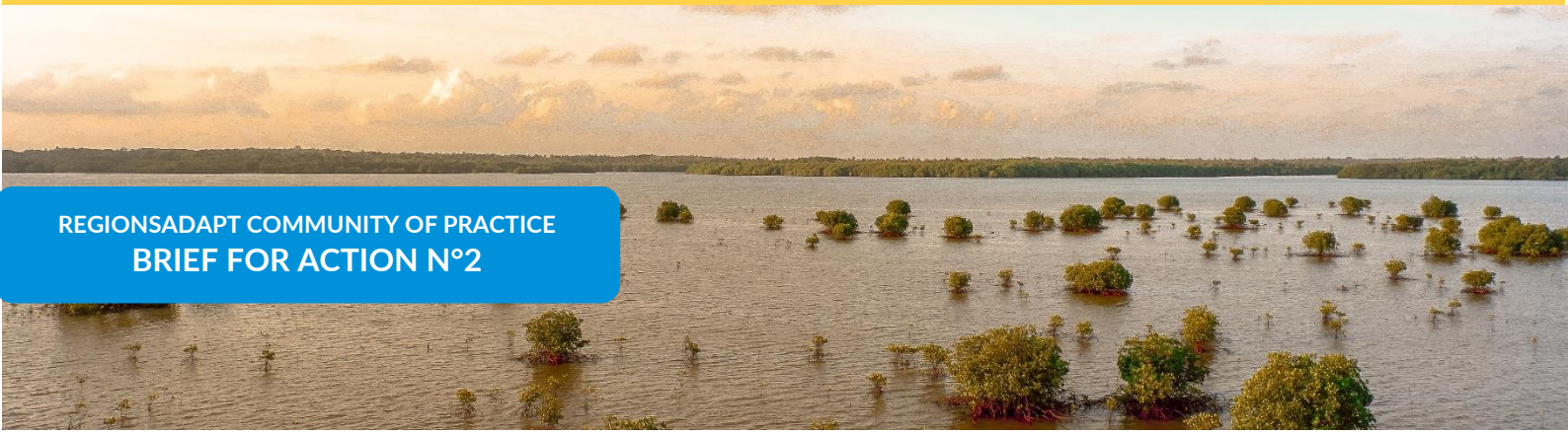
Regions4
Sustainable Development

REGIONSADAPT



REGIONSADAPT COMMUNITY OF PRACTICE
BRIEF FOR ACTION N°2

Measuring progress on Adaptation: toward a Global Goal on Adaptation

Introduction

This document is a key take-away note of the main recommendations delivered in the RegionsAdapt Community of Practice session **'Measuring progress on Adaptation: toward a Global Goal on Adaptation'**- held on the 14th of September 2022 and which counted on the participation of:

- Marta Olazabal, research fellow and head of the Adaptation Research Group at the **Basque Centre for Climate Change, BC3.**
- Karl Schultz, steering committee chair at the **International Platform on Adaptation Metrics (IPAM)** & executive chair at **the Higher Ground Foundation.**
- Jonathan Charlebois, advisor at the Ministry of Environment and Climate Change, **Government of Québec, Canada.**
- Gabriel Borràs, head of the adaptation area, **Catalan Office of Climate Change.**

