Palacký University Olomouc
University of Clermont Auvergne
University of Pavia

MASTER THESIS

Semhal Tsegaye
Supervisor: Mgr. Lenka Dušková PhD

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Evaluating the Integration of Conflict Sensitive Approaches in Climate Change
Response: Bangladesh and Nepal

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I hereby declare that this thesis has been composed by myself. Except where stated otherwise by reference or acknowledgement, the work presented here is entirely my own.

Semhal Tsegaye

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Zásady pro vypracování

Effective climate change adaptation and mitigation strategies are of vital importance, particularly for developing societies that are disproportionately facing the impacts of climate change. These strategies, however, may have unintended consequences that can provoke new conflicts or make existing conflicts worse. As such, conflict-sensitive approaches must be integral in developing and implementing climate change adaptation and mitigation projects. This thesis will explore cases of climate change adaptation and mitigation strategies that have or have not integrated conflict-sensitive approaches, and to what end. This paper will then posit some recommendations for how conflict-sensitive approaches can enhance the effectiveness of climate change-related strategies.

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Abstract

As developing countries struggle to cope with climate change, the design and implementation of adaptation strategies is becoming increasingly important. Particularly in fragile and conflict-affected states, the effects of climate change can increase the risk of conflict. In such contexts, it is vital to consider that adaptation strategies themselves can have unintended consequences. As such, adaptation and mitigation efforts must integrate conflict sensitive approaches. This paper attempts to understand how conflict sensitive approaches are being integrated into climate change response in two of the most climate-vulnerable countries: Bangladesh and Nepal. These countries are chosen as case studies because of their vulnerability to climate change, compounded by their social and political challenges. To understand how conflict sensitive approaches are applied, the author examines climate response plans that both countries have published and cross-references the processes used for their planning, design, and implementation with conflict sensitive principles. The author concludes that neither Bangladesh nor Nepal manages to incorporate a conflict-sensitive approach into their adaptation strategies, primarily due to weak governance. International donors, aid agencies, and NGOs also bear some responsibility for not effectively mainstreaming conflict sensitivity into their operations. The author recommends that the international community and the governments of Bangladesh and Nepal take steps to mainstream conflict sensitivity into their climate responses.

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Abbreviations

BCCRF	Bangladesh Climate Change Resilience Fund
BCCSAP	Bangladesh Climate Change Strategy and Action Plan
BCCTF	Bangladesh Climate Change Trust Fund
CAPD-N	Climate Adaptation Design and Piloting-Nepal
CCR	Climate change response
CS	Conflict sensitive
CSA	Conflict sensitive approach
CSO	Civil society organization
GoB	Government of Bangladesh
GoN	Government of Nepal
INGO	International non-governmental organization
LAPA	Local Adaptation Plans for Action
LDC	Least Developed Country
MoE	Ministry of Environment
MoEF	Ministry of Environment, Forests, and Climate Change
NAPA	National Adaptation Program of Action
NCCSP	National Climate Change Support Program Start-up Phase- Nepal
NGO	Non-governmental organization
UNFCCC	United Nations Framework Convention on Climate Change
VDC	Village Development Council

1. Introduction

1.1 Background

While there is a robust debate about the exact links between climate change and conflict, the broad consensus is that the effects of climate change cannot be decoupled from other factors that may contribute to conflict. The Intergovernmental Panel on Climate Change (IPCC) 2014 report points out that while the extent to which climate change causes conflict is debated, it is widely agreed upon that social, political, and economic factors are sensitive to climate change (Adger et al., 2014). When handled poorly, the interaction between climate change and these factors can be a precursor to conflict. This is especially true for populations living in weak states. According to the OECD's States of Fragility report[1], about 1.8 billion people lived in fragile states as of 2016 and 80 percent of the world's poorest populations will live in fragile states by 2030 (OECD, 2018). For these populations, the effects of climate change are compounded by poverty, unaccountable government, poor infrastructure, and sometimes active conflict. Responses to climate change, especially in fragile states, must take into account these social and political dynamics to be effective.

Like many development interventions, even well-intended climate change response (CCR) has a tendency to produce winners and losers if the wider impacts are not considered. For the purposes of this paper, CCR will encompass both climate change mitigation, which aims to minimize the sources of climate change, and adaptation, which seeks to reduce our vulnerability to climate change. An example of CCR that has the potential benefit some at the expense of others is the construction of dams. Dams can have many positive impacts, such as the generation of hydropower and facilitating irrigation (Duflo & Pande, 2005). At the same time, however, these benefits tend to accrue among large, wealthy farmers and those who can already afford to pay for access to electricity and the water needed for large-scale irrigation (McCully, 2006), rather than poor farmers. Dams have also displaced, by some estimates, 40 to 80 million people worldwide, with disadvantaged populations bearing the brunt of displacement (Duflo & Pande, 2005). It is clear that people's existing socio-economic circumstances impacts on their capacity to adapt both to a changing climate and to CCR.

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[1] The OECD States of Fragility 2018 report measures state fragility on a spectrum of intensity across 5 dimensions: political, societal, economic, environmental, security. Under each dimension, there are a number of indicators that help measure risk and coping capacity. For example, some indicators for environmental security include natural hazard exposure, government effectiveness, and resource rent dependence.

Considering the potential of CCR to entrench structural inequalities, it is important that CCR is informed not only by science and technology, but also by an understanding of social and political dynamics. A CS approach (CSA) is one way to account for these dynamics.

This thesis has been written during the author's internship with Asylum Access Thailand (AAT), an organization that provides legal aid and psychosocial support to refugees in Thailand. As an intern with the Community Outreach team, the author has observed and implemented various participatory methods. For example, the author conducted a series of focus group discussions with refugee communities in Bangkok and used these findings to develop a training curriculum for refugee advocates. The practical experience that the author has gained in participatory methods has informed this paper's discussion of participatory and inclusive approaches to policymaking. This thesis has also been written against the backdrop of COVID-19, which escalated into a pandemic during the time of writing. The subsequent disruption and necessary precautions limited the author's ability to gain additional hands-on experience in participatory approaches.

1.2 Theoretical background: Defining Conflict Sensitivity

The principle of conflict sensitivity came to the fore in the aftermath of the Rwandan genocide in the 1990s. It was revealed that perpetrators of the genocide had weaponized aid to consolidate their power (Brown et al., 2009) and international organizations had contributed to structural violence in the preamble to the genocide, for example by hiring primarily Tutu staff (Haider, 2014). In response, international aid actors devoted a significant amount of time and resources to make conflict sensitivity a cross-cutting issue. The Conflict Sensitivity Consortium2 defines conflict sensitivity as the capacity of an organization to:

- understand the context in which it is operating;
- understand how its intervention interacts with that context;
- use this understanding to minimize negative impacts and maximize positive impacts on conflict (Conflict Sensitivity Consortium, 2012).

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2 The Conflict Sensitivity Consortium is a group of 35 agencies that work together on a project to improve conflict sensitivity in development, humanitarian aid, and peacebuilding.

Conflict sensitivity is not an intervention itself, rather it is an approach that should be mainstreamed into all interventions (Haider, 2014). The underlying assumption of this approach is that interventions are not neutral, and they can have unintended consequences that provoke or worsen conflict. As such, development actors are responsible for taking the necessary steps to ensure that their programs are responsive to the social, political, and economic dynamics of the contexts in which they operate.

1.3 Debates in Conflict sensitivity

A central debate in conflict sensitivity is how ambitious a CSA should be. Pandey (2016) writes that conflict sensitivity operates on a "spectrum of ambition" from minimalist to maximalist positions. At the minimum are development actors who are aware of the surrounding conflict dynamics and try to limit the risk that their intervention exacerbates these dynamics, the so-called "do no harm" principle (Tänzler & Scherer, 2018). These actors may wish to remain neutral in political matters, valuing a constructive relationship with host governments to do their work. At the maximum are development actors who are aware that their interventions can contribute to peace by addressing the underlying causes of conflict and take steps to do so (Woodrow & Chigas, 2009). These actors may see how their activities can, for example, bring conflicting partiers together or encourage good governance, and try to integrate these aims into their work (Goodhand & Atkinson, 2001). While minimalists may view the maximalist position as a risky broadening of their mandate to refrain from participating in politics, those on the maximalist end may also consider it part of their mandate to do as much good as possible by addressing the underlying factors that can contribute to conflict.

Additionally, there has been a recognition that, despite the commitments and resources devoted to conflict sensitivity at the international level, operational approaches on the ground remain relatively unchanged. This could be for a number of reasons, including the lack of host government involvement in applying CSAs and the heavy focus on tools to implement CSAs. First, applying a CSA is a process that is primarily driven by donors and international NGOs. Governments are not typically considered stakeholders in the process of implementing conflict sensitivity, because of "their size, complexity, dysfunctionality, corruption, or complicity in violent conflict" (Barbolet et al., 2005, p. 6). Although conflict sensitive (CS) guidelines caution against civil society and NGOs bypassing the state in implementing CSAs (APFO et al., 2004), in reality, donors may prefer to work with NGOs that are directly connected to local

communities. This may be done with the intention to avoid working with corrupt officials and entrenching unequal power structures. Despite this intention, working in parallel with the state can have its own set of consequences. Namely, such parallel structures and systems can undermine the legitimacy of the state and disincentivize the strengthening of state institutions, perhaps undercutting future prospects for peace.

Second, as Paffenholz (2016) points out, "conflict sensitivity is an overtly political issue that has been neutralized by being detached and insulated within toolboxes" (1969). In an effort to take conflict sensitivity from an abstract concept to concrete practice, experts have promulgated a number of how-to guides and checklists to assist practitioners. While CS tools can be helpful, they do not always capture the complexities and implications of implementing a CSA. For example, some practitioners may understand "do no harm" as not challenging the status quo, even if that status quo is perpetuating structural violence (Parlevliet, 2009). Michelle Parlevliet (2009) highlights one case in which a local partner in Nepal was not sure how to reconcile "do no harm" with their work in helping landless farmers and tenants to organize and advocate for themselves. While these efforts help address structural inequalities, in the eyes of landlords, this work could be understood as "doing harm" (Parlevliet, 2009). Toolkits and checklists are of limited assistance in dealing with these challenges and, without practical guidance in CSAs and a lack of accountability for implementing CSAs (Woodrow & Chigas, 2009), some practitioners may shy away from applying CSAs to avoid the politicization of their work. In addition, aid practitioners already contend with overlapping mandates and resource limitations, which may further discourage them from applying a CSA (Gaigals & Leonhardt, 2005, p. 19).

1.4 Pre-requisites for operationalizing CSA

There are two structural prerequisites needed to integrate CSAs that will be considered in this paper: the willingness and ability of organizations and institutions to change (Handschin et al., 2016) and mainstreaming CSAs into existing policy and practice (Bronkhorst et al., 2014).

First, both international aid actors and governments have to be flexible and willing to change both to institutionalize CSAs and to act on the understanding that CSAs can provide. On the part of international aid actors, there is sometimes a disconnect between the commitment to CSAs made in headquarter offices versus the willingness and capacity of local missions to

deliver on these commitments (Handschin et al., 2016). Local missions may view CSAs as too political or too resource consuming to justify prioritizing in the context of their other mandates. The integration of a CSA requires their buy-in to implement CSAs and help build local ownership over CS processes. On the part of host governments, especially governments in fragile states, issues of corruption, high turnover, and clientelism can produce problematic incentive structures and undermine efforts to integrate a CSA into the organizational culture. International aid agencies can lend some support in this respect by providing for enough time, funding, and guidance for governments to integrate CSAs while also following up and holding implementing institutions accountable. At present, donors rarely do this and there are also "no mechanisms for recipients of international assistance to hold organizations accountable for the negative impacts of projects on local people" (Haider, 2014, p. 36). Without systems of accountability for both aid agencies and host governments, institutions are unlikely to make the changes that CSAs require.

