

## What adaptation chapter in the New Climate Agreement?

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**M**any Parties to the UNFCCC claim that there is a need now to upscale efforts on adaptation and identify what a global adaptation goal should represent for the international community. However, it seems there is still a lack of a coherent and comprehensive treatment of adaptation in the context of UNFCCC<sup>1</sup> negotiations, while this could enhance the opportunity for a more efficient and fair response to adaptation needs worldwide.

This paper intends to propose an overall structure for integrating adaptation into the 2015 agreement, with the aim to foster discussion and guide further definition of the different elements of this overall framework. It starts with the observation that the idea of a global adaptation goal has never been expressed as such, and thus not much has been done in terms of defining what a global adaptation goal may mean. As a consequence, the international community currently lacks a complete approach to achieve adaptation, in opposition to mitigation for which a global goal and a precise framework have been designed.

I. United Nations Framework Convention on Climate Change.

### RECOMMENDATIONS

- This paper defines the *Global Adaptation Goal* as the commitment of the international community to ensure human security<sup>1</sup> in a 2°C warmer world.
- This entails, first, to enhance adaptation efforts when possible, and second, to provide adequate answers for those whose security could not be covered in a +2°C world (i.e. specific mechanisms to be strengthened/put in place).
- Taken together, resilience and anticipation are the best ways to enhance adaptation, as they allow strategies to be at the same time reactive and anticipative. In this perspective, international climate negotiations hold the responsibility to support collective efforts to face security challenges both after extreme events (resilience) and before the occurrence of gradual climate-related environmental changes (anticipation).
- In order to structure and organise collective action at the global scale, the international community could be inspired by the way the framework for mitigation has been progressively developed, i.e. the definition of a common goal and of references and tools to track progress, responsibility and efficiency. In such a perspective, acknowledging that adaptation efforts should be first defined nationally leads to a reopened discussion about the needs for international cooperation at regional or global scale, and broader than only focussed on financial transfers.
- Counting on references and indicators of progress will provide several benefits:
  - Empower stakeholders (especially policymakers and investors) to be more aligned and lower risks;
  - Engage/reinforce an awareness raising and learning process at the national and international scales (in line with the Cancun Adaptation Framework), and thereby highlighting the needs for international cooperation;
  - Help defining a common structure for reporting and monitoring, which is necessary for such a learning process at various scales;
  - Enable the global community to count on an “official” climate vulnerability index and track collective progress towards the global adaptation goal.

1. Human security is in response to widespread and cross-cutting threats. These threats can spread rapidly within and across nations and give rise to more intractable crises that seriously challenge both governments and people. At the same time, human security underscores the universality and interdependence of a set of freedoms that are fundamental to human life (Definition from the *United Nations Office for the Coordination of Humanitarian Affairs*).

## 1. HOW TO STRUCTURE AN ADAPTATION CHAPTER IN THE 2015 AGREEMENT

While stringent mitigation action is still crucial to meet the official target of limiting warming to 2°C above pre-industrial level in 2100, adaptation must become a key objective at the global, national and local levels. In the international negotiations context, this means that the new agreement that will be agreed at the 21<sup>st</sup> Conference of the Parties (COP21) in 2015 should include an effective and comprehensive adaptation framework. Indeed, the fact that adaptation “... is place and context-specific, with no single approach for reducing risks appropriate across all settings (*high confidence*)”<sup>2</sup> does not mean that cooperation at a supra-local level is useless.

Concretely, this means that on the road to COP21:

- A key goal for mitigation is *to limit global warming to +2°C by 2100*;
- And according to this, a key goal for adaptation must be *to ensure collective action to be prepared to a +2°C world*, which refers to *a matter of security for worldwide human systems* (people, territories, activities, etc.).

### 1.1. Being inspired by the framework developed for mitigation

Major progress has been made from the 1990s to develop a shared vision of what to do, at the world and national scales, in terms of GHGs emissions reduction, in a both top-down and bottom-up approach. These efforts progressively led to an agreement on a concrete image of the goal to reach (i.e., not to exceed an increase of surface average temperature beyond 2°C by 2100), and to the definition of a basic shared unit of measurement (tons of CO<sub>2</sub>eq.) to assess progress on the field.

