

Localizing Climate Actions in Nepal:

The Role of Local Governments in Implementing National Climate Change Policy and Nationally Determined Contribution

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ACRONYMS AND ABBREVIATIONS

°C	Degree Celsius
3C	Coordination, Collaboration and Co-existence
3Rs	Reduce, Reuse, Recycle
AFOLU	Agriculture, Forestry and Other Land Use
C4	Climate Change Coordination Committee
CAPs	Community Adaptation Plans
CbA	Community-based Adaptation
CFUGs	Community Forest User Groups
DHM	Department of Hydrology and Meteorology
DRR	Disaster Risk Reduction
DRRM	Disaster Risk Reduction and Management
EbA	Ecosystem-based Adaptation
FY	Fiscal Year
GDP	Gross Domestic Product
GESI	Gender Equality and Social Inclusion
GHGs	Green House Gases
GIZ	The Deutsche Gesellschaft für Internationale Zusammenarbeit
GoN	Government of Nepal
IPPU	Industrial Processes and Product Use
LAPA	Local Adaptation Plan for Action
LDRMP	Local Disaster Risk Reduction and Management Plan
LG	Local Government
LGOA	Local Government Operation Act
MER	Monitoring, Evaluation and Reporting
MoFE	Ministry of Forests and Environment
NAPA	National Adaptation Programme of Action
NCCP	National Climate Change Policy
NCCSP	Nepal Climate Change Support Programme
NDC	Nationally Determined Contribution
NPR	Nepalese Rupee
PES	Payment for Ecosystem Services
SDGs	Sustainable Development Goals
SNLGs	Sub-national and local governments
UCLG	United Cities and Local Government
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States Dollar
VDCs	Village Development Committees
VRA	Vulnerability and Risk Assessment

EXECUTIVE SUMMARY

Nepal has developed various policy instruments including National Climate Change Policy (NCCP) 2019 to reduce climate change risks and impacts and enhance community resilience. It has its second Nationally Determined Contribution (NDC) 2020 in place, which aims to contribute to meeting greenhouse gas (GHGs) emission targets set to limit the global temperature rise below 2°C as targeted by the Paris Agreement. For these instruments (NCCP and second NDC) to become meaningful, the country needs to formulate and honestly implement context-specific adaptation and mitigation actions. Equally important is the localization of these instruments in order to achieve their policy targets (GIZ, 2021; UCLG, 2019). This paper examines the role of local governments and analyses the barriers to and potential options of localizing NCCP and second NDC. This paper is mainly intended to contribute to deliberations on localization of these instruments. The empirical evidences were collected through literature review, review of NCCP and second NDC, expert interviews at the national level, and consultation with three local governments: Tarkeshwor Municipality (Kathmandu), Banepa Municipality (Kavre), and Ilam Municipality (Ilam).

The NCCP and second NDC policy targets that are relevant to the local governments, have been identified considering both the exclusive and concurrent functions of the local, provincial, and federal governments as laid out in the constitution of Nepal (Annex 8 and 9), and the provisions in the Local Government Operation Act (LGOA), 2017. The local governments' experiences in implementation of different activities have also been considered while identifying the policy targets relevant to them. NCCP policy targets that are relevant to local governments are related to preparing context specific policies, raising public awareness, building the capacity of local governments and the communities, promoting indigenous knowledge and skills,

and promoting technology. The targets also call for addressing gender equality and social inclusion (GESI) issues under inter-related thematic areas. NCCP has also envisioned dedicated units to lead the implementation of climate change policies and actions at all three governments level. However, conducting specific activities to achieve NCCP targets in energy, biodiversity, tourism, heritage, rural and urban habitats, industry, transport and infrastructure sectors is new to most of the local governments. Research and technology development are even more difficult for them to comprehend. The local governments, however, have prior experiences of implementing activities to achieve policy targets under such sectors as agriculture, forest resources, water resources management, health, drinking water and sanitation, disaster risk reduction and management, GESI, livelihoods and governance.

The second NDC mitigation targets, which are relevant to local governments are mostly focused on promoting technologies; integrating mitigation related activities into local government plans; inclusive process of developing policies on energy, waste management; and agriculture, forestry and other land use (AFOLU) sectors. Second NDC targets are also related to setting up and capacitating institutions required to lead mitigation activities; and integrating climate change into school curriculum. However, despite some previous experience in implementing similar activities, the local governments do not have adequate knowledge and skills to work for achieving the mitigation targets.

Past experiences of designing and implementing local adaptation plans for action (LAPA), in particular would be crucial for localizing NCCP and second NDC. LAPA process is well appreciated for its enabling approach such as sensitization and engagement of local stakeholders, and recognition of local government¹ roles in

¹During LAPA implementation period, local governments were named Village Development Committees (VDCs) and Municipalities.

planning and implementing LAPA. However, some aspects of LAPA have come under criticism, e.g.: it is mostly externally funded, projectized, inadequately resourced; and the capacity and ownership gaps at local level have constrained its effective implementation. Likewise, the adaptation activities prioritized in LAPA process are said to have been failed to offer 'additionality' to the general and 'no regret' development needs. Therefore, it is essential to consider and build on these learning for effective localization of NCCP and second NDC.

This paper has identified a number of barriers to localization of NCCP and second NDC. The barriers range from lack of local governments' familiarity with NCCP and second NDC, absence of qualified human resources and, inadequate funding to lack of non-existence of institutional mechanism to lead the implementation of policies, lack of collaboration and coordination among government and non-government actors, and monitoring of the implementation status. Other constraining factors include the local elected leaders' commitment during elections to undertaking various (infrastructure) development activities, which they want to fulfill, and for that matter, securing the local governments' buy in and ownership of NCCP and second NDC localization process could be an uphill task.

Localization of NCCP and second NDC in line with the concerned international policy instruments including the Paris Agreement and Sustainable Development Goals (SDGs) entails **three major parts**: developing or updating climate change policies, implementing climate change policies, and ensuring positive interplay through coordination (GIZ, 2021). Along with these

fundamental parts of localization, this paper proposes a **four-pillar framework** informed by literature review, policy analysis, expert interviews, and consultation with local level institutions, for effective localization of NCCP and second NDC.

Policy and institution pillar

This pillar calls for policy coherence among the governments at all levels, consultative and inclusive policy process, and institutional arrangements.

Communication and strategic partnership pillar

It refers to communicating NCCP and second NDC to local governments and strategic partnership among government and non-government agencies focusing on inclusive and participatory governance.

Resources and implementation pillar

This pillar is related to accessing and allocating funds, capacity building, and implementation of NCCP and second NDC. It also includes the preparation of implementation plan with policy target detailing and its integration into the local government level planning process.

Monitoring, evaluation and reporting pillar

It calls for setting indicators, progress tracking, providing feedback, and documenting and reporting the progress. The four-pillars of localizing NCCP and second NDC should not be looked at in isolation. These pillars are inter-related and complement each other.

1. INTRODUCTION

1.1 Background

Nepal is one of the countries that are most vulnerable to climate change. It is at high risk due to the presence of fragile topography, climate-sensitive livelihoods and limited adaptive capacity (MoFE, 2021; MoFE 2019). The country has developed various policy instruments including National Climate Change Policy (NCCP) 2019 to reduce climate change risks and impacts, and to enhance community resilience. The country's contribution to global greenhouse gases (GHGs) emission is insignificant. However, given the global temperature rise primarily triggered by increasing GHGs emission the impacts of climate change are likely to increase. Therefore, each country has to honestly contribute to reducing GHGs emission irrespective of its global share. Nepal has developed and submitted its second Nationally Determined Contribution (NDC) in 2020 outlining the country targets to reduce GHGs emission for the 2020-2030 decade (MoFE, 2019).

