

## What roles do sub-national governments play in Nationally Determined Contributions? Between rhetoric and practice in REDD+ countries

Juan Pablo Sarmiento Barletti, Anne M. Larson and Natalia Cisneros

### Key points

- Research and practice place much emphasis on the transformative role that sub-national governments (SNGs) may play in climate change action.
- Nationally Determined Contributions (NDCs) are not blueprints for implementation, but they offer some insight into potential priorities. Currently, the role of SNGs in most is limited: of 60 "REDD+ countries", only 14 explicitly mention a role for SNGs in mitigation, and only 4 of these give SNGs a decision-making role.
- This failure to assign more precise roles to SNGs may prove to be short-sighted as climate change is a global problem, but solutions such as REDD+ need to be implemented locally and jurisdictionally, and thus require local input.
- The factors that will affect the realization of the roles assigned to SNGs in NDCs include: political will toward decentralization; the funds required by Parties to achieve their targets; the capacities of SNGs; and the need to align sub-national with national development priorities.

### Introduction

In 2015, after almost a decade of negotiations, the United Nations Framework Convention for Climate Change (UNFCCC) adopted the Paris Agreement. Signatories agreed to collaborate toward limiting global warming to below 2 degrees Celsius above pre-industrial levels. As part of the agreement, countries submitted and are now expected to pursue Nationally Determined Contributions (NDCs). NDCs register each signatory country's ambition toward contributing to the global goal. These will be monitored and revised in 5-year cycles. By April 2018, 197 Parties to the UNFCCC had submitted their NDCs (Pham et al. 2018).

There is considerable optimism in research and practice on the transformative role that sub-national governments (SNGs) can play in climate change action. SNGs currently hold a place in broader national and international initiatives for low emissions development,

such as REDD+ (Nepstad et al. 2013; Boyd et al. 2018; Stickler et al. 2018a). The REDD+ framework under the UNFCCC includes sub-national implementation centered on projects as part of a transition to national-level implementation, some of which have been implemented as jurisdictional programs. The World Bank's Forest Carbon Partnership Facility follows a similar jurisdictional program approach (Fishbein and Lee 2015).

Recent decentralization processes have transferred increased responsibilities over forest and land-use governance to SNGs (Larson and Ribot 2009). Jurisdictional approaches build on decentralization reforms that "aim to make local government responsive and accountable to the needs and aspirations of citizens so as to improve equity, service delivery and resource management" (Ribot 2015: ii). These approaches work within political-administrative boundaries, facilitating alignment with public policies

and programs (Stickler et al. 2018b). They are better defined than ‘landscape approaches’, which fail to assure that geographical spaces coincide with the governing bodies that control access to resources (see McCall 2016).

The importance of SNGs was acknowledged in the negotiations leading to the Paris Agreement. Its preamble recognizes “the importance of the engagement of all levels of government and various actors in accordance with respective national legislations of Parties, in addressing climate change”. Although SNGs are not Parties to the agreement, Article 7(2) notes that “adaptation is a global challenge faced by all with local, sub-national, national, regional and international dimensions”. Their potential was exemplified in the response by the state of California, which took a leading role in supporting global climate action in the wake of the announcement by US President Trump’s administration that it would withdraw from the Paris Agreement. Similarly, the Governors’ Climate and Forests Task Force<sup>1</sup> provides a platform for SNGs – mainly from tropical countries, but also in collaboration with some from the North – to address climate change while promoting sustainable development and low emissions investment (Scanlan et al. 2018). The potential of SNGs to be agents of change, at times countering national development policies, is also reflected in recent research (see Brockhaus et al. 2017; Luttrell et al. 2017; Boyd et al. 2018; Stickler et al. 2018a).

The emphasis is simple yet powerful – climate change is a global problem, but most of its solutions will be implemented locally. Thus, the design and implementation of adaptation and mitigation solutions require local input. At their core, the NDCs provide the foundation of the new bottom-up approach established in the Paris Agreement. But to what extent is this recognized in the NDCs proposed by national governments? This Infobrief explores this question by examining the NDCs of ‘REDD+ countries’ in order to assess how SNGs are involved in the achievement of their targets. We selected these countries specifically because of our interest in REDD+, because REDD+ illustrates the important role of SNGs in the implementation of global climate solutions, and because these countries, in the South, are the most likely to consider forests in mitigation and adaptation strategies. In our conclusion, we highlight the best cases among the NDCs in terms of the roles they assign to SNGs, and argue that the minimal assignment of precise roles to SNGs may prove to be short-sighted as, without local action, global goals cannot be met.