However, as climate change cannot be fully avoided, and as even a +2°C change will have important impacts, COP21 also has to move a step further on adaptation. Beyond the adoption of the Cancun Adaptation Framework during COP16 in 2010 (national adaptation programmes and relevant discussions on funding), discussions have now to address a complementary question: how to develop a commitment on collective and effective action on adaptation, and ensure that the world

is on the right road to adaptation? This question defines what we call the *Global Adaptation Goal*, and it refers to the need to structure collective action at the global scale to be prepared for a 2°C warmer world (and *de facto* to the need to develop a comprehensive adaptation chapter in the new climate agreement from COP21). Indeed, up to now such a shared vision of the future in terms of adaptation and acceptable risks has been an implicit element of the negotiations, but it needs now to be clarified and consequent concrete and collective action on adaptation should be undertaken.

The framework developed for mitigation is a very relevant source of inspiration, i.e. by defining common references and tools to track progress, responsibility and efficiency. Making such a parallel with mitigation is key in the aim of highlighting the bases of a comprehensive adaptation chapter in 2015, as this will bring many benefits: notably saving time (e.g. shortened discussions on the mainstreaming process at many levels and among many actions, e.g. international finance institutions), improving the general efficiency of the negotiation process, and identifying more quickly priorities of action (both top-down and bottom-up).

### 1.2. Building on existing bases: the Cancun Adaptation Framework

The Cancun Adaptation Framework definitely advocates (*cf.* Decision 1/CP.16) for “the implementation of enhanced action on adaptation in a coherent manner under the Convention”, highlighting the need for: “providing technical and guidance to the Parties” (paragraph II.20.a); “strengthening, consolidating and enhancing the sharing of relevant information, knowledge, experiences, and good practices at the local, national, regional and international levels...” (II.20.b); “promoting synergy and strengthening engagement with national, regional and international organisations, centres and networks, in order to enhance the implementation of adaptation actions...” (II.20.c); “providing information and recommendations...” (II.20.d); and “considering information communicated by Parties on their monitoring and review of adaptation actions...” (II.20.e).

However, the Cancun Adaptation Framework also presents two major gaps that COP21 will have to fill in:

- It mainly focuses on technical aspects for funding adaptation (paragraph IV.A), and remains limited in providing a complete understanding of adaptation;
- Except when reminding the generic assumption that “adaptation must be addressed with

2. Field C.B., Barros V.R., Mastrandrea M.D. (Eds.) *et al.*, 2014. *Climate Change 2014: Impacts, Adaptation and Vulnerability – Summary for policy makers. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press, Cambridge, London and New York (p. 22).

**Table 1.** Some parallels to build from mitigation to adaptation

	Mitigation	Adaptation
<b>Only one overarching two-fold goal</b>	How to limit global warming to +2°C by 2100, and how to ensure collective action to be adapted to a +2°C world?	
<b>A shared vision of the future, of the goal to reach collectively (top-down)</b>	< +2°C by 2100	Being prepared to a +2°C world (in order to ensure human security)
<b>Clear units to define and track progress</b>	tCO <sub>2</sub> eq tCO <sub>2</sub> per unit GDP tCO <sub>2</sub> per unit energy level of investment in RD&D sectoral decarbonisation metrics (e.g. CO <sub>2</sub> /kWh), etc.	Which unit/indicator (or aggregation of units/indicators)? To ensure transparency and a common definition of priorities at the national level requires a set of common “units of accountability”. This means indicators (or references) to follow what is being done, and thus measure effectiveness in terms of adaptation (i.e., improving resilience <u>and</u> promoting anticipation).
<b>National contributions with common reporting guidelines (bottom-up)</b>	A common reporting format that: - Produce an internal domestic learning process - Enhance the capacity to organise a global learning process - Allows performance assessment at the national and global scales	National Adaptation Plans with common reporting format (to be defined by Parties, e.g. building on the NAPA guidelines adopted under the Cancun Framework): - To ensure transparency and ability to measure collective progress - To help better understand/identify priorities, common progress, efficiency, risks and vulnerabilities, etc. - To ensure the domestic internal learning process as well as a global learning process - To mainstream adaptation into sectoral policies, investment decisions and risk reduction strategies
<b>Cooperation needs</b>	- Learning process on technology, policies and implementation - Funding - Other cooperation needs...	- Learning process (defining adaptation principles, peer-review and benchmark on adaptation plans) - Sharing climate data, scenarios, research capacities, etc. + For those countries where adaptation will not be possible in a +2°C scenario: climate security means specific solutions at the global scale, e.g.: Loss and damage Climate refugees Others (to be defined)
<b>A mechanism to assess if the world is on track</b>	In progress (i.e. if the sum of March 2015 contributions overshoots or not the +2°C objective)	Does the sum of adaptation efforts lead to ensure climate security in 2100 under a +2°C scenario? How to measure that?

the same priority as mitigation and requires appropriate institutional arrangements to enhance adaptation action and support” (paragraph I.2.b), it does not highlight any significant parallels with the mitigation framework.

