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Social acceptability of large infrastructure projects in Vietnam

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Abstract: We compare international best practice guidelines on Social Impact Assessment with current practices in Vietnam, based on a desk review of relevant regulations; participative observation; stakeholder interviews and three exemplary hydropower project cases. We find that infrastructure development is booming in Vietnam despite administrative complexity and inefficiencies; resettlement for hydropower projects has become a kind of lightning rod for questions of environmental justice in Vietnamese society; compensation is the key issue there; overshadowing other social impact considerations. Options to improve the investment of all stakeholders in the social impact assessment and management are discussed.

1. Introduction

Infrastructure development is a necessary condition for economic growth and modernization. Globally, between 7 to 10 per cent of Gross National Product is invested in infrastructure. In a fast developing country like Vietnam, the percentage is even higher. Costs to people and ecosystems match this scale. Throughout history, in all countries, millions of people have been displaced to make way for roads, water canals, and dams. Indirect impacts from projects such as real estate speculation modify access to natural resources and environmental pollution further escalates their impact.

Hydropower, once put forward as essential to modernization, continues to play an important role in low carbon clean energy development. Hydropower is a low CO_2 emissions source of electricity, it does not rely on imported fuels and it can be turned on and off to follow demand --unlike solar and wind. In recent years it has drawn considerable criticism for its negative impact on people and environment. WWF (2004) puts it simply: “Dams are both a blessing and a curse”. Large dams destroy ecosystems, impacting wetlands and freshwater species, while

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economic benefits are not necessarily distributed justly, but rather mostly to developers and investors.

As a means of navigating the complicated process of balancing benefits of large infrastructure projects against costs, governments and international funding organizations require Environmental and Social Impact Assessments (ESIA). In an ideal world, only projects with compliant ESIA would be funded, and this would guarantee acceptable impacts. Reality checking reveals some important impediments and inefficiencies, among them a significant problem of good faith. Almost all ESIA reports conform to the language of regulations. Yet failed resettlement or biodiversity losses issues still exist.

There is still no coherent mechanism for sharing the learning from ESIA across communities of practice or sectors of industry, resulting in the repetition of mistakes and inadequate pressure on ongoing and future projects to improve. Discussing the impacts of the Sesan river dam in Cambodia, Sangha and Bunnarith (2006) observe, for example, "*The Sesan issue highlights the learned water governance lessons in the Mekong Region, yet shows how these learned lessons continue to be ignored.*" Furthermore, a substantial amount of research literature on ESIA is project specific, and contributes little to understanding how to improve ESIA systematically.

Another large share of ESIA-related studies are interested in environmental rather than social impact, resulting in an incomplete analysis of human-environment interactions. For example, the most popular on-line database of scientific literature returns 81 100 results for *dam "environmental impact"* versus only 13 700 results for *dam "social impact"* (accessed 2015-09-18). In an effort to address the need for a more thorough analysis of infrastructure impact, we chose to focus on the social dimension.

Previous research suggests that resettlement —the economic and/or physical displacement of people— is the main social issue for many projects. While most large infrastructure projects have to resettle some people to ensure effective implementation, the problem is especially acute for hydroelectricity projects. Thus, hydropower projects are of particular interest in understanding how regulations attempt to mitigate the impact of resettlement and how effective these guidelines are to what happens on the ground.

Having examined the costs and risks of hydropower dams in Vietnam, Tu et al. (2013) concluded that "*Regarding the costs for resettlement, it seems that citizens are generally worse off after resettlement. The Government of Vietnam has implemented the 'land-for-land' policy in land confiscation practices since the 1990s, including those for hydropower projects. However, in many cases, compensated land provided is less in quantity and worse in quality than the land that was taken. The compensation and support is insufficient for resettled people to conduct the same agricultural practices as on their former land. People have become poorer than before resettlement.*" Huu (2015) noted that "*To date, approximately 200,000 people have been displaced and relocated for the construction of hydroelectric dams, of which over 90% are ethnic minorities. The majority of resettled people have no stable life after resettlement, and their living standards are increasingly more difficult than before resettlement. In practice, very few cases of resettlement due to hydropower dam construction are considered as successful examples in Vietnam.*"

