



# Facilitating the Implementation of NDC Adaptation Goals through enhanced Multi-level Governance

## Learning from Colombia, Indonesia and Mexico

### Key Messages

**Multi-level governance helps to show that all the actors involved have an interest in adaptation actions and the benefits they bring.** Such benefits are often considered to only be felt locally. However, it is usually possible to link up local-level adaptation measures to national goals – e.g. the goals set in the NDCs and other national commitments such as the 2030 Agenda for Sustainable Development, the UN Convention to Combat Desertification (UNCCD), the Sendai Framework for Disaster Risk Reduction 2015–2030 (UNISDR) and others.

**Multi-level governance promotes integrative dialogue that helps to align different or competing objectives.** Contradictions between national sectoral policies and national climate change policies frequently hinder the implementation of adaptation actions at the local level. Multi-level governance (MLG) dialogue processes provide stakeholders with a space not only to share their concerns and interests, but also to identify areas of conflict and search for joint solutions that may contribute towards the achievement of the NDC adaptation goals.

**Multi-level governance helps those implementing adaptation measures to secure the technical and financial resources they need.** The coordination and implementation of adaptation actions is more difficult when resources are lacking and skilled personnel are scarce. MLG dialogue processes and coordination help to identify when and where technical and financial resources are needed so that resources can be allocated or redirected more effectively.

**Multi-level governance helps to close knowledge and information gaps, thus promoting greater transparency and building capacity at different levels.** Information is produced at all levels but, at present, it is not being properly managed and thus can end up lost. To address this issue, stakeholders could utilise the MLG dialogue spaces to develop strategies for information and knowledge management and for monitoring, reporting and verification (MRV). Such strategies would seek to ensure the retention of knowledge and transparency of actions in situations where staff turnover, new administrations or changes in the political environment threaten the continuity, ownership and momentum of work. Furthermore, the MLG coordination processes provide stakeholders with the opportunity to identify and exchange information. For example, the subnational/local levels can be kept up to speed on national commitments that influence their actions, and the national level can access information on subnational/local needs and priorities that can be used to improve policies.

### Introduction

Central to the 2015 Paris Agreement are the Nationally Determined Contributions (NDCs), which outline the actions that each party will take to tackle climate change. The main objective of the NDCs is to reduce greenhouse gas emissions so that the global average temperature does not exceed 2°C – and, if possible, 1.5°C – above pre-industrial levels. Alongside working towards this

overarching mitigation goal, the parties to the Paris Agreement commit to plan and implement adaptation actions<sup>1</sup>, ‘placing adaptation on a par with mitigation action’.<sup>2</sup> The planning and implementation of adaptation actions is therefore key to achieving the goals set by parties in their NDCs and the multi-level dimension is clearly stated (Article 7): “...adaptation is a global challenge faced by all with local, subnational, national, regional and international dimensions...”<sup>3</sup>

<sup>1</sup> More than 70% of the NDCs submitted by parties include adaptation measures. See the [Tool for Assessing Adaptation in the NDCs \(TAAN\)](#) (all data accurate as of 20 September 2018).

<sup>2</sup> OECD, *Implementing the Paris agreement: remaining challenges and the role of the OECD*, Meeting of the OECD Council at Ministerial Level Paris, 30-31 May 2018, available at <https://www.oecd.org/mcm/documents/C-MIN-2018-12-EN.pdf>

<sup>3</sup> United Nations (2015) ‘Paris Agreement’ available at [https://unfccc.int/sites/default/files/english\\_paris\\_agreement.pdf](https://unfccc.int/sites/default/files/english_paris_agreement.pdf)

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While the implementation of countries' international commitments under the Paris Agreement is the responsibility of national governments, in practice it mostly occurs at the local level.<sup>4</sup> If planning and implementation is to be effective, coordination across all levels of governance and across jurisdictions is required. 'Adaptation to climate change is not only a complex technical issue, it is also a demanding matter of governance ... defined as the interactions between public and/or private entities ultimately aiming at the realization of collective goals'.<sup>5</sup>

A multi-level governance approach is here understood as the coordination between actors of the different governmental levels, and non governmental actors which seeks to give an important role to subnational levels to influence national decision-making, distributing roles and responsibilities to support implementation processes at the local level. MLG is critical for adaptation in order to achieve maximum impact with the greatest available knowledge. Much of the actual implementation of adaptation actions is taking place at the subnational level and national level can learn from locally and regionally based experience feeding it back into national planning in order to advance the NDC goals.