## Method

We reviewed the NDCs<sup>2</sup> of the countries that, as of July 2018, had ratified the Paris Agreement.<sup>3</sup> For each NDC, we searched for a set of sub-national terms,<sup>4</sup> as well as the sub-national administrative division used in each country.<sup>5</sup> We then analyzed the context in which each term was included in the text to identify references to a sub-national jurisdiction. These were compiled in a database, and classified under three categories, as relating to mitigation, adaptation and/or any acknowledgment of past role (including the planning process for the NDCs). We ranked the findings under each of these categories as “no mention of SNGs”; “vague mention”<sup>6</sup>; “only mention”; or “mention with a defined role” toward achieving the NDC.

This Infobrief presents a subset of our database. It focuses on a combination of countries with national REDD+ programs or that are currently hosting REDD+ projects (see Duchelle et al. 2018) with those that have been identified as having a high potential for REDD+ (see Olesen et al. 2018). Our subset includes 60 countries, listed below by geographic region:

- **Africa (26)** - Angola, Burkina Faso, Cameroon, Central African Republic, Congo, Côte d’Ivoire, Democratic Republic of Congo, Ethiopia, Gabon, Ghana, Kenya, Liberia, Madagascar, Malawi, Mali, Mozambique, Niger, Senegal, Sierra Leone, Sudan, Tanzania, Togo, South Africa, Uganda, Zambia and Zimbabwe;
- **Asia (12)** - Cambodia, China, India, Indonesia, Lao PDR, Malaysia, Mongolia, Myanmar, Nepal, Philippines, Sri Lanka, and Vietnam;
- **Latin America and the Caribbean (18)** - Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Guyana, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Uruguay, and Venezuela;
- **Oceania (4)** - Fiji, Papua New Guinea, Solomon Islands, and Vanuatu.

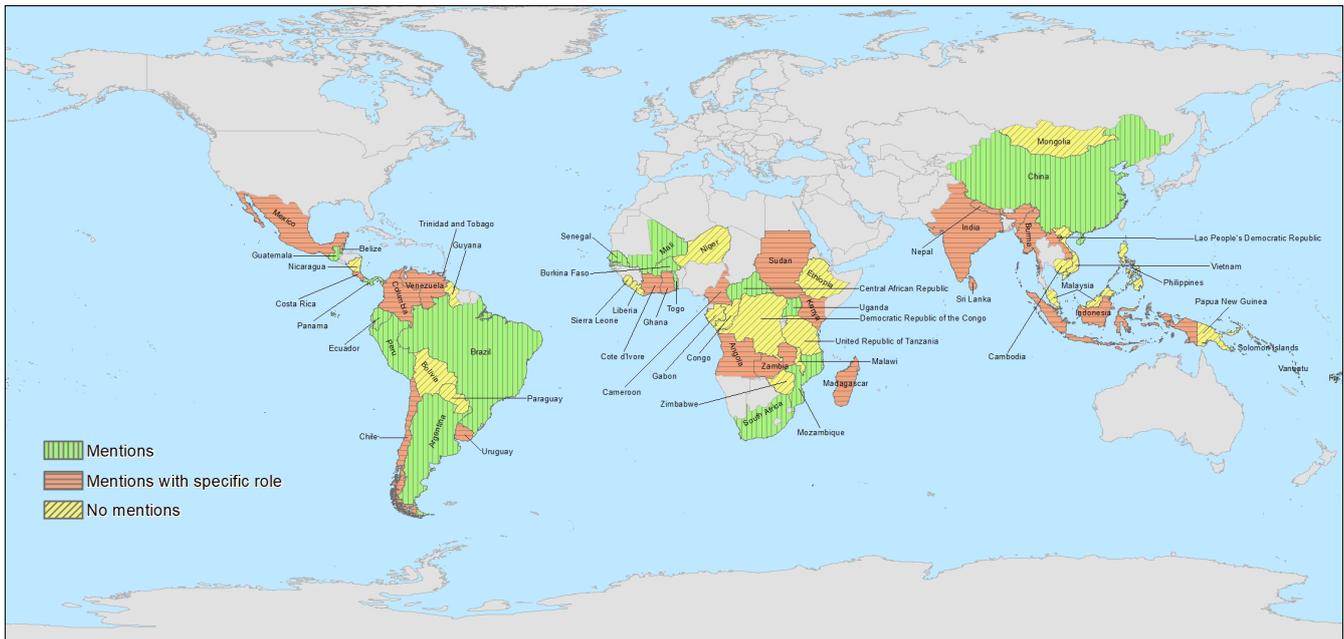
2 From the UNFCCC (Interim) NDC Registry, <http://www4.unfccc.int/ndcregistry/Pages/All.aspx>

3 After the Paris Agreement, all INDCs have become NDCs, but as some are referred to as INDCs in the texts studied, we have used both terms accordingly.