Second, a CSA needs to be mainstreamed into existing frameworks rather than being adopted on a project-by-project basis. For international agencies, this means that CSAs should be incrementally integrated into existing frameworks rather than developing entirely new processes and overburdening country staff. For example, conflict analysis—a process by which development actors seek to understand the conflict dynamics of the context in which they operate—can be integrated into organizations' existing assessment frameworks. Mainstreaming should also take place in host governments, with the guidance and support of international agencies. International agencies should careful in how they present conflict sensitivity so that government officials do not view it as too political and perhaps a threat to their power, or irrelevant for local contexts. One way to frame conflict sensitivity, for example, is as an approach that will enable governments to protect their development gains (Gaigals & Leonhardt, 2005, p. 19) and make investments in development more effective. Rather than emphasizing tools and guidelines, trainings with national aid practitioners and state officials should draw from practical, and preferably local, experiences implementing CSAs (Aryal, 2017).

1.5 Understanding CSAs in this paper

Given the above considerations, this paper will operate on a definition of conflict sensitivity that focuses more on the integration of CS *approaches* rather than the use of specific tools. A

CSA implies an ethos that permeates how organizations "strategize, plan, implement, and evaluate their work" (Barbolet et al., 2005, p. 5). This ethos might be made evident through the presence of conflict sensitive principles such as inclusivity, accountability, and participatory approaches.

Additionally, this paper will examine the opportunities and challenges present in Bangladesh and Nepal as they relate to the aforementioned structural prerequisites of a CSA. In the case of Bangladesh, for example, the government's reluctance to change might be evidenced by the predominance of technology and infrastructure projects in its CCR, despite the fact that the success of such projects in the past has been limited due to a lack of social and political considerations (Lewis, 2010). However, institutional change in Bangladesh may be facilitated by the strong development partnerships the government maintains with many international and national NGOs, who can advocate and provide support for the integration of CSAs. In Nepal, instability and high turnover in politics can hamper efforts to effectively mainstream both CSAs and CCRs into development work. At the same time, Nepal has a history of community mediation mechanisms (Dahal & Chandra, 2008) that can lay the groundwork for a CSA at the local level.

1.6 Defining conflict

CSA operates on a definition of conflict that can be understood not only as violent conflict, but also as structural violence (APFO et al., 2004). Galtung (1969), the preeminent scholar on structural violence, defines it as inequality or injustice that is rooted in societal structures and systems, the result being that those with relatively less power are subsequently less able to meet their basic needs. The manifestation of violence, in Galtung's understanding, is not necessarily direct physical harm, but is also "unequal power and consequently…unequal life chances" (Galtung, 1969, p. 171). He further posits that those who benefit from structural violence will do their best to maintain the status quo and keep in place the structures that privilege them.

It is important that conflict sensitivity operates on an understanding of structural violence both because it can lay the groundwork for physical violence and because there is potential for development actors to contribute to structural violence unknowingly. First, structural violence is revealed through patterns of injustice and inequality that repeatedly inflict harm upon those with relatively less power. In an interview, a guerrilla fighter in El Salvador explained that

Americans' preoccupation with physical violence in his country obscured the "violence to the spirit" that he and many others felt when they had to watch their children die of hunger and sickness without being able to do anything (Kent, 2011). The resentment associated with "violence to the spirit" is exacerbated by those institutions and individuals who hold power and use it for private enrichment. It is not difficult to imagine that anger and frustration with being repeatedly subject to systems that devalue peoples' well-being can accumulate and manifest in acute violence.

Second, structural violence is not always apparent on the surface and development actors who are not deeply familiar with the context can easily become complicit in patterns of structural violence. For example, Uvin (1999) writes about how the development aid system tends to operate in a way that is top-down and reinforces state bureaucracies, which can themselves be the perpetrators of structural violence. Additionally, Ferguson (1994) points out that when development organizations integrate their work with governments and provide resources to those governments, they can entrench systems of inequality and corruption. CSAs can help inform development actors of the political, social, and economic dynamics surrounding their interventions so they can avoid becoming complicit in structural violence.

1.7 National adaptation planning

In recent decades, the international community has been actively working with least developed countries (LDCs) to address climate change through the development and funding of state-level adaptation plans. In 2001, the seventh Conference of Parties (COP 7) to the United Nations Framework Convention on Climate Change (UNFCCC) established a work program to help LDCs address the impacts of climate change (UNFCCC, n.d.). This work program includes a process for LDCs to identify their most pressing climate challenges and develop activities to respond to these challenges, resulting in National Adaptation Programs of Action (NAPAs). Technical support and guidelines are provided by the LDC Expert Group (LEG). Once LDCs submit their reports to the UNFCCC, they are eligible to access funds set aside specifically to advance the implementation of the NAPAs, through the Least Developed Countries Fund (LDCF). Between 2005 and 2017, 51 countries had submitted their NAPAs (UNFCCC, n.d.). The NAPA process has been followed by the formation of other state-level adaptation plans, both within international frameworks and outside of them.

This paper examines the cases of CCR plans in Bangladesh and Nepal to address one main question: How are CS principles and approaches reflected in national CCR plans and their implementation? Pursuing this inquiry will involve an examination of the processes used to form CCR plans, how the concerns of vulnerable populations are taken into account, and how structural violence is addressed.

In pursuit of these study objectives, this paper will first outline the research methodology. Next will be a review of the literature regarding national CCR plans. Following that will be an in-depth exploration of the selected cases in Bangladesh and Nepal. Finally, the conclusion will draw comparisons between the two case studies and make recommendations.

2. Methodology

2.1 Multiple case study approach

This paper will take a case study approach because it facilitates an in-depth exploration of the contexts from which CCR plans emerge and in which they are implemented. For the purposes of this study, the cases, or units of analysis, are national and sub-national processes that develop and implement CCR plans in Bangladesh and Nepal. In order to develop a nuanced understanding of these processes and their implications for conflict, they cannot be divorced from the political and social contexts surrounding them. Yin (2009) explains that a case study approach can help the researcher "understand a real-life phenomenon in-depth" within the phenomenon's context because "the boundaries between phenomenon and context are not clearly evident" (p. 79). Other qualitative methods, such as field research and focus group discussions, would lend valuable insight into affected populations' perceptions of and experiences with CCR. However, without a broader understanding of the processes which shape CCR and its implementation, these methods would provide an incomplete picture in regard to the research question at hand. A case study approach allows for a more comprehensive understanding of the development and implementation of CCR.

This paper will examine two cases: Bangladesh and Nepal. These cases have been selected for a set of similarities and differences that can facilitate significant comparisons. In terms of

similarities, both countries are LDCs that, according to the ND-GAIN Country Index,3 score high in terms of vulnerability to climate change and low in terms of readiness (*ND-GAIN Country Index*, 2017). In addition, they are both high warning states, according to the Fragile States Index (The Fund for Peace, 2019). They are both highly prone to rapid-onset disasters such as floods and droughts, which threaten food security and displace people. While Bangladesh's economy is more diversified than Nepal's—78 percent of Nepal's population are employed in small scale agriculture—even Bangladesh's growing manufacturing sector depends on outputs from the agricultural sector (World Bank, 2011b). In recent years, both Bangladesh and Nepal have seen strong economic growth and improving development indicators, evidenced by increases in their Human Development Index (HDI) scores. The ability of Bangladesh and Nepal to effectively respond to climate change will play a vital role in their ongoing development.

At the same time, the two countries also differ in ways that may influence how they approach climate change and conflict. For example, Bangladesh has not suffered from a conflict since the Bangladesh War of Independence in 1971. Nepal, on the other hand, ended a ten-year civil war in 2006. Given that Nepal presumably has more experience dealing with conflict and reconciliation, the national government might be more inclined to be sensitive to conflict dynamics. Moreover, while there is overlap, both countries face some different climate vulnerabilities. While Bangladesh faces a sea level rise that threatens to displace tens of millions of people (Adger et al., 2014), rising temperatures are melting glaciers in Nepal's Himalayan mountains, leading to flooding and landslides (World Bank, 2011b). Overall, in their position on the frontlines of the climate crisis, Bangladesh and Nepal offer an opportunity to analyze and compare how CCR plans can deal with complex interactions between climate change and social and political realities.

2.2 Data collection

The literature drawn upon for this paper is from multiple sources and can be categorized into three main groups. The first group is comprised of the primary climate change plans. For Bangladesh, this paper analyzes the Bangladesh Climate Change Strategy and Action Plan BCCSAP (2009). While Bangladesh also has a NAPA, the BCCSAP is meant to be a

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3 A country's ND-GAIN score is composed of readiness indicators (related to economic, governance, and social factors) and vulnerability indicators (related to exposure, sensitivity, and adaptive capacity) (*ND-GAIN Country Index*, 2017).

culmination of and improvement on Bangladesh's work on the NAPA and is a living document that will inform Bangladesh's future CCR (GoB/MoEF, 2009). In the case of Nepal, this paper focuses on the NAPA (2010) and Local Adaptation Plans for Action (LAPAs) (2011), which are the primary planning documents for CCR. The LAPA framework, which will be discussed in detail below, is unique to Nepal as its main implementation strategy for the NAPA.

The second group are peer-reviewed papers assessing the selected climate change plans of both countries, with a focus on aspects that are relevant to conflict sensitivity, including gender, power, and inclusivity. The third are reports and publications from non-governmental organizations (NGOs), international organizations, and think tanks as well as news sources. This method of sourcing documents is meant to provide for a rich and layered analysis from a variety of perspectives.

2.3 Data analysis

The selected documents undergo a content analysis that takes place in four stages. First, the official climate change plans are cross-referenced with CS principles and guidelines. This stage of document analysis will begin to lend insight into how CSAs are reflected in the official plans. Second, documents from the second and third groups, as outlined above, are analyzed to reveal more about the processes behind developing Bangladesh's and Nepal's national climate change plans. Again, these processes are examined with reference to CS principles. The third stage of analysis also draws upon documents from the second and third groups, but with a focus on the implementation of climate change plans, how CSAs are or are not integrated, and to what end.

2.4 Limitations of methodology

Due to time and resource constraints, including the onset of COVID-19 during the time of writing, this research will not include data from direct observations, interviews, focus group discussions, or other primary sources. The researcher recognizes that these sources could contribute to a richer understanding of the research question. Additionally, due to the inherently context-specific nature of case study research, the findings are not necessarily generalizable to other settings. Taking these limitations into account, a better understanding of the role a CSA can play in countries as vulnerable as Bangladesh and Nepal will hopefully provide some guidance for other LDCs grappling with climate change.

3. Literature Review

3.1 Conflict sensitivity and Climate Change Response

The IPCC 2014 report points out that while the extent to which climate change directly causes conflict is debated, it is widely agreed upon that various social, political, and economic factors are sensitive to climate change (Adger et al., 2014). When handled poorly, the interaction between climate change and these factors can worsen structural violence and be a precursor to conflict. As such, there is increasing recognition that effective CCR need to integrate CS principles. This literature review will first discuss main themes in the research around CCR, conflict, and conflict sensitivity. These themes are centered around critiques of technocratic approaches, the importance of strong institutions and international assistance, and the importance of mainstreaming. Once those central themes are explored, this review will examine the literature on CCR in Bangladesh and Nepal specifically.

