

Conflict sensitivity: understanding and applying best practice in the energy sector

EEG Energy Insight

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Acronyms

ADB	Asian Development Bank	DRC	Democratic Republic of Congo
AfDB	African Development Bank	FCAS	Fragile and conflict-affected situation
CDD	Community-driven development	HPL	Nepali Himal Power Limited
EEG	Energy and Economic Growth	ICAI	Independent Commission on Aid Impact
ESIA Assessment	Environmental and Social Impact Assessment	KREC	Khimti Rural Electric Cooperative
DFID	Department for International Development	LTWP	Lake Turkana Wind Power Project
		USAID	US Agency for International Development

Introduction

This review aims to develop the understanding and enhance the application of best practice when implementing large-scale electricity projects in fragile and conflict-affected situations (FCAS)¹. It provides a practical complement to an earlier paper written for the Energy and Economic Growth Programme (EEG) which focused on the relationship between energy, fragility, and conflict from an academic perspective², with the aim of supporting the uptake of conflict sensitivity best practice. The focus is therefore primarily the potential impacts of electricity infrastructure on conflict and fragility dynamics, rather than the reverse. In order to manage the conflict risks emerging from investments in electricity projects and to contribute to building peaceful societies, investors and project managers need to have a clear understanding of what conflict sensitivity means in the context of the energy sector, as well as the ability to monitor and improve the performance of their interventions in this regard.

This is a challenge for infrastructure projects more broadly. In 2015 an Independent Commission on Aid Impact (ICAI) report noted that the UK Department for International Development (DFID) ‘needs to think strategically about the inclusion of infrastructure elements in fragile state

programming’ and ‘should consider how targeted infrastructure can be integrated creatively into larger sectoral programmes to build community cohesion, meet needs and prevent conflict’. The report also urged DFID to work with other partners with a focus on large-scale infrastructure, such as development banks, ‘to help them to create new, more fit-for-purpose approaches in fragile states’³. Indeed, despite discussing cross-cutting priorities such as gender, DFID’s most recent infrastructure policy framework does not explicitly mention conflict⁴.

In light of this the present review has sought to focus both on DFID and on key development banks with which DFID works. Since there are very few publicly available bilateral donor evaluations or learning documents from electricity projects, the review has largely focused on electricity investments by multilateral development finance institutions (DFIs), including the World Bank, the African Development Bank (AfDB) and Asian Development Bank (ADB), which are some of the largest providers of finance for large-scale electricity projects.

Although there is some research available on the linkages between large-scale infrastructure and conflict dynamics, there is relatively little policy-

¹ The author would like to thank Mark Harvey, Head of Profession for Infrastructure at DFID, and Mark Segal and George Hamer, from DFID’s ICED programme, for their time discussing this topic and for suggesting specific areas to explore in more detail.

² Morris, R (2017) ‘Energy, Fragility and Conflict’, Oxford Policy Management.

³ ICAI (2015) ‘Assessing the Impact of the Scale-up of DFID’s Support to Fragile States’, ICAI, Report 40.

⁴ See DFID (2015) ‘Sustainable infrastructure for shared prosperity and poverty reduction: A policy framework’, Summary document, London: DFID. There is a small section on infrastructure in FCAS in DFID’s 2013 infrastructure position paper.

oriented information focused specifically on the energy sector. Nor are there international frameworks for best practice as there are for the extractives sector in FCAS for instance⁵, although there are certainly some common lessons which could be drawn from that guidance. Indeed, most of what has been written in relation to electricity infrastructure is grey literature, which rarely focuses on the practicalities of implementation. At the same time, while conflict sensitivity has long been a part of the development lexicon, and is generally well-understood as a concept, there remain considerable gaps in its practical application and implementation, despite the existence of a vast amount of guidance⁶.

With this in mind, this review does not set out to provide a generic 'toolkit'. Rather, it recognises that the application of conflict sensitivity may look very different in different contexts, both between and within countries, and that individual approaches are therefore crucial. Consequently, it sets out to draw lessons from practical case studies on what has and has not been effective in the application of conflict-sensitive approaches in electricity infrastructure projects. This will enable the review to identify common principles for conflict sensitivity in relation to electricity infrastructure, highlighting operational best practice for these types of interventions in FCAS.

Where relevant and possible, the review has sought to showcase examples which relate specifically to the four priority research areas of EEG: energy reliability, the efficient and productive use of electricity, grid access, and renewable energy. Much of the relevant evidence for such a study is found in internal project evaluations, which are generally not publicly available. This has meant that the review has focused on available information from donors and DFIs, which is likely to be mostly positively skewed towards discussing stories of success rather than dwelling on more problematic projects. Conversely, at the extreme opposite of the spectrum, learnings from projects which have not been successful come from information which has made its way into the public domain only when a

project has caused considerable controversy. Attempts have been made to ensure a balance where possible between these two contrasting sets of information, but it would be remiss not to identify this as a challenge to the conclusions drawn in this review.

In the first section, the review defines key terms and situates the subsequent discussion. Section 2 identifies examples of positive application of conflict sensitivity in the electricity sector, and examples of where the approach has not been sufficiently considered or applied. Section 3 draws together the findings from these case studies to identify common principles for conflict sensitivity in relation to electricity infrastructure and to develop recommendations for priority areas and 'quick wins' for improving conflict sensitivity.

What do we mean by conflict sensitivity?