So in spite of a robust set of guidelines attached to Vietnamese infrastructure projects, evidence on social impact remains a cause for concern. Is reduced wealth and quality of life an inevitable result of resettlement? Are there concrete, actionable ways of mitigating loss and even improving livelihoods, as the guidelines imply? With these questions in mind, we have undertaken an analysis of international best practice guidelines/ESIA compared to current practices in Vietnam, looking specifically for which characteristics constitute barriers to sustainable infrastructure development and which allow infrastructure projects to minimize damaging effects to people and environment while achieving the best balance between development goals and costs.

2. Method and observations

This reporting is based on 1) a desk review of relevant regulations 2) our first-hand experience as consultants tasked with implementation for various hydropower and expressway projects and 3) interviews with international lending organization officers, impacted persons and consultants 4) three hydropower project cases discussed in section 3.

2.1. ESIA in theory: the guidelines

Environmental and social impact assessments are, as their name indicates, assessment tools for evaluating the impact of projects on ecosystems or environments, and people (Morgan, 2012). The data contained within them informs decisions on the viability and potential consequences of infrastructure and other types of development.

The International Association for Impact Statement (IAIA) defines ESIA as:

The process of identifying, predicting, evaluating and mitigating the biophysical, social, and other relevant effects of development proposals prior to major decisions being taken and commitments made. (IAIA 1999)

The first source of guidelines defining what these ESIA should contain is national law. In Vietnam, the Environmental Protection Law of 2005 (art. 18) requires Environmental Impact Assessment (EIA) for projects of national importance or those having potential risks or adverse impacts on the environment. Although these EIA do not include “Social impact” as a distinct category, the law (art. 20) provides that assessments should contain opinions of the municipal-level People's Committees and representatives of population communities in the place where the project is located, including unfavorable opinions. The law (art. 21) also states that before making conclusions or decisions, EIA appraisal councils must consider petitions or recommendations sent in by organizations, population communities and individuals. Government’s Decree 69/2009/ND-CP and Decree No. 197/2004/ND-CP frame the role of local administrations: “basing themselves on local realities, the provincial-level People’s Committee presidents shall decide on other supporting measures to stabilize life and production of persons who have land recovered”.

International regulations constitute an additional level of rules governing the impact assessment of large infrastructure projects in Vietnam. Between 2010-2014, Vietnam ranked third highest in the amount of external aid received (OECD, 2015). Over 40% of infrastructure investment in the

country is financed from external sources. With foreign funding comes a system of oversight intended to assess a project's adherence to the funding organization's development goals. Regulations for oversight and reporting are meant to improve the likelihood of sustainable outcomes.

The major external funding sources for infrastructure in Vietnam include the World Bank, the Asian Development Bank (ADB), Japan's JICA, Germany's KfW/GTZ, and France's AFD. Climate finance organizations, from the ailing Clean Development Mechanism to the newly created Green Climate Fund fund are also involved in hydropower. Each organization has its own preferred domain of intervention regarding the size, geographic location and type of projects supported. There is also variety in the financial structure and in the conditions attached to funding. However, these agencies all require some form of ESIA to be conducted prior to large project approval (ADB 2009, WB 2001, JICA 2010).

For example, according to current World Bank procedures, the Bank must satisfy itself that the borrower has explored all viable alternative project designs to avoid involuntary resettlement and, when it is not feasible to avoid resettlement, to minimize its scale and impacts, such as through the realignment of roads or reduction in the height of dams. The World Bank's current involuntary resettlement policy presupposes that the project justifies the evictions or restrictions of access to resources and does not contain a requirement to first assess whether the project promotes the general welfare.

