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Multi-scale politics in climate change: the mismatch of authority and capability in federalizing Nepal

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ABSTRACT

Nepal's transition to federalism in 2015 involved a significant redistribution of authority across three levels of government, with a greater level of autonomy granted to provincial and local levels. We examine multi-scale climate policy and politics in Nepal, focusing on three elements that are important for policy development and implementation: (a) the authority to make decisions; (b) the knowledge and expertise to develop and implement policies; and (c) the ability to access and mobilize resources, primarily external funding, by government bodies at different levels. Our findings show that the newly decentralized local governments are constrained in their ability to develop and implement climate change-related policies and practical responses by a mismatch between the authority granted to them and existing institutional capabilities. These governmental bodies have limited opportunities to develop, access and mobilize knowledge of climate and development and financial resources, which are needed to put new policies into action. Based on this analysis, we argue that decentralization of governmental authority is not likely to produce effective climate policy outcomes if this mismatch remains unaddressed.

KEY POLICY INSIGHTS:

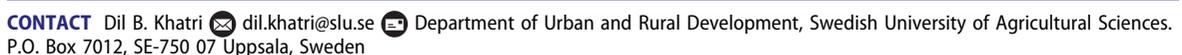
- The ability of the provincial and local governments in federal Nepal to respond to climate change has been constrained by a pervasive mismatch between authority granted and institutional capabilities, in terms of opportunities to access and mobilize knowledge and financial resources.
- The devolution of power is not adequate for effective climate change responses; rather, there is a need to strengthen the institutional capabilities and opportunities of the decentralized local governments to address climate change.
- Formal allocation of authority is always blurred in practice, as agencies at different levels of governance engage in power struggles within and beyond formally delineated boundaries. This suggests the need for more operational clarity on policy implementation procedures.
- There is a need for a clear exchange of knowledge and a flow of resources to the level where responsibilities lie to respond to climate change.

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1. Introduction

Decentralization has been promoted across the Global South as a mechanism to make governments more accountable and promote effective governance of resources. Nepal is no exception. Decades of political upheaval have resulted in a transformation of the State to a system based on three levels of governance: Federal (National), Provincial (*Pradesh*) and Municipal (*Nagar and Gaon Palikas*) (Chaudhary, 2019). Historically, the State was highly centralized, while the new system devolves substantial political authority to the provincial and local levels (Thapa, 2019).¹ Yet, it remains unclear what this redistribution of authority across scales means for effective governmental responses to climate change, a problem with national as well as local level implications. In this paper, we examine environmental policy reform in Nepal and offer generalizable conceptual insights about the challenges of multi-scalar governance and distribution of resources for climate change and development, particularly in contexts undergoing forms of rapid political change.

Our research team has been on the front line of understanding climate change and Nepal's federalization process. Through the struggle for democracy in the 1990s, the armed conflict (1996–2006) and constitution building process (2006–2015), and now federalism, we have participated in national-level dialogues on new strategic policies within the natural resource sector, and been involved in qualitative research on the dynamics of governance reform and other socio-political changes (i.e. Khatri, 2018; Nightingale, 2017, 2019; Ojha et al., 2016). Federalism in Nepal is still evolving, moving from a system where national ministries and the National Planning Commission were responsible for policymaking and the allocation of financial resources, to one wherein the local municipalities have significant autonomy to form policy. We draw from our experience to analyse a core concern within decentralization debates: whether devolving responsibility aligns sufficiently with the knowledge and resources needed to address those responsibilities. We are motivated by the disjuncture between what is expected of local governments, and the tools they are given to fulfil both global ambitions and locally-generated priorities around climate change. Our analysis provides fresh insights into the consequences of mismatches between levels of authority and decision-making, and the capabilities of decentralized (provincial and local) governmental bodies for climate change adaptation. Nepal offers a particularly poignant example given the scale mismatches between global climate models and local-level experiences of climate change (see also Ahlborg & Nightingale, 2012; Ojha et al., 2016), in addition to widespread concern about whether and how global financial commitments land in places where they are most needed (Eakin & Lemos, 2010; Eriksen et al., 2021; Murtinho et al., 2013).

We largely contain our analysis to the sub-national level and analyse how and with what resources newly-formed provincial and local governments are using (or not) their authority to implement climate change adaptation. A refrain we heard many times in Kathmandu, that 'climate change is a donor's agenda', and the sense that systematic adaptation activities would cease if development funds stopped underpins our purpose. We draw from the literature to foreground three key elements of effective policy development and implementation: authority to make decisions; knowledge and expertise underpinning institutional capability to make decisions; and access to and mobilization of financial resources. As the three new government layers claim constitutional powers, this 'policy update' work exposes struggles over meanings, resources and authority in relation to how climate problems are addressed.