Within the donor community, there is a broadly shared definition of what it means to be conflict-sensitive, which encompasses three key components:

1. analysis and understanding of the operating context;
2. understanding the interaction between that context and a specific intervention; and
3. acting upon this understanding to ensure interventions minimise negative impacts, 'do no harm', and maximise positive impacts on the context⁷.

In practice, the more 'minimalist' version of the definition is often applied: ensuring no harm is done but stopping short of maximising positive impacts⁸. This review will, however, focus on the 'maximalist' version of conflict sensitivity, recognising that DFID has long been a proponent of such an approach – 'all our interventions should consider their impact on the causes and drivers of

⁵ See, for example, the Natural Resource Charter, the UN Guiding Principles on Business and Human Rights, and the Voluntary Principles on Security and Human Rights.

⁶ CDA (2016) 'Conflict-Sensitivity Mainstreaming Efforts', CDA Collaborative.

⁷ Conflict Sensitivity Consortium (2012) 'How to guide to conflict sensitivity', London: Conflict Sensitivity Consortium.

⁸ Goldwyn, R (2016) 'Conflict Sensitivity Integration Review', Washington: US Agency for International Development (USAID).

conflict and contribute to building stability'⁹ – and also that its work is increasingly focused in FCAS¹⁰.

When considering conflict sensitivity, a recognition that conflict exists at a variety of levels and in various intensities is vital. While not necessarily linear in its increasing intensity or impact, conflict can exist at the intra-household or interpersonal level right up to the level of civil or indeed inter-state war. A recognition of such a 'spectrum' of conflict leads to an understanding that 'lower intensity' conflicts, such as social tensions between certain groups or latent, structural conflict between citizens and state institutions, can connect to 'higher intensity' conflicts, such as violent disputes over land access and rights, or inter-communal conflict. This connection is particularly relevant in the context of electricity infrastructure development, where, as we shall see, it is possible for projects to exacerbate underlying social tensions, aggravate perceived or actual inequality between different groups, or impact on pre-existing poor relationships or lack of trust between communities and state security actors.

The connection between the different intensities of conflicts on this spectrum also recognises that simply labelling a country as 'fragile and conflict-affected' is not sufficient to point to the various complexities it faces in relation to the development of infrastructure. Sector-specific conflict analysis, which understands the historical legacies of conflict as well as the ongoing dynamics of fragility, is vital to form an accurate appreciation of the likely impacts of large-scale electricity projects on conflict. While such an analysis only at the national level will discuss the key drivers of conflict, it is unlikely to provide implementers with a sufficient level of detail about local social dynamics, tensions, and political economies to navigate the complexities within the electricity sector and intervention context¹¹.

This leads to four distinct considerations when thinking about conflict sensitivity in electricity projects:

- **What are the sector-specific conflict drivers in the local context that may be impacted by the electricity project in question?** For example, the rents that can be derived from monopolistic control of electricity infrastructure can drive conflict where those in control are resistant to change and aggressively and violently push out competition. This can be especially acute in contexts where ownership and control is either directly or indirectly linked to armed groups and former warlords, such as in many of the major cities in south-central Somalia¹². Alternatively, electricity infrastructure may become a high-profile target for non-state armed actors seeking to challenge a ruling elite, as happened when insurgent groups sought to oust the nascent Iraqi government after the fall of Saddam Hussein in Iraq¹³.
- **What are the underlying social dynamics in the context which are not necessarily related to the conflict drivers, but may be impacted and changed by the electricity project in question?** For example, in the case of the Gibe III dam in Ethiopia, the impact on the water levels of Lake Turkana could potentially bring communities currently separated by this large body of water, with a history of mutual distrust and in some cases enmity, into conflict with one another over increasingly limited access to the natural resources required to maintain their livelihoods¹⁴.
- **What are the potential impacts of the project on existing political economies of electricity access and provision which feed**

⁹ DFID (2016) 'Building Stability Framework', London: DFID

¹⁰ Segal, M.(2016) 'Putting Conflict Sensitive Development into DFID's Practice: A Personal Perspective', in Handschin *et al.* (eds) *Conflict Sensitivity: Taking it to the next level*, Basel: Swisspeace.

¹¹ Indeed, AfDB has pledged to develop sector-specific fragility indicators for its infrastructure projects in Somalia in recognition of this challenge. See AfDB (2017) 'Multi-partner Somalia Infrastructure Fund: Mid-Year Report', Abidjan: AfDB

¹² International Organization for Migration (2016) 'Youth, Employment and Migration in Mogadishu, Kismayo and Baidoa', p. 57

¹³ Stark, J., Mataya, C. and Lubovich, K. (2010) 'Energy Security and Conflict: A Country-Level Review of the Issues', USAID CMM Discussion Paper No. 2

¹⁴ Vidal, J (2015) 'Ethiopia Dam will turn Lake Turkana into "endless battlefield", locals warn', *Guardian Global Development*, accessed at www.theguardian.com/global-development/2015/jan/13/ethiopia-gibe-iii-dam-kenya

into a conflict system? For example, facilitating access to electricity in eastern Democratic Republic of Congo (DRC) may disrupt the local charcoal trade. In that region charcoal is a lesser known 'conflict commodity': a key resource which is often controlled by the various non-state armed groups operating in the eastern provinces and that forms part of a widespread illicit economy in the region. Indeed, projects distributing biomass briquettes and briquette presses in the region, with the aim of diversifying fuel sources away from environmentally damaging charcoal, have come up against a number of challenges. These include the destruction of presses by rebel groups and the continued coercion of community members to produce and transport charcoal for them¹⁵.