Although there has been progress in reforming national systems, there are still significant gaps between requirements and guidelines of various development partners (government, ministries, local agencies, international banks, other countries' development agencies) which require harmonization. The gaps between the environmental and social impact assessment guidelines given by international funding organizations and current practices in the country can lead to unintended and/or unsustainable outcomes.

2.2. ESIA processes and practices

Large infrastructure projects involve private actors, central ministries and local administrations.

Proper design is critical to minimizing impact. Private actors in charge of the detailed design determine project scope --it is their expertise and ways of working that drive a project in its early stages. The design consultant is usually a consortium led by one main consultant with many sub-consultants. The main consultant is selected according to the nature of the infrastructure, e.g. to build a highway one would hire those with experience in road and bridge engineering; for hydropower plants, design consultants with experience in dam and power plants are chosen. Expertise in social and environmental domains is not a primary criteria. The main consultant generally contracts out the EIA to a sub-consultant, who in turn may subcontract out the social assessment portion.

On the government side, planning and development of large projects involve the following ministries:

- Prime Minister - Approval of development orientation

- Ministry of Construction (MoC) - Line Ministry for urban development
- Ministry of Planning and Investment (MPI) - Allocates state budget. All major investment projects must have approval of MPI. Prepares Social Economic Development Plan
- Ministry of Natural Resources and Environment (MonRE) - Manages water resources, water use, pollution and is in charge of land use planning.
- Ministry of Finance (MoF) - Distributes state funds to sectors and projects, sets annual sector goals and regulates accounting

The coordination of official development assistance (ODA) projects follows a top-bottom approach with MPI being the focal point, Ministry of Finance being the official contractual "borrower", and the branch Ministries or Line Agencies acting as state supervisors of operational implementation. The MoF, on behalf of Government of Vietnam, borrows funds from donors and development banks, which have their own specific financial conditions and technical policies. Then MoF either allocates the funds to the project implementing agencies through state treasury (for projects that do not bring future revenue), or re-lends the funds through the Viet Nam Development Bank (for projects that generate revenue in the future).

Projects involve many layers of responsible agencies at the national, provincial and municipal levels. The People's Committees at the provincial and city levels in general have limited capacity in carrying out ODA projects, lacking familiarity with procedures in project administration and management best practice. Local governments have little experience of mobilizing sources of funds other than central government transfers (Trần Tiếp Đệ 2012). Though they have final control on project implementation, their standards and methods can differ from those of international funders, and consequently the building may differ from the approved design in problematic ways (Phạm Tuyên-Ngọc Sơn 2015, MONRE 2011). On the other hand, funders can also lack sufficient knowledge and involvement at the ground level of implementation, thereby lacking a clear picture of how infrastructure building is actually affecting people and ecosystems.

The ESIA process is designed to inform "prior to major decisions being taken." In practice, though, the time line of ESIA studies and their influence on project approval is anything but straightforward or transparent.

Many development projects that require acquisition of land or natural resources will resettle local communities prior to project implementation. The Phu Lac Wind Park in the Binh Thuan province, supporting agency KfW from Germany, illustrates this. Its feasibility study was approved in January 2010, but it took three years to sign the loan. Resettlement and other tasks like road construction and unexploded ordnance clearing were therefore conducted before the loan was granted. A three year delay is a long exposure to exchange rate fluctuations, given that wind farm projects are usually physically constructed in less than a year. The delay in this case can be explained by the fact that this was the first wind farm ESIA performed in the country. Donor oversight was very present in this case.

We have seen other cases where resettlement and displacement have occurred in anticipation of donor involvement for the specific reason of avoiding compliance with donor safeguard policies. Many development projects that require acquisition of land or natural resources will cause resettlement or displacement during a period prior to implementation of the project. For example, families in Tay Ho district, Hanoi have been threatened to remove houses for a resettlement project though no legal decision had been issued yet (ĐCSVN 2015).