3.2 Limitations of technology and the importance of institutions

First, many scholars agree that while technology and engineering solutions can play an important role in CCR, a predominantly technical approach can produce unintended consequences (Bahadur et al., 2017; Lewis, 2010; Nagoda, 2015; Ojha et al., 2016). If technocratic approaches do not take into account local power dynamics, they are more prone to elite capture, which comes at the exclusion of marginalized groups (Ait Hamza et al., 2012). Strategies such as developing drought resistant crops and constructing costal embankments are not sufficient to address the underlying causes of peoples' vulnerability. R.J.T. Klein (2011) cautions that a narrow focus on technology-based solutions will "be only partially effective at best, or even maladaptive" (p. 165). Inderberg et al. (2015) also note that strengthening peoples' adaptive capacity requires broader reforms, such as providing secure rights to land and resources, rather than top-down strategies that lack the buy-in of local communities.

Second, the ability of institutions, particularly in fragile and high-risk states, to cope with the effects of climate change can determine whether or not those effects lead to conflict. However, given that some states lack the will and/or capacity to address the root causes of peoples' vulnerability, some authors stress the role that the international community can play to ensure that CCRs are CS (Smith & Vivekananda, 2008; Tänzler et al., 2013). Smith and Vivekananda

(2008) highlight two main reasons that the international community should assist states that lack sufficient institutional and financial capacity: maintaining international security and working toward the goals of sustainable development. International security is a concern even if conflicts are internal, as the consequences tend to spill across borders, and "the cost of civil war is far higher than the cost of adaptation" (Smith & Vivekananda, 2008, p. 31). Also, addressing the determinants of vulnerability to climate change means addressing issues central to the sustainable development agenda, like poverty and gender inequality (Inderberg et al., 2015). At the same time, while international support to strengthen institutions is important, scholars also point out the risk of strategic dilemmas when it comes to external assistance. For example, if the objectives of donors and host governments are opposed, the tension between them increases the possibility that aid does more harm than not (Ait Hamza et al., 2012). As such, it is important for scholars to consider more specifically the ways in which the international community would provide support to state institutions to enhance their capacity to respond to climate change.

Third, many scholars agree that CCR should be mainstreamed into states' overall development agendas since peoples' vulnerabilities to climate change are determined by typical development indicators (Ayers et al., 2014; Louis Lebel et al., 2012; Mitchell et al., 2006; Mogelgaard et al., 2018). However, there are different approaches to mainstreaming, and the approach taken can determine its effectiveness. Klein (2011) differentiates two main perspectives on mainstreaming adaptation: a technology-based view and a development-based view. A technology-based approach, as discussed above, is unlikely to address the underlying drivers of vulnerability (Inderberg et al., 2015) and can simply mean that investments are made in climate-proofing technologies. A development-based approach, however, can integrate climate-proofing technologies while more substantially engaging existing national policies regarding health, infrastructure, education, and others to ensure that the effects of climate change are being addressed through a multi-sectoral approach (Ayers et al., 2014; Pachauri & Energy and Resources Institute, 2010). Taking the development approach to mainstreaming facilitates the integration of a CSA into CCR, as they share common goals of building resilience.

3.3 Bangladesh

The two main documents regarding climate change policies and strategies in Bangladesh are the NAPA, developed in 2005 and revised in 2009, and the BCCSAP, developed in 2009. Many scholars point out that Bangladesh was one of the first countries to develop a NAPA, highlighting the government's recognition of the pressing need for a coordinated national climate change strategy (Ayers & Forsyth, 2009; Reid, 2017; Zamudio & Parry, 2016). At the same time, Bangladesh's 2009 NAPA has been criticized for taking a project-based approach and being positioned for an international audience rather than stemming from domestic political will (Reid, 2017). In this vein, some scholars commend the development of the BCCSAP because, relative to the NAPA, the BCCSAP is mostly nationally-driven and funded, which authors point to as an indicator of its sustainability (Ayers et al., 2014). The BCCSAP is considered a "comprehensive and integrated example of adaptation planning" and some argue it is one of the most important strategy documents in South Asia (Ayers et al., 2014; Tänzler et al., 2013). It includes considerations not present in the NAPA, such as the impact that climate change has on migration (Walsham, 2010). Scholars highlight that the BCCSAP is considered a "living document" to be revised based on changing realities and challenges, highlighting that Bangladesh's CCR strategy is highly flexible and adaptive (Vij et al., 2017).

While there is significant debate among researchers regarding the GoB's CCR and apprehension about the potential for internal and transboundary conflict, few authors have explicitly analyzed Bangladesh's CCR through a CS lens. Rather, researchers have evaluated documents such as the NAPA and BCCSAP on factors which can be related to CS principles, such as the degree of participation and gender sensitivity (Lopa & Ahmad, 2016; Nahian & Bala, 2015; Shabib & Khan, 2014). Some authors outline recommendations for how to include CSAs into Bangladesh's existing CCR documents, but these recommendations are fairly broad and it is not clear how feasible they are (Dalrymple et al., 2009). Given the significant risk factors present in Bangladesh, more detailed research is needed on how CSAs could work in practice.

3.4 Nepal

Nepal was the first country in the world to create a LAPA process and has been commended for its emphasis on participatory development and support for grassroots efforts (Peniston,

2013; Regmi et al., 2014). In 2010, Saferworld[4] lent CS expertise to the LAPA process, working with local stakeholders to develop participatory analyses and build their capacity in CS tools (Campbell, 2011). However, the effectiveness of this effort is not clear, as there are no published results.

Some scholars highlight the complexity of using CS tools, such as participatory approaches, in Nepal. Nagoda and Nightingale (2017) use the case study of Humlu, a food insecure district in Nepal, to make the point that participatory approaches are undermined by a legacy of socio-economic exclusion that still persists in Nepal. They argue that participatory climate change adaptation processes can "entrench existing power relations and social hierarchies rather than effectively challenge them" (Nagoda & Nightingale, 2017, p. 91). While the NAPA and LAPA emphasize the importance of cooperative, community-based user groups and bottom-up participation, the apolitical nature of the documents can undermine efforts to genuinely alter the status quo (Ojha et al., 2016).

3.5 Conclusion

The debates and considerations that are present throughout the literature on conflict, conflict sensitivity, and CCR highlight how complex and multi-faceted these issues are. There is a need for more research into efforts to integrate CSAs into CCR and how to do so concretely and effectively. By examining CS and CCR in two specific and frontline contexts, this paper will attempt to provide more insight into the associated opportunities and challenges.

4. Bangladesh

4.1 Background: Bangladesh's climate vulnerabilities

Bangladesh is uniquely situated in one of the largest deltas in the world. The low-lying Ganges Delta is formed by the confluence of the Ganges, Brahmaputra, and Maghna rivers (Walsham, 2010). The country has an average elevation of four to five meters above mean sea level, one-third is susceptible to tidal inundation, and nearly 70 percent of the country is flooded during heavy monsoons (World Bank, 2011a). The effects of climate change are felt differently in different regions of the country. Bangladesh's northwest will be most impacted by temperature increases and drought. The northeast and middle of Bangladesh will be heavily impacted by

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[4] Saerworld is an INGO that works in conflict prevention and has an expertise in conflict sensitivity. More information available from: https://www.saferworld.org.uk.

more frequent and more intense floods. The coastal area and Bangladesh's islands will bear the brunt of the rise in sea level and salinity intrusion. Bangladesh faces a combination of slow and rapid onset climate events that, when coupled with its socio-economic standards, illustrates why Bangladesh is considered one of the most climate vulnerable countries in the world.

Slow-onset disasters

Increasing salinity of soil, sea level rise, rising temperatures, and drought are just some of the slow-onset climate events that Bangladesh faces. As the sea level rises and Bangladesh's coast, home to 28 percent of the population (Environmental Justice Foundation, n.d.), salt water encroaches further inland. The intrusion of saltwater, particularly in the south-west of Bangladesh, diminishes the amount of land that is viable for cultivation. The effects are likely to be felt most by marginalized and rural landless farmers who depend on agriculture to sustain themselves (Walsham, 2010). It is estimated that over 35 million Bangladeshis could become climate migrants by 2050 because of flooding and drought (World Bank, 2011a). Drought and rising temperatures will also affect food and water security in the country.

Rapid-onset disasters

In addition to the progressive effects of climate change, Bangladesh is also particularly prone to natural disasters such as cyclones and floods. It is ranked the most vulnerable country in the world in terms of tropical cyclones, according to the UNDP (*Climate Change Profile Bangladesh*, 2018) and about 60 percent of worldwide deaths caused by cyclones in the past two decades have been in Bangladesh (World Bank, 2011a). There have been two devastating cyclones in recent history: Sidr in 2007 and Aila in 2009, which killed 3,363 and 190 people respectively (Shaw et al., 2013). These casualty numbers indicate a vast improvement in disaster preparedness and response since the cyclone of 1991, which killed over 138,882 people (Shaw et al., 2013). Beyond the immediate aftermath, however, these cyclones have disastrous impacts on housing, infrastructure, public health, livelihoods, and overall quality of life for years following. Floods are a more common event (See Appendix A), inundating about 25 percent of the country every year, with severe floods covering over 60 percent of the country every four to five years (*Climate Change Profile Bangladesh*, 2018). They affect a greater amount of the population than any other natural hazard in Bangladesh (World Bank, 2011a). Floods can ruin thousands of hectares of agricultural land and further salinate coastal lands, affecting not only harvests but also the long-term productivity of these lands.

Socio-economic context

Bangladesh's vulnerability to climate change is intensified by its socio-economic realities. While poverty in Bangladesh has decreased by half and the country has seen significant economic growth in recent decades, one in four Bangladeshis still live in poverty (World Bank, 2019, p. 7). Additionally, the reduction in poverty is not evenly distributed, with rural areas accounting for 90 percent of this decline while urban areas have seen little improvement (World Bank, 2019). Bangladesh is one of the most densely populated countries in the world, with 1,240 people per square km. (World Bank, 2018) and the urban population making up 38.2 percent of the total population while urbanization is increasing by 3.17 percent annually (*The World Factbook: Bangladesh*, 2020). Increasing landlessness, natural disasters, and sea level rise all contribute to rural-urban migration. Cities in Bangladesh, however, are not equipped to absorb hundreds of thousands of migrants and many migrants are forced to eke out their living in urban slums. Women are particularly vulnerable to the effects of climate change. For example, women are constrained in seeking protection from natural disasters because of social rules which dictate that male relatives accompany them when they move, among other factors (Tanjeela & Rutherford, 2018). In the 1991 cyclone, 90 percent of deaths were women and children (Shabib & Khan, 2014).

For Bangladesh to protect and sustain the development gains it has made in recent years, effective CCR is necessary. Given how interdependent environmental and human security are in Bangladesh, it is imperative to ensure that the efforts to address one dimension does not negatively impact on the other. For this reason, adopting a CSA is vital to ensure that CCR does not inadvertently provoke or exacerbate tensions in a context with such heightened vulnerability to the effects of climate change.

4.2 Opportunities and Challenges for CSAs in Bangladesh

This chapter will begin with an overview of opportunities and challenges as they relate to the structural prerequisites for CSAs in Bangladesh. Then, this chapter will analyze the BCCSAP and its implementation through a CS lens, noting the presence and absence of CS principles. In addition to examining the role of the Government of Bangladesh (GoB) in incorporating CSAs, this chapter will also examine the roles of international actors in providing guidance and support for the application of CSAs.