RECOMMENDATIONS AND KEY POINTS

- Measuring adaptation is still a challenge. Whereas the world has a global goal and indicator on mitigation, there is no such equivalent for adaptation as its metrics is quite complex, needing to combine both quantitative and qualitative metrics, and acknowledge the interconnections with development and/or sustainability.
- Some regional governments have started or are in the process of developing their own frameworks of evaluation, ranging from governance structures for reviewing impact, theories of change narratives and stories of impact, data and indicators, and tools/ reporting mechanisms.
- The measurement system that supports the adaptation decision-making process should align to real needs, and to the sustainable development goals, to avoid maladaptation. Adaptation indicators should be context-specific, count on historical data and easily accessible data, have regular revisions, and take into account all stakeholders, particularly vulnerable groups. They should also be easy to interpret, and focus on assessing the effects of adaptation actions, and not only its process.
- Vulnerability and Risks data should be used to inform policymaking and prioritize action. A BC3 study (Olazabal et al., 2019), states that at the regional level, 35-40% of policies do not include vulnerability and risk assessments in their adaptation policies. Around 92% do not align actions with the identified risks. Although decision on adaptation actions should take into account the evolution of the climate and socioeconomic projections, 90% do not use socio economic projections, and almost 27% do not use climate scenarios in their climate polices.
- When preparing, map relevant stakeholders and; set-up of a system for continuous collaboration with stakeholders in the adaptation process. Consult of existing guidelines, tools and templates; learning from peers and exchanging experiences.
- To monitor and evaluate, use a practical approach to assess progress that can be elaborated and made more complex over time (for instance transition from qualitative assessment based on scoreboards/checklists to assessment of output indicators to evaluation of outcomes)., thus transitioning from measuring process to measuring effects [1]

Background

The Paris Agreement has, for the first time, defined a '**Global Goal on Adaptation (GGA)**', which **features three core components: enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change**. The Paris Agreement intends that the Global Stocktake, starting in 2023, should also review the overall progress made in achieving the Global Goal on Adaptation, which could benefit from adaptation metrics that allow the aggregation of national adaptation efforts to assess progress made globally [2].

Regions4, through its climate programme, has advocated for also measuring the efforts of regional governments on adaptation and to be part of the aggregation, through its reporting to the Race to Resilience campaign, and through the RegionsAdapt/CDP reporting, and RegionsAdapt annual report. Regions4 works closely with CDP and the Race to Resilience to inform the resilience metrics, and adapt it to regional governments realities, to allow for a measurement of progress that reflects realities on the ground.

Adaptation metrics under the United Nations Framework Convention on Climate Change (UNFCCC) have evolved considerably over the last twenty years. Started with measuring the degree of vulnerability of countries to monitoring and evaluating adaptation in their projects, followed by sectoral and subsequently national levels to, more recently, reviewing the adequacy and effectiveness of adaptation measures and support, as well as the collective progress made in achieving the GGA following the adoption of the Paris Agreement in 2015 [2].

Adaptation practitioners and scholars have generated a diverse literature in recent years dealing with the question of how to assess adaptation progress and aggregate these assessments across various scales and dimensions. Assessing adaptation progress is critical for understanding whether and how the vulnerability is changing over time and across scales and dimensions, and how adaptation interventions (or a lack thereof) are influencing these changes [3].

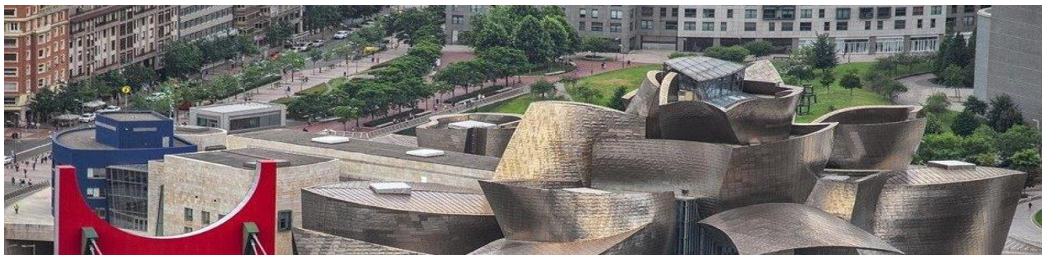
Several key institutional players have all produced various forms of overview and guidance documents on adaptation tracking. In particular, various donors and developing agencies (e.g. GIZ) have created their own adaptation framework metrics, or have built various vulnerability indices. Nevertheless, none have been officially endorsed by UNFCCC, which underlines the complexity of coming up with a framework that is both flexible enough to be locally relevant and specific and standardized enough to truly provide a common approach and sufficient guidance to local stakeholders on designing adaptation assessment frameworks that work at all levels and across all sectors. Indeed, the gathering of such local and regional data remains a difficulty, notably in developing countries and regions. Accordingly, a key to the discussions of the GGA and through the two-year work program of Glasgow-Sharm El Sheikh launched at COP26 will be to look at how to define 'successful adaptation' but there are multiple interpretations of success.