Our arguments rest upon the insight that climate change policy development is better understood as a political act involving struggles over authority, knowledge and access to resources, rather technical interventions designed to improve people's lives (Dolšak & Prakash, 2018; Eakin & Lemos, 2010; Eriksen et al., 2015; Ojha et al., 2016). In a decentralization context, these aspects take on a particular scalar dimension. Mismatches arise when the scale at which resources are distributed and knowledge/expertise is held does not fit with the scale at which the authority – and responsibility – to respond is legislated. Knowledge and financial resources, rather than simply tools to implement policy, can become a context for power struggles over who ought to have what authority in relation to natural resource governance (Nightingale, 2017). The analysis thus focuses on how policy decisions are made and the factors that lead to desired adaptation outcomes, and thus help to authorize new decentralized government bodies to exercise their devolved powers (see also Ribot, 2003).

The next section gives a brief background on political change in Nepal (Section 2) and Section 3 theorizes how scalar politics play into policy processes in a decentralized context, followed by the methodology (Section

4), and results and analysis (Section 5). We conclude by highlighting how well-intentioned policies can fail to manifest adequately on the ground, and by pointing to some structural solutions for resolving such mismatches.

2. The Nepal context

Nepal's 2015 Constitution profoundly changed the distribution of authority for legislation of policy and service delivery across governmental levels. Article 5 of the Constitution gives provincial and local levels legal rights to make policies and laws, allocate an annual budget and implement policies and plans on any matters for which they have financial mandates within their respective jurisdiction. At the time of writing of this paper, *Palikas* and even provinces are just beginning to flex these new powers of self-governance.

Before the 2015 constitution, the Nepali State was governed under a centralized political system wherein national ministries and the National Planning Commission (NPC) were responsible for policymaking and the allocation of financial resources. Programmes for specific sectors were prepared by sectoral ministries and endorsed by the NPC. The budget, reflecting the spending plan for each Ministry, required endorsement from the Ministry of Finance, after which funds were passed down to implementing bodies at the regional and local levels. In other words, the ministries decided the budget in local units, and the budget itself was required for authorization of programmes within any given sector.

This arrangement left a power vacuum with regards to a clear line of authority for climate change matters between the national and local levels (Nightingale, 2017). Now, under the federal system, institutional mechanisms have been reorganized by the reshuffling of Ministries and Departments at the national level. Ministries have been downsized from 30 to 21 and others reorganized. For example, the former Ministry of Environment (MOE) and Ministry of Forest and Soil Conservation have merged into the new Ministry of Forest and Environment. Departments within ministries have similarly been reorganized. The province (*Pradesh*) level, armed with significant governmental powers, has replaced the Development Zones which had no real governing authority. Provinces elect parliaments for making policy decisions and have their own ministries and departments. The federalization process has not been completely clean, of course. As a transitional measure, many provincial departments have set up branches at the district level to coordinate the implementation of sectoral activities and law enforcement. These transformations in the State have profound implications for which departments and government levels have a mandate for the climate change agenda.

The most significant restructuring has taken place at the local level. The district, which was the hub of development planning and service delivery at the sub-national level, has far less authority in the updated federal system. The District Development Committee (DDC) has been transformed into the District Coordination Committee (DCC) with a limited coordination and monitoring role, while many of its previous responsibilities have been transferred to the *Palikas*.² *Gaon* and *Nagar Palikas* (rural municipalities and municipalities) were formed by merging a number of former VDCs. The *Palikas* are not only larger in terms of geographical area than the VDCs, but they are also empowered with more authority and resources (budgets). The *Palikas* also have autonomy to generate their own revenue, something which is unprecedented in Nepal's governmental history. Currently, climate change efforts are becoming mired in the struggles over authority, knowledges and resources linked to these jurisdictional changes across all levels of government in Nepal. We are particularly interested in how struggles over authority across the decentralized government levels lead to power vacuums, but also possibilities for creative, local-level solutions.

3. Multi-scale climate policy politics: authority, knowledge and access to resources

The ability to control or distribute key resources and mobilize different knowledge consolidates political authority, shaping how governance of environmental change plays out (Forsyth, 2018; Goldman et al., 2016; Nightingale, 2018). In the context of rapid political transition, like in Nepal, struggles over authority become relevant in multi-scalar, multi-dimensional ways (Nightingale et al., 2019). National governments often try to retain control over key resources, such as forests and financial resources generated from carbon sequestration (Dolšak & Prakash, 2018; Khatri, 2018; Leach & Scoones, 2015). At the same time, decentralized government

bodies are keen to control these lucrative resources to bolster their financial and political base (Nightingale, 2017).