Opportunities

One key opportunity that could help compel institutional change and mainstream CSAs in Bangladesh is the strength and influence of donors, NGOs, and civil society. As aforementioned, CSAs usually enter national development efforts through the work of NGOs and donors. Bangladesh is home to 2,625 registered NGOs and around 22,000 NGOs registered and otherwise (Iftekharuzzaman, 2018) and received about USD 6.21 billion in foreign aid in 2018-2019 (H. Kabir, 2019). NGOs established their credibility in Bangladesh after their relief and rehabilitation efforts in the aftermath of a series of natural disasters in the 1980s, 90s, and early 2000s (Nurul Alam et al., 2007). While there was some debate about NGOs being too involved in Bangladesh's politics in the 1990s (for example, through activities like voter education and election monitoring) NGOs are understood by the government to be central players in Bangladesh's socio-economic development (Nurul Alam et al., 2007). Shamsul Haque (2002) writes about how a combination of local populations' favorable attitudes toward NGOs and international pressure to give NGOs more responsibility has inclined the GoB to partner with NGOs in a number of state development activities. To the extent that NGOs build the capacity of state actors and do not take over the GoB's responsibility to deliver on socio-economic development, NGO-GoB partnerships can provide an avenue through which CSA is integrated into CCR. This, of course, requires NGOs to mainstream CSAs into their own practices and devote the resources needed to build ownership of CSAs among state actors.

Challenges

A potential obstacle to the institutional change needed for CSAs to be integrated into CCR in Bangladesh is the reluctance of the state and national experts to move away from purely technical approaches to CCR and consider how social and political factors intersect with the effects of climate change (Stock et al., 2020). In the Handbook of Climate Change Adaptation, Parvin and Johnson (2015) posit that the bias toward physical adaptation measures in Bangladesh is rooted in a history of being viewed by the international community as a poor, disaster-prone country, a view that was encouraged by policy makers and power elites of Bangladesh. This perception resulted in billions of dollars of financial support from donors and development partners being channeled into infrastructure projects such as coastal embankments, raising roads, and cyclone shelters (GoB/MoEF, 2009). Even as the GoB expressed an understanding of the social dimensions of vulnerability to climate change in the BCCSAP, the decades of experience and expertise in large-scale, engineering solutions helped entrench a view of CCR that favors top-down, physical and technical responses rather than

people-centered, context-specific responses. Even when infrastructure-based responses to climate change have failed, as will be discussed below, it remains a challenge to integrate lessons learned into policies (Saleemul Huq & Rabbani, 2011).

Another obstacle to integrating CSAs in Bangladesh is rampant corruption, as it consistently ranks among the most corrupt countries in the world. In 2019, Transparency International's Corruption Perceptions Index ranked Bangladesh 149 out of 180 countries, with 180 being the worst country in terms of corruption (*Corruption Perceptions Index*, 2020). Among South Asian countries, Bangladesh ranks second worst in terms of corruption after Afghanistan (*Corruption Perceptions Index*, 2020). Corruption is especially pervasive in the public sector, where political leaders depend on patron-client networks with elites and lower-level government officials to maintain their power (Rahman, 2018). The culture of corruption in Bangladesh is evident when we look at the issue of tenure insecurity. Tenure insecurity[5] is a pervasive problem in Bangladesh (Hiscock, 2008), and one that is becoming more acute as Bangladesh loses cultivable land. The elite and wealthy are common perpetrators of practices such as land grabbing and are able to do so because of their privilege and access to power. They use tactics such as bribing and coercing land officials and paying "gangs" to intimidate residents into giving up their land (*Bangladesh: Food Security and Land Governance Factsheet*, 2016). The government has not only failed to implement its own laws meant to address inequality in land holdings, government officials are complicit in the corruption (*Bangladesh: Food Security and Land Governance Factsheet*, 2016). Powerful actors such as this are likely to resist the integration and mainstreaming of a CSA, which can threaten their grip on power by bringing to the fore issues of social inequality and political failure.

4.3 Introduction to the BCCSAP

The BCCSAP is a ten-year program originally set to run from 2009 to 2018 based on the GoB's vision to "eradicate poverty and achieve economic and social well-being for all the people" through a "pro-poor" strategy (GoB/MoEF, 2009, p. xvii). The BCCSAP is supposedly being updated in 2020 to cover another ten-year period. It is not clear how or if the implementation of the BCCSAP was altered in the interim period between 2018 to 2020. The BCCSAP includes 44 medium to long term programs that fall under six themes:

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[5] Tenure insecurity includes issues of land grabbing, landlessness, eviction, and loss of land/property to natural disasters (Hiscock, 2008).

1. Food security, social protection and health
2. Comprehensive disaster management
3. Infrastructure
4. Research and knowledge management
5. Mitigation and low carbon development
6. Capacity building and institutional strengthening

This chapter will start with an analysis of the process by which the BCCSAP was formed, followed by an examination of the content of the BCCSAP. The final section will look into the implementation of select BCCSAP projects.

4.4 Formulation of the BCCSAP

Concerns regarding the BCCSAP's integration of CSAs begin in the lack of input that vulnerable populations had in the planning phase. The Ministry of Environment, Forest, and Climate Change (MoEF) initially assigned a group of expert consultants, funded by DFID, to formulate the strategy (Alam et al., 2011). This process was met with criticism by civil society, who opposed the fact that the BCCSAP was developed by consultants and endorsed by policymakers, lacking more inclusive, grassroots participation (Hossain, 2009). It was then revised in 2009, when a new coalition government came into power and established a committee of representatives from different ministries to review and revise the 2008 BCCSAP (GoB/MoEF, 2009). Ultimately, a number of stakeholders, including civil bureaucrats, national experts, donors, and NGOs, were involved in developing the BCCSAP.

However, even after more stakeholders were included in the planning process, the BCCSAP ended up as an "expert-driven document" (M Sajid Raihan et al., 2010) missing the direct involvement of the "most vulnerable populations" (Alam et al., 2011). No separate needs assessment was carried out for the BCCSAP (Md. Masud-All-Kamal, 2017). Rather, many key actors on the drafting committee considered the involvement of NGOs and civil society as representative of these populations' concerns (Alam et al., 2011). They also treated the findings from the NAPA regional consultation meetings as sufficient, believing that the results would not change significantly (Shaw et al., 2013). This is despite the fact that the NAPA process was met with criticism for its own lack of substantial engagement with vulnerable populations, as no representatives from these populations were on the NAPA team (Huq & Khan, 2006). In

preparation for the NAPA, four regional consultative workshops were held that incorporated stakeholders such as farmers, social activists, fishermen, representatives of civil society, and women (GoB/MoEF, 2009). It seems that the primary takeaways from these workshops were that people felt that the climate had changed for the worse and that people's socio-economic status, where they lived in the country, and their gender impacted on how they felt the impacts of climate change (GoB/MoEF, 2009). There seems to be no deeper analysis of the root causes of people's vulnerabilities nor an appreciation for their knowledge and existing adaptive practices. Given the inadequacies present in NAPA's needs assessment, it does not provide sufficient insight into the concerns of vulnerable populations that should act as the foundation of the BCCSAP.

In the formulation phase, the influence of international donors is also notable. Vij et al (2018) highlight that Bangladesh shifted from the NAPA to the BCCSAP as their main climate planning document, and integrated the BCCSAP into their development agenda Vision 2021, because they were not getting enough adaptation funding. This prompted the government to consider a strategic reframing so that donor agencies could "divert funds in the name of adaptation and development, thereby achieving dual benefits" (Vij et al., 2018, p. 81). Their research also reveals that the idea of mainstreaming CCR into the national development agenda mostly originated from donor agencies and INGOs. International stakeholders also bear some responsibility for the lack of engagement with vulnerable populations when developing the BCCSAP. One reason cited by experts who were involved in the process was that DFID financing did not include "resources or guidance on involving [vulnerable groups] in the process" (Alam et al., 2011, p. 58). It is clear that the GoB is responsive to what donors want and this influence can act as an entry point for donors to encourage the integration of CSA. This influence also comes with the responsibility for donors to provide funds, longer timelines, and guidance for CSAs, as well as hold the GoB accountable for applying CSAs.

A conflict analysis in the initial stages of CCR is vital and requires a participatory approach with the direct involvement of all relevant stakeholders. Assuming that NAPA's assessment process was sufficient means that weaknesses of the NAPA process carried into the BCCSAP, rather than being improved upon. Moreover, local populations are stakeholders in and of their own right and NGOs and civil society organizations (CSOs) cannot be considered substitutes or representatives for these voices. There was one positive instance of a participating CSO organizing local-level consultation meetings with about 500 participants to gather the opinions

of stakeholders for the BCCSAP (Lopa & Ahmad, 2016). But that effort seems to be the utmost extent to which local populations were involved. A key aspect of conflict analysis is considering multiple views and challenging assumptions to ensure that "we do not perpetuate biased perspectives and to identify gaps in our own knowledge of conflicts" (Conflict Sensitivity Consortium, 2012, p. 6). Although many of them provide essential services and act as advocates for vulnerable communities, NGOs and CSOs are not without their own complex power dynamics and interests that may color how they represent vulnerable populations. There is also evidence that the selection of NGOs and CSOs to participate in drafting the policy was not apolitical, and that they "were engaged either arbitrarily or selectively, depending on who had good rapport with the government bodies" (Lopa & Ahmad, 2016, p. 790). It appears that drafting the BCCSAP was mostly a technocratic exercise, lacking essential elements of CSA.

4.5 BCCSAP Content

Inconsistencies between justification and strategy

The BCCSAP can be divided into two parts, the first of which is meant to justify the climate change strategy and the second of which details specific programs. In the first section, the GoB describes the strategy as being driven by "sustainable development, poverty eradication and increased well-being of all vulnerable groups in society with special emphasis on gender sensitivity" (GoB/MoEF, 2009, p. xv). The first section repeatedly stresses the vulnerability of the poor, women, coastal and urban slum dwellers, rural populations, and migrants. It explains that building the country's resilience to climate change is critical to protecting the "lives and livelihoods of...the poorest and most vulnerable families, including women and children" (GoB/MoEF, 2009, p. 2). The GoB emphasizes that the constraints and opportunities presented by climate change will be integrated into all sectors of development (GoB/MoEF, 2009, p. 3). It also states that "the needs of the poor and vulnerable, including women and children, will be mainstreamed in all activities under the Action plan" (GoB/MoEF, 2009, p. 27). With such considerations, the first section indicates that the GoB understands the intersectionality of issues regarding human security and climate change and seems committed to addressing these issues.

However, despite positive indications in the first section of the BCCSAP, the focus on vulnerable populations and their concerns is not consistently reflected in the second part, which outlines the programs to be pursued under each theme. First, the aforementioned commitment

to mainstreaming the needs of the poor and vulnerable into all activities is not apparent in the program descriptions. For example, the first theme—food security, social protection, and health—is the pillar under which one might expect to find more vulnerability-centered programs. The first goal listed under this pillar is increasing the resilience of vulnerable groups through "community-level adaptation, livelihood diversification, [and] better access to basic services and social protection" (GoB/MoEF, 2009, p. 27). There is some attention paid to these populations, particularly in theme one's final two programs, which are explicitly centered around protecting the livelihoods of the most vulnerable. However, the other seven programs under theme one are largely technology-focused and reflect a top-down approach in which conditions are assessed, adaptive measures are developed, and technologies are then disseminated to farmers. Even where the adaptive measures that are already used by farmers are acknowledged, the program's actions do not involve building on local knowledge. Rather, it suggests developing and testing new adaptive measures and, again, disseminating that information to farmers. It is true that the scale and speed of climate change will bring new challenges that farmers may not have adaptations for, but their knowledge and innovations are valuable and could inform future adaptation efforts. Inserting external expertise and technology without understanding the local context can have unintended consequences.

The disconnect between the first and second sections of the BCCSAP highlights the importance of using a CSA. It follows that since a conflict analysis was not engaged from the start, that issues of power and access would not be reflected in the programs. While the GoB appears to understand that climate change will have disproportionate impacts on the poorest populations, it is perhaps not ready or willing to address the underlying causes for this imbalance.