In 2015, Parties (countries) to the United Nations Framework Convention on Climate Change (UNFCCC) adopted the Paris Agreement after series of consultations and negotiations (GIZ, 2021; Brand et al., 2021). Acknowledging the urgency to take action to minimize climate change risks and impacts, enhance adaptive capacity and strengthening resilience, the Paris Agreement appeals to all countries to increase their ambition and act collectively to reduce GHGs emission pathways to achieve well below 2°C, preferably to 1.5°C warming limit target compared to pre-industrial levels (GIZ, 2021; Dimitrov, 2016). The Paris Agreement, for the first time, has served as a binding agreement to bring all nations on board to achieve a climate-neutral world by 2050 (Tosun and Peters, 2021; Brand et al., 2021). Nepal, being one of the parties to the Paris Agreement has shown its commitment to implementing

climate change policies and actions to achieve the goal. The fact is that the efforts to limit global temperature rise to 1.5°C would contribute to lowering the climate change risks and impacts compared to that by 2°C. So, Nepal has developed its second NDC, 2020 aiming to contribute to mitigation targets in line with the Paris Agreement.

The NCCP and second NDC hold meaning only when adaptation and mitigation actions tailored to the country context are worked out and implemented in such a manner as to enhance community resilience and contribute to achieving the Paris Agreement. Localizing these policy instruments by *"identifying, using and enabling the potential of sub-national governments"* is considered an anticipated approach to achieving their policy targets (GIZ, 2021; UCLG, 2019). The constitution of Nepal, 2015 has devolved more rights and authorities to the local governments to develop and implement contextual policies and plans based on their context and needs (GoN, 2015). The local governments are, therefore, well positioned to contribute to achieving the climate change policy goals, and thereby building community resilience and contributing to the achievement of the Paris Agreement goals (see section 4 and 5 for more on the role of local governments on climate change policy implementation). However, the effective implementation of climate change policy instruments is under scrutiny due to the existing top-down policy development and implementation approach (Maharjan, 2021; Mahat et al., 2019). This paper examines the role of local governments and analyzes the barriers to and potential options of localizing these instruments-- NCCP and second NDC. This paper is primarily intended to contribute to deliberations on localization of these climate change policy instruments in Nepal.

1.2 Methodology

This paper has adopted a qualitative analytical approach to access and analyze information. A simple seven-step approach was adopted to collect, compile and analyze empirical evidences (Figure 1). The empirical evidences were collected through literature review, review of NCCP and second NDC, expert interviews at the national level, and consultations with three local governments: Tarkeshwor Municipality (Kathmandu), Banepa Municipality (Kavre), and Ilam Municipality (Ilam).

The literature review helped generate information on the best practices and lessons learned from ongoing initiatives for integrating climate change into the local government level policy and planning processes. The review also helped understand the institutional, knowledge and capacity, and other key barriers at the local government level to localizing climate change policy instruments and actions. The policy review was instrumental in identifying the actions and policy targets in NCCP and second NDC, which can and have to be localized and executed by the local governments. Expert interviews and consultation with local governments provided deeper insight into the key barriers and



Figure 1: Methodological approach employed to develop the paper

opportunities to localize NCCP and second NDC, and helped to collect input to overcome the barriers. The information was compiled, aggregated and analyzed based on which this paper has presented the major barriers and the way forward for localizing NCCP and second NDC.

2. CLIMATE CHANGE IMPACTS IN NEPAL

Nepal is likely to face aggravated climate change risk due to unprecedented changes in climatic variables. A recent assessment reveals that the annual maximum temperature trend of the country is increasing by 0.056°C per year (DHM, 2017). The average temperature is predicted to rise by 0.92°C -1.07°C in the medium term and 1.30°C -1.82°C in the long-term (MoFE, 2019b). Similarly, different studies have indicated that the precipitation pattern is highly fluctuating over the period. The average annual precipitation is expected to rise in both short-term (2030) and long-term (2050) (MoFE, 2019b) with an estimated increase by 2-6 per cent in the medium-term (2016-2045) and by 8-12 per cent in the long-term (2036-2065). These unprecedented changes in climatic variables have escalated the intensities and frequencies of numerous climatic hazards thereby impacting various sectors such as agriculture, water, disaster management, energy, biodiversity, health, and urban planning (MoFE, 2021; Dhungana et al., 2013).

Various factors determine the degree of climate change exposure, sensitivity, risk, and impact. It differs in geography, socio-economic diversity and gender (Maharjan, 2021; MoFE, 2021; MoFE, 2019). Nepal's mountainous landscape with challenging terrain has made it difficult to generalize climate change impacts, risks and effects. However, studies have estimated an increase in the degree of impact in terms of loss and damage. It is reported that at least 647 people were killed between 1971 and 2019 due to climate-induced disasters. Climate-induced

disasters have incurred an average annual economic loss of USD 23.3 million (i.e. NPR 2.78 billion) equivalent, or about 0.08 percent of the FY2018/19 GDP at the current cost (MoFE, 2021). Climate induced disaster-driven loss and damage are predicted to increase in the future (MoFE, 2021).

Local communities and individual households are highly exposed and vulnerable to climate change impacts. Climate change policy instruments have also recognized that *"women, Dalit, indigenous people, Madheshi, Tharu, Muslim, oppressed groups, backward class, minorities, marginalized, farmers, laborers, youths, children, senior citizens, persons with all forms of disability, pregnant women, incapacitated and disadvantaged persons or groups"* are most vulnerable section in the community (MoFE, 2019). Hence, prioritizing these most vulnerable sections is indispensable while developing and implementing climate change policies and initiatives. The next section summarizes the country's climate change policy landscape and its initiatives to reduce climate change risks and impacts.

3. NEPAL'S CLIMATE CHANGE POLICY LANDSCAPE AND THE PROCESS

Nepal has ratified different international policy instruments and agreements including the Paris Agreement, Sustainable Development Goals (SDGs) and Sendai Framework for Disaster Risk Reduction (SFDRR). In line with these conventions, Nepal has developed two major climate change policy instruments: NCCP and second NDC aiming to reduce the risks and impacts of climate change, enhance community adaptive capacity, and reduce GHGs emission. These policy instruments are also instrumental in accessing financial and technical assistance,

along with other forms of support through dedicated international frameworks to contribute to achieving the goals of the ratified international conventions (Maharjan, 2021; MoFE, 2019).

The NCCP serves as an overarching policy instrument to minimize climate change risks and impacts. The overall goal of the policy is to *“contribute to socio-economic prosperity of the nation by building a climate-resilient society.”* It has set policy, strategy and working policies recognizing eight thematic areas: 1) agriculture and food security, 2) forest, biodiversity and watershed conservation, 3) water resources and energy, 4) rural and urban habitats, 5) industry, transport and physical infrastructure, 6) tourism and natural and cultural heritage, 7) health, drinking water and sanitation, and 8) disaster risk reduction and management. It has also set policy targets focusing on four inter-thematic areas: 1) gender equality and social inclusion (GESI), livelihoods and good governance, 2) awareness raising and capacity development, 3) research, technology development and expansion, and 4) climate finance management (MoFE, 2019).

Nepal has developed its second NDC for the period 2021-2030 in accordance with Article 4 of the Paris Agreement. It aims to *“achieve net-zero greenhouse gas emission by 2050”* (GoN, 2020). Second NDC takes into account *“the principle of common but differentiated responsibilities and respective capabilities in light of national circumstances”*. To achieve the long-term low GHGs emissions, second NDC, 2020 has set the mitigation targets mainly for four sectors: 1) energy, 2) industrial processes and product use (IPPU), 3) agriculture, forestry and other land use (AFOLU), and 4) waste. It has included GESI as the cross-cutting thematic area while implementing activities to reduce GHGs emission (GoN, 2020).