Due to the early stage of adaptation planning and because these plans by nature involve long-term objectives and with high uncertainty, some of the main questions raised in current adaptation tracking research are whether and how they will be implemented and what is required for these plans to successfully achieve their objectives. In mitigation, it is quite straightforward to estimate the relationship between the implementation of different policies and greenhouse gas emission reduction. However, establishing valid methods for measuring the outcomes of adaptation policies in a similar way is elusive as many of the impacts of climate change will occur in the very long term, are cross sectoral, and involved wide range of actors, and therefore are not easy to measure or estimate [4].

In addition to national systems for reviewing adaptation progress, subnational governments and the results they have achieved can also offer important insights. Subnational systems can offer more detailed and robust information to feed into national planning and can inform the design and development of national monitoring, evaluation, and learning systems. Indeed, countries that are in the process of creating or revising their own systems could increase the efficiency of their system and reduce the burden it imposes by building on data and indicators that are already in use at the subnational level within their national context. This information may in turn help to inform global assessments on adaptation [3].

Science review

Trends and orientations from a scientific perspective



BASQUE CENTRE FOR CLIMATE CHANGE
Klima Aldaketa Ikergai

Marta Olazabal, research fellow and head of the Adaptation Research Group at the Basque Centre for Climate Change (BC3), *spoke about the importance of metrics to measure the needs, actions, and progress on adaptation.*

The work on how to measure adaptation has been ongoing for over two decades and remains at the centre of the climate discussions. Initially more focused on identifying and prioritizing adaptation needs, it then evolved into monitoring and evaluation adaptation process. Lately, since the Paris Agreement, the focus is has now shifted to measuring collective adaptation progress, or in other words, trying to measure the real effect that adaptation measures have on vulnerability to climate change.

There are several reasons to assess adaptation, e.g.,

- ✓ Identify adaptation needs (which population, which sector)
- ✓ Provide accountability of actions.
- ✓ Assess efficiency and effectiveness of the adaptation efforts.
- ✓ Assess the outcomes of those actions.
- ✓ Understand equity of adaptation progress.
- ✓ Improve learning and increase capacities.
- ✓ Improve future activities or interventions.
- ✓ Compare with other similar activities or interventions.
- ✓ Attract funding and distribute resources.
- ✓ Gather political momentum.
- ✓ Increase the understanding of adaptation and its relation with sustainable development and others societal challenges.

Measuring adaptation is still a challenge: unlike mitigation where there exists a simple universal and quantitative indicator (CO2eq emission) as well as a universal target (keeping warming below 1.5°C), there is no simple metric for adaptation. It must be context-specific, combining both quantitative and qualitative metrics, and taking into account the interconnections with development and/or sustainability.

When looking at a detailed analysis (BC3, 2019) of 226 adaptation policies considering more than 57 regional/state entities (see table below), two concerns emerge:

- **Lack of use of vulnerability and risks data:** for example, 35-40% of policies do not use vulnerability and risk assessments to take decisions on adaptation. More concerning, for those who were reporting on vulnerability and risks, 92% did not align actions with the identified risks.

- **Lack of projections in data:** decision on adaptation actions is often based on current data, without taking into account population projections or climate scenarios. Around 90% of adaptation policies did not take into account socio economic projections, and around 27% did not use climate scenarios.

This shows the importance to conduct more informed policies based on data and vulnerability/risk assessments, and gain the knowledge and capacity to gather this evidence to inform policy.

