Harnessing Myanmar’s hydropower, while essential for the country’s development, has significant potential to stir social unrest in ethnic states. Trang Do and Elliot Brennan argue that Vietnam’s experience in this regard holds a number of cautionary lessons, especially in terms of mitigating the negative consequences of displacement for affected communities.

Myanmar has the lowest rate of electrification in South-east Asia. Increasing electricity supply for power generation to buttress development and lift its large rural population out of poverty is one of Myanmar’s defining challenges. Possessing large rivers including the Irrawaddy and Salween, the country’s development of hydropower plants (HPPs) is anticipated to provide the base-load of power supply. However, the pressure to quickly establish such capacity—the majority of planned HPPs are located in ethnic states—has seen serious problems, at times open conflict, emerge. If such projects and their consequences for local populations are not effectively addressed, hydropower development will suffer and could destabilize both the fragile peace in parts of the country and stall investment and overall development. Vietnam’s experience of hydropower development offers some cautionary lessons to inform and help mitigate social conflict in Myanmar, in particular when it comes to developing resettlement and compensation practices.

Hydropower and Conflict in Myanmar

Myanmar has the potential for over 100 GW of hydropower of which 46 GW is currently considered technically feasible. Despite its potential, currently only 3.15 GW has been installed through 25 operational HPPs. With only 32 percent of the population having access to electricity, boosting the country’s electrification ratio is a major challenge for the Myanmar government. The National Electrification Plan, issued in June 2014, aims to connect the entire country by 2030. Under this plan, installed hydropower capacity would triple to 9 GW. Currently, electricity from HPPs makes up the two-thirds of the energy mix. While large increases in coal and renewables are expected, government projections for 2030 would see 66 percent of power supply coming from hydropower (42 percent from large HPPs; 24 percent from small and medium-sized HPPs). In order to meet this 2030 goal, large international investment is needed. Such investments have been supported by new legislation that improves attractiveness for investing in HPPs. Notwithstanding, managing social conflict from large infrastructure projects will be crucial.

Over 30 HPPs have been tabled across Myanmar. This includes the 7,110 MW Tasang/Mongtong dam on the Salween River in the country’s east, which would be the biggest dam in Myanmar and the tallest in Southeast Asia. In fact, at least half a dozen proposed dams on the Salween are of particular concern with the river system running through areas currently or traditionally controlled by ethnic armed groups. A push for the development of the Kunlong dam on the Salween in north-eastern Shan state coincided with the resurgence of fighting between government forces and the local ethnically-Chinese Kokang rebel group. Elsewhere, protests over the Myitsone HPP on the Irrawaddy in Kachin State triggered tensions between Naypyidaw and the ethnic Kachin, which contributed to the breakdown of the 17-year ceasefire between the Kachin Independence Army and Naypyidaw in 2011.

While previous Myanmar governments suppressed local protests over HPP developments, in the burgeoning democratic opening this is no longer the case. Large popular protests successfully suspended development of the Myitsone HPP in September 2011. Other projects, meanwhile, risk widespread displacement of local communities and may exacerbate social unrest and disrupt traditional livelihoods. As the fragile ceasefire and peace process con-
tinues, the risk of HPP projects reigniting latent conflicts with ethnic minorities and ethnic armed groups is high. As such, drawing on the cautionary lessons of hydropower development and conflict management from regional neighbors could prove highly instructive.

**Vietnam: Cautionary Lessons**

Vietnam’s rapid development beginning in the 1980s quickly earned it the status of one of the region’s “Asian Tigers.” Its success in becoming one of the world’s key manufacturing hubs helped lift millions of Vietnamese out of poverty. Electricity from hydropower for power generation has been instrumental to the country’s development. According to the Ministry of Industry and Trade, there were 268 hydropower projects in operation by the end of 2013. However, the development of the country’s hydropower has not been without issue.

Hydropower construction has resulted in enormous negative economic and social impacts, especially on ethnic minorities who make up less than 14 percent of Vietnam’s population but half of the current poor. Consultancy on Development (CODE), a Vietnamese NGO, estimates that 90 percent of those affected by HPPs belong to ethnic minorities. Field research conducted by the authors in the resettlement sites of the three projects of Tuyen Quang, A Vuong, and A Luoi, located in the country’s central and northern provinces, illustrate the challenges faced. Ceding housing, farming, and forestry land to hydropower project developers, minority peoples have had to face land scarcity, severe loss of traditional customs and cultural values, and unequal and insufficient compensation—all of which have led to unresolved social tensions and insecurities.

**Table 1. Facts on Three Cases**

<table>
<thead>
<tr>
<th>Project</th>
<th>Province</th>
<th>No. of relocated households/individuals</th>
<th>Affected ethnic group</th>
<th>Relocation Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuyen Quang</td>
<td>Tuyen Quang, Ha Giang, BacKan</td>
<td>4,139/20,138</td>
<td>Tay, Kinh, Dao, etc.</td>
<td>2007</td>
</tr>
<tr>
<td>A Vuong</td>
<td>Quang Nam</td>
<td>257/1,176</td>
<td>Co Tu</td>
<td>2006</td>
</tr>
<tr>
<td>A Luoi</td>
<td>Thua Thein Hue</td>
<td>118/547</td>
<td>Ta-Oia, Pa Co</td>
<td>2011</td>
</tr>
</tbody>
</table>

**Shortage of Arable Land and Forestry Resources**

Most HPPs were constructed after the introduction of the 1993 Land Law which saw the adoption of the “land-for-land” compensation principle. Nevertheless, due to agricultural land scarcity, affected people usually receive not only less land but less fertile land. Studies conducted by CODE at the four largest hydropower projects in three regions across Vietnam indicate 83 percent of people reporting having received less farmland than their former areas and up to 77 percent assessing their compensated land to be of poorer quality.