The bottom-up and multi-stakeholder approach to contextualized policy development is well appreciated as it

increases the ownership, and ensures effective implementation (Khatri et al., 2013; Bishwokarma, 2014). However, the expert consultations revealed that NCCP and second NDC continued the top-down approach despite being the overarching climate change policy instruments. Participants of the expert consultation pointed out that stakeholder consultation on both the policy instruments was mainly concentrated in the federal level, although some consultations were organized at the provincial level. The breadth and depth of the stakeholder consultations were not as adequate as required to have their issues and concerns reflected in the policy instruments. The ongoing COVID-19 crisis also limited the scope of wider consultation especially on the second NDC. But NCCP consultation process also failed to accommodate the local governments.

The NCCP and second NDC have recognized the need for localization for their effective implementation. One of the objectives of NCCP (2019) is *“to enhance climate change adaptation capacity of persons, families, groups and communities vulnerable to, and at risk of, climate change”* (MoFE, 2019). It further intends *“to mainstream or integrate climate change issues into policies, strategies, plans and programmes at all levels of State and sectoral areas”* (MoFE, 2019). Second NDC has envisioned its implementation *“through federal, provincial and local governments, in collaboration with other relevant stakeholders including youth, women and indigenous people.”* It indicates that both the policy instruments have clearly recognized the role of local governments in their effective implementation.

Significance of localizing climate change policies

A common understanding among the stakeholders concerned on the concept and approach of localizing climate change policies and actions is imperative. The United Cities

and Local Governments (UCLG) network has put forward the governance framework and described localization as *“the process of defining, implementing and monitoring strategies at the local level for achieving global, national and sub-national sustainable development goals and targets”* (UCLG, 2019). It accentuates the vital role of local entities in the localization process and emphasizes policy coherence and increased synergy. This description of localization clearly indicates the need for adequate coordination and participation mechanism to ensure effective engagement of the sub-national and local governments (SNLGs) and civil society during policy design, implementation and monitoring processes (GIZ, 2021; UCLG, 2021; North and Longhurst, 2013). This paper also draws on the description of UCLG, 2019 while discussing the localization of the climate change policy instruments.

Studies (such as Maharjan, 2021; Laudari et al., 2021) and participants of expert consultations emphasized the need to localize NCCP and second NDC if they are to be effectively implemented. The implementation of these policy instruments needs to be expedited in order to achieve their policy targets related to community resilience as well as to contribute to achieving the Paris Agreement objectives. These policy instruments, to a large extent, have to be implemented at sub-national and local levels (see Table 2 and Table 3 for more details). In the context of Nepal, it is broadly understood as ‘localization’.

A part of the localization process involves engaging local governments and non-state actors in coherent policy development, familiarizing the local governments with the policy instruments, supporting them for their implementation, and establishment of effective coordination mechanism (GIZ, 2021; North and Longhurst, 2013). So, localization of NCCP and second NDC requires coherence in policy development at provincial and local levels. It also demands multi-stakeholder engagement and

contextualization of the policy instruments. Likewise, communicating policy targets to the local level stakeholders, particularly local governments would lead to their sensitization on the instruments and targets, meanwhile facilitating on identification of the roles of local governments and the level and kind of support they require to implement the policy instruments.

Past experiences, both in the climate change sector and beyond, show that localization could speed up the process of community resilience, while contributing to improving local governance, and ownership and accountability of local governments.

4. LOCALIZING CLIMATE CHANGE POLICY INSTRUMENTS

4.1 Past experiences of localizing climate change actions

Multiple climate change policy instruments and initiatives have been initiated towards mitigating climate change and reducing climate change risks and impacts. The majority of such initiatives have focused on addressing urgent, immediate and short-term adaptation needs (Chaudhury et al., 2014; Dhungana et al., 2017; Bishwokarma, 2014). The National Adaptation Programme of Action (NAPA), 2010 served as an overarching policy instrument to plan and implement adaptation initiatives. NAPA has identified local and community institutions including community forest user groups (CFUGs) and local governments- the then village development committees (VDCs) and Municipalities- as local entities to implement adaptation initiatives. It laid the foundation for localizing climate change policies and programmes. The National Climate Change Policy, 2011 had emphasized the implementation of adaptation actions identified and prioritized in NAPA.

The National Framework on Local Adaptation Plans for Action, 2011 or LAPA framework was formulated to localize NAPA.

The LAPA framework provided guidelines on localizing adaptation initiatives. Various donor-funded adaptation initiatives such as Nepal Climate Change Support Programme (NCCSP) have supported the development and implementation of LAPA based on the guidelines (Regmi et al., 2016; Bishwokarma, 2014; Dhungana et al., 2013). Similarly, some adaptation initiatives have prepared LAPA focusing on community-based adaptation (CbA) and ecosystem-based adaptation (EbA) approaches. Some donor funded initiatives, especially those working in forestry sector, have supported the preparation and implementation of Community Adaptation Plans (CAPs) in CFUGs and preparation of LAPAs (Bishwokarma, 2014). It is estimated that more than 700 LAPAs and 2,500 CAPs have been prepared and implemented (MoFE, 2019). However, the LAPA framework was followed as the guiding document to prepare both LAPAs and CAPs irrespective of the different intervention approaches (Dhungana et al., 2017; Regmi, et al., 2016; Bishwokarma, 2014).

The approach to LAPA preparation and implementation has been appreciated internationally and has set an example for localization of climate change actions. It has generated ample learning including the followings for localizing NCCP and second NDC (**Table 1**):

- » Sensitization and multi-stakeholder engagement are crucial to have the localization process materialized. LAPA process is well appreciated and has been successful in sensitizing and engaging vulnerable households, communities and local stakeholders in identifying and prioritizing adaptation activities (Dhungana et al., 2017; Regmi et al., 2016).

- » Local governments and well-recognized CFUGs were engaged as primary institutional entities in LAPA and CAP preparation and implementation processes. This engagement facilitated the formalization of LAPA and CAP implementation processes and also helped to improve coordination among the stakeholders
- » Funding for LAPA and CAP preparation and implementation significantly contributed to the localization process. However, LAPA has been criticized as being projectized, external fund-based and under resourced.

The LAPA process has also brought to light the challenges in localizing climate change initiatives which should be considered while localizing NCCP and second NDC. The challenges include:

- » The LAPA experience shows that the local governments had not adequately owned LAPA which was a setback to its integration into local government level plans and its effective implementation. LAPA implementation was not mandated to the local governments as they were to develop and implement the Local Disaster Risk Reduction and Management Plan (LDRMP). LAPA implementation was new to the local governments (then VDCs and Municipalities) and too technical area for them to comprehend properly. The limited external support for capacity building could not fill the gap. Consequently, there were limitations on ownership in terms of both effective implementation and up scaling of LAPA.
- » Except for project-specific steering committees, there is no proper institutional mechanism of coordination and collaboration for NAPA localization at national and sub-national levels. Had there been such a mechanism it would have facilitated coordination and collaboration among different sectoral

agencies and stakeholders, which lead different adaptation activities, and helped intensify the localization and integration process along with progress tracking.

- » Adaptation activities identified and prioritized in LAPA are identical to general development activities. It is argued that such 'no regret options' focused on adaptation activities have not generated any additional outcomes as anticipated in NAPA other than those brought about by the general development activities.

- » Capacitating local governments is a crucial element in the localization process so that they are able to lead the process. However, some studies have contended that local governments were not adequately capacitated to be able to lead LAPA process without external facilitation (Dhungana et al., 2017; Regmi et al., 2017).