4 “Department”, “province”, “state” (for federal systems), “municipal”, “regional”, “local”, “level”, “sub-national”, and variations.

5 The terms for sub-national administrative divisions in each country were identified using the CIA World Factbook <https://www.cia.gov/library/publications/the-world-factbook/>

6 For example, Cambodia’s NDC’s reference to SNGs is unclear in this statement: “Reduce sectoral, *regional*, gender vulnerability and health risks to climate change impacts”. Note that Cambodia is administratively divided into provinces. Liberia’s NDC also includes some mentions that were considered as unclear in terms of SNGs and their roles: “[Climate change] will greatly affect the country due to its high vulnerability owing to its [...] low capacity to adapt at the *community* and national levels”. Finally, Vietnam, which is subdivided into provincial governments, notes the production of “Socio-Economic Development Plans based on climate change scenarios, with a focus on key sectors and *regions*”.



**NDCs mentioning subnational governments (SNGs) in 60 REDD+ countries**

Our analysis below eliminates the “no mention” and “vague mention” categories and includes only the other two, more substantive groups, and it includes only those with mentions of SNGs in relation to future mitigation and adaptation plans. Some additional countries do provide substantive references to SNGs, such as Peru regarding the design process of the INDC, but they are not included here because the mention is not related to mitigation or adaptation.

Further, we highlight and explore the NDCs that provide a “mention with a defined role” for SNGs. After reviewing these specific roles granted to SNGs, we grouped them into three types: implementation of actions and policies toward NDC targets; knowledge exchange/capacity building; and – the most substantive – decision-making. To a degree, these categories overlap and are subjective, but they are analytically helpful to identify distinctions. The first type identifies roles aimed at the implementation of activities and policies toward reaching NDC targets that should be carried out at the sub-national jurisdictional level, but were designed at the national level. The second type refers to capacity building and knowledge exchange activities toward the implementation and/or integration of national efforts at the sub-national level. These are most often linked to the development of technical capacities in SNGs. The third type identifies specific roles in decision-making for SNGs, such as through the articulation and synergy of national and sub-national plans.

## Results

Our results reveal that 39 out of the 60 REDD+ countries mention SNGs in their NDCs: 18 of those “only mention” SNGs (Table 1), while 21 countries identify a specific role for SNGs (Table 2). Of the 18 countries classified as “only mention”, 9 included mentions only under adaptation (Burkina Faso, Central African Republic, Ecuador, Guatemala, Mozambique, Peru, Solomon Islands, South Africa, Vanuatu); 3 only under mitigation (China, Panama, Senegal); and 6 under both (Argentina, Brazil, Fiji, Mali, Togo, Uganda). Of the 21 countries that mention a defined role for SNGs, 7 identify a role only under adaptation (Angola, Chile, Costa Rica, Ghana, Mexico, Nepal, Venezuela); 4 only under mitigation (Cameroon, Côte D’Ivoire, Lao PDR, Myanmar); and 10 under both (Belize, Colombia, India, Indonesia, Kenya, Madagascar, Sri Lanka, Sudan, Uruguay, Zambia). We note that out of the 60 countries in our subset, none in Oceania set out specific roles for their SNGs, while 50% of Asian, 39% of Latin American and Caribbean, and 31% of African countries do. Whereas in Africa and Asia SNG roles consider both adaptation and mitigation fairly evenly, Latin America and the Caribbean lean toward adaptation.