	Vulnerability assessment (% Yes)*	Risk assessment (% Yes)*	Aligment of actions with scenarios and risks (% Yes)*	Socio-economic projections (% Yes)*	Climate scenarios (%Yes)*	*IPCC scenarios (% directly)***	*IPCC scenarios (% indirectly)*
Policy scale							
City	53.3%	53.3%	26.7%	31.1%	77.8%	*42.9%*	*22.9%*
Metropolitan	58.3%	75.0%	16.7%	22.2%	69.4%	*56.0%*	*12.0%*
National	65.9%	51.1%	5.7%	14.8%	75.0%	*59.4%*	*17.2%*
Regional	40.5%	35.1%	8.1%	10.8%	73.0%	*44.4%*	*25.9%*
State	60.0%	65.0%	45.0%	35.0%	90.0%	*66.7%*	*22.2%*
World region							
Africa	69.2%	38.5%	0.0%	23.1%	61.5%	*50.0%*	*0.0%*
Asia	54.5%	50.9%	9.1%	14.5%	74.5%	*79.5%*	*0.0%*
Europe	60.0%	70.0%	18.0%	8.0%	86.0%	*39.5%*	*37.2%*
Latin America	68.8%	62.5%	0.0%	25.0%	65.6%	*66.7%*	*14.3%*
North America	46.5%	41.9%	39.5%	39.5%	88.4%	*36.8%*	*31.6%*
Oceania	50.0%	55.0%	20.0%	15.0%	60.0%	*58.3%*	*16.7%*
Total	**57.5%**	**54.0%**	**15.5%**	**20.4%**	**75.7%**	***53.8%***	***19.5%***

Most beneficial for adaptation planning — Least beneficial for adaptation planning

Source: Olazabal et al 2019 Env Res Letters. https://doi.org/10.1088/1748-9326/ab5532

* of the total number of policies analysed

** of the total number of policies using climate scenarios

Current works also **favour process effectiveness approach**: we normally assess the *process* of the actions (target, input, and output) whereas it would be interesting to measure the *effects* of those actions (outcomes, impacts), as shown in the example below.

Example: Potential metrics for the implementation of a urban park as an adaptation action to increase thermal comfort	
MEASURING THE PROCESS (Target, Input, Output)	MEASURING THE EFFECTS OF ACTIONS ON ADAPTATION (Outcome, Impact)
- Area of Green surface - Number of Urban park project delivered …	- Number and type of users of the park - Dynamic of the use of the park - Actual temperature decrease - Number of hospitalization - Number of death due to extreme temperature …

Most of the current adaptation metrics focus on outputs. This is because they are easier to measure, but also it might be because the adaptation targets and goals are not clear enough.

From this information, it follows that we have a lot of work to do to improve the way we measure adaptation and its progress. Moreover, the measurement system that supports the adaptation decision-making process should be responsible for real needs, equitable, effective, and efficient adaptation. It should also be aligned with sustainability goals, and guarantee not to produce maladaptation.

Presentation of a tool

Adaptation Metrics Mapping and Evaluation (AMME)

Karl Schultz, steering committee chair of the International Platform on Adaptation, executive chair of the Higher Ground Foundation, and founder and principal of Climate Adaptation Works, *introduced the Adaptation Metrics Mapping Evaluation (AMME) Framework, a methodology for evaluating and deploying metrics.*

The AMME framework aims to guide the formulation of good practice in the choice and development of appropriate metrics for the wide array of different contexts related to climate adaptation. It provides a systematic assessment process for a better understanding by the adaptation community of how metrics relate to their potential range of purposes. It is living, adaptive framework that responds to future challenges.

Regional governments might use AMME for the design and evaluation of:

- ✓ Projects: metrics choices before, during and after.
- ✓ Programs: methodologies for reporting, etc.
- ✓ Finance: investment in decisions and monitoring.
- ✓ Policies: target setting, evaluation, and communications.

The AMME Framework outlines five **aspects** common to all adaptation interventions. The five key aspects of metrics mapping are:

- **Purpose**: understand the reason for undertaking mapping evaluation
- **Stakeholder engagement, participation and communication strategies:** establish the people - individuals and groups - for whom metrics are designed to provide support, and how they might use and interpret them
- **Stakeholder competencies and capacities: The** ability and capacity for people that will use metrics and analytical tools needs to be taken into consideration in terms of their skills, time, financial resources, and access to data and technologies
- **Data and information:** The danger lies in designing metrics to fit the data available, rather than having a clear plan of what metrics are required for the purposes of the mapping evaluation and for this reason taking an 'ideal metrics' perspective as a starting point – deliberately disregarding any data or other real world constraints– is crucial for obtaining a systematic and objective perspective on metrics requirements
- **Evaluation and good practice.**

Each of these aspects is viewed through three **lenses** which provide a focus on key metrics issues central to all adaptation projects:

- Stakeholders and their needs,
- a 'whole system' perspective, and,
- how metrics support decision making processes.