- **What are the potential positive impacts of the project on local conflict and fragility dynamics, and how can projects capture their contribution in this regard?** There are opportunities for such projects to contribute to more positive relationships between different groups of citizens, and between citizens and their governments. For example, the lack of access to electricity has been linked to sexual violence and robbery, and increased street lighting has been linked to reductions in violence¹⁶. Provision of key services, including electricity, have also been shown to build trust in governments and improve the social compact.¹⁷ Although it is challenging to capture the causal linkages in these processes, this is an important consideration for electricity projects which seek to make claims about their contribution to stability.

Electricity infrastructure in the context of EEG

For the purposes of this review, and in order to align with the objectives of EEG, electricity refers to large-scale infrastructure, such as hydroelectric dams, wind and solar farms, electricity grids, power stations, and biomass plants. It does not include off-grid or hybrid mini-grid systems. These types of large-scale programmes pose a substantial challenge when considering the most fragile situations, for three important reasons.

Firstly, it is an increasingly accepted best practice among key donors that in complex and dynamic contexts, such as FCAS, adaptive programming which seeks to react and respond to changes in the political and socio-economic operating environment is the most effective method of project delivery¹⁸. However, large-scale electricity projects, which require long-term and rigid power purchase agreements and contracts in order to secure finance, and which can involve construction of considerable, and sometimes geographically widely-spread, infrastructure over long periods of time, do not lend themselves well to this type of programming approach. Indeed, they are also harder to protect in contexts where the security situation may remain poor and where it may take far longer to produce the results, and potential peace dividends, that local populations are so desperately seeking¹⁹.

Secondly, despite an often critical need for large-scale electricity infrastructure in countries recently emerging from periods of conflict or situations of ongoing fragility, attracting interest from international private sector actors is extremely challenging because of the considerable risks posed to successful delivery and to a guaranteed return on investment. Indeed, energy investments have been shown to be particularly sensitive to higher country risk ratings, and are therefore much smaller and less frequently implemented in conflict-affected

¹⁵ Miller, L. (2009) 'Congo's Conflict Charcoal', Mercy Corps article, accessed at www.mercycorps.org/articles/dr-congo/congos-conflict-charcoal

¹⁶ See, for example, E4SV (2015) <https://e4sv.org/wp-content/uploads/2015/08/03-Technical-Report.pdf> and Helms and Costanza (2014) 'Energy Inequality and Instrumental Violence'.

¹⁷ McLoughlin, C. (2014) 'When Does Service Delivery Improve the Legitimacy of a Fragile or Conflict-Affected

State?', *Governance: An International Journal of Policy, Administration, and Institutions*.

¹⁸ Blum, A. (2016) 'Addressing Fragility—A New Learning Agenda', Fragility Study Group Policy Brief No 8, accessed at www.usip.org/sites/default/files/Fragility-Report-Policy-Brief-Addressing-Fragility-A-New-Learning-Agenda_1.pdf

¹⁹ Mashatt, M., Long, D. and James Crum, J. (2008) *Conflict-sensitive approach to infrastructure development*, Washington: United States Institute of Peace.

contexts²⁰. Consequently, it is often difficult for donors and DFIs to prioritise these projects in the most challenging conflict contexts. There are also concerns regarding relapses into violence and conflict: where existing energy facilities are state-owned or legacy state-owned, resistance to change and the potential for political interference is considerable²¹.

Finally, and in part because of the two preceding factors, donors seeking to address the challenge of both chronic lack of access to, and unreliability of, electricity in FCAS often focus on smaller scale electricity projects at the community or even individual household level, such as off-grid solar or hybrid mini-grid systems. Indeed, much of the literature assumes a more minimal conflict risk associated with these types of interventions, as opposed to large-scale electricity infrastructure²².

²⁰ Araya, G., Schwartz, J. and Andres, L. (2013) 'The Effects of Country Risk and Conflict on Infrastructure PPPs', World Bank Policy Research Working Paper, Washington: World Bank

²¹ Akoum, I (2012) *The Political Economy of SOE Privatization and Governance Reform in the MENA*

Region, International Scholarly Research Network, ISRN Economics Volume.

²² See, for example, Kristensen (2017), Kittner and Yamaguchi (2017) and European Parliament (2011).

Conflict-sensitive considerations and approaches in electricity projects

Grid access and reliability

The potential for conflict around access to, and the reliability of, electricity depends heavily on the existing expectations of citizens, and the extent of state legitimacy in a particular context. In some FCAS, where state provision of services has historically been very weak, citizen expectations may be extremely low or even non-existent. In DRC, for example, studies suggest very low expectations of the state and even an aversion by citizens to its intrusion into their everyday lives. A foundational level of services was therefore seen as required before subsequent improvements were likely to positively affect citizens' view of the state²³.

However, in other contexts the relationship is very different. In Iraq, where citizens (especially those in Baghdad) were accustomed to uninterrupted service before the war, irregular electricity provision provoked and amplified questions regarding the effectiveness and legitimacy of the US-backed Iraqi government²⁴. There had been expectations that after the fall of the Hussein government people would experience marked improvements, but instead grievances over the lack of electricity sparked deadly riots in Basra and continued to contribute to a feeling of dissatisfaction. The fact that the international reconstruction plan in Iraq did not prioritise areas with poor basic infrastructure and electricity provision contributed to grievances and fuelled mobilisation for the insurgency²⁵.

These contrasting cases suggest that stimulating expectations must be balanced with managing expectations in line with what it is possible to deliver. Raising expectations beyond what is feasible can result in the exacerbation of tension and conflict where those expectations go unmet.