The shortcomings of engineering solutions

The BCCSAP's focus on technical solutions obscures from view the political solutions necessary to address the underlying issues that influence peoples' adaptive capacity. The majority of programs in the BCCSAP focus on research and development, physical infrastructure, institutional capacity, and technology development. Only nine programs out of 44 focus on human capacity development (Alam et al., 2011). The number of projects that have been implemented under the infrastructure pillar are nearly double the amount of projects under all of the other pillars combined (Yasmin, 2018). Infrastructure and technology do have important roles to play in adaptation, especially in a country that is so prone to natural disasters. However, pursuing technology and infrastructure-centered responses at the expense of building

individuals' resilience to climate change is a critical weakness. Vulnerability is not rooted in a lack of appropriate technology, it is a "socially determined phenomenon, because of the inequitable distribution of resources and low capacity of the poor to adapt" (Adger, 2006, p. 189). Even the utilization of disaster shelters is affected by people's degrees of vulnerability. In the aftermath of Cyclone Sidr, there were reports of people having died because they did not want to leave their livestock and homes unguarded or feared that they would be forced off of their land if they went to the shelters (Hiscock, 2008, p. 22). Women, in particular, are more hesitant to use cyclone shelters because of poor sanitation facilities, the need to care for children, and the fear of sexual violence and social stigmatization for taking shelter with other men (Shabib & Khan, 2014). The economic situation of women after disasters is also particularly tenuous because it is less socially acceptable for them to migrate in search of work, so they are left to make a living through subsistence farming or other activities that are sensitive to climate change (The Asia Foundation, 2012).

Focusing on such technocratic solutions is particularly puzzling in the case of Bangladesh because the failure of such an approach has played out before. Following two devastating floods in the 1980s, international donors became highly interested in coordinating a response to help Bangladesh deal with its flood problem. The resulting Flood Action Plan (FAP) of the 1990s included 26 studies and pilot schemes with the ultimate purpose of constructing tall embankments on the sides of Bangladesh's three main rivers, and was to be "one of the largest development projects ever undertaken" (Lewis, 2010, p. 120). However, people disagreed with the top-down approach that was taken, as the plan was developed in London under World Bank leadership (Hanchett, 1997). The engineering solutions included in the FAP bypassed the vast experience people had in flood-prone areas and largely ignored alternative solutions that would be people-centered. The opposition grew so strong that those who had started the FAP initiative eventually "lost confidence in the project" (Lewis, 2010, p. 122). The lesson meant to be drawn from this case was that privileging "'expert knowledge'…was a poor substitute for engaging with local communities and their institutions" (Lewis, 2010, p. 122).

There has been progress since the FAP and there is also much room for improvement. Although they are not stand-ins for local communities, the involvement of CSOs and NGOs in the BCCSAP process is an improvement on the FAP process. However, the parallels between the failures of the FAP and the BCCSAP are striking. It seems that the GoB still does not fully appreciate that the success and sustainability of infrastructure and technology-based projects

depends on an understanding of the root causes of peoples' vulnerabilities and a commitment to addressing them. A CSA aids in identifying these vulnerabilities and provides insight that can inform the design of more effective infrastructure projects.

4.6 BCCSAP Funding

A CSA is time and resource-intensive and requires the commitment of both the international community and developing countries to provide sufficient funds. The two main funding channels for the BCCSAP are the Bangladesh Climate Change Trust Fund (BCCTF) and the Bangladesh Climate Change Resilience Fund (BCCRF). The former was established and is funded by the GoB and the latter was established to bring in funding from development partners. The BCCRF was owned and managed by the MoEF while the World Bank was the trustee of the Fund until it was cancelled in 2017, due to ongoing disagreements between the World Bank and the GoB about ownership of the fund (World Bank, 2016).

Donors' Responsibility

The international community should support LDCs in providing sufficient funding and guidance in order for them to effectively and thoroughly integrate CSAs into CCR. This starts with international donors meeting their financing commitments under the UNFCCC. According to UNFCCC principles, funding for adaptation should be additional to development assistance because, "climate change is an 'additional' burden, on top of development, that developing countries bear but are not responsible for creating" (Ayers, 2010, p. 88). At COP 15, developed countries committed to providing USD 100 billion annually by 2020 for developing countries to deal with climate change but, as of May 2020, about USD 20 billion has been pledged (Green Climate Fund, 2020). Without adequate funding, it is unlikely that developing countries will prioritize CS measures, which are resource-intensive and do not yield tangible outcomes that are immediately apparent. Additionally, international donors have been reluctant to directly fund the GoB due to concerns about corruption and misappropriation. While this is understandable, efforts should be taken to build the capacity of Bangladesh's institutions rather than duplicating their functions.

GoB's Responsibility

The GoB also has the responsibility to be transparent in allocating funding and ensure accountability to local communities. In the absence of a needs assessment and detailed budget breakdown, the cost estimates provided for BCCSAP programs have been criticized for being

vague and undermining Bangladesh's credibility (Hossain, 2009). Without further specification and a prioritization of actions, the BCCSAP states that an infrastructural budget of USD 500 million will be needed in the first two years (Zamudio & Parry, 2016). In 2012, at the time of Transparency International Bangladesh's (TIB's) study into climate financing, there were five to six officials monitoring 63 projects to the amount of about USD 150 million across Bangladesh (Haque et al., 2012, p. 17). With such limited institutional capacity, it is difficult to imagine that appropriate considerations regarding vulnerable communities and conflict potential were taking place. Furthermore, a lack of transparency regarding the process by which projects were selected for funding, how they were implemented, and a lack of coordination among stakeholders led to corruption. In their research into a cyclone-resistant housing construction project, TIB found "failures in the consultation processes with local stakeholders" and that funds and building materials were "siphoned off by local contractors, leaving the construction project unfinished and woefully inadequate" (Haque et al., 2012, p. 13). Incidents such as these demonstrate how mismanaged climate funds can exacerbate existing inequalities and power imbalances.

4.7 BCCSAP Implementation

The implementation of Bangladesh's CCR provides the opportunity to examine how the formulation and content of the BCCSAP have contributed to or detracted from the effectiveness of CCR in Bangladesh. As of June 2018, 512 projects were implemented with funds from the BCCTF (Yasmin, 2018). Until the closing of the BCCRF in 2017, ten projects were implemented with its funds (World Bank, 2016). For the purposes of this paper, only projects implemented under the BCCSAP and funded through its mechanisms will be examined.

Without a monitoring and evaluation framework and a dearth of documentation, the implementation of most projects under the BCCSAP are difficult to assess. Moreover, the effects of these projects on peoples' vulnerability and the potential for conflict will take many years to understand. However, studies conducted on a number of projects can still be instructive as to how effectively the BCCSAP has been implemented. Under theme two of BCCSAP, Comprehensive Disaster Management, the BCCTF supported a project to build cyclone-resistant homes and safe drinking water for poor households in the Satkhira district. Under this project, 353 cyclone resistant homes were built and allocated to people who had lost their homes to natural disasters (Yasmin, 2018), While the project did provide homes for people

who needed them, the project was also supposed to include an insurance scheme in case of loss of property or income, which did not materialize (Yasmin, 2018). Insurance plays an important role in securing people's livelihoods and lives, as land grabbing in the aftermath of natural disasters is not uncommon and can deter people from seeking shelter (Sovacool, 2018). Interviewees also mentioned that not all beneficiaries were chosen through proper procedures and that politics contributed to the decision-making process. This issue was mirrored in a cyclone-resistant housing construction project in another district, in which ineligible households became beneficiaries by bribing officials or through nepotism (TIB, 2017).

On the other hand, another BCCSAP project, entitled Revegetation of Madhupur Forests through the Rehabilitation of Forest-Dependent Local and Ethnic Communities (RMF), was somewhat successful in minimizing a long-running, occasionally violent, conflict between the forest management agency and tribal forest dwellers (K. H. Kabir et al., 2020). RMF was a participatory forest management project intended to conserve the Madhupur Forests by creating alternate livelihood options for forest resource users and sharing the responsibility for managing forest resources among community members (Abdullah Al Faruq et al., 2017). The project involved 700 participants, 500 of whom were illegal loggers and the other 200 being poor forest dependent people (Abdullah Al Faruq et al., 2017). Prior to the project, there were high tensions between tribal forest dwellers and the Forest Department (FD) which resulted in the deaths of several indigenous people (K. H. Kabir et al., 2020). These conflicts revolved around times when the FD would take actions in the forest without informing or consulting tribal forest dwellers, including cutting down 1,000 hectares of banana plants that belonged to tribal forest dwellers and filing apparently false claims with the police against tribal people (K. H. Kabir et al., 2020). As part of this project, participants received training in alternate income sources, they were given seedlings to plant and care for, and received monthly allowances as Community Forest Workers (Khan & IUCN Bangladesh Country Office, 2014). In doing so, the FD sought the participation of tribal forest dwellers in the decision-making process, worked to understand their concerns, and incorporated these concerns into the RMF program. Among other positive outcomes, participants reported that the FD followed through with their promises and did not harass them as they used to, making them feel more secure and trusting of the FD (K. H. Kabir et al., 2020). The FD's previous approach to deter illegal logging involved shooting at encroachers and filing court cases against them, and it was unsuccessful in preventing logging (K. H. Kabir et al., 2020). During the project, illegal logging stopped completely (Yasmin, 2018) demonstrating how community participation and inclusive

approaches can be effective both in protecting the environment and in bridging the divide between conflicting parties.

4.8 Conclusion

Relative to other LDCs, Bangladesh is notable for the progress it has made in CCR and the amount of national expertise it has built. However, while the connections between human and environmental security are recognized by the GoB, there is a lack of willingness to innovate new responses. This shortcoming is mirrored in the international community, which also has yet to mainstream CSAs into CCR efforts. Corruption and a lack of accountability to local populations further stymies CSAs and CCR efforts. The BCCSAP document itself does not exist in Bengali, further limiting the extent to which local populations can hold the government accountable.

5. Nepal

5.1 Background: Nepal's climate vulnerabilities

Nepal's climate vulnerability is, in part, driven by its varied topography. Nepal can be divided into three ecological zones that run from east to west: snow-covered mountain ranges, mid hills, and the Terai plains (See Appendix B). Each of these geographies support a wide variety of cultures and livelihoods that are designed to take advantage of the opportunities present in different ecosystems (Ajaya Dixit, n.d.). Each geography also comes with its own set of climate risks. The sloping Himalayas see high rates of soil erosion and the growth of dangerous glacier lakes as temperature rises (Deepak B Singh, 2014). The mid hill region is particularly vulnerable to landslides (World Bank, 2011b), accelerated by road construction (Deepak B Singh, 2014). The Terai plains are flood-prone and suffer from high rates of groundwater contamination (Deepak B Singh, 2014). Nepal faces a combination of slow and rapid-onset disasters that, when coupled with its low development indicators and weak governance, exacerbate its vulnerability to the effects of climate change.

Slow-onset disasters

In terms of slow onset disasters, Nepal is contending with issues such as drought and soil erosion. Increasingly frequent droughts in Nepal pose a particular threat to food security, as 75 percent of agricultural area is rainfed (*Climate Risk Profile: Nepal*, 2017). When monsoon rains dropped to 16 percent below normal in 2006 and 2007, rice cultivation went down by 21

to 30 percent (World Bank, 2011b). Additionally, about 66 percent of the population works in farming (International Labor Organization, 2019). Soil erosion also raises concerns about reduced crop productivity and the pollution of land and water from chemical fertilizers (Chalise et al., 2019). Erosion can result from landslides, deforestation, and use of fertilizers. Researchers estimate that about 1.7 mm of topsoil is lost annually to erosion in Nepal, and it takes about 100 years to form 1 cm of soil (Chalise et al., 2019). Only about 17 percent of Nepal's land area is suitable for agriculture (*Climate Risk Profile: Nepal*, 2017), so drought and soil erosion pose a great risk to Nepal's agriculture sector and food security.