After a project has been authorized, public services have less leverage to make the developer deal with the problems of impacted persons and environment. There is generally less supervision by authorities once a project is in operation.

3. Examples of social impact management stories

This section exposes three contrasting cases of hydropower social impact management coming from different parts of Vietnam. The first is funded by a Japanese bank and thus bound by domestic guidelines, the second and third follow WB and ADB donor policies.

3.1. Srepok 4A hydropower project

Description: Electricity generation utilizing the water from the discharge channel of Srepok 4 Hydropower Project upstream. Total installed capacity 64 MW, no dam or reservoir, see Figure 1 (at the end of this manuscript).
Dates: Start date Oct, 2010. Commissioning of the first unit on 25/12/2013
Location: Ea Huar, Ea Wer and Krông Na communes, Buôn Đôn district, Đăk Lăk province, Vietnam. Coordinates 12.8934412, 107.8116228.
Funding: Commercial loan from Sumitomo Mitsui Banking Corporation (Japan) under Non-binding Foreign Credit Insurance Program of Nippon Export and Investment Insurance (NEXI), guaranteed by Vietnamese Government.

A look at Srepok 4A reveals many examples of complications inherent in conducting large infrastructure building (damage to livelihoods and property, pollution, dislocation).

Project documents (EIA report, resettlement plan) for Srepok 4A were prepared in compliance with Vietnamese regulations. In the EIA, impact on water supply for the part of Srepok river extending from the dam of Srepok 4 to Srepok 4A's powerhouse was considered adequate to ensure the water supply for cultivation and tourism. However, the actual situation did not match the ESIA calculation.

Water diversion for the project caused a lack of water in a part of the river upstream of the powerhouse and has had a negative impact on Buon Don village (a tourist destination, close to the Yok Don national park). The waterfall and river at the site have dried out and hence become much less attractive to tourists. This causes serious problems for people dependent on tourism for a living.

The construction and existence of a water diversion channel for the powerhouse was thought to make communication and transportation more difficult. To resolve this issue the project owner built some bridges. However, during construction, people complained that the bridges were of low quality and unsafe. A group of about 50 gathered to prevent the construction of the plant, after which the local authority decided to postpone the bridge construction for review and safety checks. Finally, during construction, the water diversion channel was broken due to heavy rain, flooding land used for cultivation by local people.

Other problems included complaints about inadequate compensation, damage to houses from construction (cracks in walls, broken windows), pollution from solid wastes and floods.

On the positive side, farmers whose land was damaged were able to learn about their property rights for the first time and get legal aid for the right compensation.

3.2. Trung Son dam

Description: the 260 MW Trung Son Hydropower Plant is a multipurpose project (power generation, flood regulation, CO_2 emission reduction). More Information including the SEIA report is available at http://trungsonhp.vn/
Location: Ma River and has its project site in Thanh Hoa, Son La and Hoa Binh province.
Funder: World Bank
Dates: expected to operate on QIV 2016.

Reports regarding environmental and social impact assessment, livelihood for indigenous people, etc were prepared in accordance with WB regulations. All documents are available on the websites of project owner and WB.

The Trung Son project has a practical, efficient multi-layer monitoring and evaluation framework consisting of the following elements:

- Dam Safety Review Panel/Project Technical Advisory Panel (PTAP)
- Panel of Environmental and Social Experts (POE),
- Independent monitoring consultants (IMC),
- Regular supervision by staff of the World Bank.

It also has well-funded social and environmental impact mitigation programs, including the US $28million spent for improvement of life and livelihoods of affected people and environmental protection (with a total of over 50 packages related to environmental and social issues).

In terms of addressing the grievances of impacted people, project owner TSHPCo established a detailed plan to ensure that all complaints related to compensation would be resolved quickly, via two channels: People's Committees from town to provincial level and an Independent Grievance Panel setup by project owner. The process of resolving complaints and claims only ends when people are satisfied with the outcome. TSHPCo has its own website

http://www.trungsonhp.vn where public information related to addressing complaints and grievances is continuously updated.