Historically, states have pursued the delivery of key services in order to establish presence and visibility, and particularly in areas previously cut off from the state during conflict to prevent the development of, or quash, alternative power sources²⁶. In some FCAS the extension of services to under-served areas may be seen as a direct challenge to a locally legitimate non-state authority or group, resulting in heightened tensions or violence. For instance, in Afghanistan the central state and international donors are forced to compete with local traditional and customary institutions, which have historically been in charge of providing public services. The introduction of 'modern' governance structures in rural areas in conflict settings in which the state has historically been absent or weak has led in some cases to the 'capture' of those structures by traditional authorities and local leaders, as well as the Taliban and other armed groups²⁷. In another case, workers at the Kosovo Electro-energy Corporation, many of whom were demobilised Kosovo Liberation Army soldiers, were providing contributions in the form of payroll deductions from their Kosovo Electro-energy Corporation salaries to 'benevolent' organisations, which were themselves likely conduits of funds to those advocating the return to violent means to achieve Kosovo's independence²⁸. Conversely, subsidised electricity tariffs can be a way for ruling elites to buy political patronage. In the Dominican Republic, for example, President Joaquín Balaguer, who was in power for three non-consecutive terms from 1960 to 1996, provided electricity access for little or no cost in exchange for political loyalty²⁹. Additionally, the *Corporación Dominicana de Electricidad*, the state electric company, purposely allowed payment evasion and illegal hook-ups, and became a source of jobs for

²³ Stel, Nora, de Boer, Diederik, and Hilhorst, D. (2012) 'Multi-Stakeholder Service Provision and State Legitimacy in Situations of Conflict and Fragility: Experiences from Burundi, DR Congo, Nepal and the Palestinian Territories'. The Hague: Peace, Security and Development Network.

²⁴ Stark, J., Mataya, C. and Lubovich, K. (2010) 'Energy Security and Conflict: A Country-Level Review of the Issues', USAID CMM Discussion Paper No. 2

²⁵ Brown, R (2005) 'Reconstruction of infrastructure in Iraq: End to a means or means to an end?' *Third World Quarterly* 26: 4-5; 759-775.

²⁶ Van de Walle, S. and Scott, Z. (2010) 'The Political Role of Service Delivery in State-Building: Exploring the

Relevance of European History for Developing Countries', *Development Policy Review* Vol 29 Issue 1.

²⁷ Schultze-Kraft, M. and Rew, M. (2014) 'How Does State Fragility Affect Rural Development? Evidence from Afghanistan, the Democratic Republic of the Congo, Yemen, Nepal, and Bolivia', GIZ.

²⁸ Mashatt, M., Long, D. and James Crum, J. (2008) *Conflict-sensitive approach to infrastructure development*, Washington: United States Institute of Peace

²⁹ Oviedo, J. (2004) 'The pitfalls of the Dominican electricity sector'. Working paper for the Foundation for Environmental Security and Sustainability.

adherents of the party in power³⁰. These factors resulted in a popular view that electric power was a public good that should be provided by the state for free. When later attempts were made to reform the sector, resulting in regular blackouts, frequent demonstrations and deadly protests followed, which heightened political tensions and even played a role in the defeat of President Hipólito Mejía in 2004³¹.

Despite these challenges, in FCAS where various inequalities prevail, a redistribution of services is likely to be important for (re)legitimising the state among excluded groups, including those alienated through a period of conflict³². Should patterns of accessibility intersect with historically marginalised groups or those who feel they have been disproportionately impacted by conflict, electricity projects run the risk of being viewed as cementing existing unequal power dynamics and therefore lead to a heightening of social tensions. An ADB electrification project in Afghanistan faced such a challenge when it became apparent that a plan to spend \$740,000 to provide 18,000 safe and affordable household electricity connections through connection kits was not sufficient to meet the local demand. As it proved too difficult to ensure equitable distribution of kits among the ethnically divided population, this component of the project was cancelled. The project evaluation pointed to this as an oversight at the design stage,³³ with important social issues with serious political ramifications being overlooked.

It is also important to consider the conflict scenarios which could arise from electricity projects which *create* inequality between different areas. For instance, the Ugandan government's commitment to develop electricity infrastructure in Karamoja, which has suffered years of under-development and is the country's poorest sub-region, could bring about in-migration from the neighbouring regions of Turkana in Kenya, and from Equatoria in South

Sudan. Some in Karamoja are concerned that the Turkana and Equatorians already cross the border to access healthcare³⁴, and as these communities are all largely pastoralist there is a potential for increasing pressure on natural resources, such as land. In a region where these relationships are already strained, the potential for conflict is considerable and will need to be carefully managed.

There is, however, some evidence of a connection between infrastructure projects and more peaceful relationships in instances where projects use community-driven development (CDD) initiatives. These encourage collective and collaborative decision making with local communities, with projects designed to actively prevent and resolve conflicts. Indeed, research indicates that CDD has a positive impact on people's capacity to resolve disputes, and enhances interpersonal trust and social cohesion through the process of collective action³⁵. While community engagement is usually a component of large-scale infrastructure development, CDD initiatives generally lend themselves to smaller scale projects and are therefore rarely used in the design of large-scale infrastructure investments. However, the examples discussed below indicate that it is possible to incorporate components of the CDD approach into large-scale electricity projects, and they demonstrate the impact these approaches can have on project outcomes in relation to conflict.