Table 1: Learning from past experience of localizing climate change

S. No.	Key Learning	Explanation	References
Learning 1	Engaging diverse stakeholders at the local level is highly important	<ul style="list-style-type: none"> » LAPA and CAPs engaged households and communities that contributed to wider sensitization and awareness; » Both government and non-government actors at the local level were engaged and coordinated especially in LAPA preparation process. So, LAPA process has contributed to sensitizing those stakeholders and identifying potential avenues to support implementation; » Contributed to making LAPAs/ CAPs more contextual. 	Expert interviews; Khatri et al., 2013; Chaudhury et al., 2014; Regmi et al., 2016; Dhungana et al., 2017
Learning 2	Involvement of established local institutions makes implementation smooth and effective	<ul style="list-style-type: none"> » Local government (the then VDCs and municipalities) and CFUGs were the primary institutional entities engaged in preparation and implementation of LAPAs/CAPs; » Easier in decision making; » Easier to approach for collaboration; » Easier in tracking, monitoring, evaluating and progress reporting. 	Expert interviews; Dhungana et al., 2013; Khatri et al., 2013; Chaudhury et al., 2014; Nightingale, 2017

Learning 3	Financing is the key	<ul style="list-style-type: none"> » Additional budget, especially from projects, facilitated implementation of adaptation activities; » NAPA's provision to allocate 80% of funds to local level not materialized; » Insufficient budget was a setback to effective implementation of LAPA; » Local governments seldom allocated budget to implement LAPA; » Budget allocation is among the major factors in integrating climate change policies into local plans. 	Expert interviews; Regmi et al., 2016; Nightingale, 2017
Learning 4	Ownership matters	<ul style="list-style-type: none"> » The local governments did not own LAPA to the desired extent; » VDCs /Municipalities were legally mandated to prepare and implement LDRMP but not LAPA, which also contributed to inadequate ownership; » No local government was reported to have prepared any LAPA on its own indicating low prioritization and ownership gap. 	Expert interviews; Dhungana et al., 2013; Chaudhury et al., 2014; Regmi et al., 2016
Learning 5	Coordination is critical	<ul style="list-style-type: none"> » Lack of overarching multi-stakeholder coordination mechanism at national and sub-national level to contribute to sectoral integration, identification of the roles of agencies, and tracking and complementing implementation; » LAPA criticized for being a more project-based process. Focus should have been put on coordination among stakeholders for sectoral integration; » Sub-national and district level stakeholders felt excluded from LAPA process. 	Expert interviews; Chaudhury et al., 2014; Regmi et al., 2016; Nightingale, 2017; Maharjan, 2021
Learning 6	Additionality to the 'general development needs' should be contemplated	<ul style="list-style-type: none"> » Adaptation activities identified in LAPA/ CAPs resemble general development needs and are limited to 'no regret options'; » It's argued that adaptation activities prioritized in LAPA have not recognized the need for additionality as anticipated in NAPA; » High likelihood of the risk of mal-adaptation rather than localizing NAPA in real sense. 	Expert interviews; Regmi et al., 2016

Learning 7	Contextualization and capacity building at the local level highly crucial	<ul style="list-style-type: none"> » LAPA process considered technically heavy process as it involves climate science, hence dominated by external technical experts; » Had there been provision for adequate capacity building of local governments they could have led LAPA processes; » Local governments (VDCs, Municipalities) seldom led LAPA processes mainly due to limited capacity and legal mandate, which impacted both ownership and effective implementation. 	Expert interviews; Dhungana et al., 2013; Dhungana et al., 2017
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4.2 Policy provisions and targets relevant to local governments

The NCCP and second NDC have set a number of policy targets aimed at reducing climate change risk and impacts, enhancing adaptive capacity, and contributing to GHGs emission reduction. Under the federal structure the federal, provincial, and local governments are supposed and expected to play different roles in a coordinated manner so as to meet the policy targets. This section analyzes the policy targets in both the policy instruments and the potential roles of the local governments in achieving the targets. **Two factors** are considered for identifying policy targets relevant to the local governments. They include the **legal mandates** or the exclusive and concurrent functions of the local, provincial, and federal governments as laid out in the constitution of Nepal (Annex 8 and 9), and the provisions in the Local Government Operation Act (LGOA), 2017). As the local governments have been implementing various activities similar to those required for meeting policy targets in NCCP and second NDC, their **existing experiences** are the another factor considered while identifying policy targets relevant to them.

4.2.1 Policy targets in National Climate Change Policy (2019) relevant to local governments

The NCCP has also provisioned a number of sectoral policies, strategies and working policies to achieve the goal to “contribute to socio-economic prosperity of the nation by building a climate-resilient society.” Local governments have a crucial role in implementing and contributing to achievement of these policy targets as part of localization. Different policy targets are also set under “inter-thematic areas” which are critical to meeting the sectoral policy targets. **Table 2** presents the major policy targets in NCCP which are relevant to local governments.

Table 2: Policy targets and provisions in National Climate Change Policy (2019) relevant to local governments

S.N.	NCCP Targets	Provision/working policies relevant to local governments	Rationale
Sectoral policy, strategies and working policies			
1. Agriculture and Food Security			
	Adopt climate-friendly agriculture system to improve food security, nutrition and livelihoods	<ul style="list-style-type: none"> » Conduct agriculture-based adaptation programmes targeting vulnerable people; » Promote crops suitable for dry and water logged areas; » Promote water-efficient irrigation technology; » Promote crop diversified kitchen garden or home garden; » Document, promote and expand climate-friendly traditional knowledge, skill, practices, and innovative technologies. 	<ul style="list-style-type: none"> » Mandated (as the exclusive power of LG and concurrent powers of federal, provincial and LGs) by the Constitution of Nepal, 2015 (Schedule -8; Schedule-9); » Mandated by LGOA, 2017 (Article 11(2)(O), (R))
2. Forest, Biodiversity and Watershed Conservation			
	Develop climate-resilient ecosystem to ensure sustainable environmental services	<ul style="list-style-type: none"> » Formulate and implement an action plan for wetlands management; » Incorporate best practices of watershed and landscape management into adaptation programme; » Develop and expand the Payment for Ecosystem Services (PES) received from the local level Ecosystem-based Adaptation (EbA) programmes and conservation work. 	<ul style="list-style-type: none"> » Mandated (as the exclusive power of LG and concurrent powers of federal, provincial and LGs) by the Constitution of Nepal, 2015 (Schedule -8, Schedule-9); » Mandated by LGOA, 2017 (Article 11(2)(J))

3. Water Resources and Energy		
Promote multiple uses of water resources and production of low carbon energy to ensure energy security	<ul style="list-style-type: none"> » Construct rainwater harvesting ponds for groundwater recharge and their multiple uses; » Develop and implement standards for sustainable use of groundwater resources; » Promote technologies for storage, multiple-use, and efficient use of water in climate change risk-prone areas and settlements; » Encourage renewable energy production and use; and use of energy-efficient technologies. 	<ul style="list-style-type: none"> » Mandated (as the exclusive power of LG and concurrent powers of federal, provincial and LGs) by the Constitution of Nepal, 2015 (Schedule -8; Schedule-9); » Mandated by LGOA, 2017 (Article 11(2)(S), (U))
4. Rural and Urban Habitats		
Develop safe, sustainable and resilient habitats and infrastructures to build climate-friendly villages and cities	<ul style="list-style-type: none"> » Develop and implement standards for systematic rural and urban settlement infrastructures; » Carry out roadside plantation following the concept of green village/city; » Manage footpath and cycle lane while constructing roads. 	<ul style="list-style-type: none"> » Mandated (as the exclusive power of LG) by the Constitution of Nepal, 2015 (Schedule -8); » Mandated by LGOA, 2017 (Article 11(2)(G))
5. Industry, Transport and Physical Infrastructure		
Adopt the concept of climate resilient economic development for reliable, sustainable, and low carbon technology industry, transport and physical infrastructure	<ul style="list-style-type: none"> » Follow measures to mitigate climate induced risk while designing and constructing physical infrastructures. 	<ul style="list-style-type: none"> » Mandated (as the exclusive power of LG) by the Constitution of Nepal, 2015 (Schedule -8); » Mandated by LGOA, 2017 (Article 11(2)(G))
6. Tourism, and Natural and Cultural Heritage		
Conserve and develop important natural, cultural and social heritages to make climate-friendly tourism	<ul style="list-style-type: none"> » Identify, conserve and manage natural and cultural heritages at risk of adverse impacts of climate change; » Encourage private sector and local communities to implement climate-friendly tourism programs. 	<ul style="list-style-type: none"> » Mandated (as the exclusive power of LG and concurrent powers of federal, provincial and LGs) by the Constitution of Nepal, 2015 (Schedule -8; Schedule-9); » Mandated by LGOA, 2017 (Article 11(2)(V))