Climate governance involves political authorities making choices on how to mobilize resources to respond to the effects of climate change. In addition to ‘evidence-based solutions’, climate responses are the result of complex negotiations embedded within social and political inequalities (Paprocki & Huq, 2018; Taylor, 2014), differences in access to knowledge (Forsyth, 2018; Goldman et al., 2016), and the ability to implement policies (Gore & Robinson, 2009). Our analysis follows Eriksen et al. (2015) and Nightingale (2018) to focus on the distribution of and contestation over authority, knowledge and financial resources in order to evaluate localized responses to climate change.

Climate change is exacerbating such political struggles for two main reasons. First, as resources change—water becoming scarcer or temperature changes shifting the agricultural potential of land—new struggles are emerging over how to govern those resources in relation to forests (Bushley & Khatri, 2011; Khatri et al., 2018; Ojha et al., 2013). Second, national or even international funds, which are intended to support adaptation, can be a catalyst for exclusion or struggles over authority at the local level (Nightingale, 2017).

Struggles over authority also centre around knowledge; it is often a potent tool for claiming who has the right expertise to govern environmental change (Nightingale, 2017). Climate adaptation outcomes, at least in part, rest on how knowledge exchanges take place. As we demonstrate in our case study, knowledge is inherently scaled (see Ahlborg & Nightingale, 2012; Bulkeley, 2005). The expertise required for developing and implementing climate change-related policies is largely produced at the global scale, using climate models to generate future ecological scenarios and aggregated case studies to inform the evaluation of social phenomena like migration and land-use change (IPCC, 2022; Nielsen & Sejersen, 2012). In part because of the scalar logic of these analyses, transfer of knowledge from the global level is targeted at the national level and, in the case of Nepal, centred in Kathmandu. Government channels rarely communicate well these global assessments to the local *Palika* level. The few actors we encountered with a good working knowledge of expected climate change outcomes gathered their understanding through other channels. Even a quick look at National or Local Adaptation Plans shows that they are largely missing local-level baseline assessments. Local-level experience is rarely recognized as an important tool for national policies (Tschakert, 2007), but we argue that it is essential for effective adaptation. Knowledge politics are not simply about whether the right knowledge is available at the right level and time. It is about how expertise is created and claimed, and whose knowledge informs what constitutes adaptation (Bowden et al., 2019; Eriksen et al., 2015; Hulme, 2010).

In Nepal’s federalization process, struggles over knowledge and expertise are a central issue as sectoral ministries are reshaped within the new system (Nightingale, 2017). We, therefore, explore both what knowledge is used by whom, and how knowledge is claimed in decisions over who is authorized to govern adaptation (Khatri, 2018). We show how there is a scalar mismatch between the authority devolved to these levels, and the ability to generate and mobilize expertise (Ahlborg & Nightingale, 2012), which undermines their ability to develop policies and organize practical responses.

Effective climate responses also require funding for implementation. Research shows that the ability to access international funding is vital for least developed countries to effectively implement climate change policies (Tanner & Allouche, 2011). Our analysis explores the ability of decentralized bodies to access financial resources targeted at climate change, including domestic and international sources. International donors have heavily invested in Nepal, and each level of government has its own resources and mandate for climate change. We show how decisions about financial resources (budgets) are made, and the extent to which such financial resources are available for climate change responses at the local level.

By analysing these multi-scalar struggles to govern resources, knowledge, and finances, we examine the mismatches of governance autonomy compared with the ability to access and mobilize knowledge and resources in practice. Rather than universal, the extent to which decentralized units such as provinces and *Palikas* have access to the knowledge and financial resources needed for developing and implementing climate change policies is an empirical question. We build on Nepal’s case to provide some general theoretical and policy insights towards understanding how decentralized institutions can organize more effective responses to the mounting challenge posed by climate change, especially in the context of political transitions. These insights are of

relevance to poor and least developed countries that are highly vulnerable to climate change and undergoing political transformation.

4. Methodology

The author team is committed to policy-relevant research in Nepal with the intellectual ambition of informing policies and practices through locally engaged research (Nightingale, 2017; Ojha et al., 2019, 2022). The work here is thus informed by our long-term engagement and commitment to fostering deliberative dialogues at all levels of governance (see SM1).