Energy consumption and productive use

It is widely recognised that electricity is a necessary, but insufficient precondition for economic growth. Numerous studies find a link between electricity consumption and economic growth in countries affected by conflict³⁶. However, there are suggestions that access to electricity may not automatically enhance productive uses. While access has the potential to be transformational, it is important to consider any existing skills gaps or

³⁰ Stark, J., Mataya, C. and Lubovich, K. (2010) 'Energy Security and Conflict: A Country-Level Review of the Issues', USAID CMM Discussion Paper No. 2

³¹ Ibid.

³² McLoughlin, C. (2014) 'When Does Service Delivery Improve the Legitimacy of a Fragile or Conflict-Affected State?', *Governance: An International Journal of Policy, Administration, and Institutions*.

³³ ADB Independent Evaluation (2017) 'Afghanistan: Power Transmission and Distribution Project', Validation Report.

³⁴ Inter-Agency Regional Analysts Network (2017) 'Future Livelihoods in Karamoja: A scenario analysis. Looking Forward to 2022.'

³⁵ Jones, S. and Howarth, S. (2012) 'Supporting Infrastructure Development in Fragile and Conflict-Affected States: Learning from Experience'. UK: DFID.

³⁶ Atif and Siddiqi (2010) find this relationship in Pakistan, as do Nonejad and Fathi (2014) in Iran and Fowowe (2012) for 14 sub-Saharan African countries.

financial constraints which prevent people from capitalising on their new access to reliable electricity³⁷. In some contexts, limited access to markets, small private sector, and lack of other important infrastructure may prevent or slow down the impacts of electricity access on productivity and labour opportunities³⁸.

The consideration that access alone is not always enough to facilitate the productive use of electricity points to the difficulties surrounding the attribution of positive development impacts to electricity access projects. There is often an assumption by donors that in post-conflict environments the rehabilitation or development of key infrastructure, including electricity, leads to job creation and creates economic opportunity for those previously involved in the conflict, such as combatants³⁹. The conclusion drawn, therefore, is that facilitating access to electricity, amongst other infrastructure, can result in increased stability. Many scholars have argued for a connection between increased employment opportunities and reduced levels of violence.⁴⁰ However, even the idea that the unemployed are more likely to participate in violence is one that has been challenged with data from Afghanistan, Iraq, and the Philippines⁴¹. A study from Liberia found only a reduction in the amount of time at-risk youth spent on illicit activities as a result of local employment generation, rather than a complete cessation⁴². Indeed, larger infrastructure projects, including in the electricity sector, have been shown to have little effect on levels of violence in Iraq⁴³.

While this is not an argument against investing in electricity infrastructure projects, it does pose a challenge to donors to understand whether there is tangible evidence from their projects to support the assumption of a linear and positive relationship between an increase in electricity infrastructure, an

increase in jobs, and an increase in stability. As we have seen, the broader relationship between state legitimacy, citizen–state relationships, and electricity access is particularly complex in FCAS, where the state may have been a party to the conflict, or may be distrusted or even feared by large swathes of its population. This poses considerable challenges for donors who make the case for the contribution of infrastructure development, including electricity, in post-conflict contexts as a method of stabilisation.

Renewables

Renewable electricity projects face many of the challenges described above, but because of their large-scale use of, and impacts on, key natural resources – land and water, in particular – they come with their own specific set of challenges in FCAS. Three more detailed examples provide insights into good and bad practice in the application of conflict-sensitive approaches in relation to large-scale renewable electricity infrastructure projects.

Myitsone Hydropower Dam, Myanmar

Hydropower in particular has been at the centre of social tension and conflict in a number of high-profile examples – notably the Myitsone dam in Myanmar. This hydropower mega-project would have been among the world's 15 largest hydropower stations. The project, run by the Chinese developer, China Power Investment, planned to channel 90% of the electricity generated back to China in exchange for \$17 billion⁴⁴. The project proved hugely controversial and in 2010, after violent clashes between government forces and Kachin rebels erupted, plans for construction were suspended.

Many of the communities who have been displaced by the dam are Kachin, Myanmar's Christian

³⁷ International Bank for Reconstruction and Development (2017) 'State of Electricity Access Report', Washington: World Bank.

³⁸ Bonan, J., Pareglio, S., and Tavoni, T. (2017) 'Access to modern energy: a review of barriers, drivers and impacts', *Environment and Development Economics*, Volume 22, Issue 5 pp. 491–516.

³⁹ This assertion is made in DFID (2013) 'Connecting people, creating wealth: Infrastructure for economic development and poverty reduction', London: DFID.

⁴⁰ See, for example, Urdal (2006), Collier (2000).

⁴¹ Berman, E., Callen, M., Felter, J. H., and Shapiro, J. N. (2011) 'Do working men rebel? Insurgency and

unemployment in Afghanistan, Iraq, and the Philippines.' *Journal of Conflict Resolution*, 55(4), 496-528.

⁴² Blattman, C., and Annan, J. (2013) 'Reintegrating and Employing High Risk Youth in Liberia: Lessons from a randomized evaluation of a Landmine Action agricultural training program for excombatants'. Working Paper.

⁴³ Berman, E., J.N. Shapiro, and J.H. Felter (2011) 'Can Hearts and Minds Be Bought? The Economics of Counterinsurgency in Iraq', *Journal Political Economy*, Vol. 119, No. 4, August.

⁴⁴ Linn, Z. (2013) 'Burma: Will the Myitsone Dam project resume?', asiancorrespondent.com.

minority, who have been demanding self-determination since the 1960s. Ethnic conflict between the Kachin and the Burmese military was widely acknowledged to have been exacerbated by the Myitsone dam development, and this is also cited as the reason for the renewed violent clashes in 2011, which ended a 17-year ceasefire⁴⁵. The Kachin believe that the resettlement and relocation plans under the dam development serve the government's interest as regards controlling the Kachin military forces⁴⁶.