This document argues that implementing and strengthening a multi-level governance approach is key to delivering climate resilience and hence to fulfilling the adaptation commitments set in the NDCs. It is a synthesis of the findings of three case studies from Colombia, Indonesia and Mexico (see Box 1) where an MLG approach has helped to advance the formulation and implementation

of adaptation goals under these countries' respective NDCs.

## Using multi-level governance to overcome challenges in the implementation of NDCs – what the case studies tell us

The work to achieve the NDC adaptation goals is beset by numerous challenges, which are the product of a range of factors. These factors include the complexity of evaluating adaptation options (e.g. uncertainties around climate change, the long intervals between taking action and perceiving its benefits, and the difficulty in attributing specific outcomes to actions, known as the 'attribution gap') and the ways in which interactions between stakeholders will (or might) be affected by the implementation of adaptation measures. While this policy brief recognises that there are many challenges in implementing adaptation action, it mainly focuses on those that have a more direct link to MLG and those that are addressed by the case studies (see Figure 1).

### Box 1: Case study overviews

#### **An institutional arrangement for climate action: Colombia's Regional Climate Change Nodes**

To coordinate Colombia's local and regional actors and efforts around climate action, the country's Ministry of Environment and Sustainable Development divided the national territory into nine regions and set up a Regional Node for Climate Change in each one. The Nodes form part of the National Climate Change System (SISCLIMA), the institutional framework that coordinates actors, plans, strategies, instruments and information, and aligns them with Colombia's NDC. The Nodes provide spaces for the transfer of knowledge, capacity-building, relationship-building and dissemination of climate action.

#### **Transboundary flood risk management in Indonesia**

The TRANSFORM Project was set up to promote a transboundary approach to the management of flood risk in the Garang watershed of Central Java, Indonesia. The Project has worked to strengthen the Garang Watershed Forum, a multi-stakeholder coordination platform where participants exchange information and discuss collaboration on flood management in the basin and formulate relevant adaptation actions, mechanisms and decision-making processes. It is implemented by the non-profit organisation Mercy Corps Indonesia in collaboration with different tiers of government, local NGOs and communities, and the private sector.