The implementation of the AMME Framework is undertaken in four steps - each with their own action checklists:

1. Scoping = clarifying the metrics mapping requirements
2. Mapping and identifying gaps = review lens-aspects issues
3. Aligning metrics with real world constraints.
4. Feedback learning and revision.

Example of how the tool looks like and the variables considered:

AMME FRAMEWORK: Metrics assessment tool

The AMME Matrix Assessment Tool is a systematic framework for evaluating existing metrics and identifying gaps in coverage.

The measurement scale is user-defined. It can be yes/no, quantitative, descriptive or a mixture. This will depend on the mapping requirement, local context and ease of acquiring data.

(The current pilot version of the matrix enables 'yes/no' or simple numerical values only).

IPAM International Platform on Adaptation Metrics

AMME Work Programme

Mapping Evaluation Example:

Urban metro system resilience in the face of increasing climate change induced flood risks

Adaptation Challenge 1: Maintaining train operation frequencies without additional health and safety risks

		Aspects & Lenses								
		A1: Purpose			A2: Stakeholder engagement			A3: Competencies & capacit		
	Existing available metric?	*Stakeholders*	*Systems*	*Dec Making*	Stakeholders	Systems	Dec Making	*Stakeholders*	*Systems*	*D*
Number of days/year with 95%+ trains on-time	YES	x	x	x	x	x	x			
Passenger accidents/year (hospitalisation or death)	YES	x				x	x		x	
Number of days/year with urban drainage systems over capacity	NO		x	x	x	x			x	
Additional metric 1										
Additional metric 2										

Adaptation Challenge 2: Maintaining ground-water quality through prevention of leachate from metro system flooding

		Aspects & Lenses							
		Aspect 1: Purpose			Aspect 2: Stakeholder engagement			A3: Competencies & capacit	
		Lens 1	*Lens 2*	*Lens 3*	*Lens 1*	*Lens 2*	*Lens 3*	*Lens 1*	*Lens 2*
Contaminants (ppm) within 50 m of metro system after flooding event								x	
Number people/100,000 reporting gastro-intestinal ailments after flooding event									x
Etc.									

Adaptation Challenge 3:.....

Figure 9: Indicative Mapping Evaluation Matrix

Shared experiences from regional governments

Measuring Progress on Adaptation

Québec

To increase Quebec's resilience to climate change, the government has developed several tools, such as the Flood Protection Plan, with an allocated budget of CA$479 million to be implemented in the period 2020-2025, a new National Policy on Architecture and Land Use Planning, a Disaster prevention framework allowing for risk analysis at the local or regional level, and finally a Sustainable Development Strategy that will be renewed in 2022.

However, the most important climate adaptation tool is the 2030 Plan for a Green Economy (PGE). Published in 2020, this document is the policy framework that guides the Quebec government's action on climate change. Its 5-years implementation plan, which is revised annually, will invest $7.6 billion to fight climate change over the next five years. An amount of $643 million is reserved for adaptation actions.

All of these adaptation tools have their own monitoring and evaluation systems. For the Quebec government, it is essential to evaluate the impacts of adaptation actions in order to assess the achievement of its objectives and ensure accountability to the population. Monitoring allows to update the measures put in place and to add new ones over the years.