The history of dam development in Myanmar also explains why communities were so strongly opposed to the project. In previous projects developers were allowed to choose sites for construction of hydropower dams with apparently little consideration for environmental and social safeguards. Affected communities, including those to be resettled, were not consulted or compensated⁴⁷. In the case of Myitsone, although it was originally reported that only 2,146 people were going to be relocated, 12,000 people had already been relocated by 2011, and an estimated 20,000 people have been displaced due to violence⁴⁸. Many have said they now have less farmland and diminished access to the Irrawaddy River, while some have moved back to their original homes in protest, despite the electricity there having been cut off⁴⁹.

This extremely sensitive conflict context in a community suffering decades of armed conflict and social exclusion made for an incredibly challenging environment for the development, but the Chinese developer faced a number of accusations of bad practice and thus demonstrated 'conflict-insensitivity'. At the time of the planning phase Myanmar had no environmental protection laws; legal requirements to conduct an Environmental and Social Impact Assessment (ESIA) were only

introduced in January 2016, but it has been argued that these requirements largely neglect social impacts and the government lacks enforcement capabilities to implement them⁵⁰. While the company did conduct an ESIA, there were serious doubts about the quality and independence of the assessment – experts found serious flaws in the report, including total neglect of the temporal and spatial scale of the social and environmental impacts of the dam and superficial analysis of the dam's impacts on freshwater biodiversity⁵¹. The independent review found a lack of attention to livelihoods impacts and an inadequate strategy for public participation⁵².

Khimti I hydropower project, Nepal

In contrast, the Khimti I hydropower project in Nepal demonstrates a very different set of outcomes for communities affected by the construction. Construction of the plant, owned by the Nepali Himal Power Limited (HPL) and Norway-based SN Power, began in 1996, and it went online in 2000. HPL put an emphasis on supporting the socio-economic development of local communities, and implemented a variety of development activities in collaboration with the Norwegian Ministry of Foreign Affairs, Norwegian Agency for International Development, and the Government of Nepal.

As well as other community development activities, to overcome a key challenge with such projects – namely that communities often bear the brunt of disruption from the construction and development of the plant without reaping requisite benefits – the flagship activity was the simultaneous construction of two mini-hydro plants to supply electricity to about 8,000 households and several electricity-based enterprises. These assets are owned and managed by the Khimti Rural Electric Cooperative (KREC), a local community-owned cooperative

⁴⁵ Kirchherr, J. (2017) 'Dams on Myanmar's Irrawaddy river could fuel more conflicts in the country', *The Conversation*, accessed at <https://theconversation.com/dams-on-myanmars-irrawaddy-river-could-fuel-more-conflicts-in-the-country-84386>

⁴⁶ International Rivers (2011) 'The Myitsone Dam on the Irrawaddy River: A Briefing', accessed at www.internationalrivers.org/resources/the-myitsone-dam-on-the-irrawaddy-river-a-briefing-3931

⁴⁷ Kristensen, J (2017) 'Life after Myitsone, Frontier Myanmar', accessed at <https://frontiermyanmar.net/en/life-after-myitsone>

⁴⁸ Ibid.

⁴⁹ Ives, M (2017) 'A Chinese-Backed Dam Project Leaves Myanmar in a Bind', *The New York Times*, accessed at www.nytimes.com/2017/03/31/world/asia/myanmar-china-myitsone-dam-project.html

⁵⁰ Kirchherr, J., Matthew, N., Charles, K., and Walton, M. (2017) "'Learning it the Hard Way": Social safeguards norms in Chinese-led dam projects in Myanmar, Laos and Cambodia', *Energy Policy* 102: 529–539.

⁵¹ International Rivers (2011) 'The Myitsone Dam on the Irrawaddy River: A Briefing', accessed at www.internationalrivers.org/resources/the-myitsone-dam-on-the-irrawaddy-river-a-briefing-3931

⁵² International Rivers (2013) 'Independent Expert Review of the Myitsone Dam EIA'.

established under the programme. KREC has a 15-member governing board directly elected by the local population. An elected three-member account and supervisory committee functions as the internal auditing body of KREC. KREC personnel have been trained in various areas, such as operation, maintenance, and repair of the power plants and distribution systems, meter reading, consumer billing, revenue collection, and accounting⁵³. Such community-managed rural electrification promotes leadership and collective action within the community, supporting cohesion around a shared resource.

When the massive 7.8 magnitude earthquake hit Nepal in April 2015, although the power plant suffered minimal damage, the local community experienced considerable damage to houses, infrastructure, and services. Working with the KREC, HPL was able to identify specific areas of assistance to support the restoration of key community infrastructure and houses⁵⁴.

As with much conflict sensitivity work, the absence of a counterfactual (that is, no conflict) makes impact measurement particularly challenging. However, given the timing of this project – during Nepal's civil war and a period of considerable political instability – and in light of the associated social impacts, loss of cultivated land, reduced water availability for irrigation, displacement of households, a school, and some cultural and religious sites – the absence of social unrest or conflict between the company and the community can be seen as a testament to the success of these community development approaches.