We use content analysis of documents, policy processes and narratives (Wiles et al., 2005) informed by our extensive experience within multi-stakeholder policy forums and on-the-ground ethnographic research to build the case here. Beginning with the 2015 Constitution, we reviewed major climate change policies that were developed at both the federal and provincial levels (see Table 1), as well as the Local Governance Operation Act (2018) to understand the legal authority and responsibility of local governments. At the Provincial level, we reviewed the recently drafted environment and climate change policy of the Gandaki Province as an illustrative example of action at this level. In-depth interviews with 12 people involved in drafting new policies and legal documents at federal and provincial levels helped reveal the processes behind these documents. At the federal level, the respondents included the senior officials from the Ministry of Forest and Environment who were leading the process of drafting the climate change policy (2019) and LAPA framework³ (2019). We also interviewed environmental professionals (3) involved in the development of previous climate change policy and representatives (2) from prominent civil society organizations, such as the Federation of Community Forestry Users, Nepal (FECOFUN). At the Gandaki provincial level, our respondents (5) were: senior officials, including the head of the Climate Change Division, secretary of the ministry and head of the department that looks after forest and climate change; and people involved in drafting the policies. Insights were also gathered from our participation in the stakeholder meetings organized by the government on specific policies and legislation. The Supplementary Material (SM) provides details of how data was gathered at each level.

We collected fine-grained data about the local dynamics of institutional reform and the development of climate-related policies through a field study in two districts – Khotang and Gorkha. We conducted interviews with District Coordination Committee (DCC) officials in both districts, where we focused on organizational changes and the transfer of district-based organizations to *Palika* level. We then visited one *Palika* from each district, where we interviewed elected officials and staff focusing on the local government's work on climate-related issues.

5. Results and analysis

5.1. Distribution of authority

Under the federal structure, the three levels of government are developing or updating existing policies and legislative frameworks. At the federal level, over 300 pieces of legislation and a huge number of policies

Table 1. Overview of interviews and respondents across federal, provincial and local levels.

Governmental levels	Data types
Federal	In-depth interviews with officials from the Ministry of Forest and Environment (4) on climate change policy development. Interviews with experts (3) who were involved in drafting climate change policy documents hired by international organizations. Interviews with the representatives of civil society organizations (2) on their perspective about climate change policy update.
Provincial (Gandaki Province)	In-depth interviews with the officials from provincial Ministry and Departments (4) Interview with experts involved in the development of provincial policy (1)
Local	In-depth interviews with officials from two district coordination committee offices (Khotang and Gorkha) (2) Interviews with two <i>Palika</i> representatives (Diktal-2 and Tsum-Nubri-4)

were updated at the time of our study in 2018–2019. Among those were the climate change and environment-related policies (Table 2). The Ministry of Forestry and Environment (MOFE), which has the mandate for governing climate change, supported by various aid programmes and consulted civil society groups took a lead in drafting the new Climate Change Policy (2019) to replace the Climate Change Policy (2011), the National Adaptation Plan (NAP) that replaces the National Adaptation Plan of Action (NAPA), the updated Local Adaptation Plan of Action (LAPA) framework (originally 2012, updated 2019) and the Environment Protection Act (2019). The process was accomplished without much contestation from the sub-national levels government.

Although formal institutional restructuring has the stated aim of streamlining climate governance, in practice, it has been compromised by past institutional legacies and disciplinary fragmentation of expertise among public servants. The reorganization of the MOFE after 2017 elevated people with forestry expertise, which in turn reshaped the climate change agenda. People from environmental science disciplines who were involved in formulating climate change policies under the former Ministry of Environment were marginalized. At a policy discussion event in Kathmandu held in July 2019, one noted,

The Environment Bill was drafted by MOFE officials, most of them come from a forestry discipline, and have limited knowledge of climate change. People involved in the development and implementation of earlier climate change policies were not involved in the process of drafting this bill.⁴

This means that while the reorganization of the MOFE was intended to capitalize on past experiences and merge fragmented expertise around climate change, in practice, established hierarchies and hegemonies of certain disciplines block productive, multi-disciplinary dialogues and coordinated action.

Table 2. Overview of the climate change-related policies being updated at the federal level.

Existing policy/ legal framework	Updated/ new policy legal frameworks	Climate change related provisions	How have the authorities of provincial and local levels been defined?
Climate Change Policy 2011	National Climate Change Policy 2019 (endorsed in 2019)	CC Policy 2019 provides a broader policy framework and sets national priorities on climate change responses. It stresses the mainstreaming of climate change into the overall development process across three levels of governance.	The provincial government is mandated to formulate policies, directives, and plans as well as undertake monitoring and evaluation of CC mitigation and adaptation programmes within the province (Section 10). <i>Palikas</i> authorized to formulate local policies and undertake monitoring and evaluation of climate change related activities at the local level.
LAPA framework 2012	LAPA Framework 2019 (endorsed in 2019)	The LAPA framework 2019 aims to mainstream climate change adaptation and disaster risk reduction into the development process. The framework is expected to provide guidance to <i>Palikas</i> towards sustainable and climate-friendly development at the local level.	<i>Palikas</i> offered a framework to act towards achieving climate-adaptive development. Provincial level government to monitor and evaluate the climate change related programmes within the jurisdiction.
Environment Protection Act 1997	Environment Protection Act (including a section on climate change) (Enacted in September 2019)	EPA 2019 aims to mitigate the adverse impacts on environment and biodiversity and includes a section on climate change (chapter 4). On climate change, it provides a legal basis for the development and implementation of climate change related activities such as climate change adaptation and carbon trading.	Provincial government and <i>Palikas</i> authorized to develop and implement climate change mitigation and adaptation related projects (Chapter 4). The Act requires provincial and local levels to ensure that the sectoral policies and strategies are made climate sensitive.
Local Self Governance Act 1999	Local Government Operation Act (LGOA 2017) (first amendment in 2018)	The Act requires the <i>Palikas</i> that the periodic, yearly, strategic, thematic development plans are climate adaptive.	The LGOA 2017 recognizes that local people and local bodies are the most appropriate points of entry to meet the climate change adaptation needs. It also authorizes <i>Palikas</i> to undertake carbon neutral and environment friendly development.