### 1.3. Key cascading questions

All the points above raise the need to debate some key cascading questions referring to: (1) the definition of a reference for global adaptation; (2) the identification of units of measurement, e.g. for the reporting process; (3) the existence of limits to adaptation; and (4) the translation of this into a legal framework in the perspective of COP21.

(1) How to measure concrete progress in terms of adaptation at the global scale? Following which “referential”? While the “+2°C” objective helps answering the question “are we mitigating climate

change?”, which equivalent benchmark(s) could be designed for adaptation, in order to assess if the world is on track for adaptation to a +2°C scenario?

(2) Based upon this, which shared units of measure can be imagined for adaptation (the equivalent of tCO<sub>2</sub>eq for mitigation)? A possibility is to define indicators to track adaptation at the national and global scale, and thus being able to report on and monitor progress. What could these indicators look like? In the context of climate negotiations, it is under the responsibility of countries to define such indicators and the related reporting instruments, especially:

- An “awareness raising report” highlighting the reality of the threats currently induced by climate change at the country level. This assessment could be based upon the analysis of the

increase in the number and impacts of extreme climatic events and gradual climate change induced environmental changes;

- A “reporting framework” based upon the elaboration of a standard grid that takes into account both resilience and anticipation, and that focuses on processes as well as on results. Key indicators could thus be, e.g. the existence of a national adaptation plan, the decrease in people affected by extreme events and/or by gradual climate-related environmental changes, etc. Existing instruments (e.g., guidelines for national adaptation plans) could serve as bases here, with the aim of increasing usability, transparency and effectiveness.

(3) Which mechanisms should be strengthened or developed in the aim of helping the countries that will not be able to adapt to a +2°C world, given that such a level will already inevitably bring major and sometimes unavoidable environmental changes (e.g. sea level rise)?

(4) How to aggregate this work to the Cancun Adaptation Framework? A possibility for a more comprehensive version could be to promote the development of common reporting formats and indicators of progress, e.g. by proposing minimum requirements to countries that would then build their own reporting framework. In addition to many benefits (e.g., institutionalization of adaptation tracking, multilateral cooperation on adaptation, etc.), aggregating the reflection on a Global Adaptation Goal to the Cancun Adaptation Framework appears to be key in the perspective of developing an ambitious and comprehensive chapter on adaptation in the New Climate Agreement to expect from COP21.

## 2. IMPLICATIONS FOR THE ELABORATION OF A COMPREHENSIVE ADAPTATION CHAPTER

Five main steps can be highlighted at this stage.

### Step 1 - To agree on a common understanding of adaptation

To agree on the bases to define a Global Adaptation Goal firstly supposes to agree on what adaptation is. A simplified and practice-oriented definition, inspired by IPCC’s and by the Cancun Adaptation Framework,<sup>3</sup> considers adaptation at the crossroads of two pillars: resilience (i.e. better

3. For example, the Cancun Adaptation Framework refers to “actions aimed at reducing vulnerability and building resilience” (paragraph II.11).

react to and prevent extreme climate-related hazards) and anticipation (i.e. being able to anticipate risks induced by gradual climate-related environmental changes).

Only countries that meet these two conditions can be considered as being on the road to adaptation. Therefore, and based upon a cumulative process, some aggregate assessment could be made at the global scale about the efforts and progress (trajectories and rhythms). Yet, distinguishing between resilience and anticipation is useful to move towards practical guidelines for adaptation and indicators for assessing implementation progress and results.