KEY INFORMATION:

Location: Québec, Canada

Published: 2020 (PGE)

Budget: $643 million for adaptation ations(PGE)

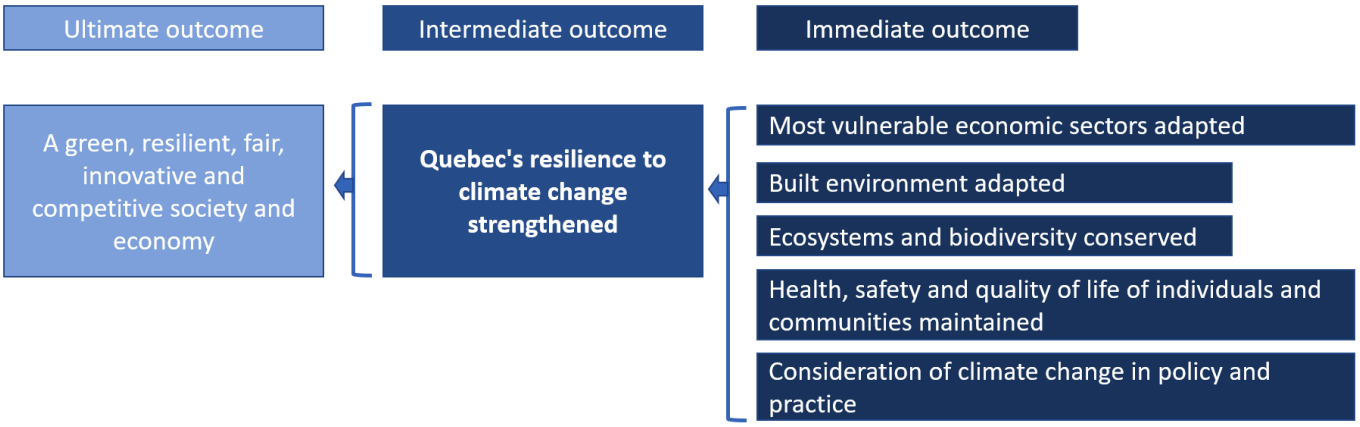
More information: PGE

Jonathan Charlebois, advisor at the Ministry of Environment and Climate Change of the Government of Québec, Canada, *spoke about the approach in Quebec in terms of measuring progress on adaptation.*

The Quebec government recognizes the importance of developing scientific knowledge and adaptation trajectories in order to plan its interventions in a structured manner. Thus, government interventions focus on prevention and on taking into account the future climate by targeting the major climate risks to which Quebec is exposed (rising temperature, flooding, thawing permafrost, coastal erosion). This means that before taking action and supporting various adaptation measures, it is necessary to examine whether climate change is actually having a measurable or anticipated impact, whether it is significant, whether it is causing a major problem, and if so, over what time horizon. It is also important to understand the anticipated effects to ensure that the right adaptation measures are identified and that maladaptation is avoided. Finally, it is necessary to know what adaptation goals we want to achieve by 2030 or 2050.

For the 2030 Plan for a Green Economy, Québec's major adaptation tool, a preliminary monitoring and evaluation framework was completed in accordance with the government's directive for evaluations. A logic model was designed to succinctly describe the key changes and effects sought. This model describes the logical connections between the outcomes to which it is intended to contribute.

The model shown below presents only the intermediate and immediate outcomes sought in adaptation. Other parts of the model, such as mitigation, have been set aside for presentation purposes.



2030 Plan of Green Economy Logic Model – Focus on Adaptation

For each of the 5 immediate outcomes in adaptation, one or more indicators are linked. Several of these indicators are currently being worked on, in partnership with an academic group, to determine their methodologies. This logic model serves as a management tool and will allow us to monitor our adaptation trajectories. Other evaluation tools are used for the actions.

To monitor and report on results, a team of 25 people is currently responsible for the administrative and financial monitoring of all PGE's actions. Each of the 166 actions and sub-actions has indicators drawn from a standardized list of 14 indicators. A complete dashboard will be published in the fall of 2022. Also, each of the Quebec government's financial assistance programs is evaluated using a standard grid of eight major questions, including relevance, coherence, governance, effectiveness and efficiency.

Since 2019, the Climate Action Barometer provides information on the disposition of Quebecers towards climate challenges. A segmentation of the population allows us to better understand their beliefs, knowledges, attitudes and behaviours towards climate challenges. This study provides information on: The level of climate literacy of the population; the perceptions of the climate emergency; the public expectations of businesses, governments, municipalities, etc. In 2021, when the barometer asked if people were able to explain to another person, what climate change adaptation is, only 30% of the population consulted replied affirmably, which shows the gap between the "known" progress between practitioners and policy makers on adaptation, and the perceived progress from the general population. Ultimately, this annual study allows us to monitor the evolution of the population's beliefs about climate change over time, in order to continue to mobilize them into action.