At the provincial level, newly constituted ministries are still struggling to assert their knowledge and authority in the context of a strong national focus on climate governance. At the time of this writing, provinces, in general, were still in the process of setting up their institutional infrastructure. In the Gandaki Province, we found struggles over authority were central to the distribution of power and resources within the province's structure. The region is one of the country's tourism hubs, with famous tourist destinations like Pokhara and the Annapurna circuit. The Ministry of Tourism, Industry, Forest, and Environment of the Gandaki province prioritized tourism over other forest and environmental issues with respect to both policy development and budget allocation. An officer from the Provincial Forestry Department (interviewed in December 2019) remarked,

The Ministry prioritised tourism over the forest and climate change issues and a major part of the provincial budget has been spent on tourism infrastructure such as Homestays. The activities and budgets proposed by the department on forest and climate change were significantly reduced.

The provincial ministry has already drafted an Environment and Climate Change Policy and initiated the process to develop the Provincial Adaptation Plan of Action (PAPA) but have yet to be endorsed by the Provincial government. Here, struggles for authority emerged when multiple sectors – and diverse expertise areas – were lumped together into a single ministry. Unlike the dominance of the forestry expertise at MOFE, the provincial ministry is dominated by experts on and priorities around tourism, which overrides other sectors, challenging an easy consensus on these policies.

Palikas are lagging in the development of climate change policies. Ambiguity and ongoing processes of negotiation of authority between districts and *Palikas*, meaning that district-level mechanisms to deal with climate change were dissolved and climate change-related issues moved to *Palikas*. Our data shows, however, that the *Palikas* we studied are overwhelmed by the process of establishing a local government structure from scratch and are focused on developing legislation related to basic development planning and service delivery. Thus, are not yet able to establish dedicated institutional mechanisms for climate change. An official from Diktel said:

The Local Government Operationalisation Act has provided us the authority and rights to develop policies and plans to address climate change. However, such a plan has not yet been prepared. It's because we have 22 separate rights ... we can make the rules and act upon. We focused more on priority sectors such as education, health, and infrastructure.

In the *Palikas* studied, there are thus no institutional mechanisms set up to regulate environmental change issues. In principle, *Palikas* could mobilize the expertise from district-level organizations, such as the Divisional Forest Office, which was involved in the development and implementation of LAPA. However, our research found there is currently a lack of functional linkages between the *Palikas* and district-level institutions.

5.2. Knowledge and expertise

Like most developing countries, climate policy development and implementation in Nepal largely relies on global science. While the uncritical transport of Western climate science has been contested (Chakraborty & Sherpa, 2021; Ojha, 2020; Satyal et al., 2017), and some level of technical knowledge and expertise has been built through externally-funded climate change initiatives, the development of climate knowledge and expertise remains concentrated in Kathmandu. While the problem at the central level is mainly about mobilizing existing knowledge, we found a clear gap in the mechanisms to bring together local and larger-scale knowledges in the newly instituted bodies at the provincial and local levels.

The federal level has built up a pool of expertise over the past decade within the MOFE, which can also mobilize expertise from outside of the government and from international organizations.

The secretary of the MOFE, in a workshop that was organized to get feedback on climate change policy (see SM), mentioned: 'The draft of the climate change policy was prepared drawing on expertise from people both within and outside of the government'. He praised the support provided by a team of Nepali experts hired by an international organization. An officer who was coordinating the climate change policy update from MOFE (interviewed in January 2020) reported,

We consulted almost 1000 individuals through several workshops from national through local levels. We organised consultation workshops in seven provinces, with the participation in each of 60–110 people including the provincial minister from province 7. We documented the suggestions and incorporated them into the policy document.