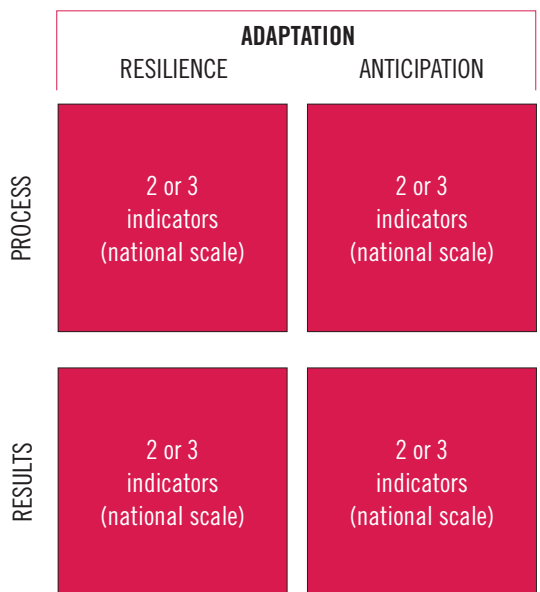
### Step 2 - To define concrete (and as much as possible quantifiable) indicators

In the international climate negotiations, the “accountability perspective” actually represents the main difference between the adaptation and the mitigation frameworks, and there is a request from Parties to now fill in this gap. Similar to what has been done for mitigation, defining concrete (and ideally quantifiable) indicators for adaptation should help assessing efficiency and what should be the priorities to increase efficiency in the future (i.e. reducing vulnerability, and thus lowering the risks and dangers on the long run).

A key challenge is thus to translate the two pillars of resilience and anticipation into a practice-oriented language, i.e. indicators that will:

- Provide a powerful tool to better mainstream adaptation into sectoral policies and investment decisions at the national and international levels;
- Provide global guidance to national scale stakeholders on what to do concretely to adapt—the top-down dimension—and how to strengthen national and local capacities designed to improve both resilience and anticipation, and thus help addressing human security at all;
- Allow measuring progress in terms of adaptation efforts (implementation process + results) at the national scale—the bottom-up dimension. Figure 1 presents such a frame, and attention will have to be paid at identifying indicators that can be expressed in a quantified way. Indeed, when quantified, these indicators can be aggregated in order to define a country profile and, more important, to allow drawing up a worldwide adaptation profile. The accumulation of assessments (e.g. on a yearly or a 5-year basis) will allow drawing up “adaptation trajectories” both at the national and international scales, and will then allow answering the initial overarching question: are we really adapting?

**Figure 1.** A possible frame to define indicators related to the Global Adaptation Goal.



- Allow defining a “world state of adaptation” based upon the aggregated national contributions. Here, the UNFCCC could play a key role in terms of compiling contributions, as by the way suggested in the Cancun Adaptation Framework.<sup>4</sup> A perspective for UNFCCC could thus be to derive from this reflection on indicators an “integrated adaptation index” at the national level. Such an index would serve as a worldwide official referential.

**Step 3 - To strengthen existing mechanisms to face the limits to adaptation**

Not all countries will systematically be able to adapt to a 2°C increase in global mean temperature, simply because such a level of global temperature change will inevitably imply problematic changes in some regions’ environmental conditions. Agreeing on the +2°C commitment induces that we collectively acknowledge some limits to adaptation, and thus that we collectively accept a burden in terms of risks. According to that, and in parallel to the development of an indicator-based grid to assess progress in terms of adaptation, the international community has to build relevant mechanisms to assist countries that will not be able to adapt to a 2°C warmer world. Such mechanisms already exist (e.g. the Loss and Damages mechanism), when some complementary ones maybe need to be developed.

4. Especially paragraph II.29 of the decision 1/CP.16.

**Step 4 - To identify what are the different types of needs for international cooperation**

Based on progress reports for adaptation at the national scale, the overall framework proposed in this paper enables to renew the discussion about international cooperation for adaptation, in a broader sense than only on financial transfers. Re-building cooperation needs in a bottom-up way is a key point of this proposed framework, in a kind of parallelism to the evolution of the discussion on mitigation.

What type of international (regional or global) cooperation would be needed to help countries improve their adaptation capacity? Regional or global learning processes are among those cooperation needs, but it would be also useful to develop other components: e.g. sharing climate information or remote sensing facilities, sharing or building modelling, and research and scenario building capacities...

**Step 5 - To identify and complete a relevant framework**

To be useful, the work on the Global Adaptation Goal has to be developed within a relevant framework. This is necessary to allow for this Global Adaptation Goal to be included into COP21’s final agreement, which is key for the post-2015 road map. Here, the Cancun Adaptation Framework represents a key frame and an objective for the COP21 negotiation process could be to complete the Cancun Adaptation Framework with the definition of a Global Adaptation Goal and of the means to assess progress (“adaptation trajectories”). ■

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