006): (i) Per capita daily calorie intake was calculated based on a seven-day recall of food consumption, (ii) Dietary diversity was calculated as the weighted sum of the number of different food groupsconsumed by the household over a 30-day period, where additional weight reflects the frequency by which different foods are consumed (24 = 16–30 days, 10 = 4–15 days, 3 = 1–3 days, 0 = 0 days). To assess the resettled households' satisfaction levels of compensation and situation at the new location, we used a set of questions with five-point Likert scale (strongly dissatisfied, dissatisfied, neutral, satisfied and strongly satisfied). Monetary values from 2007 and 2009 were converted to 2013 values using the Consumer Price Index (CPI) for rural areas of Vietnam.

3. Results

3.1. Compensation: Policy and Practice

The immediate and notable impact of forced displacement upon local communities experiencing dam projects is loss of land, which is the most important productive asset within rural economies. In the case of the Son La Hydropower Project, the 'land for land' compensation policy was applied to the resettled households in Muong Lum commune. The land given to the resettled households was taken from the host communities and cleared from the hills. However, as the commune's land budget was limited, the land areas distributed to the resettled households were significantly smaller than before resettlement. After resettlement, each resettled household was distributed 0.039 hectares (ha) of residential land and 0.407 ha of arable land, falling 56.7% and 73.9% respectively as compared with before resettlement. In addition, there was a large gap between the amount of land received by the resettled households and the amount of land they should have been given in line with the compensation policies (as stated in Decision No. 02/2007/QD-TTg). The resettled households were also compensated for the loss of other assets, including their houses, other buildings and crops (Table 1).

	Items	Mean	Standard deviations	% payments
Compensation payments				
-	House	57.68	11.44	37.05
-	Other buildings	4.70	4.80	3.02
-	Crops	33.04	28.96	21.22
Support payments				
-	Transportation	2.07	1.58	1.33
-	Food	25.07	6.91	16.10
-	Production	17.20	3.67	11.05
-	Electricity and fuel	1.52	0.40	0.98
-	Others	14.40	-	9.25

Table 1: Compensation and Support Payments after Resettlement (Million VND/ Household) Sources: Author's Survey in 2009 and 2013

Different from previous dam projects in Vietnam, in the Son La Hydropower Project, the government already paid attention to supports additional to compensation for reconstruction after resettlement by providing support payments such as transportation, food, fuel, agricultural extension and others (medicines, reward for moving on schedule, water-closet, etc.), accounting for 38.7% of the total payments. The average cash compensation and support payment each household received was 156 million VND, of which 45 million VND was provided in 2009. This is a large amount of money when considering that the average income per capita for the rural area in Vietnam is only 12.8 million/year in 2010 (GSO, 2011). However, the support payments mostly focused on basic services after the resettlement. The resettled households spent a large share on building a new, large house (43.9%), daily expenses (16.8%) and for buying consumable items 26.8%), rather than invested in rebuilding livelihood assets (6.6%) (as mentioned in the studies of Bui and Schreinemachers, 2011). After the resettlement, 36% of households had used-up their compensation and support payments within little more than a year.

It should be noted that the support for agricultural production was only in the form of cash. From the unstructured interviews held with the resettled and host households and the extension workers from the commune, it was found that there had not been a considerable change to the extension system in the study site after the resettlement.

3.2. Perception and Satisfaction of Resettled Households

Opposition to displacement and under-compensation is increasing in many developing countries (Cernea, 2008). However, the Son La Hydropower Project is an example of dam projects successful in persuading people to accept the displacement and resettlement options. Apart from several factors such as participation of displaced people in the resettlement process, provision of important information about the project and resettlement schemes and encouragement to move through political mobilization, the promise of sufficient compensation and new land influenced their decision to move.95% of the resettled households in Muong Lum said that they were willing to move to the resettlement site. After moving to the new location, the resettled households received compensation in land and in cash as they had been announced. Most of the resettled households (82%) were found to be satisfied with their new houses which are generally larger and built with better materials than their previous house (Table 2). 55% of the resettled households said they were satisfied with the compensation payments they had received, while only 16% of them were dissatisfied. Despite being allocated a smaller amount of land than they had before the resettlement, 46% of the resettled households were still satisfied with the new arable land. The majority of the households identified positive outcomes in the areas of schooling, health and infrastructure. However, the resettled households expressed concerns about their income-earning opportunities as they lost all access to rivers for fishing purposes and due to increased pressure on land, natural vegetation and other common resources at the new location.