In what follows, we outline the three types of roles explained above, with examples from each of the countries that included such specific mentions (see also Table 2). Two countries appear under both implementation and capacity building categories, but in general we have sought to place each country based on

**Table 1. Countries that mention and/or specify roles for SNGs**

Country	Only mention	Mention of specific role
<b>Africa</b>		
Angola		A
Burkina Faso	A	
Cameroon		M
Central African Republic	A	
Côte d'Ivoire		M
Ghana		A
Kenya		A + M
Madagascar		A + M
Mali	A + M	
Mozambique	A	
Senegal	M	
South Africa	A	
Sudan		A + M
Togo	A + M	
Uganda	A + M	
Zambia		A + M
<b>Asia</b>		
China	M	
India		A + M
Indonesia		A + M
Lao PDR		M
Myanmar		M
Nepal		A
Sri Lanka		A + M
<b>Latin America and the Caribbean</b>		
Argentina	A + M	
Belize		A + M
Brazil	A + M	
Chile		A
Colombia		A + M
Costa Rica		A
Ecuador	A	
Guatemala	A	
Mexico		A
Panama	M	
Peru	A	
Uruguay		A + M
Venezuela		A
<b>Oceania</b>		
Fiji	A + M	
Solomon Islands	A	
Vanuatu	A	

Note: A = adaptation; M = mitigation

the main emphasis of its text (those that define a more substantive, decision-making role, in particular, tend to mention at least one of the other two roles as well). We have focused on providing quotes referencing rural landscape-related roles, but some are more urban or energy-related. In some cases, the NDC may include several mentions, and in others only one. We did not take those distinctions into account here, as they emphasize quantity more than quality.

## Implementation of actions and policies toward NDC targets

Implementation roles are the most common, found in 12 NDCs. They are identified slightly more often for adaptation than mitigation; 5 countries identify roles in adaptation only, 2 in mitigation only, and 5 in both (see Table 1). The statements regarding implementation roles range from vague and overarching to very specific, and from more integrated to more top-down processes. For example, Indonesia's NDC states that "A landscape-scale and ecosystem management approach, emphasizing the role of **sub-national jurisdictions**, is seen as critical to ensure greater and more enduring benefits from these initiatives (to reduce emissions in land use sector)" in its mitigation actions. Venezuela's NDC encourages "the development of **municipal and local** adaptation plans for risk management scenarios that directly involve co-responsibility between the State and the People's Power [...] to reduce the vulnerability of the population and its socio-productive activities". Nepal seeks to "strengthen implementation of Environment-Friendly Local Governance (EFLG) Framework in **Village Development Committees and municipalities** to complement climate change adaptation, promote renewable energy technologies, and water conservation and greenery development". Mexico mentions that "At the sub-national level, **States and Municipalities** have also embarked on adaptation efforts as reflected in their own Climate Change Plans".

Zambia's NDC stands out as one of the few that mentions funding, and is one of a group that emphasizes integration among levels. It states, "Planning for adaptation and mitigation programs under Zambia's INDC will be integrated in existing planning processes and supported by national budget allocations to sectors, ministries and **sub-national authorities** towards implementation of both the domestic and international supported efforts. In addition, the **decentralization process** currently being undertaken in the country will enhance multistakeholder participation in the implementation of the INDC".

Chile seeks to implement “specific actions [...] under the National Climate Change Adaptation Plan and the sectorial plans, with a **decentralized** perspective and seeking to integrate efforts among the different decision-making levels (national, **regional, and municipal**)”. In similar vein, to mobilize economic sources to finance mitigation and adaptation activities, Cameroon sets out an approach that accompanies “the **State and local governments** in the development of low carbon intra and inter-urban public transport development plans”. This will “Ensure coherence between agricultural development plans and strategies to limit deforestation or degradation (REDD+ process) thanks to the National Development Plan and the sustainable development of the territory [...] in consultation with each of the sectors and the territories”.

More top-down implementation refers to putting into action national plans or decisions made by national institutions. Kenya, for example, proposes that “The National Climate Change Council shall provide an overarching national climate change coordination mechanism and, among other roles, ensure the mainstreaming of climate change functions by the National and **County governments**”. This, its NDC states, will allow for “Mitigation and adaptation actions [to be] implemented across the various sectors at both the national and **county government** levels”. Myanmar’s NDC assigns an implementation role to SNGs to decrease the rate of deforestation, in order to continue to achieve a significant mitigation contribution from the forest management sector: “As part of implementing the [National Forestry] Master Plan, each **district** [will produce] a 10 year management plan so that overall goals can be met by 2030”. In Madagascar, as means to implement its NDC, the National Bureau of Climate Change Coordination will have “the role of coordinating, facilitating, supervising and monitoring the effective implementation of all the measures/actions provided [in this NDC, working closely] with sectorial ministries, the National Climate Change Committee, sectorial and **regional environmental offices**”.