While the MOFE could mobilize a wide range of expertise, there remain concerns about the extent to which the policy update process generated new evidence. Studies show that national policy revisions have not adequately benefitted from the experience of adaptation projects (Nightingale, 2017; Ojha et al., 2016; Regmi et al., 2016). There is also a problem retaining institutional and expert knowledge within these processes due to the frequent transfer of staff and changes in organizational arrangements linked to political transition.

At the provincial level, government agencies and civil society actors feel inadequately equipped with expertise and larger-scale knowledge of expected climate change outcomes to develop climate policies. In 2020, within the Gandaki Province Ministry, no one had formal climate change expertise, nor was there external funding available to access and mobilize expertise from outside of the government. An officer from the ministry said, ‘Whether to hire experts to prepare draft policies depends on the availability of funds and expertise available within the ministry to develop a draft’. When asked the process of drafting the climate change policy, a senior officer from the provincial ministry noted,

to be very frank, the province either waits for other provinces to draft the policy so that they can copy it; otherwise, we follow the federal policy and draw a significant part [from that document]. If the province is the first one, the respective ministry would hire a consultant to prepare the first draft.

Another officer reported that a Nepali consultant was hired using their limited provincial funds for the first draft of their Environment and Climate Change Policy. The draft was then discussed among officials from within the ministry, but even outside of the government, local expertise of global climate change was limited to assist the process.

In contrast, officials from the Gandaki Province Ministry drafted the forest and watershed management policy, with limited input from the federal ministry, believing the expertise available within the provincial ministry was adequate for the task. Of particular interest to us is how government officials feel equipped (or not), and how they assume the knowledge they need must be on (global) climate change. No one suggested looking to the local level to gather knowledge of environmental change from the people experiencing it. Neither were provincial level processes informed by knowledge generated through past and ongoing climate change-related initiatives. A senior staff member at the Province Forest Directorate remarked, ‘I have no idea what will happen to the old LAPA’. We further learned that the Climate Change Policy and the Provincial Adaptation Plan of Action (PAPA) developed at the Gandaki Province Ministry are not fully informed by the expertise and knowledge available within the ministry itself.

Palikas are even less equipped with expertise to deal with climate change than the provincial government. Part of this has to do with delays in implementing the restructuring of the civil service after federalization but also the lack of institutional memory as first-time politicians and civil servants join the *Palikas*. When we did fieldwork in Gorkha and Khotang during 2017–2018, *Palikas* were waiting for civil servants to be posted by the federal government to their jurisdiction. In addition, there were gaps in responsibility. Previously, where budgets flowed through ministries down to their departments at the local level, now these departments need to be created by the *Palikas* themselves. Within this process, the responsibility for climate change suffers. As one official remarked regarding the transfer of powers from the old Districts to the *Palikas*,

On the one hand, the DFO staff have some expertise and knowledge, but do not have the mandate to develop plans. On the other hand, the *Palikas* have not started developing climate and environmental policies as *Palika* officials are confused on how to deal with these issues.

The representative of the Tsum-Nubri *Gaun Palika* from northern Gorkha (interviewed in November 2018) reported that they have no mechanisms to deal specifically with climate change, ‘We do not have knowledge about what to do on climate change’, adding, ‘there are no staff nor a dedicated office for forest and climate-related issues. We spent the first year drafting key policies required for [development] planning and expenditure. We have not given any attention to environment-related issues’.

Palika officials were also largely unaware of earlier initiatives on climate change adaptation, including LAPA, which was considered as a major initiative towards local response to climate change in Nepal. An official from Diktel (interviewed in March 2018) municipality was of the view that the *Palika* does not have current staff who are knowledgeable on climate-related issues:

We don't know what the LAPA and NAPA are. Really! Because we now have new a generation of elected leaders and we've not been able to educate them about these issues. We are also not experts. We used to have an engineer, but now we don't have him. We do not have staff who have knowledge of issues related to forest and climate change.

This knowledge disconnect is not particularly surprising given the politics of climate change adaptation under the previous regime (Nightingale, 2017; Yates, 2012). LAPAs were developed in Tsum-Nubri by the Manaslu Conservation Area Project under an international donor-funded initiative. The current Chairperson (and many local people we spoke to) were unaware of the LAPA and how it was developed. One of the *Palika* members recalled a workshop where staff and political representatives from the former Village Development Committee discussed climate change issues and the need for developing a plan to reduce the impact. The Chairperson said, 'As you know, before this local election our country was without elected representatives for almost 20 years. During that time, most things were looked after by civil servants. So, we have little knowledge of it'. Similarly, the DCC Chairperson in Diktel remarked in 2017 that the DCC does not have documentation of the LAPA and he was not sure what happened to the plans developed earlier. This evidence suggest that knowledge generated in LAPA under the old structure, largely within NGO efforts, has been lost in the new structure.

