

## **RegionsAdapt Initiative: an inspiring perspective for climate adaptation**

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### Introduction

Throughout history, different times and contexts brought new challenges. Mankind always had to face numerous dilemmas while averting disappearance: different mechanisms, instruments and frameworks were created to guarantee the survival of contrasting societies. In distinct moments, humanity proved to be malleable to its environment, overcoming barriers of the credible and the incredible.

In the last decades of the 20<sup>th</sup> century, the majority of the borders of the natural world were crossed. It seemed that mankind had finally won this long-lasting "war" that began at the origins of societies and with the discovery of fire. However, as always, a new issue has emerged: problems related to climate change. At that time, the world was still overcoming the end of the Cold War; the International Community was mainly used to deal with matters of War & Peace or upholding Human Rights amid the opening of political regimes, for instance. Based on this historical standpoint of view, perspectives that can help catalyze global action to foster climate goals are still a relatively new and most needed endeavor.

### Background

Most national states, which are traditionally self-interest-oriented, realized that, at this time, they had no other option rather than starting to negotiate a better climate future – a task that entails coping with several problems related to the costs of combating climate change, plus the complexity of devising holistic approaches to take into account the disparities between developed and developing countries. In the wake of this process, a gap between mitigation and adaptation became a matter of deep concern: the first was widely prioritized, sometimes even at the expense of the later.<sup>1</sup> Fortunately, this reality has been changing over the last years. The imbalances between mitigation and adaptation became more openly debated, and a more comprehensive and effective global climate approach started to be shaped.

In a nutshell, until early 21st century, most achievements of the climate change agenda came up against three challenges: i) negotiation issues among national states around the mitigation process;<sup>2</sup> ii) incongruences between developed and developing countries;<sup>3</sup> and, iii) climate change impacts that already affect territories - a pressing situation that demands other measures rather than just mitigation actions.<sup>4</sup> This exact framework created the necessity for adaptation measures. In other words, the failure of

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<sup>1</sup> Mizan Khan and Timons J. Roberts. *Adaptation and International Climate Policy*, p.171, 2013. As explained by Mizan R. Khan and J. Timmons in "Adaptation and international climate policy":

<sup>2</sup> Mizan Khan and Timons Roberts, *Adaptation and International Climate Policy*, 174.

<sup>3</sup> Mizan Khan and Timons Roberts, *Adaptation and International Climate Policy*, 174.

<sup>4</sup> Mizan Khan and Timons Roberts, *Adaptation and International Climate Policy*, 174.

negotiations on mitigation in the international sphere has prompted adaptation initiatives, mainly at the local and regional spheres.

Numerous authors and organizations have widely observed the importance that climate adaptation has within the international community. As previously suggested by Mizan R. Khan and Timmons Roberts, the "failure of the world to agree an adequate regime to limit emissions to a safe level has created the need to refocus on adaptation." Today, notwithstanding all the existing potentiality of the Paris Agreement, recent political setbacks provide emblematic illustrations for two major conclusions at least. First, that continuously investing in adaptation may function, somehow, as a hedge to counterbalance the risks associated to unpredictable and irresponsible political decisions. Second, local and regional governments have proved, once again, their vital role in stepping in and taking the lead of the climate agenda, whenever the national level fails to secure public goods necessary for a healthy climate. Taking these considerations into account, supporting the pursuance of adaptation goals at the local and regional levels may represent a strategic approach to be adopted in general, at least while the three challenges described at the beginning of this article remain unresolved. As the World Economic Forum (WEF) clarifies in its article *Why we need to focus on climate change adaptation?*:

"Even if we limit the rise in global temperatures, climate change is here to stay. Communities are already facing more extreme and frequent droughts, floods, and other weather events. These consequences will only intensify (...) Some argue that the global economy cannot afford adaptation. But, as the latest evidence shows, delaying action will mean higher costs later. If we truly want to build a sustainable, prosperous, and equitable future, we cannot afford to wait."<sup>5</sup>

In fact, despite some recent advancement, we are too often still lacking behind our adaptation needs. Successfully adapting to climate change demands bold actions of international cooperation,<sup>6</sup> especially because most of the main vulnerable countries do not have access to adequate financial support nor the information or the know-how to adapt.<sup>7</sup> Thus, initiatives that could connect different regions of the world engaged on climate adaptation with different stakeholders are prone to offer auspicious contributions.

In this context, the RegionsAdapt Initiative may offer inspiring solutions on how to face the three aforementioned challenges. Its framework might explain us why.