Finally, the NDCs of Ghana and Sri Lanka mention very specific initiatives for implementation. In Sri Lanka, adaptation activities include “Improvement of solid waste management systems by **local authorities** including recycling of non-degradable items”. Adaptation policy actions in Ghana aimed at building agricultural resilience in climate-vulnerable landscapes will lead “43 **administrative districts** [to adopt] modified community based conservation agriculture”.

**Table 2. Types of roles granted to SNGs**

Implementation	Capacity building/ knowledge exchange	Decision-making
Cameroon (M)	Belize (A + M)	Angola (A)
Chile (A)	Chile (A)	Colombia (A+M)
Ghana (A)	India (A + M)	Costa Rica (A)
Indonesia (A + M)	Lao PDR (M)	Côte d’Ivoire (M)
Kenya (A + M)	Mexico (A)	Lao PDR (M)
Madagascar (A + M)		Sudan (A + M)
Mexico (A)		Uruguay (A + M)
Myanmar (M)		
Nepal (A)		
Sri Lanka (A + M)		
Venezuela (A)		
Zambia (A + M)		

Note: A = adaptation; M = mitigation

## Capacity building/knowledge exchange

Five NDCs have roles focusing on knowledge exchange and capacity building, identifying a lack of capacity at sub-national levels and sometimes at national level. Two of these refer to adaptation only, one to mitigation only, and two to both. Lao PDR’s NDC is illustrative of this recognized lack of capacity throughout our sample: “one of the biggest requirements above all is to instigate the development of technical capacity [...] at all levels of engagement from central government decision-makers through to **local levels** and technical staff” for both mitigation and adaptation activities. Recognizing a similar need, Belize’s NDC seeks to “Increase and strengthen the capacity of [...] **municipal authorities** to ensure developments within the coastal and urban areas”. It states that “Many government sectorial plans and strategies have expressed the need for research and monitoring related to climate change adaptation and mitigation but they lack the human and financial resources to fully undertake this task. The way forward will include innovative approaches in partnerships between the University, local agencies and overseas research institutions”.

The strategy of linking SNGs and research institutions is also present in Chile’s NDC, which calls for the “preparation of instruments to promote research and capacity-building at the national and sub-national level, strengthening the response capacity of the communities and **local governments**, so as to strengthen national

adaptation capacity through institutional development and the capacity-building of the groups and sectors of the country which are most vulnerable to the impacts of Climate Change". India's NDC recognizes the importance of engaging with local researchers to support adaptation strategies: "All the **state governments** [will] have established links with local research institutions to ensure a continuous updating of their [State Action Plan for Climate Change]". Mexico's NDC mentions multilevel knowledge exchange in capacity building, transfer of technology and finance for adaptation. In that context, it notes that "it is imperative to consolidate platforms for the exchange of knowledge and information related to adaptation at the **three levels of government**".

## Decision-making

Decision-making roles for SNGs are found only in seven NDCs and are more or less evenly divided between mitigation and adaptation; three countries refer to adaptation only, two to mitigation only, and two to both. To some extent, all of these refer to working with SNGs to formulate policy, in planning processes or through workshops, to meet climate objectives. They also often include implementation and sometimes capacity building as part of what appear to be more collaborative decision-making processes.

"To contribute to the achievement of global mitigation and adaptation goals and targets", Colombia's NDC plans an articulation "of the National Government, with **regional governments** for the formulation and implementation [...] of comprehensive climate change plans". In similar vein, Côte d'Ivoire sets out an "Alignment of National Agricultural Investment Plans (NAIP) with strategies to limit deforestation (REDD+ process) through a master plan for land use planning in [...] consultation with each agricultural sector and the **territories** in its mitigation activities". Angola mentions "strengthening the capacity of national and **sub-national** entities to monitor climate change, generate reliable hydro-meteorological information (including forecasts) and to be able to combine this information with other environmental and socio-economic data to improve evidence-based decision-making for early warning and adaptation responses as well as planning" to enhance its adaptation capacity.