Lake Turkana Wind Power Project, Kenya

The Lake Turkana Wind Power Project (LTWP) in Kenya provides an interesting case of community engagement. The Loiyangalani District of Kenya's Marsabit West County, where LTWP is being built, is a remote area characterised by harsh living

conditions, supporting a population of roughly 1,000 nomadic pastoralists. In accordance with Kenya's national environmental and social regulations, as well as international standards applied by LTWP's lenders (initially the World Bank, then the AfDB), multiple ESIA's were conducted to evaluate the impact of the proposed construction and operation of LTWP on the surrounding area⁵⁵.

To obtain support from the affected communities and to maintain regular stakeholder interaction, LTWP developed a stakeholder engagement plan, which included: interviewing representatives and designated key informants; surveying affected parties; holding public meetings, workshops, and focus group meetings of vulnerable people; and utilising visual representations, brochures, posters, and signage to inform stakeholders of roadworks, security requirements, access restrictions, and dangers near the project area⁵⁶.

There were two key outcomes from the stakeholder engagement: an employment plan that distributed employment and training opportunities among the tribes residing near the project site; and a resettlement action plan for the semi-nomadic Sirima encampment, located within the project footprint.

To engage the community and ensure the equitable hiring of local residents from the four tribes in the area, LTWP set up two employment offices—one to the north of the project site and one to the south—and engaged local leadership to facilitate the hiring process. For many of the local recruits, working for LTWP represents their first employment experience. Given this, LTWP has emphasised on-the-job training and money management as part of their employment services.

Despite these exemplary efforts and initial support for the project, which it was assumed would bring economic benefits and job opportunities⁵⁷, the

⁵³ Basnet, S. (2012) 'Managing Community Expectations When Developing a Project in Nepal', HydroWorld, accessed at www.hydroworld.com/articles/print/volume-20/issue-6/articles/new-development/managing-community-expectations-when.html

⁵⁴ Statkraft (nd) 'Khimti Hydropower Project – Hydropower in Nepal', accessed at: [www.statkraft.com/annualreport2015/Corporate Responsibility/CR-in-development-projects/Cetin-Hydropower-project---hydropower-in-Turkey/](http://www.statkraft.com/annualreport2015/Corporate%20Responsibility/CR-in-development-projects/Cetin-Hydropower-project---hydropower-in-Turkey/)

⁵⁵ Cookson, P. Kuna, J. and Golla, E. (2017) 'Benefits of low emission development strategies: The case of Kenya's Lake Turkana Wind Power Project', ICF, USA.

⁵⁶ Ibid.

⁵⁷ Rights and Resources Initiative (2017) 'Tenure and Investment in East Africa: Power and BioEnergy', accessed at http://rightsandresources.org/wp-content/uploads/2017/02/Tenure-and-Investment-in-East-Africa_Power-and-Bioenergy_TMP-Systems_Feb-2017.pdf

project has not been without challenges. Some members of the community have expressed dissatisfaction with their local leaders for not allocating jobs in a way that they consider equitable, while others perceive there to be clashes between tribes over access to resources, as each tries to best leverage project benefits for themselves⁵⁸. Land disputes have meant the project finds itself facing legal battles, with the four communities arguing that they have legal rights to the land LTWP leased from the Kenyan government⁵⁹.

Other wind power projects in the country have also faced problems associated with protests over land and resource rights. The 60.8 megawatt wind farm in Kinangop was cancelled following site invasion and a protracted legal battle; while another case, Kipeto, will also be delayed by concerted local opposition⁶⁰.

Conclusion

Common principles for conflict sensitivity in relation to electricity infrastructure

As the previous examples suggest, fragility and conflict dynamics are context-specific and often finely politically balanced. They are therefore crucial considerations for an understanding of practical conflict-sensitive delivery of electricity projects.

Conflict-sensitive policy considerations

Donors and DFIs should conduct conflict analysis that is sector-specific and tailored to support particular interventions. This does not necessarily require huge resources; indeed, it is a process which could actively involve the expertise of donor electricity and infrastructure experts as part of programme design, which would support their buy-in of the broader process of conflict sensitivity.

Research in Kenya suggests that most disputes associated with wind projects stem from a lack of engagement with communities, and with local politicians, at the earliest stages of project development. Where developers make little effort to address the concerns and interests of local politicians and simultaneously do not forge strong, direct, and trusting relationships with local communities, they are powerless to prevent politicians who feel cut out of the deal (either for legitimate reasons or due to corruption) from fostering local opposition to projects⁶¹. The case of LTWP also demonstrates that engagement with political figures at the local level, when not matched with simultaneous direct engagement with local communities, can be a source of tension as communities perceive leaders to be using project benefits to leverage political support.

This analysis should include a mapping of the host country policy framework around key conflict-related policies. Such policies include commitments to transparency; the legal requirement to conduct ESIA's; policies regarding free, prior and informed consent⁶² and meaningful community engagement; land tenure laws; requirements for compensation; and if there is a clear line of accountability over the responsibility for each of these between the government and private sector actors. This will enable donors to foresee where potential disputes might arise – particularly in contexts where government capacity is lower – and indeed understand where private sector actors may need to take on additional responsibilities in these areas to ensure the smooth running of the project.

Technical support on the implementation of this policy framework is vital. As some of the above examples have indicated, even when the policy

⁵⁸ Cusick, D. (2016) 'How a huge wind farm in Kenya could transform Africa's energy landscape,' *E&E News*, October 11.

⁵⁹ Darby, M (2017) 'Kenya clean energy revolution dogged by land disputes', *Climate Home News*, accessed at: www.climatechangenews.com/2017/02/09/kenya-clean-energy-revolution-dogged-by-land-disputes/

⁶⁰ Rights and Resources Initiative (2017) 'Tenure and Investment in East Africa: Power and BioEnergy'.