Items	Mean	Satisfied (%)	Undecided (%)	Dissatisfied (%)
Compensation payments	3.482 (0.934)	55.4	28.6	16.0
New house	3.946 (0.961)	82.1	5.4	12.5
New arable land	3.321 (0.936)	46.4	30.4	23.2
Basic facilities at the new location	3.553 (0.989)	48.2	37.5	14.3
Income-earning opportunities	2.250 (0.939)	12.5	16.1	71.4

Table 2: Resettled Households' Satisfaction Levels after Resettlement Sources: Author's Survey In 2009

Note: Standard Deviations Are In Parentheses

In contrast to previous studies reporting that involuntary resettlement can cause physical and mental health problems to the displaced people (Brown *et al.*, 2008; Hwang *et al.*, 2010; Kloos, 1990), our results of the self-reporting questionnaire on mental health show that the share of household heads suffered from mental health problems in the host population (29%) is significantly greater than that in the resettled population (16%). The difference is mainly due to the host households' concern about losing resources, general disorder and instability. This indicates that the displace people might have been insufficiently prepared to adjust their life after the resettlement. Before the resettlement, the local authority simply notified them of how many newcomers they were going to absorb, the intended timetable for the resettlement and the land area they would have to give up. Unspecified delays in compensation for the land they lost also contributed to their growing concerns and stress.

Meanwhile, considerable attention was paid to the preparation of the resettled households. Sufficient and on-time compensation payments as well as additional support payments for food, house building, fuel, medicines, etc. contributed to reduce social stresses and emotional trauma right after resettlement which has been usually observed in resettlement programs. In Vietnam, wealth level is one of key determinant of someone's status in the society. Based on informal talks with the host and resettled people, we observed that with a large amount of compensation and support payments, the resettled households could keep their status in the society and did not face resettlement-induced social problems such as social alienation and discrimination from the host community.

Improvements in some aspects of their life at the new location also contributed to a reduction or avoidance of displacement-caused social tension and psychological trauma among the resettled households. Immediate circumstances after resettlement strongly affected the resettled people's perceptions of their social-economic status in the new location. After resettling they were allotted land instantly and provided with compensation and support from the government, plus they said they faced little inhospitality, hostility or discrimination from the host population, and even received assistance in terms of food and labour from them. The affable behaviour of the host households was partly attributable to the fact that both communities have similarities in terms culture, customs and language. In addition, the improved commune infrastructure systems provided by the project were beneficial to the host households as well. These improvements made the hosts more

willing to accept the resettlement program, as they could see some of the benefits it would bring and found that resettlement did not necessarily mean land loss, increased resource competition and increased instability.

3.3. Livelihood Rehabilitation and Improvement

The changes in distribution of net household incomes of the resettled and host households before and after resettlement are presented in Figure 1. The resettled households (left-hand diagram) saw their incomes decline dramatically right after resettlement 92009). Even five years after resettlement (2013), the resettled household failed to recover their former income levels. However, the results show the importance of compensation and support payments for the resettled households. When including these payments, the resettled households actually experienced a significant increase in net household income. Meanwhile, the host households (right-hand diagram) were just about able to maintain their incomes at their previous levels right after resettlement but their net household income fell drastically five years after resettlement. Nevertheless, their incomes were still significantly higher than those of the resettled households.