In Lao PDR's NDC, "The Ministry of Agriculture and Forestry, in collaboration with [...] **provincial authorities**, will determine and develop policies related to the most effective use of lands for plantation of crops for fuel and industrial uses, carry out participatory land use planning and local land use zoning, and monitor and enforce the implementation of the policy" in its implementation of renewable energy strategy as part of its mitigation actions. As an approach to conducting vulnerability and adaptation

assessments, Sudan plans to set up "regional and state level workshops to 1) validate the vulnerability and adaptation assessments, 2) identify areas of synergies with national and state-level development planning, and 3) develop implementation strategies and discuss ways forward". Uruguay's NDC comments on already standing jurisdictional level efforts, as "Efforts have been made towards a more comprehensive approach in land sustainable development planning, for greater consistency and efficiency in the implementation of practical measures at local level, including adaptation and climatic risk reduction measures. [...] Climate change units, working groups and/or offices have been set up in several **departmental governments**, which have helped support local [planning] efforts" for adaptation in cities, infrastructure and land-use planning. Finally, Costa Rica's "territorial [adaptation] approach to urban growth management" seeks to provide "participative instruments for informed decision making at the local, municipal level".

## Conclusion

This Infobrief outlines the ways in which some of the Parties to the UNFCCC are considering involving their SNGs to achieve their NDCs, as stated in their texts. Our research suggests that, in general, NDCs do not explicitly recognize the potential for SNGs to be involved in solutions to climate change. Nevertheless, it is important to note that NDCs were not intended to map out a country's implementation plan but rather to register its ambition. It is still worthy of note to consider what is included and what is not.

Looking past the NDCs and into in-country discussions on the relationships between national and sub-national plans might reveal different approaches to SNGs; it might also reveal the challenges and opportunities toward national targets set by the development agendas held by SNGs themselves. We also recognize that defining a specific role for SNGs in an NDC does not guarantee its fulfillment. Still, we are concerned that the omission of such roles might imply the marginalization of SNGs from NDC targets and policies.

REDD+, considered a global solution to be implemented locally, is indicative of the wider treatment of climate change actions that are designed and planned globally or nationally to be implemented in sub-national geographies. Although almost two-thirds of the REDD+ countries reviewed include some mention of SNGs in mitigation or adaptation, only one-third define a specific role for them in at least one of these arenas. In fact, REDD+ itself is included in 56 of the 197 NDCs submitted by April 2018 (Pham et al. 2018), and in 37 of the 60 countries in our subset.<sup>7</sup> Furthermore, as noted by Pham et al. (2018), REDD+ is usually discussed in terms of

<sup>7</sup> We note that this could be connected to the lack of specific mitigation targets for the forest sector that was noted by earlier analyses of INDCs (see Petersen and Braña Varela 2015).

finance and monitoring systems, with much less attention to governance or safeguards, while in general NDCs are still weak on addressing drivers of deforestation and degradation (see also Petersen and Braña Varela 2015).

The three types of roles that we have identified in the countries included in this Infobrief name SNGs as recipients of policies and/or information (implementation or capacity building), or as active participants in shaping those policies (decision-making). We find that implementation roles are the most common, and that overall there is more attention to SNGs in adaptation than mitigation. Further research is needed to identify how these roles relate to the level of decentralization in each country, and how they are affected by broader multilevel tensions or centralizing tendencies of national governments (Ribot et al. 2006), or whether mentions of SNGs translate to realities on the ground. Other obstacles to active SNG engagement include sub-national challenges regarding overall capacity, limited funds, and the need to align sub-national with national development priorities (see also Stickler et al. 2018b).

The global community continues to laud the Paris Agreement as a bottom-up agreement, but what does this really mean? Although countries have set their own NDCs, in practice, as our results reveal, this does not necessarily mean defining processes and priorities that consider 'more local' partners. Some of the cases summarized above, however, provide examples of what this might look like. Chile's NDC refers to the promotion of research, capacity building, and knowledge-sharing at the sub-national level; Madagascar's refers to coordination and monitoring of progress working closely with multiple sectors and levels of government. In general, the NDCs classified above under "decision-making" refer to joint planning with, or at least consultation of, SNGs, and sometimes to sub-national decision-making per se, such as Uruguay's climate change units, which aim to devise sub-national adaptation strategies, and Costa Rica's territorial approach and informed, participatory local decision-making. Given the importance of SNG participation in achieving locally implemented climate change mitigation and adaptation outcomes, and the urgency of efforts to keep global warming below 1.5 degrees Celsius for greater control of climate risks (IPCC 2018), sub-national governments should have a much larger role in NDCs and national implementation plans. There is still time to make sure this happens.

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