Our engaged policy research with *Palika* officials, they pointed to the importance of longer-term collaboration with researchers for climate responsive local development planning. At the time of revising this paper, we learned that this Municipality has drafted a climate change strategy, hiring a consultant by mobilizing its own resources. We are struck by the emphasis on expert knowledge and the complete absence of knowledge emerging from grassroots efforts, including the experiences and insights gathered from the earlier implementation of LAPA.

5.3. Access to resources

One of the most significant and invisible changes in the transition to federalism is a shift in decision-making authority over the allocation of financial resources. Before federalism, sectoral ministries (forestry, water, etc.) had the primary role in developing policies and resource allocation. Their budgets flowed to district-level sectoral offices to implement the activities specified in the annual budget statement of the central government, called the 'Red Book'.⁵ And, without a budget line, doing anything at the local level was more or less impossible. The new structure has shifted the relationship between a budget line and action on the ground. Both the provincial and *Palika* levels have been provided with the authority to make decisions related to budget allocations. However, the flow of financial resources to the local level, particularly for climate change, has become messy and disconnected. Mismatches between authority, knowledge and financial resources abound and, in this section, we highlight two key domains: accessing international funds for projects and the allocation of budgets at all levels. The disconnects stem both from glitches and omissions in the institutional structure of the new system, and from resistance to fully implementing it.

First, we found that a centralized mindset continues to prevail in the distribution of international donor funding targeted for climate change. The federal government has retained the sole authority to access and mobilize foreign aid, one of the most important sources of funding for environmental action in Nepal over the past 50 years. In Khotang, the end of the donor-supported projects, signalled a break in climate change programmes. In an interview on 9 March 2018, the Divisional Forest Officer of Khotang mentioned, 'There has not been further work on LAPA after the project was over. DFO office does not have resources to support climate change activities and local governments have little ownership or say in the flow of climate funding'.

Provincial-level actors see the centralized mindset as a barrier to their ability to access and mobilize international funding. An officer (interviewed in December 2019) from the Provincial Ministry indicated climate change-related projects developed by any of the federal ministries have not involved the province. Both the Ecosystem-Based Adaptation (EBA) project implemented by IUCN and a project funded by the United

Nations Environment Programme (UNEP) and implemented by the Chinese Academy of Sciences (CAS) in the Gandaki Province have, ‘no functional coordination of these projects with the province-level government’. As a result, the provincial government is unable to integrate financial resources and external knowledge into its programme, and the national government undermines the ability of the new governing structure to establish its legitimacy to rule.

The second mismatch is that, institutionally, the new system fails to give greater access to and control over financial resources at the sub-national and local levels as mandated by the Constitution. A senior officer from MOFE (interviewed in December 2019) noted,

There is a major shift in the Climate Change Policy 2019 with regard to the mobilisation of financial resources. Unlike the 2011 policy which saw international funding as the only financial resource to tackle climate impact, the new policy made provisions to mobilise domestic resources to tackle climate change problems.

This means provincial and local governments can allocate budgets on climate change, either from federal grants or from their own revenue sources. The newly-drafted federal policies on climate change also made provisions that direct climate change-related resources to the local level. For example, the federal climate change policy (2019) made provisions to allocate 80% of the total budget of all adaptation and mitigation-related projects to the local level. However, while legally such decentralization mechanisms are in place, pragmatically it is far from clear how funds will be made available to the local level.

As a result of knowledge gaps and mismatches within and between the provinces and *Palikas*, provincial governments and *Palikas* have not prioritized climate change in their budget allocations thus far. The majority of their budgets remain tied to sectors and the logic of their needs. For example, both the Tsum-Nubri and Diktel municipalities have not allocated a budget to climate change-related activities. Rather, the priority has been on infrastructure development, as they lack road access, electricity, and health services. An official Khotang reported:

We need to construct roads. Because it is more important for people to have access to transportation than the environment. This does not mean that we do not work on other sectors such as climate change. We are setting up units to look after climate change and water and we will assign responsibility in future.

We should note here that in addition to its development benefits, roads are also popular due to the size of the contracts awarded and possibilities for graft (Rankin et al., 2018). In previous research led by one of this paper’s authors, we found that local political leaders with no experience with road contracting had won large road-building contracts. In many cases, these officials’ own excavators and bulldozers helps maintain their political standing. As Thakali et al. (2018) show, the local government’s focus on infrastructure development is often driven by narrow personal interest and graft, seriously undermining environmental considerations. So, it is not a big surprise that roads are a popular item in *Palika* budgets, but it also underscores the way that international and national environmental priorities such as climate change are rarely seen as urgent or relevant issues at the grassroots level in Nepal (so far).