Rapid-onset disasters

Most of Nepal's rapid-onset climate events are water related. Rising temperatures in the Himalayas has led to rapid ice and snow melt that has resulted in devastating floods and landslides (World Bank, 2011b). Floods are especially prevalent in the foothills, where there is extreme rainfall. Glacial lakes pose an additional flood risk, also known as Glacial Lake Outburst Floods (GLOFs), which can cause significant damage in affected areas (World Bank, 2011b). Floods and landslides are estimated to cost about 1.5 percent of Nepal's GDP annually (*Climate Risk Profile: Nepal*, 2017). Additionally, although Nepal is one of the world's most water-abundant countries, with 6,000 rivers and a per capita water availability of 9,000 m$_3$ (Bartlett R. et al., 2010), less snow in the winter and increased snow melt as a result of rising temperatures will reduce Nepal's water supply in the long-run (World Bank, 2011b). As 90 percent of Nepal's energy supply is dependent on hydroelectricity, this is a significant concern for energy security (Smith & Vivekananda, 2008). Even though 80 percent of Nepal's population has access to drinking water, most of it is not safe, and this is especially true for those in remote and underserved areas (Sahisna Suwal, n.d.).

Socio-economic context

Nepal's climate concerns are compounded by its status as an LDC, with about 24 percent of its population living in poverty (Deepak B Singh, 2014). Food insecurity is a significant concern, with about 52 percent of households at least mildly food insecure (*Food Assistance Fact Sheet: Nepal*, 2018). Rural households are more likely to struggle with food insecurity than urban household, and about 80 percent of the population lives in rural areas (*The World Factbook: Nepal*, 2020). Health epidemics in relation to water borne diseases, such as cholera and diarrhea, have the highest human toll in Nepal every year (World Bank, 2011b), taking the lives of about 3,500 children annually (Shrestha et al., 2017). Nepal also suffers from strict

caste-based inequality. One of the ways this is prevalent is in land ownership. While the richest 7 percent of households own 31 percent of agricultural land, the poorest 20 percent own 3 percent of land, and 37 percent of rural households are tenants (*Fighting Inequality in Nepal*, 2018). Wealth tends to fall along caste-lines in Nepal, with Dalit and "lower caste" households being more likely to live in poverty and be landless than the "elite" Brahmin and Chetri castes. Structural discrimination according to caste is prevalent in most facets of life in Nepal. Even in the aftermath of the 2015 earthquake, there was evidence that Dalits were "willfully neglected" by relief workers in the provision of emergency supplies (*Fighting Inequality in Nepal*, 2018).

A history of conflict

In 1990, popular pro-democracy movements started to take hold in Nepal, frustrated with the inequality, poverty, and discrimination that was perpetrated under three decades of absolute monarchy. Although Nepal's human development indicators were improving in the run-up to the war, this progress was distributed unevenly, with rural areas effectively sidelined by the Kathmandu-based central government (Einsidel 2017). Nepal had some of the world's highest levels of horizontal inequality- inequality between groups or regions- and, in 2007, it was ranked 176 out of 177 in terms of group grievance by the Failed State Index (Einsidel 2017).

The pro-democracy movements of 1990 succeeded in forcing the king to restore a multi-party parliament and reform the constitution that year (Asia Foundation, 2017) but hopes for subsequent social progress and greater equality quickly turned to disappointment. The state not only failed in its responsibility to act as service provider and redistributor, many state officials were deeply corrupt and kept resources for themselves and their networks (Einsiedel et al., 2012). Aid money further entrenched this corruption, with one study claiming that only 15 percent of Nepalis actually benefited from foreign aid, and that most of them were those in power (*Domestic Conflict and Crisis of Governability in Nepal*, 2000). The public's deep disillusionment with Nepal's failing democracy combined with long-held frustration with the structural exclusion of "lower" castes laid the groundwork for the political struggle that would ensue.

This interweaving web of grievances provided an opportunity for an opposition power to challenge the government. The Maoist Communist Party of Nepal (CPN) decided to capitalize on the moment and submitted a list of demands to the monarchy in February 1996, threatening

armed conflict if they were not met (Asia Foundation, 2017). One week later they followed through with that threat. In the violent decade that followed, about 13,000 Nepalis were killed and 200,000 were displaced (Asia Foundation, 2017). The armed conflict ended in 2006, when King Gyanedra reinstituted the parliament, which eventually signed a Comprehensive Peace Accord (CPA) with the CPN.

In the years since the end of the war, political volatility and low intensity tensions have persisted. At the heart of Nepal's political instability were debates over which federal model to adopt, as many marginalized populations wanted to be represented through ethnic-based federalism while traditional and right-wing political parties opposed that model (Asia Foundation, 2017). Elite groups were hesitant to "dismantle the unitary state that had guaranteed their privileges for so long" (Einsiedel et al., 2012, p. 5). These disagreements resulted in a series of failed negotiations and political deadlock that made the adoption of a new constitution an impossibility until 2015, when the earthquake marked a turning point.

In April 2015, Nepal endured a devastating 7.8 magnitude earthquake, which killed 9,000 people and destroyed or damaged over 750,000 homes (Harrowell & Özerdem, 2018). In the aftermath, leaders of the three main political parties quickly pushed through a constitution which reflected their desired federalist model. In the rush, the leaders of these political parties hardly consulted the public, other political parties, or even members of their own parties (Castillejo, 2017). Some observers note that the hastiness with which the Nepalese political elite advanced the constitution after the 2015 earthquake suggests a desire to move away from dealing with the "difficult political issues of post-conflict settlement" and move on to post-disaster reconstruction, which was seen as a unifying and apolitical process (Harrowell & Özerdem, 2018, p. 193). This constitution was met with swift opposition from disadvantaged groups, who saw that the repeated commitments made for inclusion and representation were violated in the new constitution. This frustration and deepening alienation from the state manifested in violent protests, particularly in the Terai region (Castillejo, 2017). Despite widely held discontent, the 2015 constitution remains in place at the time of writing.

5.2 Opportunities and Challenges for CSAs in Nepal

The effects of climate change in Nepal are thus being felt against a complex backdrop of political and social discontent which exacerbate the risks of violent conflict. Given the deep

mistrust that many populations in Nepal have toward the state, the state's actions are closely scrutinized for indications of favorability and exclusion. Planning and implementing CCR in such a context requires a CSA to prevent the real possibility of worsening existing tensions. This chapter will examine the presence (or lack thereof) of a number of CS principles in Nepal's climate change plans and implementation including participatory processes, meaningful inclusion of disadvantaged groups, effective accountability structures, and clear coordination between different stakeholders. Below is an outline of the opportunities and challenges of integrating a CSA in the context of Nepal.

Opportunities

In the face of political instability and neglect, many communities around Nepal rely on local, informal systems of conflict resolution. While these practices are not always effective in promoting equity and justice,[6] they could lay the groundwork for the integration of CSAs at the local level. For example, one method involves the subject of conflict being discussed in a meeting with villagers, negotiators, and conflicting parties in attendance. Once a settlement comes to bear, the conflicting parties exchange gifts and the conflict is considered "settled," after which a small celebration ensues (Upreti, 2004). Women are also found to play an important role in acting as informal mediators and negotiators for peace (Åshild Falch, 2010). Recognizing the importance of informal justice mechanisms, NGOs have also started to implement programs such as Community Mediation Centers (CMCs), which have a generally positive reputation because, among other reasons, the mediators are well trained to be unbiased and gender sensitive (A. Pandey et al., 2016). The common and contemporary use of informal dispute mechanisms (Dahal & Chandra, 2008) suggests that local communities in Nepal already practice some degree of conflict sensitivity and awareness, which implementing organizations could learn from in the integration of CSAs in climate activities.

Moreover, given the extent to which Nepal relies on external funding (all of the funding for Nepal's NAPA and LAPA is external), donors and international aid agencies have an opportunity and responsibility to build local and institutional capacity in CSA. In a study of the power of different institutions in Nepal's CCR regime, Sova et al (2015) find that INGOs are perceived to be highly influential at central, sub-national, and local levels, meaning that

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[6] Saferworld's research reveals that informal justice mechanisms are still influenced by "traditional attitudes and unequal social structures," with women and Dalits being among those who face challenges in gaining equal access to justice (A. Pandey et al., 2016, p. 24).

they "carry the potential to translate actions across actor levels" and possibly bridge top-down and bottom-up efforts (p. 403). Donor agencies are also perceived as "highly influential" at the central level due to their access to and control over international funds (Sova et al., 2015), and Vij et al (2018) note that the launch of the Adaptation Fund set up under the Kyoto protocol played a key role in motivating the GoN to prepare the NAPA. Given their influence, INGOs and donor agencies in Nepal are in a position to help integrate CSAs into CCR at different levels of government.

Challenges

One of the primary challenges to adopting CSAs in Nepal is the aversion of state actors to consider the intersections between conflict and development, including CCR. Even using the word "conflict" when working with development actors in Nepal can be a contentious matter. For example, in the UNDP Nepal's CSA mainstreaming program, they found that it was helpful to use words other than "conflict sensitivity," as people were quick to distance themselves from the word conflict, given Nepal's recent history with war (Aryal, 2017). Instead, they used concepts such as "development effectiveness tool" or "good practice design" to make the topic more approachable (Aryal, 2017). Also, in a study examining the extent to which post-conflict reconstruction and post-disaster reconstruction were intertwined in Nepal, the authors found that many stakeholders wished to distance the two processes from one another, as they did not want to politicize post-disaster reconstruction (Harrowell & Özerdem, 2018). Government officials seem to fear that if they link politics with development, the deep grievances that people have toward the state will come to the fore and challenge their hold over power. Overall, there is a tendency among development practitioners in Nepal to view CCR as a primarily technical challenge, rather than a social and political one.

Another challenge is Nepal's political instability, which has contributed to a lack of institutional memory and the short-term mindset of politicians. Since the war ended in 2006, most of Nepal's parliaments last only one year of their five year term. High turnover in politics weakens the incentives for politicians to act in ways that benefit the people rather than themselves, making it difficult to establish effective coordinating mechanisms between government agencies and to institutionalize a CSA. This dysfunction augments the existing feeling in the population that they cannot trust the central government. As a result, people may rely on community-based structures and service mechanisms for their needs, including adaptation. Vivekananda and Schilling (2014) point out that while community-based

adaptation can be effective and build resilience, in the long-run this could lead to further instability. If communities feel that they are performing duties that the state should be responsible for, this could weaken the social contract and undermine future prospects for peace (Vivekananda et al., 2014). This concern highlights the need for a combined bottom-up and top-down approach to CCR, as this can be a way to strengthen the relationship between the people and the state.