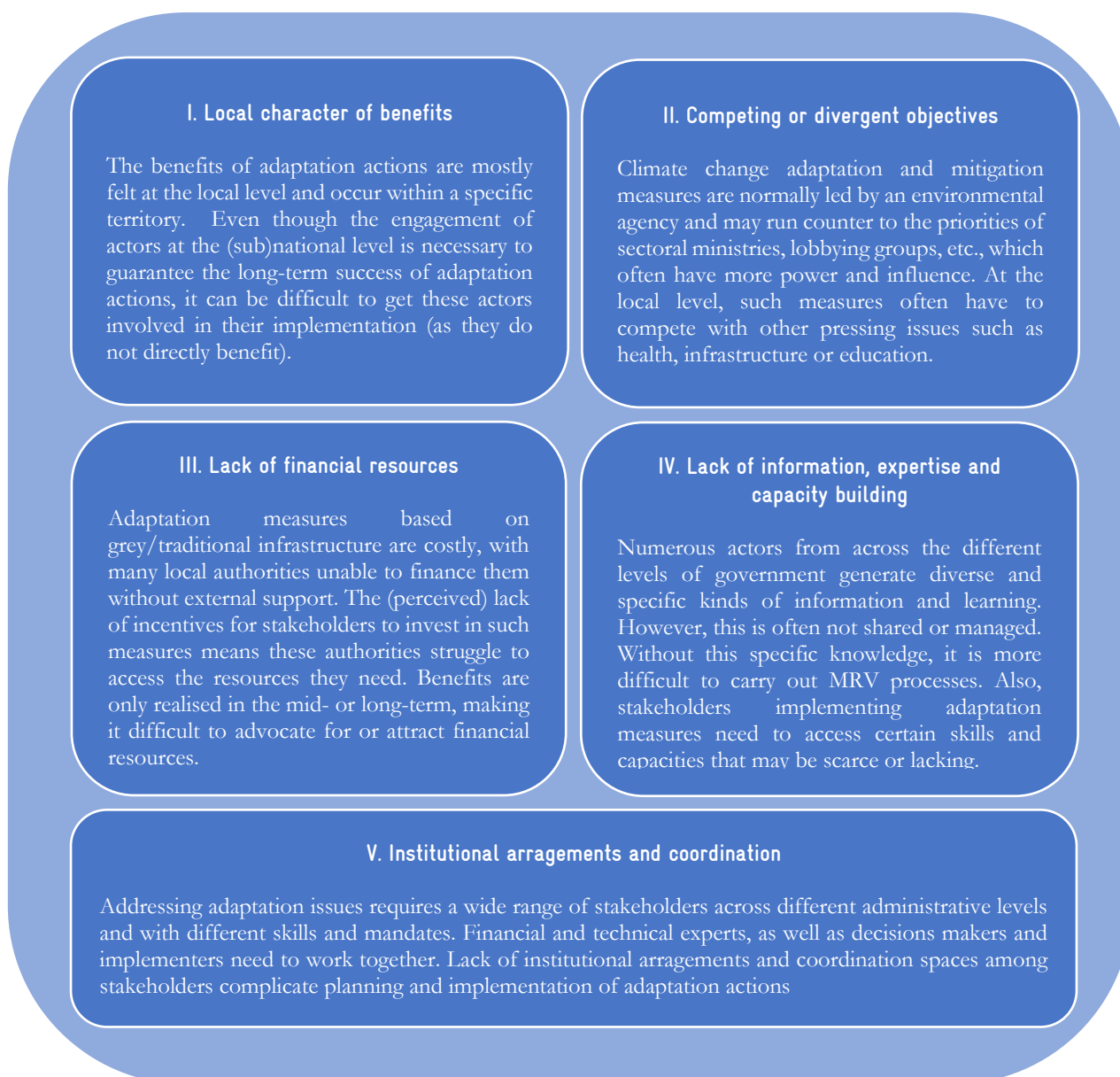
#### **A digital MRV tool based on a multi-stakeholder approach: Monitoring Mexico's Climate Change and Agri-food Production Agenda.**

To monitor the implementation of the climate change measures contained in the CCAP Agenda, measure progress made on the NDC and guide decision-making, a digital MRV and M&E tool was set up to gather relevant information at the local level. The tool is the fruit of a coordinated effort involving Mexico's three levels of government (federal, state and municipal), producers and local organisations, and aims to reduce vulnerability, increase resilience, promote economic growth, guarantee food security, and ensure agricultural biodiversity and the sustainable use of natural resources.

<sup>4</sup> Dannevig, H., Rauken, T. and Hovelsrud, G. K., 'Implementing adaptation to climate change at the local level', *Local Environment*, 76 (6-7), 2012, pp. 597-611, available via <https://www.researchgate.net/publication/236179340> **Implementing adaptation to climate change at the local level**

<sup>5</sup> Termeer, C. J. A. M. et al., 'The regional governance of climate adaptation: a framework for developing legitimate, effective, and resilient governance arrangements', *Climate Law* 2, 2011, pp. 159-179.