3.3. Song Bung 4 dam

Description: Song Bung 4 is a run-of-river Hydropower Project with the total capacity of 156 MW.
Dates: first unit commissioned on 1/10/2014
Location: Vu Gia River, Quang Nam Province
Funding: Asian Development Bank

The two previous examples may suggest that issues related to resettlement and ensuring livelihood for relocated people are better addressed in internationally funded projects (ODA from WB or ADB) than nationally funded ones. Indeed, international projects have to comply with both VN regulations and sponsor's guidelines. With these guidelines and close supervision from sponsors, the resettlement process has been significantly improved compared to that of VN regulated projects. However, there are still some problems remaining.

For example, in the case of Song Bung 4 (165MW, ADB funded project 36352-013), compensation was paid to affected households so they could build new houses themselves. This was an effort to address the widespread problem seen in many other hydropower projects of resettlement houses not meeting the needs of displaced people. However, when people received large amounts of money at once, some spent it instead on more ornate wooden houses, buying new transportation or other things unrelated to income generation. One unforeseen consequence was the deforestation caused by the wooden house trend (VNTimes 2012). By contrast, the Trung Son project avoided these problems because the World Bank required approval of house designs before paying compensation.

Another issue is land for cultivation in the resettlement area. For Song Bung 4, each household has 1.5ha as stated in approved plan, but people claimed that this was not enough. Beyond resettlement, social impacts included claims of problem with illegal workers from China working for the project (Nguyễn Thành 2013) and allegations that corrupt local officers lied about the amount of property loss to steal compensation money (Văn Nguyễn 2014).

4. Results

4.1. Administrative complexity multiplies project complexity

The complexity of projects is a significant barrier to efficient impact assessments. Factors which increase the difficulty of projects are:

- Projects have three working languages: Vietnamese, English and the language of the country behind the international funding. In general, Official Development Assistance projects require that the main consultant as well as main contractor be from donor’s nationality.

- Projects cover several towns or provinces. For example, the transfer of funds between provinces and general coordination requires time consuming processes at the central level.
- Projects cover sub sectors from different ministries. For example, different partners have different rates for the backhanders envelopes, which are not easy to know.
- Projects have multiple donors. For example, the first three lines of the Hanoi metro under construction are each financed by a different country (China, Japan and France); each requires the use of a national engineering company and national train provider. This is not only a technical absurdity, it complicates the impact study for no reason.

Complexity leads to delays in approval and start-up, particularly for procurement contracts, thereby inhibiting the effective implementation of infrastructure projects. Social realities keep changing during these delays. People move in and out, the economy grows (or shrinks), media can take interest and increase visibility, bringing to light conflicts or problems. Years of delay make the social assessment a moving target and considerably harder to reach. Long timelines also make it easier to justify any discrepancies between the lowball estimates and the social problems encountered.

When the administrative system is too complex, it becomes inefficient. In the end, the role of the State in the compensation of displaced people becomes weaker, leaving the project owner to negotiate directly with impacted people.

Viet Nam’s rapid economic and population growth has led to a multiplication of new infrastructure projects. Smooth administration of infrastructure projects needs more human resources and institutional capacity to regulate, plan, operate, and manage infrastructure assets and services (Pham, 2014).

4.2. Resettlement remains a major concern

Though the impact statement may appear to be a streamlined process, a closer look reveals some important challenges, in particular in the area of involuntary resettlement. Development guidelines call for resettlement that leaves people in “equal or better” conditions. But translating that aim into concrete outcomes acceptable to affected people is anything but simple. Those impacted by involuntary resettlement (IR) face a number of well-documented risks and human rights violations, including homelessness; loss of livelihood; food insecurity; psychological trauma; negative health impacts; increased morbidity and vulnerability, especially among women and children; economic and cultural marginalization; and social disintegration. For example:

- The land disputes between the government and people have tended to worsen when farmers want to protect their land and assets. The forcibly evicted have been arrested, beaten or even worse. On 25 April 2014, Hanoi authority mobilized “thousands of people” including gangsters and mafia in a coercive land acquisition in Duong Noi, Ha Dong district - according to many witnesses (BBC Tiếng Việt, 2014).