RegionsAdapt was designed as the first global initiative for regional governments to take action, cooperate, and report efforts on climate adaptation. In this scope, each participating government is encouraged to accomplish three main commitments:

1. To adopt (or review) a strategic approach to adaptation and prioritize adaptation actions within two years of joining the initiative;
2. To take concrete action on adaptation in at least one of the seven key priority areas<sup>8</sup> that the founding regional governments have mapped;

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<sup>5</sup> WORLD ECONOMIC FORUM, 2013. Available at:

<https://www.weforum.org/agenda/2015/01/why-we-need-to-focus-on-climate-change-adaptation/>

<sup>6</sup> Jonathan Picekering and Dirk Rübhelke. International Cooperation on Adaptation to Climate Change, p.56.

<sup>7</sup> Jonathan Picekering and Dirk Rübhelke. International Cooperation on Adaptation to Climate Change, p.56.

<sup>8</sup> The seven key priority areas of the initiative are the following: 1. Water resources and management; 2. Resilience and disaster risk reduction; 3. Agriculture and zootechnics; 4. Forestry, protected areas, and biodiversity; 5. Infrastructure (including transport and the energy sector) and territorial planning; 6. Economic impacts and opportunities; 7. Social adaptation and

3. To report data on the progress of the adaptation actions on an annual basis through the “risks and adaptation” section of CDP’s (formerly the Carbon Disclosure Project) states and regions platform.<sup>9</sup>

In fact, the first two commitments require the public administration of each regional government to deliver concrete measures (for instance, the creation of projects through different departments). This aspect varies enormously according to some characteristics, such as the existence (or not) of vulnerability assessments, a previous adaptation framework and/or plan, socio-economic indicators, geographical characteristics and the history of the regional government (if any natural extreme event occurred in recent years, for example). Considering that each government has its own specific aspects and level of advancement in terms of adaptation preparedness, diversity among members is the norm. However, differently from the aforementioned framework that has been presented to describe trends in relations among national states, daily practice has shown that the diversity of its participants is precisely what makes RegionsAdapt a stronger initiative. Its framework serves as a global platform enabling regional governments to exchange valuable experiences and best practices.<sup>10</sup> In this sense, a similar solution for a drought in an African regional government could have already been used in another region elsewhere before. RegionsAdapt intends to address these knowledge gaps. It provides a structure that allows all participating governments to join efforts and build on possible synergies to foster resilient territories and prevent irreparable damage to their respective economies, environments, and citizens. Furthermore, the first two aforementioned commitments also encourage each regional government to raise the ambition of its own adaptation measures. This effect can be especially decisive nowadays, considering that it would be unacceptable to condition the wellbeing of citizens - sometimes, their survival - solely to the results of international treaties and conferences almost exclusively defined by national states. Climate change is already affecting territories, and requires immediate action.

In addition to the two commitments already described, the third one consists of self-assessing risks and actions related to climate adaptation once in a year. This represents the reporting process of the RegionsAdapt Initiative, a valuable tool for self-improvement, transparency, and accountability. It offers an opportunity for disclosing governments not only to showcase their actions but also to check their general strengths and weaknesses, and keep on tracking their progress. Moreover, the information collected throughout the reporting process also allows RegionsAdapt Secretariat to provide recommendations to all members.

### The 2016 Report

Adaptation to climate change is already fundamental for our societies, and its importance is prone to increase steadily in the decades ahead. In this sense, it is quite impossible to secure a prosperous future for the next generations without building resilience and improving the state of preparedness to cope with the ongoing multiple effects of global warming. Fortunately, there is a vast array of examples testifying to the fact that more and more governments and other stakeholders are progressively enhancing their approach to climate adaptation. Confirming this trend, the Network of Regional Governments for Sustainable Development (nrg4SD) launched, in January 2017, “RegionsAdapt 2016 Data Report: An assessment of risks and actions.” In total,

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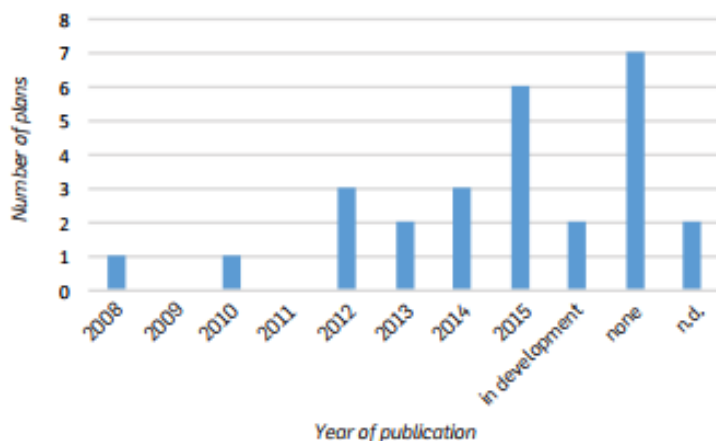
impacts. You can find more information on the Website of the initiative: <http://www.nrg4sd.org/climate-change/regionsadapt/about-regionsadapt/>

<sup>9</sup> Felipe Santoro, Joan França and Sara Kupka. *RegionsAdapt 2016 Data Report: An assessment of risks and actions*, p.3, 2016.