Find out more information on the Quebec's website on climate change.

FOCUS

Quebec undertook a large analysis and bibliography survey of indicators on adaptation and mitigation, and has shared it with RegionsAdapt members. Click here to access it

Global Indicator of Climate Change

Generalitat de Catalunya
Departament de Territori i Sostenibilitat

The Catalan Strategy for Adapting to Climate Change 2013-2020 (ESCACC), written by the Catalan Office for Climate Change (OCCC) and approved by the Government of Catalonia in 2012, represented a step forward in becoming less vulnerable to the impacts of climate change.

In 2014, for the first time, a monitoring and indicator system consisting of 29 indicators was established with the aim of evaluating whether adaptation actions have contributed in decreasing the vulnerability to the impacts of climate change.

Over the course of 2018, the OCCC further redefined the global indicator of adaptation to the impacts of climate change us (increasing the number of indicators to 42) and extended the time series of the indicators, so that the values of the indicators analysed would correspond to a timeline ending in 2014. Each update of IGA makes the indicator richer, more diverse, and more robust than the previous version.

KEY INFORMATION:

Location: Catalonia, Spain

Sector: Agriculture and livestock, Biodiversity, Water management, Forest Management, Industry, Mobility and infrastructure, Fishing and marine, Energy, Heath, Tourism, Urban planning and housing

Started: 2018

More information here

Gabriel Borràs, head of the adaptation area of the Catalan Office of Climate Change, *shared the key points of the implementation of The Global Indicator of Adaptation to the Impacts of Climate Change in Catalonia (IGA2018).*

He started his presentation highlighting that assessing how much an adaptation action is actually reducing the vulnerability to climate change through quantitative data is extremely difficult, which is why the first assessment of the ESCACC 2013-2020 was through a qualitative assessment, evaluating measures according to 3 different categories (Red – Adaptation not initiated or maladaptation / Yellow – Specific but insufficient adaptation actions / Green – Specific satisfactory adaptation action).

When later developing their monitoring and indicator systems in collaboration with a faculty of applied economic sciences, they realized the importance of choosing indicators that meet the following 3 criteria:

- Easy accessibility of information
- Historical Data, with historical series having at least 10 years of data.
- Easy interpretation

To avoid overweighting the sectors with a greater number of indicators, the weights of each of the 10 sectors are assigned according to the degree of exposure and sensitivity to the impacts of climate change (with the 3 top vulnerable sectors being Water (25%), Agriculture (14%) and Forest management (14%)).

The Principal Component Analysis (PCA) was used as the main way of analysis the data and unveiled a Factor 1 that could explain 62% of the variability, which was Eco-efficiency, understood as the use we make of resources (water, energy, and land), explains by itself 62% of the variability. This means that the better the use of these resources, the better the adaptation to climate change. Adaptation policies to the impacts of climate change in Catalonia must thus be based on avoiding rural depopulation, the abandonment of crops and pastures, the loss of extensive livestock, the lack of forest management, and the waste of water and energy.

When looking at the evolution of the Global Indicator of Adaptation, we can see a moderately positive evolution in the last 10 years: it has grown by 8.4% in 2005-2014, which coincides with the deployment of adaptation measures and actions through Catalonia. It will be necessary to continue with the periodic review every 5-10 years of the IGA with the updating of the historical series and the new information available such as, for example, the introduction of more biodiversity indicators or new sectors such as fisheries. In addition, at the same time, refine the methodology for the determination of the sectoral adaptation sub-indicators.

Discussions

Mamadou Ndong Toure from Gossas, Senegal commented on the importance of measuring adaptation and shared a tool that is being implemented in the region of Gossas, called Tracking Adaptation and Measures Development (TAMD).