5.3 NAPA and LAPA Background

The NAPA was developed by a core NAPA project team along with six thematic working groups (TWG), involving over 2,500 people in the different stages of preparation (GoN/MoE, 2010). The NAPA notes that Nepal has learned from the NAPA experience of other countries and, as a result, has adopted an approach that is more country-driven, tied to the national development agenda, representative of vulnerable groups, based on comprehensive assessments, and inclusive of all stakeholders (GoN/MoE, 2010). The NAPA outlines six thematic areas that are also meant to intersect with national development goals:

1. Agriculture and food security
2. Water resources and energy
3. Forests and biodiversity
4. Public health
5. Urban settlements and infrastructure
6. Climate induced disaster

While the NAPA provides a national framework for CCR, the LAPA provides a pathway for the operationalization of NAPA priorities at the local level. Nepal has endorsed the LAPA as a way to ensure "immediate, efficient and effective delivery of adaptation services to climate vulnerable communities and households" (GoN/MoE, 2011, p. 4). The LAPA framework provides guidelines and a seven-step process by which LAPAs are meant to be planned and executed, with Village Development Councils (VDCs) and/or Municipality Development Councils (MDCs) as the operational units. The four guiding principles of the LAPA are that they are meant to be bottom-up, inclusive, responsible, and flexible (GoN/MoE, 2011). In order to ensure that most implementation of the NAPA takes place at the local level, 80 percent of the adaptation budget is meant to be allocated for LAPAs (GoN/MoE, 2010).

5.4 CSAs in formulation, design, and implementation phases

The assessment, formulation, and implementation phases of NAPA and LAPA can provide insight into how a CSA is reflected in the underlying processes that inform these documents and in their execution. In particular, these processes should reflect a commitment to participatory and inclusive decision-making and effective coordination between bottom-up and top-down approaches. First, a commitment to participatory approaches and inclusivity should be reflected not only in assessments, but also in how the results from assessments are integrated into the design and implementation of the final document. Izzi and Kurz (2009) argue that if the quality of a conflict analysis, for example, is compromised, it is better not to do one at all. Assessments can raise people's expectations, so they should be conducted thoughtfully and with the purpose of meaningfully shaping the intervention. Otherwise, they can deepen people's perceptions that the state is unresponsive to their needs. This also reflects on institutions' willingness to change, because internalizing the input of marginalized communities may require the use of new and innovative approaches to CCR.

Additionally, the coordination of bottom-up and top-down approaches should be clearly laid out in the NAPA and LAPA documents and reflected in the implementation of their activities. Coordination between stakeholders helps minimize the risk of maladaptation as activities benefit from the combined expertise and resources of different levels of government, NGOs, and communities. Local, district, and national level government structures should coordinate to ensure that adaptation priorities are being addressed and that local governments have enough support to plan and implement LAPAs. International agencies and NGOs should go beyond planning and implementing LAPAs themselves, they should work closely with government agencies to do so and provide training and support in CSAs.

5.5 Formulation and Design of NAPA

There are a number of indications that preparation for the NAPA was a somewhat inclusive and participatory process. In 2009, the GoN hosted a three-day inception workshop to refine the NAPA process. Over 150 people attended, including government actors, NGOs, UN and donor agencies, the NAPA team, and media (Ghimire, 2011). After this, the six TWGs were formed and carried out a multi-step assessment process to determine levels of climate vulnerability across the country. This involved an initial series of workshops and consultations with different stakeholders, such as "youth, foresters, indigenous communities and disaster risk

reduction networks" (GoN/MoE, 2010, p. 16). Additionally, all 75 districts were mapped according to vulnerability, using an overlay of "climate risk/exposure maps, sensitivity maps, and adaptive capacity maps following the vulnerability assessment framework of the IPCC" (GoN/MoE, 2010, p. 10). Preparers also conducted transect walks in three different topographical regions of Nepal in order to gain the input of local communities. The TWGs took the results from this assessment and considered them alongside their desk review, expert opinion, and consultation with broader "reference groups" to prioritize adaptation activities under their themes, write their group reports, and submit them to the NAPA project team for final consolidation.

Although the Ministry of Environment (MoE) claims that the process was "country-driven, inclusive, and consultative" (GoN/MoE, 2010, p. iv) a number of concerns have been raised about accountability structures, the understanding of vulnerability that is presented, and to what degree the findings from non-experts were taken into account for the final document. First, like many LDCs, the primary impetus behind developing the NAPA was to be eligible for adaptation funding (Vij et al., 2018). The NAPA and LAPA are both funded by external donors, meaning that the government's accountability is aligned upward toward donors rather than to its citizens. An additional concern is that the climate agenda put forth by NAPA and LAPA is one defined by technocrats rather than politicians and the general public. The ideas presented by the NAPA and LAPA garnered little attention from politicians in Nepal, which is notable at a time when other public issues were being intensely debated (Einsiedel et al., 2012). This is partly because there is a history of technocratic environmental policymaking in Nepal, and political parties and leaders were largely left out of the NAPA planning process (Ojha et al., 2016). While some experts may appreciate the ability to forward climate policy without it being stalled by political considerations, this also undermines the sustainability of the NAPA and makes it more difficult for citizens to hold politicians accountable.

Second, the indicators used to determine and map the vulnerability of each district focus on climate exposure and socio-economic factors such as loss of agricultural productivity and malnutrition, but do not include social and political measures. The understanding of vulnerability reflected in the NAPA and LAPA is one defined by a lack of technical assets, absent considerations of underlying patterns of social inequality and oppression that determine people's access to resources and decision-making processes (Nagoda, 2015). This incomplete understanding of vulnerability later resulted in one pilot project to promote the use of biogas

plants--which help with energy security and reducing deforestation--being halted in three districts because of their unstable security situation (Vivekananda et al., 2014). The focus on bio-physical vulnerabilities is almost certainly insufficient to address people's adaptive capacity.

Finally, there are concerns with how the consultations were carried out and the degree to which the voices of local people made it into the projects themselves. Most, if not all, of the consultation meetings were held in English and in Kathmandu, essentially excluding non-urban and less educated populations (Ojha et al., 2016). Also, in the inception workshop, it was decided that NGOs, civil society, and government agencies would represent local-level concerns in the regional consultation workshops, due to a lack of funding and resources (Ghimire, 2011). Similar to the case of Bangladesh, this is problematic because these organizations have their own agendas and accountability structures that can prevent them from fully representing local communities' concerns. Even so, the degree to which their input was taken into account in the final report is not clear. In one case, consultations with indigenous civil society revealed that they felt that indigenous communities needed support and that their knowledge should be recognized (GoN/MoE, 2010). This input seems to make it into the final project design, as one public health project includes "exploring indigenous knowledge and community practices for health adaptation" (GoN/MoE, 2010, p. 42). In another case, however, concerns about gender raised during the assessment phase are not evident in the final projects. In fact, there is no mention of gender at all in any of the projects. This is despite the fact that the NAPA identifies gender as a cross-cutting theme and includes the findings of a gender sensitivity analysis.

5.6 Formulation and Design of LAPA

The idea for LAPA came from participants in the NAPA inception workshop, who saw LAPAs as a way to implement the most immediate, top-priority adaptation needs as determined by the NAPA (GoN/MoE, 2010). Between 2010 and 2011, a pilot framework was prepared for developing and implementing LAPA in nine districts across Nepal, chosen for their representative qualities and vulnerability (as determined by the NAPA vulnerability map) (Peniston, 2013). In 2012, the findings from this pilot were then taken and integrated into the process of developing about 70 more LAPAs in 14 districts (Lamsal, 2013). In 2013, the

prepared LAPAs started their implementation, and in 2014, 30 more LAPAs began their preparation process.

In the preparation of LAPA, planners found that local communities were "eager to participate" (Lamsal, 2013, p. 33). In one study, Regmi and Star (2014) found that community representation at the VDC level was high in the LAPA design and piloting process, with about 20 to 25 percent of households saying that they were directly engaged in the adaptation design process. This kind of local engagement and ownership is positive in that it builds on the strengths that many communities have in taking action to provide for their own needs. A history of government exclusion of certain identity groups has resulted in a greater appreciation for a bottom-up approach than a centralized, top-down approach among some communities (Vivekananda et al., 2014).

However, the purpose of the LAPAs is not only to facilitate a more robust bottom-up approach to CCR, but also to coordinate this approach with top-down processes. If community-based adaptation replaces functions that are meant to be done by the central government, the social contract is weakened and the possibility of political instability increases (Vivekananda et al., 2014). In the case of Nepal's LAPAs, particularly in the pilot phases, it was mostly NGOs and communities who were involved, with minimal involvement of district-level politicians and government officials (Regmi & Star, 2014). This is a problem when it comes to collecting the kind of information needed for local level governments to effectively sensitize populations about the risks of climate change and identify adaptation priorities. The information used to prepare LAPAs came mostly from communities, NGOs and government organizations at the local level, who relied on their understanding of the current risk factors (Regmi & Star, 2014). These are important sources of information but should be combined with more rigorous scientific expertise and technology to help anticipate the future effects of climate change in these areas. Higher levels of government could contribute to building scientific understanding of climate change at the local level and facilitate knowledge and technology transfer across different districts in Nepal.

The weaknesses of LAPA documents were made apparent in a 2013 review of the LAPAs produced until then, which revealed that "many are of inferior quality and quantity. Many are no longer than 4 pages, [and many] provide only the briefest of vulnerability and adaptation analyses," with only vague references to who will be responsible for implementation (Peniston,

2013, p. 10). In their study, Ojha et al. (2016) find that many LAPAs are "cut and paste" generic copies of donor templates and that NGOs and aid consultants would compete "unfairly" for the aid money with little attention paid to quality (p. 426). Additionally, the LAPA framework provided a separate planning process for local CCR without guidance on how it could be mainstreamed into local development agendas (Paudel et al., 2013) leaving planners with the task of interfacing the two. Without adequate understanding of the local climate risks and weak accountability structures, local governments would sometimes prioritize their existing development commitments and re-frame them as adaptation (Bahadur et al., 2017; Regmi & Star, 2014). The lack of vertical integration between national and local levels raises concerns about how communities are supposed to hold government actors accountable. Moreover, the LAPA process seems to encourage local communities to plan for their adaptation needs without regard for how neighboring districts will be affected. This could have negative implications in regard to shared resources and is another indication of the importance of coordination at the central government level.

5.7 Implementation of NAPA and LAPA

Considering that 80 percent of funds from NAPA are channeled into LAPAs as the primary mechanisms to implement NAPA priorities (GoN/MoE, 2010), this section will focus on the implementation of LAPAs. 100 LAPAs were prepared as of 2019 (Maharjan, 2019), though it is not clear how many have been implemented thus far. LAPA preparation occurred under the Climate Adaptation Design and Piloting-Nepal (CADP-N) program in 2010, the Nepal Climate Change Support Program Start Up Phase (NCCSP) in 2012, and in 2014 (Lamsal, 2013). This analysis will focus on LAPAs prepared under CADP-N and NCCSP due to greater availability of information. Projects implemented under the CADP-N pilot framework were focused primarily on grassroots organizations, NGOs, and households (Regmi et al., 2014). Projects implemented under the NCCSP involved primarily government line agencies (UNDP, 2012).

Regmi et al (2014) compared the outcomes of LAPA projects implemented under the CAPD-N pilot framework and under the scaled-up NCCSP. Their results show that for two VDCs involved in projects under the CAPD-N framework, increased collaboration between the VDCs, NGOs, community groups, and households prompted local communities to be more proactive in proposing their needs and priorities to service providers. In doing so, they were able to procure more funding from the VDCs and other agencies to implement their adaptation

priorities (Regmi et al., 2014). The planning and implementation of LAPA projects under the NCCSP framework, however, were delayed because of late funding and lack of an efficient government service delivery mechanism (UNDP, 2012). Those interviewed reported that, in 2013, less than 20 percent of the milestones had been met (Regmi et al., 2014).