7. Health, Drinking Water and Sanitation		
Reduce the adverse effects of climate-induced disasters on human health to create a healthy living environment	<ul style="list-style-type: none"> » Expand technologies on rainwater harvesting and storage; » Encourage proper management of harmful and hazardous waste and the use of biodegradable waste for energy production. 	<ul style="list-style-type: none"> » Mandated (as the exclusive power of LG) by the Constitution of Nepal, 2015 (Schedule -8); » Mandated by LGOA, 2017 (Article 11(2)(I))
8. Disaster Risk Reduction and Management (DRRM)		
Reduce the loss and damage to be caused by climate-induced disasters	<ul style="list-style-type: none"> » Develop disaster risk reduction and management system (at the federal, provincial and local levels); » Integrate DRR activities in climate change adaptation plans and programmes; » Ensure access to early warning information for all groups, levels, and areas. 	<ul style="list-style-type: none"> » Mandated (as the exclusive power of LG and concurrent powers of federal, provincial and LGs) by the Constitution of Nepal, 2015 (Schedule -8; Schedule-9); » Mandated by LGOA, 2017 (Article 11(2)(T))
Inter-thematic Areas		
9. Awareness Raising and Capacity Development		
Create awareness and enhance the capacity of all stakeholders	<ul style="list-style-type: none"> » Prepare and distribute knowledge-based materials with data, information, learning, and best practices; » Document extreme weather events and use the information for public awareness; » Provide training to focal points and support the formation of Eco-Clubs in secondary schools. 	<ul style="list-style-type: none"> » Mandated (as the exclusive power of LG) by the Constitution of Nepal, 2015 (Schedule -8); » Mandated by LGOA, 2017 (Article 11(2)(F), (M))
10. Research, Technology Development and Expansion		
Encourage climate change-related study, research and technology development and expansion	<ul style="list-style-type: none"> » Promote development and use of climate-friendly traditional and nature-based technologies; » Conduct periodic vulnerability and risk assessment (VRA). 	<ul style="list-style-type: none"> » Mandated (as the exclusive power of LG) by the Constitution of Nepal, 2015 (Schedule -8); » Mandated by LGOA, 2017 (Article 11(2)(F), (M), (T))

11. Institutional Framework			
		» Ensure the provision of a climate change section, unit, or focal points at the local level.	» Mandated by LGOA, 2017 (Article 11(2) (E); Article (14))
12. Gender Equality and Social Inclusion (GESI), Livelihoods and Good Governance			
	Mainstream good governance and GESI into the formulation of policies, institutional framework and implementation of programmes related to climate change.	<ul style="list-style-type: none"> » Address the concerns of women, Dalit, indigenous people, Madheshi, Tharu, Muslim, oppressed groups, backward class, minorities, marginalized people including farmers, laborer, youths, children, senior citizens, persons with all forms of disability, pregnant women, and incapacitated and disadvantaged persons or groups in climate change policies and actions; » Enhance access to climate change related information and technologies for persons and groups, who speak different languages, and are from different classes, cultures, ages and sexes, and people with disability. 	» Mandated by LGOA, 2017 (Article 11 (2)(R), (T), (V))

The NCCP policy targets relevant to the local governments demand local context-specific coherent policies, public awareness raising, and capacity building of local governments and the communities, and promotion of indigenous knowledge and skills, and technology. The targets also require addressing GESI issues under 'inter-related thematic areas'. NCCP has also envisioned dedicated units to lead implementation of climate change policies and actions at all three governments level. Following the devolution of many authorities to the local government as part of federalization local governments are in a position to work in many new and additional sectors. Activities required to achieve NCCP targets in energy, biodiversity, tourism, heritage, rural and urban habitats, and industry, transport and infrastructure sectors are still new to most of the local governments. Research and technology development are quite beyond the comprehension of many of them. However, local governments have prior experiences of implementing activities to achieve policy

targets under such sectors as agriculture, forest resources, water resources, health, drinking water and sanitation, disaster risk reduction and management, GESI, livelihoods and governance.

Given such experience, local governments are likely to be able to take lead on promoting technology, skills, and awareness to promote climate adaptive agriculture, and water resource management such as harvesting and efficient use of rain water. These activities are already in practice and are also part of NCCP. Also of importance is the local governments' role in preparing different policies on resilient settlements and infrastructure development by, for example, developing and implementing building code. Establishing and promoting early warning system would be a milestone in disaster risk reduction and management at local government level.

Climate-smart agriculture

Wetlands conservation



Early warning system and disaster risk reduction

Rain water harvesting



ADAPTATION ACTIONS



Eco-tourism

Green city and rooftop farming

Picture 1: Adaptation actions relevant to local governments

Local governments should also play a key role in addressing cross-cutting issues such as GESI through, among other activities, awareness raising, information collection and documentation, research and extension, and consider GESI in all aspects of their development planning process. Local governments have been successful in implementing some of these activities. However, a functional institutional set-up on climate change and collaboration between local governments and other key stakeholders would be crucial in implementing these activities more effectively and efficiently.

4.2.2 Policy targets in second NDC (2020) relevant to local governments

The second NDC has adopted the “*principle of common but differentiated responsibilities*” based on the Paris Agreement. It has also acknowledged the different capabilities of different countries including financing and technical capacity to contribute to climate change mitigation. Second NDC, 2020 has set different ‘*conditional*’ and ‘*unconditional*’ mitigation targets. Local governments will have a fundamental role to play in meeting the targets. **Table 3** presents the mitigation targets along with some adaptation targets set by second NDC which are relevant to local governments.

Table 3: Policy targets and activities in Second Nationally Determined Contribution (2020) relevant to local governments

S.N.	National Goal/ Targets	Targets/Provisions relevant to local governments	Rationale
A.	Mitigation targets		
1.	Energy sector		
	By 2025, reduce emissions from the cooking sector by around 11%; and by around 23% by 2030	<ul style="list-style-type: none"> » By 2025, install 500,000 improved cooking stoves, specifically in rural areas; » By 2025, install an additional 200,000 household biogas plants and 500 large scale biogas plants (institutional/industrial/municipal/community); » By 2030, ensure 25% of households use electric stoves as their primary mode of cooking. 	<ul style="list-style-type: none"> » Mandated (as the exclusive power of LG) by the Constitution of Nepal, 2015 (Schedule -8); » Mandated by LGOA, 2017 (Article 11(2)(S), (U))

2. Agriculture, forestry and other land use (AFOLU)		
2.1 Forest		
<ul style="list-style-type: none"> » By 2030, maintain 45% of the total area of the country under forest cover » By 2025, enhance the sink capacity of the land-use sector 	<ul style="list-style-type: none"> » Afforest/reforest viable public and private lands, including agroforestry; » Restore and manage degraded forest land, including in the Chure region. 	<ul style="list-style-type: none"> » Mandated (as the power of LG and concurrent power of federal, provincial and LGs) in Constitution of Nepal (2015)(Schedule -8; Schedule-9); » Mandated in LGO Act (2017)(Article 11(2)(J))
2.2 Agriculture		
<ul style="list-style-type: none"> » By 2030, soil organic matter content of agriculture land will reach 3.95% » By 2030, establish 200 climate-smart villages and 500 climate-smart farms 	<ul style="list-style-type: none"> » By 2030, expand mulberry and fruit orchard areas to 6,000 ha.; » By 2030, maintain an additional 500,000 improved cattle sheds; » Promote intercropping, agroforestry, conservation tillage, and livestock and agricultural waste management. 	<ul style="list-style-type: none"> » Mandated (as the exclusive power of LG and concurrent powers of federal, provincial and LGs) by the Constitution of Nepal, 2015 (Schedule -8; Schedule-9); » Mandated by LGOA, 2017 (Article 11(2)(O), (R))
3. Waste Sector		
<p>By 2025, treat 380 million litres/day of wastewater before being discharged, and manage 60,000 cubic meters/year of fecal sludge</p>	<ul style="list-style-type: none"> » By 2030, adopt and implement waste segregation, recycling and waste-to-energy programmes in at least 100 municipalities; » Promote the 3Rs (Reduce, Reuse, Recycle) approach to waste management; » Focus on co-production of energy and organic fertilizer from solid waste, wastewater and fecal sludge. 	<ul style="list-style-type: none"> » Mandated (as the exclusive power of LG) by the Constitution of Nepal, 2015 (Schedule -8); » Mandated by LGOA, 2017 (Article 11(2)(I))