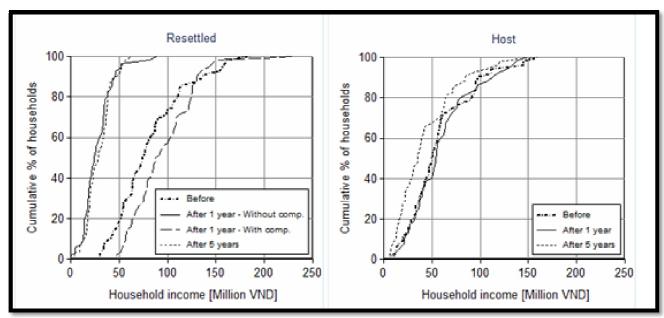


Figure 1: Distribution of Household Incomes for the Resettled and Host Households, Before (2007), Immediately After (2009) and 5-Years after Resettlement (2013) Sources: Author's Survey in 2009 and 2013

As explained in Bui and Schreinemachers (2011), right after resettlement, the sudden drop in crop production and household income levels for the resettled households did not translate into them experiencing a lower level of dietary diversity than the host households, which is likely to have been caused by the cash compensation payments made to the resettled households, with which they were able to offset the insufficiency of their own food production by purchasing food. However, with little land available and limited income-earning opportunities, food security of the resettled householdsdeteriorated five years after resettlement, after the compensation and support money dried up. Figure 1 and Figure 2 show the per capita calorie intake and dietary diversity of the resettled and host households immediately after and five years after resettlement. The food security curves in 2013of both groups considerably moved to the left reflecting a sharp deterioration in food security situation of them over the long-term. 16.4% of the resettled households became food insecure, while that rate was only 7% right after resettlement. The host households also experienced an increase in the share of food insecure household, from 11.5% to 15.4%.

161 Vol 6 Issue 2 February, 2018

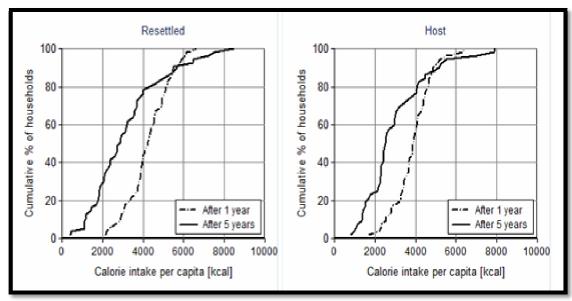


Figure 2: Daily Calorie Intake of the Resettled and Host Households Immediately After (2009) and 5-Years after Resettlement (2013) Sources: Author's Survey in 2009 and 2013

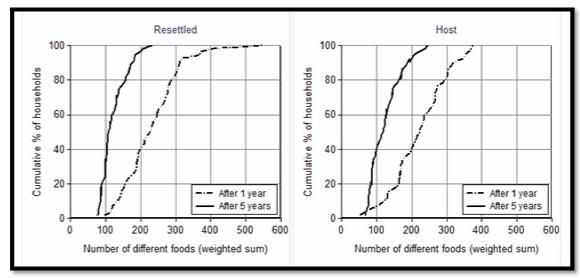


Figure 3: Dietary Diversity of the Resettled and Host Households Immediately After (2009) and 5-Years after Resettlement (2013) Sources: Author's Survey in 2009 And 2013

4. Discussion

According to the World Bank, where resettlement is unavoidable, it should be conceived and implemented as a development project, one provided with adequate investment resources and that has the ability to ensure that the resettled people receive the benefits of the project (World Bank, 2004). In previous resettlement programs in Vietnam, compensation has been conceived as only restitution for what is expropriated from the displaced people which has been also observed in other developing countries (see Cernea, 2008). However, since 1990s Vietnam has been making more of an effort to improve its displacement and compensation policies as well as its implementation processes. The resettled households from the Son La Hydropower Project did not face recurrent issues related to compensation such as insufficiency, corrupt subtractions and distortion during delivery. Generally, the resettled households got the full amount of compensation for their assets and were satisfied with what they received after the resettlement. The compensation and support payments helped the resettled households restore their living standards right after resettlement and contributed to a reduction or avoidance of displacement-caused social tension and psychological trauma among them.