M. Gabriel Borras, from the Climate Change Office of Catalonia, intervened by commenting that one of the challenges they face when starting developing the indicators in 2014, was that the consulted sectors were much more focused on mitigation data rather than in adaptation. Vulnerability reduction policies were not on the political agenda of sectoral priorities at that time. In 2018, the collaboration started to become much more positive. This is due to the evidence and the increasing sensitivity and awareness of the imminent effects of climate change in the region. Moreover, another factor to take into consideration are the economic cycles.

Cristina Gonzalez Rubio from the region of Baja California Sur pointed out that they want to start implementing adaptation measures in the framework of the climate change law they are working on. She found very useful to share the regions' experiences and the bibliography provided by Quebec.

When it comes to the question on how many vulnerable populations are impacted by resilient and adaptation actions and have built their resilience to climate change, which is key question raised in the Race to Resilience framework, it is clear from the conversation that this information is still difficult to obtain. The challenge of the Race to Resilience framework would be to come across with a measurement methodology that works for all regions, and would look at the data available.

Natalia Uribe, Regions4 Secretary General, highlighted the fact that 92% of the regions that work on climate policies do not align them to identified risks. It is crucial to identify the reasons why this is happening. Marta Olazabal from BC3 stated that the regions that have previous experience with disaster risk management policies or mitigation actions are more capable to draft adaptation policies than the ones without previous experience. Counting on historical data on risk and vulnerability assessment is key to developing more robust adaptation policies. For Mrs. Olazabal, the challenge of measuring adaptation is not the measurement itself; it is rather a matter of defining holistically, and context specifically adaptation and creating adaptation policies fit for purpose.

Heloise Chicou, climate program manager of Regions4 concluded on the necessity to improve capacity building and data generation on adaptation at the regional level to fill these gaps, mostly in Africa and Latin America.

Melisa Cran, RegionsAdapt program manager, from Regions4 added that it is important to build on adaptation measures that are context-specific, count on historical data, improve responsiveness to real needs, carry out regular revisions, and take into account all stakeholders, particularly vulnerable groups.

References and suggested reading

[1] CoR (2022) Climate adaptation: Measuring performance, defining targets and ensuring sustainability

[2] Christiansen, L., Sanchez Martinez, G., & Naswa, P. (Eds.) (2018). Adaptation Metrics: Perspectives on measuring, aggregating and comparing adaptation results. UNEP DTU Partnership.

[3] Adaptation Committee (2021) Approaches to reviewing the overall progress made in achieving the global goal on adaptation, Technical paper

[4] Olazabal, M., I. Galarraga, J. Ford, A. Lesnikowski and E. Sainz de Murieta (2017) Towards successful adaptation: a checklist for the development of climate change adaptation plans. BC3 Working Paper Series 2017-01. Basque Centre for Climate Change (BC3). Leioa, Spain.

Climate-ADAPT. (2022b). Urban Adaptation Support Tool.

CoR (2022) Green Deal Going Local Handbook: Giving local and regional authorities guidance for the green transition

Content shared by speakers and panelists during our webinar can be access here: Bibliography - Reference

ABOUT THIS BRIEF FOR ACTION

This brief for action is part of a series aiming to inform Regions4 members on key results and recommendations based on Regions4 research and Community of practice sessions.

***RegionsAdapt** is Regions4 climate initiative gathering more than 70 regional governments. It mobilizes ambition and action on climate adaptation by facilitating access to the latest innovations, tools, and best practices at the regional level.*

***RegionsAdapt Community of Practice** offers a space for regional governments to present their expertise and to learn from each other, discuss and engage, on a series of learning session on focused topics on adaptation, so as to help them gain capacity and improve their own policies and activities on adaptation.*

For more information on the initiative, please visit: http://www.regions4.org/project/regions-adapt/

Also, find in the link below the RegionsAdapt Progress Report 2021 – 2022: Regional Governments Driving Climate Resilient Development launched at COP27: https://regions4.org/news/regionsadapt-report/

ACKNOWLEDGMENTS

***Authors:** Mariana Corvaro, Mélisa Cran*
***Contributions:** Héloïse Chicou*
***Date:** March 2023*

RegionsAdapt Community of Practice sessions and materials are supported by the Government of Quebec