4. Gender Equality and Social Inclusion (GESI)			
	By 2030, develop an action plan for integrating GESI in achieving second NDC targets	<ul style="list-style-type: none"> » Develop specific programmes with dedicated resources (human and financial) to ensure full, equal and meaningful participation of women and other marginalized groups in climate change-related policy development at all three levels of government; » Promote the leadership, participation and negotiation capacity of women, indigenous peoples and youth in climate change forums; » Ensure gender-disaggregated data when reporting on progress and achievements. 	<ul style="list-style-type: none"> » Mandated by LGOA, Article 11(2) (E); Article (14))
B. Adaptation Component			
		By 2030, prepare and implement climate-resilient and gender-responsive adaptation plans in all 753 local governments.	<ul style="list-style-type: none"> » Mandated (as the exclusive power of LG) by the Constitution of Nepal, 2015 (Schedule -8); » Mandated by LGOA, 2017 (Article 11(2)(G), (J))
		By 2025, establish and/or operationalize local level institutional structures on environment protection and climate change management.	<ul style="list-style-type: none"> » Mandated by LGOA, 2017 (Article 11(2) (E); Article (14))
		By 2025, including climate change-related education in all secondary schools and locally mobilize 2,000 climate change adaptation resource persons.	<ul style="list-style-type: none"> » Mandated (as the exclusive power of LG) by the Constitution of Nepal, 2015 (Schedule -8); » Mandated by LGOA, 2017 (Article 11(2)(H))

Micro hydro, solar and wind energies



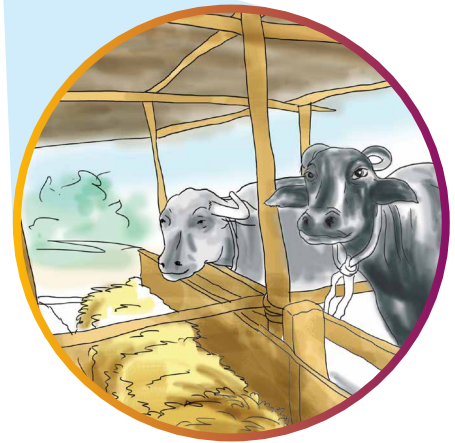
Waste management



MITIGATION ACTIONS



Forest conservation



Improved cattle shed and manure management

Picture 2: Mitigation actions relevant to local governments

The mitigation targets relevant to local government in second NDC are mostly focused on expanding and promoting technologies, integrating mitigation related activities into the planning process, and ensuring inclusive processes of making policies on energy, waste management and agriculture, forest and other land use (AFOLU) sectors. Activities for promoting and expanding renewable energy options, improved cooking stoves installation, and encouraging the use of electricity especially for cooking purposes are directly relevant to the local government to reduce GHGs emissions from the energy sector. Similarly, local governments can play significant role in conducting activities to increase and maintain the forest cover, and promote and upscale technologies to increase soil organic matter and decrease GHGs emissions from the AFOLU sector. They can also undertake activities to promote and upscale technology for waste management through segregation and 3R (reduce, reuse and recycle) approach as provisioned by second NDC.

The second NDC has stressed the need to consider GESI while preparing policies, developing and implementing plans, and enhancing leadership ability for achieving mitigation targets. It has also included adaptation targets which overlap those of NCCP and provisioned development of adaptation plans at the local level, development and capacity building of institutions required to lead adaptation activities, and integration of climate change into school education. These activities are also directly relevant to the local government considering the mandates given to them by the constitution of Nepal and LGOA.

Despite some previous experience in implementing similar activities, the local governments are not confident enough to work for achieving the mitigation targets. The

local governments have to the experience of planning and implementing different activities related to waste management, promoting bio-gas and improved cooking stove installation, and agriculture and livestock, which directly contribute to mitigation. However, specific initiatives to reduce emission are conspicuously absent at the local government level. Second NDC includes similar and extended activities to achieve the mitigation targets. External support and increased collaboration would be crucial to make the local governments realize their existing contribution and to encourage and enable them to work for mitigation and develop mitigation accounting system.

4.3 Barriers to localization of NCC Policy and second NDC

The NCCP has recognized the need for localization as it emphasizes further rolling out of LAPA framework and integration of climate change into the local development plans. It has also emphasized the role of local governments as a critical milestone in meeting its policy targets. Similarly, second NDC has set multiple targets, which can be met only if the local governments own them and actively contribute to meeting them. Active engagement and ownership of the local governments is key to successful localization and effective implementation of NCCP and second NDC. The constitution has mandated the local governments to develop and implement context-specific policies (GoN, 2015). LGOA has further clarified their roles and responsibilities. In this sense the local governments are considered the mandated entity to lead the localization of NCCP and second NDC. However, some hindrances could limit the localization of these two policy instruments (**Table 4**).

Table 4: Barriers to localizing NCCP (2019) and second NDC (2020) in the federal context

Localization Barriers	Explanation
Policies and detailing targets	<ul style="list-style-type: none"> » Mostly employed top-down policy approach; » As policy targets have not been detailed out, it has been difficult for the provincial or local governments to understand their anticipated role in implementation of these policy instruments; » The constitution and LGOA have mandated the local governments to work in different sectors. However, there is inadequate policy mandate/provisions to make integration of NCCP and second NDC in their plans legally binding for the local governments; » Some policy instruments including 'Local Level Plan Formulation Guidelines (2021)' and 'Environment-Friendly Local Governance Framework (2021)' have prescribed basic process and steps to be considered while formulating climate friendly plans and programmes. But this does not seem to be enough for the local governments to be able to make local plans climate responsive and achieve NCCP and second NDC policy targets.
Communicating policies	<ul style="list-style-type: none"> » Local governments are not adequately engaged and consulted while developing NCCP and second NDC; » The policy instruments and roles and responsibilities expected of them are not adequately communicated to the provincial and local governments nor are their capacity limitations, and requirements for achieving policy targets have been identified.
Institutional mechanism and coordination	<ul style="list-style-type: none"> » Climate Change Coordination Committees (C4) are being set up in some of the provinces but they are not legal entities; » The institutional mechanism at the local government level are either not established or lack human resources; » Mechanism of policy communication and strengthening vertical and horizontal communication flow which is important for policy implementation are still inadequate; » The absence of a proper institutional mechanism hinders effective implementation, coordination and integration.
Resource allocation and information	<ul style="list-style-type: none"> » Local governments do not have adequate qualified human resources to lead localization, sensitization, and integration; » Local governments have not allocated budget for having NCCP and second NDC localization materialized. Climate change activities might not be prioritized over general development activities; » Implementing activities to meet NCCP and second NDC targets require additional funds.

Capacity building	<ul style="list-style-type: none"> » Technical capacity of local governments is still inadequate to take lead on achieving NCCP and second NDC targets; » Technical capacity gaps at local government level are constraining implementation of activities especially in new and additional sectors, in which they have no previous experience; » Lack of localized risk information and assessment especially in relation to future climatic condition, and inadequate capacity to access and analyze data required for implementation (e.g., meteorological data as the part of vulnerability analysis).
Institutional ownership, leadership, and prioritization	<ul style="list-style-type: none"> » Elected local government leaders are perceived to be less sensitized both to the climate change issues and climate change policies, hence their unwillingness to consider and integrate climate change-related activities in the policies and plans; » Inadequate institutional ownership and willingness to introduce and integrate climate change friendly plans and programmes especially due to limited understanding and capacity of the local government bureaucrats and leaders on the crucial area of localization; » Local governments prioritize general development activities as committed during election campaigns.