Figure 1: The challenges identified by the case studies in climate adaptation action<sup>6</sup>



The case studies from Colombia, Indonesia and Mexico show **how an MLG approach can offer solutions** to overcome these different challenges:

In **Colombia**, the country's Regional Nodes for Climate Change hold meetings that bring together actors from the different levels of government and from outside government, enabling these stakeholders to plug knowledge and information gaps (**challenge IV**). The national government has identified where these gaps exist and has provided stakeholders with expertise on a wide range of topics, ranging from the financial to the technical. The Nodes are of particular value to Colombia's Ministry of Environment and Sustainable Development because, by gathering together regional stakeholders, they provide spaces for the dissemination

of policies and national guidelines, which, in turn, facilitates the alignment of the actions developed and implemented by the Nodes with those of, for example, the NDC (**challenge V**).

Lack of financial resources (**challenge III**) is one of the key factors prompting stakeholders to participate in the Nodes, because taking part provides them with the opportunity to, among other things, share information, present their projects, or invite potential donors to Node meetings. In this way, they increase their chances of acquiring financial resources that they would struggle to secure working alone. Being part of a Node lends institutional credibility to an individual party looking for funding and ensures its strategies and projects are viewed as part of a bigger (regional/national) endeavour.

<sup>6</sup> Not all challenges adaptation actions face are mentioned here (like institutional arrangements and coordination). The focus is only on those challenges identified by the case studies.

The Colombian case shows that, in order to avoid difficulties in implementation, the objectives of the different stakeholders must be aligned (**challenge II**). This alignment starts during the Node meetings, where stakeholders present their interests, concerns and agenda and get to know those of others. The national government has also been involved in regional and local adaptation planning from the outset. As a result, when drawing up national policies/instruments, it has been better able to consider the particularities of adaptation at these two levels, which, in turn, facilitates the implementation of these policies/instruments at the subnational levels. Evidence that this process of mutual benefit is happening is provided by the big advances being made on integrating adaptation measures into action plans and climate change into development plans, and by the progress made on Colombia's NDC adaptation target to formulate territorial adaptation plans.

In **Indonesia**, the TRANSFORM Project works on the understanding that, although the impacts of flooding in the Garang watershed are most acutely felt in Semarang city downstream (**challenge I**), river flood events are largely caused by factors occurring in upstream areas in Semarang Regency, outside the city's jurisdiction. The solution was therefore to work in a coordinated way in order to build resilience around the basin and, at the same time, contribute to the adaptation goals contained in Indonesia's NDC. These goals aim to build economic, social and livelihood resilience and ecosystem and landscape resilience through measures such as integrated watershed management. The Project established the Garang Watershed Forum, a multi-stakeholder dialogue platform for the coordination of institutions' actions on managing flood risks at the watershed level (**challenge V**).

The TRANSFORM Project's adoption of innovative and easy-to-use technology has improved how information (e.g. assessments of the economic benefits of investing in flood risk reduction actions) is shared among members of the Forum, who include representatives from the private sector (**challenge IV**). This, in turn, has helped to secure decision-makers' buy-in for the intended programmes or activities and to encourage investment in flood resilience actions (**challenge III**).

The communities upstream and downstream in the watershed face different issues (**challenge II**): People are moving further upstream, increasing the demand for land, but this new settlement is driving the very deforestation and land degradation that exacerbate flooding problems in mainly downstream areas. So, while the pressing issue upstream is the growing population and its solution is more housing, downstream the concerns are focused more on flooding. With the creation of the Garang Watershed Forum, government institutions, the private sector and community actors were able, through dialogue, to raise their concerns and share their interests, knowledge and information and then to, among other

things, coordinate flood risk management planning around the basin (**challenge V**). Sharing information thus, it was possible to consider in a consistent way how actions will (or will not) impact on each and every party along the river. One of these parties, a local housebuilder, has increased its understanding of flood control and ecosystem services, resulting in better watershed management interventions.