⁶¹ Ibid.

⁶² In practice, this means extensive consultations with those affected by any infrastructure development at the earliest stages of project development, and their involvement in the decision making process throughout the life of the project – particularly where natural resources are managed under practices of collective ownership. FPIC best practice is enshrined in several international treaties, such as the International Labour Organization Convention and the United Nations Declaration on the Rights of Indigenous Peoples.

framework supporting conflict-sensitive electricity projects exists, host governments in FCAS are often constrained by capacity gaps and require technical assistance to build their capabilities in this regard. This is vital not only to ensure conflict-sensitive programming happens in practice, but also to ensure the completion of smooth and timely legal processes as electricity projects are developed.

Project design should reflect the particular constraints in FCAS. As we have seen, facilitating access to electricity does not mean the productive use will necessarily follow. Projects should be designed with complementary components which seek to provide targeted support for the up-front cost of connecting, to ensure that differential abilities to take advantage of new electricity access are minimised. Designs should also include targeted promotion directed at potential new users about the gains from the use of electricity – based on an understanding of local productive activities and supporting sectors. Such an approach maximises the benefits of the access initiatives, ensures expectations are met, and supports long-term sustainability.

Monitoring and evaluation should aim to capture not just project effectiveness but also impact. If donors hope to make claims about the impact of electricity projects on broader economic outcomes, such as job creation and even stability, projects must develop more sophisticated quantitative and qualitative methods by which to capture their impact, including over the long term, as current evidence in this regard is lacking.

Conflict-sensitive practice considerations

Treat every context differently. This is an overused tenet in conflict sensitivity but an important one. Although there are some broad practices which are relevant across electricity projects in FCAS, as the examples demonstrate, every context has its own nuances and challenges, and the way programmes are designed and delivered needs to reflect that difference. What works in one context may not be successful in another.

Prioritise information sharing, meaningful consultation, and locally appropriate communication channels. Regular information sharing helps to prevent the spread of misinformation about projects and also serves to manage local expectations. If consultations are conducted in a meaningful way, which is inclusive and locally

appropriate, project-affected communities are more likely to feel part of the decision making process, and to feel able to articulate their concerns and demands. It is also important to capture community perceptions, regardless of their veracity. If people feel they are being unfairly treated or left out of development benefits, even if that is not evidenced, it is important to engage with that discussion. Dismissing unsubstantiated claims will only allow grievances to build.

Early engagement with all parties can prevent unrest and conflict further down the line. Building trusting relationships with both local political figures and directly with communities is a key factor in the success of electricity infrastructure projects. Despite a preference to limit the number of stakeholders engaged with during consultation processes, dealing only with local officials serves to develop or exacerbate tensions and resentment, as those not consulted feel cut out of the deal and are more likely to oppose the project, potentially leading to stoppages, social unrest, and even legal battles. A lack of trust between developers and local communities from the outset makes countering rumour and misinformation particularly challenging, and where a donor or developer's reputation is damaged within a community, through not consulting widely at the earliest opportunity, this is often extremely difficult to repair.

Incorporate CDD initiatives where possible.

Although it is challenging to incorporate CDD into the wholesale design of large-scale electricity infrastructure, including project components which allow for local ownership and decision making, such as locally elected cooperatives to design and manage key local resources, has been shown to positively impact on overall project outcomes and to improve community relationships and cohesion at a local level.

Where possible, ensure local communities directly benefit from the infrastructure which will inevitably cause disruption to their lives. As demonstrated, large-scale infrastructure projects often result in significant social impacts, while the immediate project benefits – namely access to electricity – do not always accrue to the local community. Although provision of additional services, such as schools or health clinics is beneficial, providing electricity access itself ensures communities are directly benefitting from the infrastructure development. This is particularly important in contexts where

infrastructure development disrupts traditional livelihoods but where this can be offset by bringing new employment opportunities associated with electricity access.

Create a balanced scorecard by which to assess the conflict sensitivity of interventions. There is often discussion of the need to create a set of institutional incentives to ensure the genuine uptake of conflict sensitivity in all aspects of a programme cycle. A method by which to do this could be to develop a balanced scorecard which assesses the conflict sensitivity of various interventions relating to the electricity sector, and to pilot the application of the scorecard in selected DFID/DFI portfolios in FCAS.

Make space for honest discussion and lesson learning. It is important to create the space for a frank internal discussion about where projects have or have not been successful in terms of doing no harm and seizing on opportunities to have positive impacts on peace and stability. There is much to be learned from negative stories of where problems have arisen, but it is equally important to share successes and understand *why* they have worked. EEG provides a platform through which to facilitate such a discussion, focusing as it does on a set of fragile and conflict-affected countries which experience challenging political contexts but nevertheless require significant electricity investments.

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Jo has worked extensively on conflict-sensitive development, particularly in relation to large-scale infrastructure projects, including providing recommendations to the World Bank and African Development Bank on conflict-sensitivity and accountability in their programming in Uganda, evaluating conflict-sensitive interventions by the Dutch Embassy and their partners in South Sudan and supporting the design of numerous projects operating in fragile and conflict-affected contexts.

She is a member of the BOND Conflict-Sensitivity group, formerly supporting the co-chair, which brings together practitioners from all development sectors to share learning and best practice and provide recommendations to donors on how to improve and adapt their conflict-sensitive approaches. Jo has also conducted research and written for the forthcoming update of the well-respected Conflict Sensitive Business Practice: Guidance for Extractive Industries, published by International Alert.

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