The climate change policy process is still a top-down phenomenon with limited consultation at sub-national levels. The participants of expert consultations claimed that similar approach was followed in NCCP and second NDC processes. This is why ownership of the local governments, which is critical to localization, is doubtful. Most of the local governments are yet to develop climate change-related policies tailored to their context and in line with NCCP and second NDC. It will pose a challenge to integrating climate change into their policies and plans.

While NCCP and second NDC were not adequately consulted at the sub-national level, they have not even been properly communicated to provincial and local governments. Had there been proper consultations and communication, it would provide ample opportunity to clarify the roles of the local governments, identify gaps and the scope of required support to them for localizing both policies. It would also help foster coordination among the federal, provincial, and local governments for effective implementation of the policies.

Legally mandated institutions are yet to be established at provincial and local levels to coordinate and lead climate change policy implementation and localization. Although Climate Change Coordination Committees have been set up in some provinces, they are still an informal forum. The local governments do not have such entities. The lack of such dedicated entities at the local government level impedes the pace of implementation, and makes coordination and integration, which are essential elements of localization, difficult. For example, second NDC has the target to increase electric-cooking stoves to reduce the GHGs emission from cooking. Promotion of electric stoves and subsidies on electricity use could be an option to achieve this target, and this can be done by the local governments. However, as it is the federal government, which determines the electricity tariff only the federal government can make the decision to provide a subsidy on electricity use. So, coordination among federal, provincial, and local governments is indispensable to achieve this target.

Allocation of human and financial resources is fundamental in localizing climate change policies. However, the local governments are constantly complaining of inadequate human resources at their disposal. As additional budget is required to implement the policies the federal government is required to provide additional budget to the local governments. The local governments are also required to allocate budget to implement climate change policies after their integration into their own policies and plans. However, neither the federal government nor the local governments have prioritized localization of climate change policies.

The provincial and local governments are fully mandated to make decisions under the federal structure. However, the local governments' capacity to implement climate change policies is under question, not to talk of the technical capacity required to address the climate change issues and issues related to other new and additional sectors that fall within their jurisdiction. Therefore, local governments' capacity has to be enhanced so as to enable them to lead the overall localization process.

The localization of both NCCP and second NDC to a large extent depends on the willingness of the local government leaders to integrate them into their policies and plans, and implement them. However, most of the local government leaders are not well-sensitized to the targets set in NCCP and second NDC. Generally, they prefer general development activities as committed by them during the election campaign. Therefore, there is a risk that activities for achieving climate change policy targets might not be prioritized as anticipated. Likewise, the expert consultation revealed that bureaucrats and leaders in the local governments have inadequate sensitization and realization on their crucial role in localizing NCCP and second NDC. This has limited institutional ownership, and willingness to introduce climate change friendly policies, plans and programmes.

5. WAY FORWARD FOR LOCALIZING CLIMATE POLICY INSTRUMENTS

The localization of NCCP and second NDC is critical to creating resilient communities and contributing to achieving the Paris Agreement goals. The local governments will have a crucial role in the localization process especially in the context of federalization. The earlier section discussed different policy targets in NCCP and second NDC, which are relevant to the local governments as per the mandates given to them by the constitution and LGOA. The section has also highlighted the barriers to localizing NCCP and second NDC. The section has also provided potential options for effective localization of NCCP and second NDC.

Localization of NCCP and second NDC, and other international policy instruments including the Paris Agreement, Sustainable Development Goals (SDGs) and Sendai Framework for Disaster Risk Reduction, entails **three major parts**: developing or updating climate change policies, implementing climate change policies, and positive interplay through coordination (GIZ, 2021). It is crucial to ensure the inclusion and engagement of sub-national and local governments and other non-state actors while **preparing or updating climate change policies**. Such a process includes sub-national and local views to portray groundwork for increasing ownership, effective implementation, and successful localization (GIZ, 2021; UCLG, 2019). The **second part** of the localization process is **implementing climate change policies**. It includes co-development of the implementation plan, investment plan, simplification of the process of accessing inter/national funding at the sub-national and local levels, and establishing the support mechanism of capacity building. The **third part** of localization entails **coordination** among government and non-government actors. Such coordination helps identify roles of different governments and other

non-state actors, and identify the scope and need of support. The coordination among stakeholders also contributes to progress tracking and shared learning including data sharing and reporting to scale up and scale out the localization.

Along with these fundamental parts of localization, learning from past experiences, policy analysis, literature review, expert interviews, and consultation with local level institutions, this paper has further proposed a **four-pillar framework** to be considered for effective localization of NCCP and second NDC (Figure 2).

Policy and institutions

This pillar demands policy coherence among governments, consultative and inclusive policy process, and institutional arrangements. The climate change policy process should adopt a bottom-up and inclusive approach in terms of engaging local governments and non-state actors. However, NCCP and second NDC have already been developed, primarily through a top-down approach. It has therefore already missed the mark on being an ideal localization process. The governments at all levels should now collaborate to mend