- In June 2012, holdout families clashed with a group of men hired to clear their land for the EcoPark site, leaving several villagers injured and others vowing to protect their homes should demolition crews return in Van Giang, Hung Yen. (Mac Lam, 2012)

Resettlement for hydropower projects has become a kind of lightning rod for questions of environmental justice in Vietnamese society (CPV, 2012). IRs are often viewed as discriminatory, as it is the poor and marginalized sections of the population, generally, who are required to move out of the way for development projects. Impacts from displacement are not constant across populations: dams are built in mountainous areas and tend to affect the poor disproportionately. Those living in remote and high mountain areas have less access to education, higher dropout rates, later school enrollment, less access to formal financial services, less productive land and less off-farm employment. On average, they have lower market access and poorer returns from markets. The difference in material living conditions of households in the deltas and those living in mountain areas is widening. The multi-ethnic makeup of Vietnam, with over fifty distinct groups and languages, adds to the difficulties of assessing and managing impact on these people and communities. (UNDP, Poverty Situation Analysis Of Ethnic Minorities in Vietnam 2007-2012).

4.3. Fair compensation, key to satisfaction but difficult to decide

Determining what is fair compensation is a critical facet of social acceptability of large infrastructure projects. According to government statistics, 70% of citizen complaints are related to land disputes and many of them have remained in deadlock for a long time (VGP, 2015).

Although the law and guidelines define a unified compensation policy, in practice there is a difference between urban and mountain areas. In the mountain areas, compensation is often land for land. In the cities, impacted persons are offered more options. For example, they can be offered a choice among several options: a) money; b) land for land, that is a comparable apartment or house in the resettlement area; or c) buying land at a preferential price in their current neighborhood. One reason for this difference is that impacted persons in cities have a stronger political voice. In the mountains, contested sites have less visibility, given that it can take several days of travel for a journalist to visit.

The relation between the compensation amount and the market price of land is problematic, complicated by the lack of professional agencies working on land price assessment. Land prices issued by the government are not updated relative to changes in market price in some localities, leaving resettled households at a disadvantage. In some cases. the land price announced by the government is equivalent only to 30-60% of market price. (BBC News, 2012).

The Provincial People's Committee has the authority to make decisions for both land price and forced eviction. Due to the lack of specific guidance on the process of determining applicable land prices, each province or city offers different solutions which may cause inequalities across cases. In the vast majority of cases, the administrative decision was imposed and not in line with market prices. Additionally, in many cases, compensation for resettlement is slow. (Gillespie and al. 2015)

Most people do not sign a formal contract agreeing to a compensation package. Thus, if they do not explicitly complain, they are assumed to be satisfied. Le Chi Cuong (2014) wrote for example *"According to assessment of the Consultant, almost all interviewed households are satisfied with the compensation plan that the Project proposed. Some households are not satisfied with the compensation price for land, crops or limit of support for agricultural land. However, after considering and clarifying, PC of Gia Lai concludes that the compensation plan for those households are totally in compliance with regulations of the State and PC of Gia Lai province. After that, those households have received compensation and support as provided in the approved compensation plan."* Yet even after compensation is taken, factors can impede the sustainability of resettlement, and lead resettled households to eventually move back to their previous land.

4.4. Other social impacts beyond resettlement are little managed

Comprehensive and independent reports on Social Impact Assessment of large infrastructure projects in Vietnam remain an exception today. Currently, SIA is typically included within EIA reports and often accounts for a very superficial part, typically about 10% of the EIA content, 20% maximum. This is not enough space to adequately address all social aspects such as gender issues, inequality or cultural heritage.