<sup>10</sup> The seven existing Working Groups offer remarkable cases.

27 regional governments<sup>11</sup> spanning from all continents reported. Most of all, this document suggests that, although all of them are taking actions to adapt to climate change, these governments could still greatly benefit from joint work, exchange and collaboration.

Among the main results disclosed in this report, Figure 1 indicates the creation of adaptation plans between the years of 2008 and 2015<sup>12</sup>.



Two points should be highlighted here:

I. The increasing number of adaptation plans that have been created since the year of 2008.

The outstanding year of 2015, when the run up to COP21 offered an exceptional momentum for climate adaptation action, as the Article 7 of the

Paris Agreement epitomizes.<sup>13</sup>

This sample allows us to infer the existence of a growing number of regional governments trying to adapt to climate change, and its consequences on their territories in terms of physical and socioeconomic risks.

In relation to the risk self-assessment included in the reporting process that originated RegionsAdapt's 2016 Report, a special attention was given to matters concerning water supply. Hence, the reporting questionnaire was comprised of three main sections: i) Physical risks from impacts of climate change; ii) Risks and adaptation actions related to water supply; and iii) Socio-economic risks from climate change. In all three sections, associated risks are assessed based on the level of their seriousness and the expected timescale of their impacts. The level of seriousness is described by estimating the probable impact from the expected effect of climate change. Four options of answers were provided: i) Extremely serious; ii) Serious; iii) Less serious, and; iv) Other. Likewise, to what concerns the different timescales related to the reported risks, four alternatives were also presented. As the report explains: "Current: the region is already experiencing the identified effect from climate change; Short-term: the region will experience the identified effect from climate change by 2025; Medium-term: if the region will experience the identified effect from climate change between 2026 and 2050; Long-term: if the region will experience the identified effect from climate change after 2051."

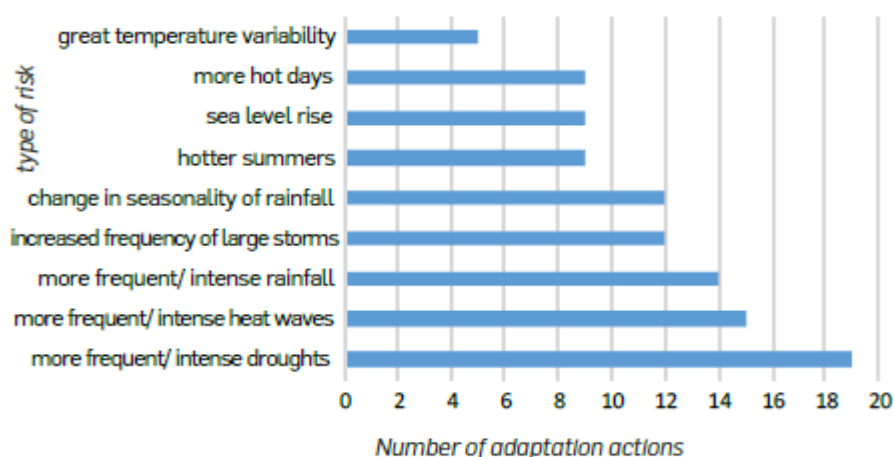
The information collected through that questionnaire and disclosed in the report was also organized within the same three topics. The first chapter, "Physical risks from

<sup>11</sup> The seven key priority areas of the initiative are the following: 1. Water resources and management; 2. Resilience and disaster risk reduction; 3. Agriculture and zootechnics; 4. Forestry, protected areas, and biodiversity; 5. Infrastructure (including transport and the energy sector) and territorial planning; 6. Economic impacts and opportunities; 7. Social adaptation and impacts. You can find more information on the Website of the initiative: <http://www.nrg4sd.org/climate-change/regionsadapt/about-regionsadapt/>

<sup>12</sup> Felipe Santoro, Joan França and Sara Kupka. *RegionsAdapt 2016 Data Report: An assessment of risks and actions*, 2016.