Tensions can also arise as a result of competition with host communities over farmland. Displaced communities may start to grow crops on uncultivated land, for example, as seen at the sites of the A Luoi and Tuyen Quang projects, which may be confiscated or destroyed by the host community. In the case of Tuyen Quang, tensions have been exacerbated by perceptions of unfairness on the part of the host ethnic Tay communities: namely, they have not been eligible for assistance in spite of loss or damage to their lands during the resettlement process of ethnic Dao.

Additionally, while access to forest resources is essential to the survival and well-being of most ethnic minority communities, compensation of forestry land is also problematic. Typically, forest-based production activities are completely lost after relocation. Other food or income sources have also become less available due to limited access to fishing, hunting, non-timber products, and raising animals. Consequently, food security emerges as a greater concern. Many families, especially elderly or woman-headed ones, are now struggling to meet their daily food needs. Even in sites that receive assistance such as at A Vuong, there is a rising poverty rate of over 80 percent.

**Damage to Traditional Customs and Cultural Heritage**

Displacement due to dams seriously disrupts the social structure of relocated communities, dispersing long-established networks and negatively affecting cultural values. Planning and population arrangements at resettlement sites often do not
take into account affected communities’ living habits and traditional customs. In the most recent projects, each relocated household has been compensated with only 400 square meters for housing land (following the National set of criteria for developing New Rural areas), which is very little for those traditionally used to living in more spacious compounds. Compensated housing structures also fall short of reflecting traditional architecture and cultural identities of relocated communities. Moreover, limited or loss of community spaces such as pastures or markets also prevents displaced people from maintaining and practicing their long-established customs.

Furthermore, disputes may also originate from inappropriate modes of resettlement planning, whereby people of different ethnic communities with notable distinctions in history, culture, and language are grouped into the same village. Such arrangements result in disrupted community civil order and a lack of social cohesion.

Compensation Policies and Fairness

Prevailing differences in compensation policies cause resentment among those who receive less or lower benefits. In Quang Nam province, for instance, different compensation schemes exist for different projects even within the same district, which evokes an inevitable feeling of comparison among affected people and exerts intense pressure on local governments in addressing compensation complaints.

Tensions also erupt between displaced people and hydropower companies. Several years after relocation, many grievances and complaints are still lodged as regards hydropower companies’ commitment in paying compensation as well as providing adequate infrastructure such as asphalted roads, schools, or water supply. Unregulated under any existing local laws, hydropower investors are not held responsible for post-resettlement issues. Meanwhile, local governments often lack funding to handle complaints/grievances on the repair and maintenance of housing and infrastructure works. This situation gives rise to mistrust from affected people towards both hydropower companies and local governments, and fuels their skepticism of the fairness of HPPs and related construction projects in their local areas.

In the case of Myanmar, a failure to heed and act on the above transferable lessons and experiences could prove even more detrimental for social stability and development, especially in the context of the country’s vulnerable peace process.

Getting it Right in Myanmar: Recommendations

To facilitate the development of the emerging hydropower industry in Myanmar, therefore, Vietnam’s decades-long experience of HPP development can, and should, be scrutinized by the Myanmar government, civil society organizations, and the hydroelectric construction companies themselves. Accordingly, the following recommendations are outlined:

• Robust and comprehensive social impact assessments must be conducted for all new hydropower projects. Such assessments are increasingly present and should be a requirement of any new HPP. The recent shift towards employing reputable foreign firms to conduct such assessments should continue. Evaluation and monitoring should be carried out by independent bodies after relocation. Reports should be freely available in Burmese and, where appropriate, local ethnic languages and/or Chinese/Thai/English.

• Compensation of farm land of similar type and quality should be prioritized where possible. Hydropower companies and/or the government should be made responsible for compensating affected people with the lost income due to land acquisition. Required costs needed for these people to restore their livelihoods should also be covered.

• A benefit-sharing mechanism is needed to ensure that profit earned after the operation of hydropower plants would be used to assist affected communities in improving their resettlement life.

• It is also necessary to provide proper legal assistance to affected people, especially those of ethnic minorities, to protect rights and limit disenfranchisement. International legal aid, often volunteer, organizations are already present in Myanmar; their work should be extended and supported to provide assistance to populations affected by HPPs. Relocations and development projects themselves should, where possible, allow access for civil society organizations.

• Resettlement planning should strictly incorporate indigenous knowledge and take into account aspects regard-
ing local customs, cultures, living habits, and traditional production practices.

- Frequent open dialogues and public discussions including mass and non-governmental organizations should also be encouraged to promote understanding of different stakeholders while enabling local governments to learn about the people’s expectations and timely address potential risks of social tension and conflicts.

- Greater community engagement and dialogue with local populations is needed to prevent or mitigate conflicts and the costly suspension of construction work. Indeed, the costs associated with the postponement or termination of proposed HPPs, both for companies and government, and the potential for triggering latent conflicts should be impetus enough for greater community engagement.

- Armed ethnic groups and local civil society organizations must be consulted and, if relevant—perhaps through Disarmament, Disintegration and Reintegration programs—employed for the construction, operation, and/or security of the infrastructure.

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