Comparing these two cases provides further insight into the importance of coordination and a merging of bottom-up and top-down approaches. In the absence of support from district and central level government agencies, the projects implemented under the CAPD-N framework were eventually halted for lack of funds (Regmi et al., 2014). Political parties and leaders felt excluded from the CAPD-N, as it focused primarily on NGOs and households. In their final report on the CAPD-N program, Maharjan et al (2014) explain that while they understand that government bodies have the responsibility of making and implementing policies in the long-term, the political instability at the time required NGOs to step in. The report notes that state institutions will take a lead role "once political stability is established in Nepal" (Maharjan et al., 2011, p. 122). However, the ultimate unsustainability of the CAPD-N projects studied by Regmi et al (2014) highlight the fact that addressing climate threats requires access to power and resources, which are "inherently political issues and demand legitimate political [processes] to resolve. Only local governments are legitimate political institutions at the local level which can take up these challenges" (Paudel et al., 2013, p. 8). NGOs and civil society could, instead, work to build the capacity of government institutions to fulfill adaptation priorities, which could also improve the perception that local communities have of the state.

On the other hand, the NCCSP process as coordinated primarily through government line agencies was inefficient and non-collaborative. Local and district level governments viewed CCR as something to satisfy aid agencies and were reluctant to incorporate it into their development agendas (Dhungana & Pain, 2013). One source of their reluctance was a lack of practical guidelines and directives from the central government on how to incorporate climate concerns into their existing development plans, as well as a lack of knowledge about the related issues. It is clear that there needs to be more effective coordination between top-down and bottom-up approaches, coordination that involves a combination of all the stakeholders included in CAPD-N and NCCSP. In the absence of such coordination, competing interests could crowd out any long-term adaptation achievements and perhaps do more harm than good.

Ultimately, although there are some elements of a CSA in the planning, design, and implementation of CCR in Nepal, it appears ad hoc. In general, the underlying causes of people's vulnerabilities to climate change were not addressed in the NAPA and LAPA. In overlooking these concerns, which are inescapably political, CCR planners are not able to assess the possibility that their interventions will reinforce people's vulnerabilities rather than diminishing them (Nagoda, 2015). In a politically unstable and resource-dependent country like Nepal, it is not unlikely that the absence of CSAs in adaptation planning will increase the likelihood of conflict. International donors and aid agencies could play an important role in encouraging the institutionalization of CSAs, as demonstrated by UNDP Nepal. Improved coordination at all levels, including within the GoN and between politicians and technocrats, would make for clearer accountability structures and stronger CCR. Obviously, it will take a great deal of time, willpower, and resources to achieve these changes and meaningfully address the underlying drivers of vulnerability in Nepal.

6. Conclusion

Ultimately, this paper demonstrates that neither Bangladesh nor Nepal have successfully integrated CSAs into their CCR. Both countries share a number of shortcomings in this regard, including a tendency to prioritize engineering rather than people-centered solutions, a lack of meaningful engagement with vulnerable populations, and corruption. At the same time, Nepal has been moderately more successful in reflecting CS principles by conducting participatory assessments and implementing a bottom-up framework through LAPA. It should be recognized that mainstreaming CSAs is an ambitious project, and even international organizations that have declared their commitment to integrating CSAs have not fully succeeded in this effort. While there are general guidelines on incorporating a CSA into CCR,[7] these mirror many of the how-to guides and checklists that have thus far been limited in impact. Practical guidance, rooted in further research into specific CCRs that have integrated CSA, could be of greater assistance to practitioners.

There is an interesting dichotomy between how Bangladesh and Nepal position themselves in international forums on climate change compared to how they plan and practice CCR domestically. In international forums, both invoke notions of climate justice, arguing that

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[7] *See*, Guidelines for conflict-sensitive adaptation to climate change (Tänzler & Scherer, 2018).

LDCs are bearing the brunt of a climate crisis they did not cause and are owed greater assistance from developed countries as a result (Adger, 2006). However, as this paper demonstrates, Bangladesh's and Nepal's apolitical and technical approaches to CCR shows that they are not serious about contending with their own, internal injustices (Ghimire, 2011). The reluctance of the GoB and GoN to reckon with the unequal distribution of power within their own societies is consistent with Galtung's (1969) assertion that those with power will try to maintain the status quo. As a primary source of climate funds and technical assistance, the international community can play an important role in shifting this status quo and helping to shape CCR that is responsive to the social and political factors that determine peoples' adaptive capacities.

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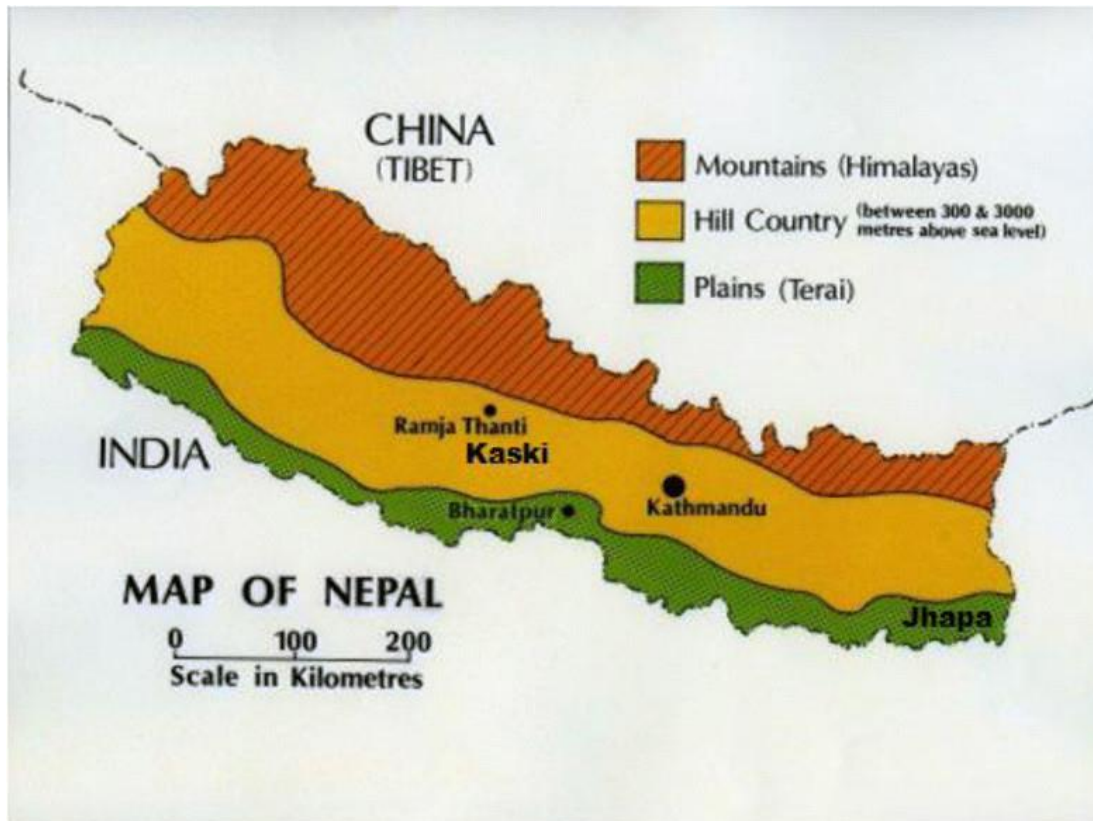Zamudio, A. N., & Parry, J.-E. (2016). *Review of Current and Planned Adaptation Action in Bangladesh*. 80.

Appendix A
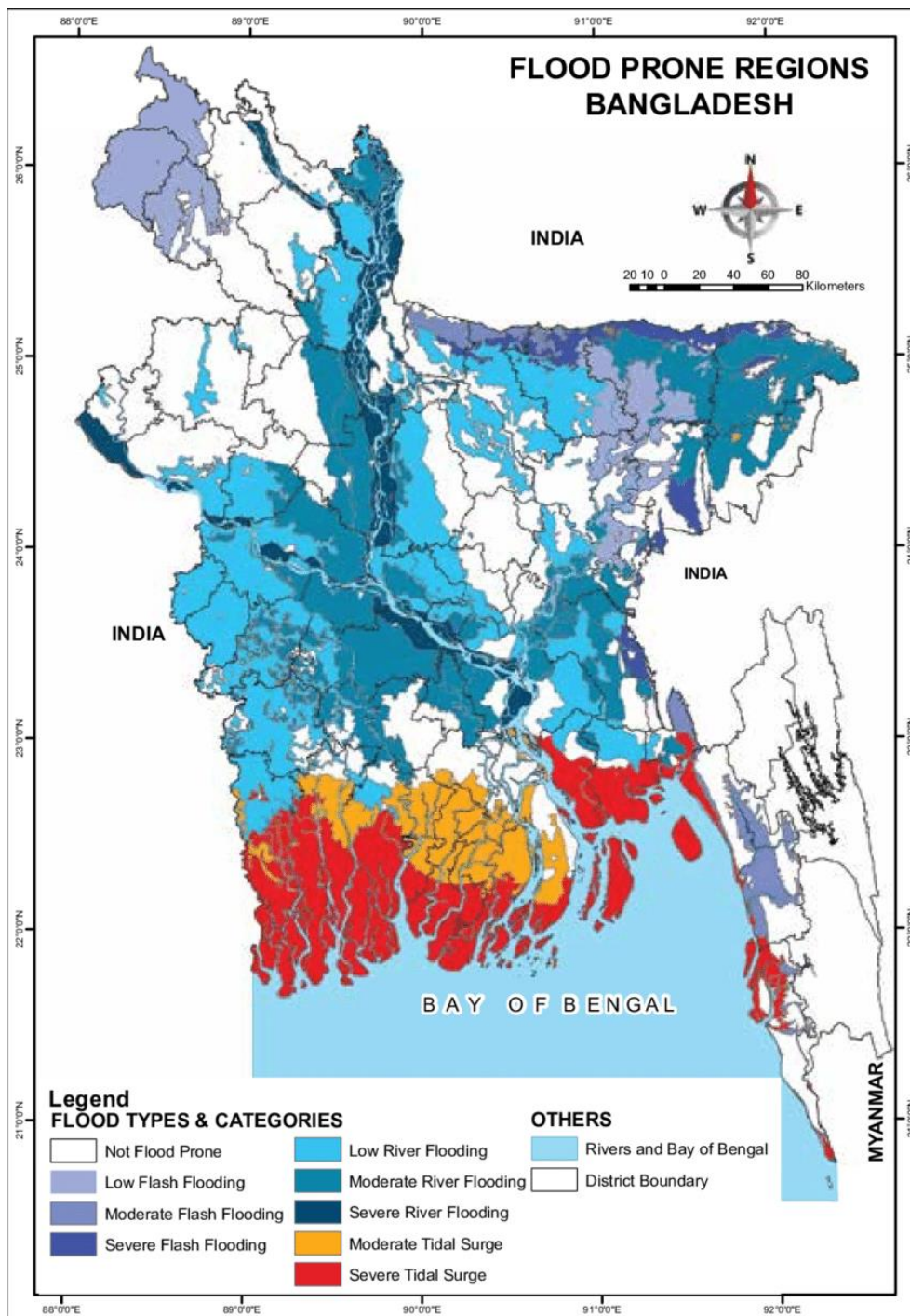
Flood Prone Areas of Bangladesh

Source: Based on BCA Drought Maps (BARC-CIMMYT, 2006), available from: https://www.researchgate.net/figure/Flood-Prone-Areas-of-Bangladesh-Source-Based-on-BCA-Drought-Maps-BARC-CIMMYT-2006_fig8_326920644 [accessed 6 Jun, 2020].

Appendix B

Physiographic Map of Nepal

Disaster resilient vernacular housing technology in Nepal - Scientific Figure on ResearchGate. Available from: https://www.researchgate.net/figure/Physiographic-map-of-Nepal-Modified-from-http-wwwjohntymancom-nepal-01html_fig8_295252380 [accessed 6 Jun, 2020].