6. Discussion

Climate change poses particular challenges to transitional states both because it is more abstract in the everyday lives of people on the ground compared to other pressing development desires (roads, schools, hospitals and food security) (see Roberts, 2010; Romero-lankao et al., 2018), and because decentralized bodies (i.e. provinces and local governments) struggle to assert powers and build their own capacity to deliver on an agenda that is primarily driven by international donors (Ojha et al., 2016). Where climate knowledge and financial resources are centralized, and where newly-decentralized institutions are struggling to access these resources, local institutions do not have adequate opportunities to fulfil responsibilities or take the lead on climate responses (e.g. see Eriksen et al., 2011). Decentralization of authority does not necessarily lead to stronger adaptation planning and governance practices.

This finding unravels a new dimension in the theory of decentralization and climate governance by showing how power operates through knowledge and financial resources. Decentralization scholars have emphasized that the devolution of decision-making authority has the potential to improve responses to climate change impacts (Agarwal et al., 2012). Instead, as this study shows, newly-established provincial and local governments

have neither the expertise to develop climate-related policies and limited access to international finance for climate programmes, nor can they draw experience and knowledge from past interventions such as LAPA because of institutional reorganization. This mismatch, despite the growing emphasis on the importance of locally-led adaptation to climate change (Reid, 2016), and the significant devolution of authority under the new Constitution of Nepal, means local governments are struggling to take meaningful action on climate change governance. This subtle process of resisting federalism by recentralizing authority to mobilize financial resources and knowledge has curtailed the ability of the local and provincial governments to devise policies and translate them into action. Decentralization is not simply about creating governments at more local levels and empowering them to make decisions; it also requires coordination across levels to share expertise, institutional memory and access to international knowledge and financial resources.

But our concern here is not simply with how international and centralized knowledges and resources land in local contexts. Our findings also show that although there is rich, indigenous and community-based knowledge on adapting to climate change at the local level, such knowledge is rarely acknowledged in climate policy discussions at any level. Local climate politics are impoverished when local-level actors are unable to mobilize multi-scalar knowledge (Tschakert, 2007, 2016), which we argue is a component of strengthening local government capacity vis-à-vis higher-level government.

7. Conclusion

Federalization in Nepal has authorized provinces and local governments to generate revenue at their respective levels and to mobilize resources for developing local responses to climate change. Nevertheless, local governments struggle to directly and indirectly access international funds earmarked for climate change, and lack mechanisms to ensure climate priorities within their own budgets. Decentralized bodies themselves have yet to significantly take the climate change agenda seriously and prioritize it in the allocation of local resources because they perceive other competing demands are more urgent.

The provision in National Climate Change Policy 2019 to allocate 80% of the climate change related external funding to local levels (*Palikas*) along with growing international attention on how climate financing lands in local contexts can thus be a good opportunity. The updated LAPA framework envisions that climate change should be mainstreamed into the local planning process. These policies envisage and support localization of climate policy and financing, but there is a need for more operational clarity for effective implementation. Our work clearly shows that without such clarity, local governments lack the capacity to adequately formulate and implement *Palika* level climate adaptive plans and strategies. This issue goes back to the unacknowledged mismatch of knowledge flows, and the subtle recentralization of authority and financial resources, which underpin formal narratives of decentralization.

Our examination of multi-scale climate policy politics in federalized Nepal shows the extent to which decentralization is actually taking place, and what that means for the climate change agenda. In countries like Nepal, which are undergoing political transition, fierce struggles over authority and material resources can compromise overall policy effectiveness on climate change. Specifics in each case differ, but the theoretical framework we outline to identify struggles within decentralization processes reveals the processes through which multi-scale climate governance actually plays out (Nightingale, 2017, 2018, 2019). Despite the promises of federalism, devolution of authority does not guarantee a better governmental response to climate change. Political struggles not only block the flow of knowledge and financial resources needed for decentralized governments to develop climate policy responses but also block the ability to build upon and mobilize local institutional memory and knowledge, meaning that it is these struggles which need more attention in localization of climate change responses debates.

Notes

1. Here we want to emphasize that Nepal's federalist structure is very much a product of internal political processes. UNDP promoted decentralisation in Nepal from the mid 1990s onwards which contributed to important precedents like the Local Self Governance Act 1999 (not fully implemented due to political unrest) but the Federalism process had its own political logic. It was not a result of international development influence.

2. Palikas (*gaun and nagar Palika*) are sub-national municipal governmental levels under the federal system.
3. The updated framework for local adaptation planning is officially called Local Adaptation Planning (Sthanya Anukulan Karayojana) Framework that is, LAP, as called in many other countries. However, as many people prefer to call it as LAPA, the old version, we also do so.
4. Policy dialogue held in July 2019 (see SM 1).
5. The Red Book is the document containing annual plan and budget approved by the federal parliament.

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