The ESIA we analysed focuses on emissions: how many tons of dust, SOx, NOx, how many dB of noise level, while other aspects such as water balance changes, deforestation, aquatic production and impact to cultural indigenous peoples are briefly described in only a few pages (see e.g. Đoàn Đại biểu Quốc Hội tỉnh Phú Yên 2013). Most of the EIA for industrial development, mining and urban transportation projects we reviewed scarcely addressed the forecasting of ecological and social impact and included very little information and data on local diversity biology, ethnography, cultural heritage, or archeology in their reports. Yet disregarding the culture of the impacted households can lead to inappropriate resettlement attempts, for example by building flat houses for people who live on stilt houses.

One reason for this may be methodological. Even in countries with the most advanced universities and research institutions, there are still controversies on the capacity of science to adequately forecast impacts on natural ecosystems or human systems. There is a risk that qualitative impacts, which are even harder to measure, are simply dropped out of the ESIA.

Guidelines have a key role to play here. They can go beyond the quantitative data of things like CO_2 measures to provide more explicit direction in employing the methods and tools of social sciences with which most engineers are not familiar.

5. Discussion

5.1. Aligning the goals of process and outcome

The ESIA must be acceptable to funding organisations and public supervisors. If there is an unacceptable environmental and social issue, either the project's execution or the impact

assessment has to be modified. This poses the problem of process overtaking substance, creating situations where the studies are modified rather than the projects they are intended to inform.

Social impact assessment and social impact management are not distinct processes; they are closely related. For example, the consultants who perform the ESIA may have to ask people if they accept the proposed compensation. While they have a limited mandate, this is in fact an intervention, not an observation. They can defer the unresolved issues to project owners, who will negotiate further until resolution of the compensation question. In this example, it is the project that is modified by adjusting the compensation. Details of the transactions may not be discussed in the final ESIA report, which may only mention that there are no outstanding issues.

5.2. Mitigating the inherent conflict of interest with expertise

Problems with conflict of interest in the ESIA process have begun to gain more attention recently with increased emphasis on questioning the “neutral” nature of these technical guidance documents (see for example Stoen et al, 2015).

Consultants are not independent experts. They are dis-incentivized to report negative impacts which may delay or impede project approval, affecting their pay. Whistleblowing also jeopardizes future business. Even if the social impact subcontractor finds issues which may stop the project, the report still has to go through the EIA subcontractor, the main consultant and the project owner before going to the funding organization. Each of these stages opens up possibilities for modifying, removing or re-doing sections describing risks fatal to the project.

EIA/SIA reports are commissioned by project owners as required by both Vietnamese law and donor guidelines. Investors and owners have an interest in exploiting any loopholes in the impact estimation guidelines in order to foreground positive impacts, minimize negative outcomes and downplay mitigation issues. This can happen in spite of the quality of experts and forecasting technology, because there is always some scientific ambiguity in the subject matter. Most social aspects are not easily captured in precise, deterministic quantified assessments.

One way to address this problem of expertise independence is to build upon the difference between social and engineering/environmental aspects: subjects can be involved in dialectic, that is a systematic reasoning, exposition, or argument that juxtaposes opposed or contradictory ideas and seeks to resolve their conflict. Counter-expertise capacity lies --or could be developed-- within NGOs, universities and other community-based practices to engage in the types of collaborative knowledge production and learning called for in the literature (Duncan 2013).

5.3. Improving transparency and participation towards an ESIA 2.0

By definition, large infrastructure projects have a national interest, which may or may not align with local interests. Thus, irrespective of the political situation in a given country, decisions on infrastructure development often challenge democratic processes. They are undertaken by governments and implemented in the name of higher national interests by large public and private actors. Such projects are not ultimately decided by the affected people.