<sup>13</sup> United Nations, *Paris Agreement*, 2015. Available at: [http://unfccc.int/files/essential\\_background/convention/application/pdf/english\\_paris\\_agreement.pdf](http://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf).

impacts of climate change”, comprises thus these possible threats that the disclosing regions will (or already) face. All regions confirmed that climate change will impact their territories. A total of 128 physical risks were reported and separated into 17 categories.<sup>14</sup> This chapter portrayed then both the physical risks that these 27 regional governments are facing or expecting to experience and their responses to these risks. As already mentioned, the efforts that this group of regional governments is making to diminish the damages of climate change are widely clear. In this sense, more than 150 adaptation actions were reported in the face of different types of threats, as subsequently shown in figure 2.



In general, these risks that are being addressed by the disclosing governments can translate into complex and severe consequences if not properly approached. For instance, changes in rainfall seasonality might disturb agricultural communities, leading to possible risks for food security and sudden disproportional influxes of human migration from rural to urban areas.<sup>15</sup> More frequent and intense droughts are another kind of risk that is frequently affecting many societies: the lack of an adequate supply of water resources is a problem that tend to be aggravated in the disclosing regions over time due to climate change.<sup>16</sup>

The second chapter, “Risks and adaptation actions related to water supply,” was entirely dedicated to this specific matter. According to the 2014 report of the Intergovernmental Panel on Climate Change, there are evidences that human action has been changing the water cycle since 1960.<sup>17</sup> In this sense, the IPCC foresees that both water scarcity and unusually large river floods will be more intense and will affect

<sup>14</sup> The 17 categories are the following: More intense rainfall; More frequent rainfall; Change in seasonality of rainfall; Increased average annual rainfall; Reduced average annual rainfall; Reduced average annual snowfall; Greater temperature variability; More hot days; Hotter summers; More intense heat waves; More frequent heat waves; More intense droughts; More frequent droughts; Warmer water temperatures; Increased frequency of large storms; Sea level rise; Other. Felipe Santoro, Joan França and Sara Kupka. *RegionsAdapt 2016 Data Report: An assessment of risks and actions*, 2016.

<sup>15</sup> According to the United Nations High Commissioner for Refugees (UNHCR), 22,5 million people were displaced due to events related to climate changes. United Nations High Commissioner for Refugees (UNHCR), *Climate Change and Disasters*. Available at: <http://www.unhcr.org/climate-change-and-disasters.html>. Accessed in August 2017.

<sup>16</sup> Felipe Santoro, Joan França and Sara Kupka. *RegionsAdapt 2016 Data Report: An assessment of risks and actions*, p.7, 2016.

<sup>17</sup> V.R. Barros et al. *Summary for Policymakers*. In: *Climate Change 2014: Impacts, Adaptation, and Vulnerability*, 2014, p.5.

more people in this century.<sup>18</sup> This scenario is especially worrisome, considering that, in 2015, more than 663 million people were using unimproved water sources or surface water, according to the United Nations.<sup>19</sup> This situation has spurred the international community to take action on this matter. A symbolic example in this sense was the promotion of an action day exclusively dedicated to water at the COP22, on November 9th, 2015 - the first time this occurred in the history of COPs.

Yet, the “RegionsAdapt 2016 Data Report: An assessment of risks and actions” reiterates IPCC's diagnosis: a clear majority of the disclosing regions attested the existence of substantial risks to water supply in their territories.<sup>20</sup> Among all related risks included in this section, “increased water stress or scarcity” was the most reported one: 73.7% of the reporting governments confirmed that they expect to be affected - many are already being affected - by this specific risk. As previously suggested, the possible collateral damages of this kind of risk are manifold and they can be of gigantic proportions, spanning all human settlements from urban to rural areas.

As a consequence of such disturbs, climate change also affects several socioeconomic aspects that define our societies' standards of living. The third chapter of the report in question, “Socio-economic risks from climate change”, depicts some key socioeconomic risks associated to climate change, as reported by the disclosing governments. According to the United Nations Task Team on Social Dimensions of Climate Change, in the draft discussion “The social dimensions of Climate Change”: “without vigorous adaptation and mitigating measures, climate change is projected to further exacerbate vulnerabilities, place human health and security at risk and impede sustainable development. Integration of social dimensions into these measures is vital.”<sup>21</sup> In this sense, it is possible to suggest that the socioeconomic effects that climate change may generate, while broadly impacting the standards of living of our societies, may indirectly contribute to the violation of key elements that are essential to the preservation of human rights, such as health, access to water, food, housing, and jobs. In other words, in some communities, climate change may pose a threat to human dignity.<sup>22</sup>

According to the information that the disclosing governments have reported, 78% of respondents expect to face - or are already facing - social risks in their jurisdictions.<sup>23</sup> Similarly, 70% of them have reported that climate change can be a

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<sup>18</sup> UN-Water, *Water and Sanitation Interlinkages across the 2030 Agenda for Sustainable Development*, 2016, p.8.