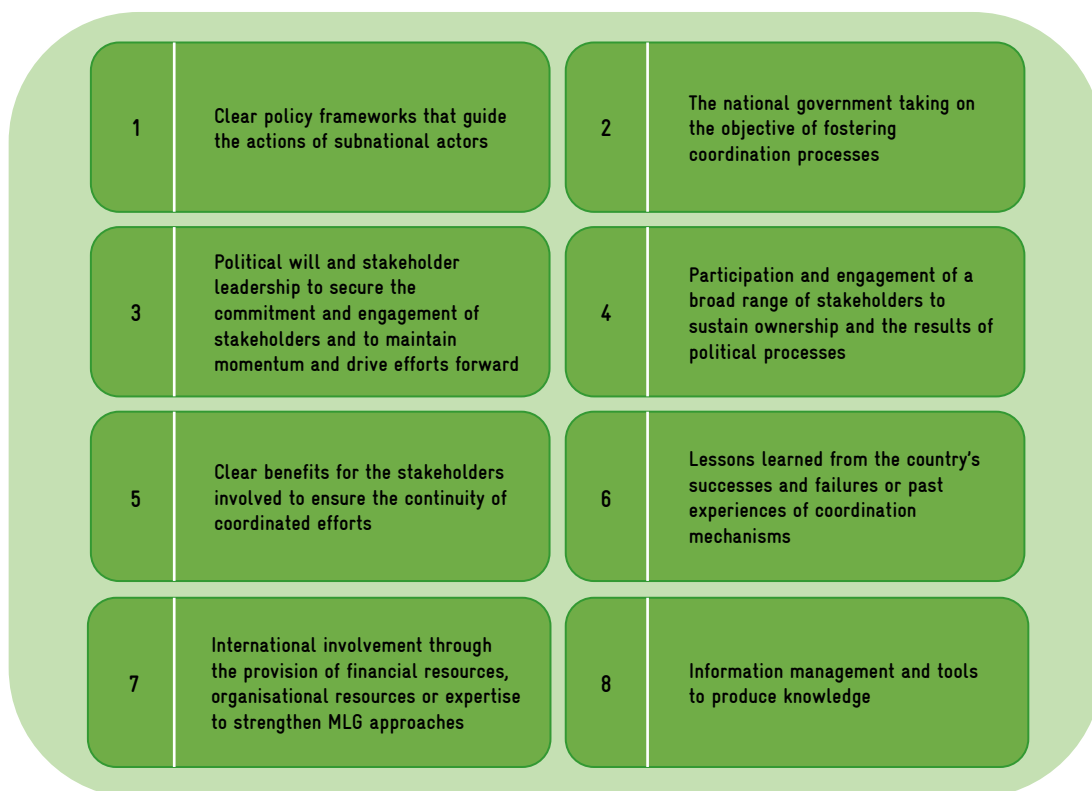
The adaptation component of **Mexico's** NDC emphasises the inclusion of climate change criteria in agricultural and livestock programmes. As a result, a Climate Change and Agri-food Production Agenda was drawn up with proposals for strategic focuses and activities aimed at increasing the agri-food sector's capacity to be climate-responsible, less vulnerable to the impacts of climate change and more resilient. This Agenda informed the creation of a digital system for monitoring indicators, which was developed through a coordination process involving the three levels of government, producers and local organisations and addressing the different objectives of these stakeholders (**challenge II**).

This monitoring system responds to the identified challenge of information gaps (by locating the sources of data, collecting the data and developing indicators), as it enables the agri-food sector to report on its progress towards meeting the objectives of the Agenda and on its alignment with the NDC (**challenge II, IV**). Through a series of workshops, stakeholders from the different levels of government, farmers and experts defined a set of 44 indicators for application in an implementation pilot.

During the dialogue sessions held with the stakeholders, it was demonstrated that all parties involved could derive benefits from the implementation of the monitoring system (**challenge I**). Also, information gaps were shown to be detrimental to the work of the federal government because, lacking appropriate information, it is unable to develop national policies that respond to local climate problems. Local data is also useful for local and regional decision-making processes. Furthermore, the process to generate and collect data at the local level must be developed in close collaboration with farmers because it is they who will be providing the data.