Instead, assessing affected persons' needs and potential impact is accomplished through various types of participation processes. These participations can range from very thorough ones in which projects seek to resolve affected persons' concerns and co-construct the project before proceeding, to those processes of merely informing people of what will be done, without leaving them any choice as to the outcome.

Our research has shown that the ESIA process often remains "top down", leaving affected or displaced people with insufficient opportunity for substantive input. Publishing relevant project information to the widest possible audience would open up more possibilities for dialogue around impact. Alan Potkin (2014) for example notes that aesthetic issues caused by the de-watering of cascades by hydro projects in the Mekong area can be understood better by interactive multimedia experiences than by traditional ESIA methods. Communication on social platforms open to comments by all netizens has become common for all projects in Vietnam.

There is a significantly different impact among project locations. People in urban areas have wider access to public information, media and to the authorities than affected communities in remote areas. Poor people, people in remote areas, less educated people and ethnic minorities have little or no effective choice or decisional power. This should lead to different approaches to Social Impact Assessment if the goal is to assess impact as accurately as possible and generate meaningful solutions. For example, oral methods in local languages may have to be used instead of written questionnaires in Vietnamese.

5.4. Revisiting the laws and regulations

Vietnamese regulations on consultation process still have limitations.

First, stakeholder consultation is still not adequate. According to the Decree 29/2011/ND-CP, only 2 groups of stakeholders are required to be involved in the consultation process (People's Committee at commune level and representatives of local community that is directly affected by the project). This does not cover other stakeholders that might be relevant such as: environmental/land/water management authorities at commune level or higher; entities involved in environmental consultation; social/political groups in charge of ensuring that environment and resources benefit the people within their scope of work; media working in project areas; international or regional organizations; individual experts/scientists and citizens willing to contribute to sustainable development.

Second, the responsibility of organizing stakeholder consultation meetings still belongs to the local authorities instead of project owners. The People's committee of the town is responsible for announcing the summary of EIA to local people as well as organizing the consultation meeting between stakeholders and project owners. This allocation of public consultation responsibility is not practical, as the responsibility for the whole consultation process lies with the project owners.

Finally, the time period for consultation process is set at only 15 days. After that period, if there is no response from the stakeholders in written form to the project owner, then it is considered that there is no opposition to the project plans. Such a short amount of time is insufficient for conducting a thorough consultation process.

6. Summary and conclusion

Infrastructure development is booming in Vietnam despite administrative complexity and inefficiencies. Hydropower is likely to continue to be an important part of energy infrastructure in the near to medium future. Resettlement for hydropower projects has become a kind of lightning rod for questions of environmental justice in Vietnamese society. Impacts from displacement are not constant across populations: dams are built in mountainous areas and tend to affect the poor disproportionately. Compensation is the key issue, overshadowing other social impact considerations.

Funders rely on the information included in ESIA to make decisions about which projects get approved. This can lead to an emphasis on the result --a report that looks good and omits issues--over the process --dealing with of the conflicts at hand. Consultation mechanisms and compensation schemes that give a strong voice to impacted people and make project advancement contingent on resolution of any claims are an important part of managing resettlements for sustainable outcomes. Dialogue alleviates the problem of dependent expertise. New collaboration practices can improve the investment of all stakeholders in the assessment process, from project owners to funders to impacted people, and lead to more robust decisions.

Finally, the potential conflict between people's interests and preferences and those of developers and governments is not easily resolved. ESIA is not an insurance policy. But ESIA, done thoroughly and thoughtfully, with real investment in ensuring sustainable livelihoods as a project goal can go far in improving the status quo.

7. References

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Figure 1: The Srepok 4A project area. Buôn Đôn district, Đắk Lắk province, Central Highlands region of Vietnam. March 2015. Colors enhanced (Strech 3D). Scale: the long leg of the canal is 11km. Landsat 8 image courtesy of the U.S. Geological Survey < http://landsatlook.usgs.gov/ >, accessed 2015-09-24