Nevertheless, data from the resettlement site of the Son La Hydropower Project show that the government only paid attention to the "outward appearance" of involuntary resettlement, that is, compensation payments and financial supports while livelihood restoration and improvement and benefit sharing for the affected people wasoverlooked. Livelihood

restoration and improvement for the resettled people was stated as the primary goal of the resettlement program, however, the measures to achieve these goals were not persuadable. All of the assistance from the government was in the form of cash rather than measures to help the resettled people rebuild their livelihood assets income-earning capacity. Meanwhile benefit sharing was not even mentioned in the resettlement legislation. From the situation in Muong Lum commune, we found that theproject did not bring further benefits to the resettled households apart from the compensation payments for expropriated land and assets and financial supports for restoring living standard right after resettlement. The results of this study indicate that compensation payments for asset losses and support payments seemed to be only effective in decreasing the opposition from the affected people at the early stage of the resettlement process and in helping the affected people maintain their living standards right after the resettlement. The in-cash compensation and supports alone cannot ensure a restoration of livelihoods for the resettled households and improve them in the long-term. Therefore, the government and local authorities need to offer specific measures to help the affected people use effectively their money and improving their adaptive capacity by helping them to create and accumulate livelihood assets.

5. Conclusion

Under-compensation and insufficient finance was claimed to be the crucial cause of resettlement failure (Cernea, 2008). However, sufficient compensation and finance does not necessarily translate into a successful resettlement program. The study found that compensation and support payments played an important role in the beginning stage in the restoration process of the resettled households. Appropriate and timely compensation is a prerequisite to reducing or avoiding opposition and marginalization among the resettled people and help them to maintain their standard of living when production is interrupted by an involuntary move. Nevertheless, compensation payments and cash supportalone cannot guarantee the achievement of desired outcomes of the resettlement program, that is, livelihood restoration and improvement for the resettled people in the long term. Other kinds of livelihood assistance such as credit facilities, training or job opportunities are needed to restore and improve their income-earning capacity and production levels. Besides, benefit sharing need to be mentioned in the resettlement legislation.

6. References

- i. Akca, E., Fujikura, R., & Sabbag, C. (2008). Ataturk Dam Resettlement Process: Increased Disparity Resulting from Insufficient Financial Compensation. International Journal of Water Resources Development, 29(1), 101-108.
- ii. Brown, P. H., Magee, D., & Xu, Y. (2008). Socioeconomic vulnerability in China's hydropower development. China Economic Review, 19(4), 614-627.
- iii. Bui, T. M. H., & Schreinemachers, P. (2011). Resettling Farm Households in Northwestern Vietnam: Livelihood Change and Adaptation. International Journal of Water Resources Development, 27(4), 769-785.
- iv. Bui, T. M. H., Schreinemachers, P., & Berger, T. (2013). Hydropower development in Vietnam: Involuntary resettlement and factor enabling rehabilitation. Land Use Policy, 31, 536-544.
- v. Cao, T. T. Y. (2003). Towards sustainability of Vietnam's large dam's resettlement in hydropower projects. MSc thesis, Royal Institute of Technology, Sweden, 2003.
- vi. Cernea, M. M. (1997). The Risks and Reconstruction Model for Resettling Displaced Populations. World Development, 25(10), 1569-1587.
- vii. Cernea, M. M. (1999). The Economics of Involuntary Resettlement: Question and Challenges. Washington, DC: World Bank.
- viii. Cernea, M. M. (2008). Compensation and benefit sharing: Why resettlement policies and practices must be reformed. Water Science and Engineering, 1(1), 89-120.
- ix. Dao, N. (2010). Dam development in Vietnam: The evolution of dam-induced resettlement policy. Water Alternatives, 3(2), 324-340.
- x. Decision No. 196/2004/QD-TTg dated 29th November, 2004, of the Prime Minister of Vietnam on regulations of compensation, displacement and resettlement (in Vietnamese).
- xi. Decision No. 459/QD-TTg dated 12th May, 2004, of the Prime Minister of Vietnam on compensation and resettlement of the Son La Hydropower Project (in Vietnamese).
- xii. Decision No. 02/2007/QD-TTg dated 09th January, 2007, of the Prime Minister of Vietnam on the regulations of compensation, assistance and resettlement of the Son La Hydropower Project (in Vietnamese).
- xiii. Decision No. 31/QD-TTg dated 25th February, 2008, of the Prime Minister of Vietnam on amendment and supplement of decision No. 02/2007/QD-TTg (in Vietnamese).
- xiv. Decision No. 801/QD-TTgdated 04th June, 2010,of the Prime Minister of Vietnam on general plan for resettlement of the Son La Hydropower Project (in Vietnamese).
- xv. Decision No. 668/QD-TTg dated 05th June, 2012, of the Prime Minister of Vietnam on approval total adjusted investment of the Son La Hydropower Project (in Vietnamese).
- xvi. Decision No. 2009/QD-TTgdated 04th November, 2013, of the Prime Minister of Vietnam on master planning of resettlement of the Son La Hydropower Project (in Vietnamese).