By opening up spaces for dialogue with local producers and decision-makers it was possible to integrate community knowledge, gather relevant and useful information on the different actors involved and, at the same time, align local realities with national indicators and the goals of the NDC. Instruments for collecting information from rural producers and the three levels of government were developed and constituted the basis upon which the monitoring system was designed. To test the monitoring system, one municipality was selected for a pilot scheme, which included building stakeholders capacities (**challenge IV**).

Figure 2: Factors identified as enabling an MLG approach



### Enabling factors for multi-level governance approaches – what the case studies tell us

The case studies not only show that MLG can support the implementation of adaptation actions, but also shed light on what factors are needed when setting up an MLG approach (see Figure 2).

**Colombia's** current institutional setting for climate change has been shaped by the experiences it has gained through other MLG approaches, such as those for watershed management. Adaptation works best when it is not constrained by existing political boundaries; what is instead required is an ecoregional approach (e.g. one based on an biogeographic, ecosystem or hydrogeographic unit). Also, assessing adaptation issues requires the involvement of different actors who might otherwise not cooperate (**enabling factor 6**).

Colombia's national government has demonstrated its political commitment by issuing a decree that enables regional action. In addition, many departments and municipalities have adopted regulations that anchor climate change considerations in their territorial planning and have allocated financial resources for their implementation (**enabling factor 3**). Colombia's Regional Environmental Authorities are members of the country's Regional Nodes for Climate Change and play an instrumental role in ensuring their operations, allocating public funds to the Nodes, which do not have their own budget (**enabling factor 3**). German international

cooperation has also provided important contributions, organising sessions to determine what is needed and to support the Nodes in their work (**enabling factor 7**).

Stakeholders involved in the Nodes get benefits from coordination. The Nodes provide the national level with a mechanism to get the local level involved in its work on meeting the NDC adaptation targets. In return, they provide the local level with orientation and guidance as well as a coordination mechanism that can leverage access to financing, project implementation support, and capacity building. Through these interactions, the national level gains information on local actions and their results, which it can then feed back into national reporting (**enabling factor 5**).

The stakeholders participating in the Regional Nodes for Climate Change consider a Node meeting to be worthwhile if it generates outcomes that can be fed into their respective activities, projects and objectives. Experience shows that if no positive outcome is reached in one meeting, fewer members participate in the next meeting (**enabling factor 5**). Given their broad range of participants, representing local and regional governments and NGOs, academia and research institutes, the Nodes are recognised as credible and important bodies. In the Node meetings, members' share and discuss their concerns, achievements and needs, which are then factored into the development of national policies and instruments (**enabling factor 4**).

Information management is important to avoid progress being lost as a result of staff turnover or change or

administration, In the case of the Nodes, the persons in charge of the technical secretariat play a fundamental role in managing information, setting agenda, communicating with the national government and in ensuring the Nodes' good functioning and results. Those secretariats have been permanent during long periods of time assuring continuity of efforts and information management (**enabling factor 8**). Nevertheless, no long-term information management strategy has been developed.

**Indonesia's** NDC states that one of the foundations for adaptation actions in the country is the enhancement of its National Action Plan on Climate Change Adaptation (RAN-API). The region in which the TRANSFORM Project is operating is one of 15 selected as a pilot study area for RAN-API implementation and contains the Garang watershed, which is considered a priority because one of the country's national strategic areas falls within it. The national interest in promoting adaptation actions in this watershed can be considered a factor that has enable coordination processes (**enabling factor 2**). As a mark of its commitment, the national agency competent for the watershed formalised the Garang Watershed Forum, thus endowing it with the authority, as a multi-stakeholder platform, to make decisions on the management of the basin (**enabling factor 3**). The Forum's members have advised government bodies on policy options and laid the ground for its future funding.