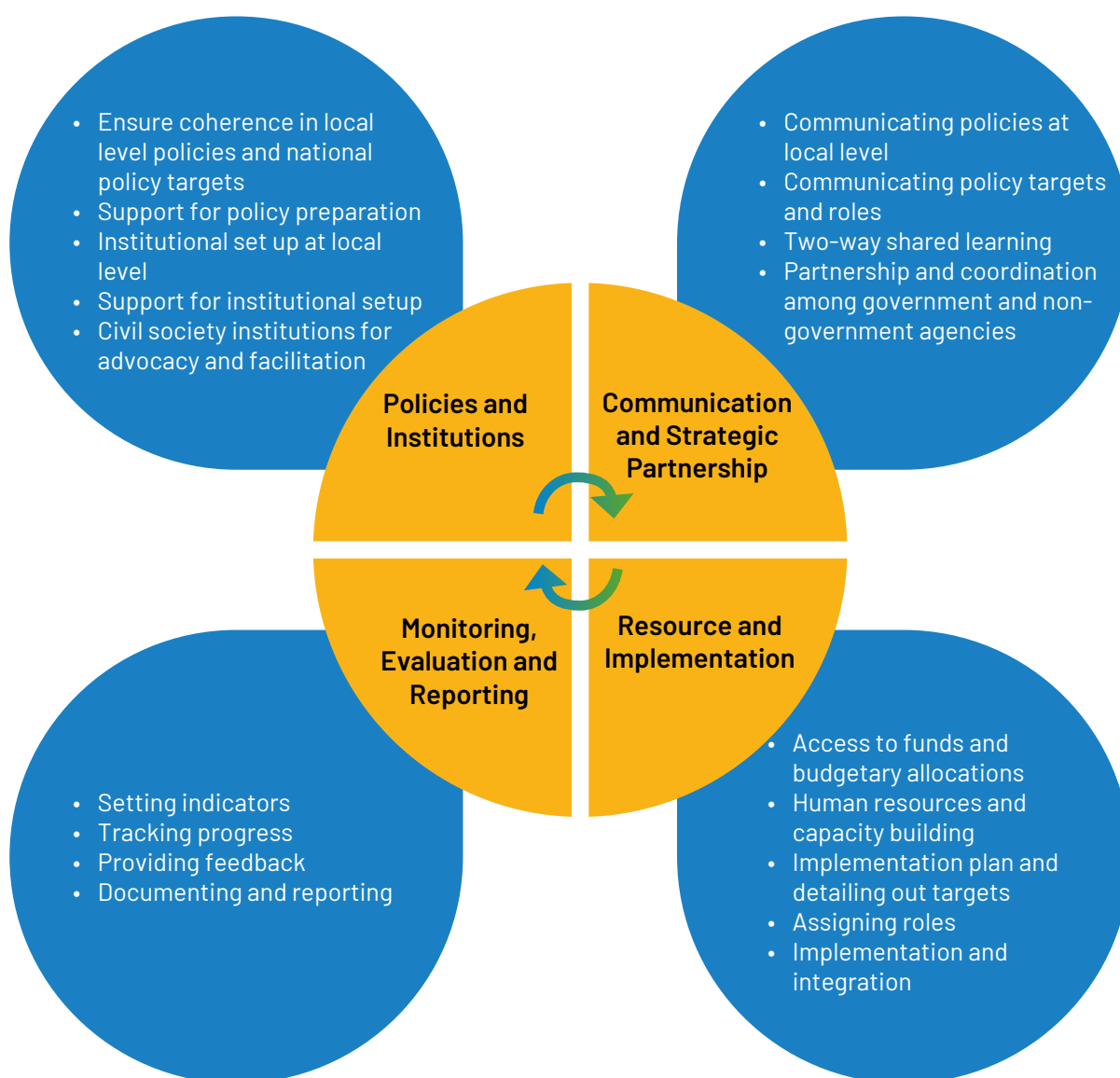


Figure 2: Four-Pillar Framework to localize NCC Policy (2019) and second NDC (2020)

the broken link by internalizing and working together on the other pillars. Provincial and local governments have to take initiatives to develop coherent climate change policies and mainstream sectoral policies in line with NCCP and second NDC. Experts are critical of the federal government's centralized and top-down approach to climate change policy process that has kept provincial and local governments at bay. Likewise, both provincial and local governments are also criticized for making policies exclusively without engaging and consulting diverse stakeholders. A multi-stakeholder, consultative and inclusive policy process is a must for effective localization of NCCP and second NDC.

Institutional mechanism required for effective localization is mostly lacking or poorly functional at provincial and local government levels. The climate change coordination committee is developed at the provincial level but it is functioning on an ad hoc and informal manner. A formal and legally recognized institution with clarity of function and mandates for different agencies is essential at the provincial level to address issues related to climate change. There are issues of ownership, overlap or siloed roles and responsibilities of stakeholders with regard to horizontal and vertical integration of policies. So, it is also essential to ensure coordination, collaboration and co-existence among governments and non-state actors. The institutional arrangements would go a long way towards effective coordination, implementation, and integration which are fundamental elements of localization.

The civil society institutions and their voice also matters in localizing NCCP and second NDC. However, proactive and well-organized civil society institutions, as in the forestry and other natural resource management sector, are still absent to raise the citizen's voice strongly. Such civil society institutions can do watch-dogging and also serve as facilitating agency engaging sub-national and local governments in the localization process.

Communication and strategic partnership

Communication and strategic partnership among government and non-government agencies with a focus on inclusive and participatory governance should be considered another strong pillar of localizing NCCP and second NDC. It entails communicating NCCP and second NDC policy targets to provincial and local governments. It leads the provincial and local governments to understanding their roles and responsibilities, identifying capacity and skills limitations and scope of external support required, and exploring avenues for collaboration. It should have been done right from the design phase of both the policy instruments. But still it is relevant to communicate these policy instruments to them so that they are able to contextualize and integrate the policy instruments into the local government level policies and plans.

The federal, provincial and local governments have their own exclusive and concurrent roles and responsibilities, and expertise in implementing NCCP and second NDC. Therefore top-down and one-way communication leads nowhere; a two-way communication among the governments at all levels is of vital importance in the localization process. Such communication can also become the medium of acquiring technical knowledge together. It would lead to acknowledging the co-existence of governments at all levels and other non-state actors thereby enhancing their ownership of the localization process.

Localization of NCCP and second NDC requires external support in terms of resources and capacity building. The local governments are required to establish strategic partnership among government and non-government actors. The partnership includes assessing and communicating risk information; building coherent policies and plans; execution of climate adaptation and mitigation actions; and accessing financial resources.

Resources and implementation

The availability and access to both financial and human resources are one of the determining factors for effective localization and implementation of the policy instruments. Local governments require additional financial resources for localizing NCCP and second NDC. NCCP is well appreciated for its commitment to channeling about 80 per cent of climate funds to the local level, which, though, has not yet materialized. Therefore, a fair share of funds should be provided to the local governments for effective localization of NCCP and second NDC. On their part, the local government should allocate budget for integration of the climate change policy instruments into their policies and plans. Spending donor supported project funds on implementing prioritized climate actions of local governments would also be an option.

The localization process demands suitably skilled human resources and for that matter technical capacity building initiatives. Currently, the local governments are short of such human resources. They need support for capacity building, improving technical knowledge and skills to work for achieving some NCCP and second NDC policy targets. For this to happen, the local governments need to work in new and additional sectors. But they do not have the expertise and experience working in these sectors. For instance, both NCCP and second NDC have policy targets related to promotion of waste management and its use for energy production. In order to achieve this target the local governments need specific technical knowledge and skills.

A detailed implementation and integration plan for effective localization and implementation of NCCP and second NDC is imperative. The implementation plan, at least at the provincial level, should detail out the policy targets. The implementation planning process helps the provincial governments to identify their strengths, gaps, and level and nature of support they require for effective implementation of the two policy instruments. Meanwhile, the planning process will contribute to identifying the roles and

responsibilities of governments and other non-state actors with regard to localization of NCCP and second NDC, and include them in the implementation plan.

Going by what past experience shows, integrating climate change actions into the local planning process is another crucial aspect of localizing NCCP and second NDC, and one of the determining factors for successful implementation of the policy instruments. However, legal mandates (exclusive and concurrent powers) of the local governments, their capacity and skills, and availability of required resources are some other factors that determine how successfully the local governments can integrate the policy instruments into their and policies and plans.

Monitoring, evaluation and reporting

Monitoring, evaluation, and reporting (MER) is another fundamental pillar as measuring the progress in localization and implementation of any policy instruments such as NCCP and second NDC. One of the objectives of both the policy instruments is to contribute to the Paris Agreement, for which each country needs to report periodically. However, the MER mechanism is mostly limited to climate change projects; progress in policy implementation is rarely monitored. Therefore, it is highly important to make MER along with clear indicators an integral part of NCCP and second NDC localization and implementation processes at the federal, provincial, and local government levels. It helps track the progress, identify gaps, explore options to address the gaps, and assign relevant stakeholders with appropriate roles and responsibilities. Institutions/entities to be set up to implement the climate change policy instruments can lead the MER.

The four pillars of localizing NCCP and second NDC should not be looked at and implemented in isolation as they are inter-related and complement each other. The four-pillar framework should be implemented in its entirety to ensure effective localization of the two policy instruments.

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ANNEX: LIST OF CONSULTATION PARTICIPANTS

S.N.	Name	Organization
A.	Participants of expert consultation at the national level	
1.	Dr. Radha Wagle	Ministry of Forest and Environment (MoFE)
2.	Mr. Hari Laudari	Ministry of Forest and Environment (MoFE)
3.	Mr. Gyanendra Karki	United Nations Environment Programme/ National Adaptation Plan
4.	Dr. Bimal Regmi	Oxford Policy Management, Nepal
5.	Mr. Ajaya Dixit	Institute for Social and Environmental Transition, Nepal
6.	Mr. Man Bahadur BK	Nepal Climate Change Support Programme-2
7.	Mr. Sandeep Kayastha	Nepal Climate Change Support Programme-2
8.	Mr. Nirajan Shrestha	Nepal Climate Change Support Programme-2
9.	Dr. Bharat Pokharel	HELVETAS Swiss Intercooperation, Nepal
B.	List of local governments and local institutions consulted	
1.	Ilam Municipality, Ilam	
2.	Tarkeshwor Municipality, Kathmandu	
3.	Banepa Municipality, Kavre	

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