- xvii. Dwivedi, R.(2002). Models and Methods in Development-Induced Displacement (Review Article). Development and Change, 33(4), 709-732.
- xviii. Hirsch, P., Bach, T. S., Nguyen, N. H. V., Do, T. H., Nguyen, Q. H., Tran, N. N., Nguyen, V. T., & Vu, Q. T. (1992). Social and environmental implications of resource development in Vietnam: The case of Hoa Binh reservoir. RIAP Occasional Paper No. 17, New South Wales: University of Sidney, Research Institute for Asia and the Pacific.
- xix. Hoddinott, J. (1999). Choosing outcome indicators of household food security. IFPRI Technical Guide. International Food Policy Research Institute, Washington, DC.
- xx. Hwang, S. S., Cao, Y., & Yi, J. (2010). Project-induced migration and depression: A panel analysis. Social Science & Medicine, 70(11), 1765-1772.
- xxi. Kloos, H.(1990). Heath aspects of resettlement in Ethiopia. Social Science and Medicine, 30(6), 643-656.
- xxii. Law on Land 2013 of the National Assembly of Vietnam (2013). Law on Land. Hanoi: Judicial Publishing House.
- xxiii. Lebel, L., Lebel, P., Chitmanat, C., & Sriyasak, P. (2014). Benefit sharing from hydropower watersheds: Rationales, practices, and potential. Water resources and rural development, 4, 12-28.
- xxiv. McDonald-Wilmsen, B., & Webber, M. (2010). Dams and Displacement: Raising the Standards and Broadening the Research Agenda. Water Alternatives, 3(2), 142-161.
- xxv. Sadoff, C. W., & Grey, D. (2002). Beyond the river: the benefits of cooperation on international rivers. Water Policy, 4, 389-403.
- xxvi. Singer, J., Ty, P. H., Hai, H. (2014). Broadening stakeholder participation to improve outcomes for dam-forced resettlement in Vietnam. Water Resources and Rural Development, 4, 85-103.
- xxvii. Suhardiman, D., Wichelns, D., Lebel, L.,&Sellamuttu, S. S. (2014). Benefit sharing in Mekong Region hydropower: Whose benefits count? Water Resources and Rural Development, 4, 3-11.
- xxviii. Tuan, T., Harpham, T., & Huong, N. T.(2004). Validity and reliability of the self-reporting questionnaire 20 items in Vietnam. Hong Kong Journal of Psychiatry, 14(3), 15-18 & 32-33.
- xxix. Ty, P. H., Van Westen A. C. M., & Zoomers, A. (2013). Compensation and resettlement policies after compulsory land acquisition for hydropower development in Vietnam: Policy and Practice. Land, 2, 678-704.
- xxx. USAID. 2006. Household Dietary Diversity Score (HDDS) for Measurement of Household Food Access: Indicator Guide. Available at https://www.fantaproject.org/monitoring-and-evaluation/household-dietary-diversity-score.
- xxxi. VUSTA (Vietnam Union of Science and Technology Association) (2006). A work in progress: study on the impacts of Vietnam's Son La Hydropower Project. Report of Vietnam Union of Science and Technology Association. Retrieved from http://www.internationalrivers.org/files/SonLa2006_0.pdf.
- xxxii. World Bank (2004). Involuntary Resettlement Sourcebook. Washington, DC: World Bank Publications.