In Semarang city on the island of Java, experience showed that the unilateral efforts of the municipality would not be enough to resolve the issue of flooding in the city, because the factors causing the flooding occur outside its jurisdiction. It was therefore necessary to engage the provincial government in coordinating the management of the issue and to bring in the national agency responsible for the watershed to facilitate the coordination activity (**enabling factor 6**). The involvement of a broad range of stakeholders, including academics, experts and local and international NGOs, has made people more aware of the importance of coordinated action on flood risk management and of the need to engage in developing synergies for adaptation action (**enabling factor 4**). Furthermore, it is clear that stakeholders value the dialogue platform provided by the Forum.

Before this Indonesian initiative could gain momentum, it was first necessary to provide all stakeholders with evidence of the benefits arising from the Forum's work. Once they had seen these benefits for themselves, many local actors committed to supporting stormwater management interventions and remained committed throughout the TRANSFORM Project (**enabling factor 5**). Funding for the Project comes mainly from international agencies, which is another factor that facilitated the creation of the Forum (**enabling factor 7**).

The project improved access to tools that provide actionable information on near-term and projected

flood risks and mitigation measures. Equipped with these tools, decision-makers can make informed decisions on where in the watershed to conduct and invest in flood resilience interventions. Making better tools and better data available was a clear success factor and those tools acquire will remain in the hands of decision makers after project's finalization (**enabling factor 8**).

**Mexico** has a national institutional framework for climate change that promotes and steers actions from the national to the local level. The Climate Change and Agri-food Production Agenda is a national framework that aims to guide regional and local adaptation action as a response to the identified challenges and effects of climate change in the sector (**enabling factor 1**) and provides for the creation of a system to monitor these actions. The agreement to develop the Agenda and the monitoring system (a digital MRV and M&E tool and indicators) was signed during the 2016 UN Biodiversity Conference by the national-level ministries responsible for the environment and for agriculture. With the agreement in place, the coordination process subsequently got underway (**enabling factor 2**). The digital MRV and M&E tool and its indicators are important to national-level stakeholders because it will contribute to the fulfilment of Mexico's NDC and will serve as a model for replication in other sectors.

The digital tool was piloted in a municipality that had prior experience of working on other information-management coordination projects, which facilitated cooperation among key actors at the local level (**enabling factor 6**) and meant best practices from the previous projects could be incorporated. The Mexican State in which the municipality is situated has a strong governance setting and its government institutions have considerable experience of climate change actions and coordination processes. The leader of this municipality has also been re-elected, which means this work can continue. To encourage broad participation in the work to gather information, the local CADER (the support centre that delivers national programmes at the local level) communicated the objectives of the digital tool and informed local stakeholders about its importance and benefits (**enabling factor 3**). To pull together the digital tool and indicators that requires the participation and commitment of local, regional and national actors, it was first necessary to run a climate change awareness-raising campaign. This involved running workshops that provided the producers, technical staff and representatives from the different levels of government with a space for dialogue and sought to build trust between all the parties involved (**enabling factor 4**).

Due to the change of government in Mexico, the digital MRV and M&E tool, its indicators and the CCAP Agenda are currently being socialized to the new administration. Some changes are foreseen to better suit the administrative changes. Given that a total of 38 institutions participated in the development of the Agenda, it is highly likely that there will be strong backing



for moves to include the topics recommended in the Agenda within the new institutional set-up.

The fact that the digital tool is hosted online by the Agri-food and Fisheries Information Service (SIAP) of the Mexican Ministry of Agriculture and Rural Development shows that government institutions at the federal level are politically committed to and have taken ownership of the system (**enabling factor 3**). Also, GIZ and the Inter-American Institute for Cooperation on Agriculture have provided financial and technical support and implemented the multilevel coordination processes for the monitoring system (**enabling factor 7**).

A proposal for the institutionalisation of the digital MRV and M&E tool and indicators was produced with the goal of making the system operational at a national level. Furthermore, recommendations were made to integrate the tool with other National Systems (i.e. Rural Development and Environment and Natural Resources) to support with information decision-making processes. All these information strategies can help to maintain long term coordination efforts (**enabling factor 8**).