<sup>19</sup> United Nations, 2016. Progress in Goal 6 in 2017. Available at: <https://sustainabledevelopment.un.org/sdg6>, Accessed on Aug. 06, 2017.

<sup>20</sup> It is divided into five physical risks related to water supply: Increased water stress or scarcity; Declining water quality; Flooding; Inadequate or aging Infrastructure; Higher water prices; Other. Felipe Santoro, Joan França and Sara Kupka. *RegionsAdapt 2016 Data Report: An assessment of risks and actions*, 2016.

<sup>21</sup> United Nations Task Team on Social Dimensions of Climate Change, *The Social Dimensions of Climate Change*, p.5. Available at: <http://www.who.int/globalchange/mediacentre/events/2011/social-dimensions-of-climate-change.pdf>.

<sup>22</sup> The article 25 of the Human Rights Universal Declaration is an awesome example of the violation to the Human Rights that the climate changes represents: “(...) Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control (...)”. United Nations. Universal Declaration of Human Rights, 1948.

<sup>23</sup> The 6 categories of risks associated to socioeconomic aspects are the following: Increased incidence and prevalence of disease; Migration from rural areas to cities and population displacement; Increased risk to already vulnerable populations; Loss of traditional jobs; Increased demand for public services (including health); Fluctuating socio-economic conditions.

threat to business in their territories. Taking these results into account, it is possible to conclude that, to address climate change effectively, it is definitely necessary to include the socioeconomic dimension in both mitigation and adaptation strategies. Since the physical and socioeconomic impacts of climate change are hardly dissociated in practice, climate actions require ingenious and innovative solutions to cope with such multidimensional risks.

To this aim, the Secretariat of RegionsAdapt concludes its report providing ten recommended actions to inspire regional governments in their adaptation efforts. These are the following:

1. Carry out vulnerability assessments to understand physical, social and economic vulnerability to climate change and to identify adaptation measures.
2. Develop a strategic approach to adaptation and prioritize adaptation actions.
3. Take concrete action on adaptation in at least one of the key priority areas identified through RegionsAdapt.
4. Foster citizen and community engagement in your region to develop and implement sustainable adaptation actions.
5. Build lasting relationships with your regional industries to learn why adaptation matters to them.
6. Engage your national government in dialogue to support the implementation of integrated National Adaptation Plans and policies.
7. Integrate climate change and adaptation as a cross-cutting topic in your sectorial policies.
8. Exchange and learn from other regions worldwide.
9. Mobilize finance for climate change adaptation from public and private sources.
10. Report data on your adaptation actions on an annual basis and track your progress.

As shown, the information gathered with the answers of 27 members throughout RegionsAdapt's 2016 reporting process allows regional governments to even further reflect and get to know better their internal conditions, as well as to track future possibilities and solutions that can be relevant to their territories. This illustrates well the importance of RegionsAdapt's third commitment. All the knowledge produced through this activity can simultaneously subsidize each disclosing regional government - thanks to the learning effect that the reporting process entails - and the initiative as a whole, shedding light on some of the existing challenges and solutions shared by members. In addition, this exchange of information also proves valuable for

underpinning the Secretariat's planning and proposed pathways, helping thus to shape the future of the initiative.<sup>24</sup>

### Conclusion

It is possible to conclude that the historical context of the beginning of this century - which demands a wider integration among national governments, subnational governments, and other multiple stakeholders - suggests that initiatives such as RegionsAdapt can represent valuable tools to contributing to adaptation goals. While the diversity of its members can add some complexity to the progression of the initiative in general, at the same time, no doubt remains that the differences existing between RegionsAdapt members constitute the most precious feature of this joint work. Considering that the global agenda on adaptation may sometimes reveal some challenging dichotomies, as the UNFCCC negotiations tend to be influenced by sharp contrasts existing between developed and developing nations, the relative success of RegionsAdapt in its early existence might indicate that subnational partnerships may offer inspiring solutions to the achievement of global climate goals. This applies not only in the sense of finding ways on how to integrate different jurisdictions into a common work, but also on how to enable the creation of multi-stakeholder partnerships, which are dramatically needed to better address climate change. Therefore, partnerships like RegionsAdapt might offer valuable examples of effective joint work, in which the sum of the characteristics and the efforts of each one of its members is what make the initiative stronger

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<sup>24</sup> We would like to thank the CDP, who is an endorsing partner of RegionsAdapt, and whose support was decisive for the success of this reporting process.



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