### Remaining challenges

While the case studies show that good MLG practices have been used to progress the implementation of the adaptation actions contained in these countries' NDCs, challenges still remain with regard to improving the MLG

approach to make it more effective at promoting these actions.

The efficiency and continuity of adaptation actions often depends on voluntary participation, which represents a risk for long-term coordination efforts. In the case of Colombia, participation in the Nodes remains voluntary, and it drops when members feel they are not benefiting from the coordination efforts. Besides having the desire to work on adaptation for its own good (for example a municipality better adapted to rising sea levels or agriculture enabled to better deal with heatwaves), having a strong mandate and the funds and obligations required to deliver it clearly strengthens the adaptation agenda (and its actors).

Staff turnover within institutions results in the loss of knowledge, ownership and momentum. Colombia has been fortunate in that those in charge of coordinating the Nodes (technical secretariat) have remained in post for long periods and thus know the entire Regional Nodes process from its inception and are repositories of institutional memory. The monitoring system project in Mexico has also benefited from the continuity of its team and of the actors at different levels who participated in the development of the Agenda and the system of indicators. Furthermore, this project drew up proposals to institutionalise the monitoring system and its governance in order to prevent a situation where changes of government affect the capacities it has installed in participating institutions.

Stakeholders need to be involved from the beginning of any initiative when its activities are being defined/decided. In addition, how and when stakeholders should engage in these activities must also be determined. In the case of Indonesia, because the municipality was not involved in the TRANSFORM Project from the outset, it was unable to support all the Project's proposed activities, because they were not prioritised in its own development plans. In Mexico those developing the monitoring system had concerns that information fed into the system might not be sound. To address this issue, they held sessions with local actors to exchange knowledge and build a shared vision that would enable information to be produced jointly and be validated by all parties.

More advocacy work is needed to achieve a bigger impact. For example, if the TRANSFORM Project in Indonesia were to advance its advocacy work with potential private sector backers and with government, it could leverage more funding. Also, difficulties continue to arise due to the lack of technical capacity at the subnational level. In Mexico the lack of sufficient staff with the skills required to collect and report information has meant that, to secure all the data it needs, the monitoring system project has had to enlist the support of university students.

## Conclusion

Climate change impacts are commonly felt at the local and regional level and much of the current adaptation efforts take place at this level. MLG is key to bring these experiences to national levels, feeding them back into national planning in order to advance the NDC goals. MLG is critical for adaptation in order to achieve maximum impact with the greatest available knowledge.

The case studies of Colombia, Indonesia and Mexico shed light on how countries can facilitate MLG approaches to advance adaptation action. First of all,

countries could (and should) draw on past experiences when thinking about their coordination and cooperation processes. National governments should define clear policy frameworks to guide and enable subnational action, and stakeholders at all governance levels should demonstrate political will and leadership to secure commitment and to maintain momentum of adaptation efforts. Even though coordination processes are difficult due to managing a large amount of actors, it is fundamental to involve the stakeholders that are going to feel the impact of adaptation. This will not only make implementation of adaptation measures easier but it will sustain long term ownership. To ensure stakeholders' participation, clear benefits have to be communicated. Finally, a knowledge management strategy is recommended to avoid losing memory due to administrative changes. In order for adaptation actions to be successful, access to information (on funding sources, climate variables, socioeconomic data etc) is key.

Implementing adaptation actions is more difficult when resources are lacking and skilled staff are scarce. A good way to overcome these issues is to draw up a strategy that defines (and narrows down) who should be involved (e.g. by mapping which actors are required), assigns financial resources and builds stakeholder capacity.

To mitigate situations where administrative and political settings threaten the continuity of work, ownership and momentum, it is recommended to institutionalise a long-term system for managing information and knowledge and to draw up an MRV strategy that ensures continuity of knowledge and transparency of actions. Also, as the subnational/local level will ultimately be required to implement the NDC adaptation goals, it needs to be party to the national-level processes that set these goals. Likewise, to formulate the next set of NDCs, the national level needs to understand the priorities and requirements of the subnational/local level.

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