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Chapter 1

Setting the scene

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Firefighters put out flames while fighting a wildfire in Hidden Valley, California.

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1.1 Context

In 2021, the global COVID-19 pandemic entered its second year. While encouraging trends are emerging, including the unprecedented development and roll-out of vaccines in most industrialized countries, the pandemic continues to pose severe challenges to human health, create economic turmoil and impose rolling restrictions on daily life in most parts of the world. Climate change, in the meantime, continues its unrelenting progress towards a warmer, more unpredictable future, riven by extreme events and trends, as starkly documented in the recent Sixth Assessment Report (AR6) of the Intergovernmental Panel on Climate Change (IPCC), released in August 2021 (IPCC 2021). The situation is also reflected in the ever-increasing risks of floods, droughts, storms and heat waves. Recent examples include the heat dome in the Pacific northwest of the United States of America and Canada towards the end of June 2021, which saw the latter break its national temperature record three days in a row and by a total of 4.6°C (World Meteorological Organization 2021), and the severe flooding events in western Europe and the Province of Henan in China in July 2021. The recent AR6 report also showed that even under the most optimistic emissions scenarios that deliver net-zero by around 2050, global warming will continue in the short to medium term, peaking above 1.5°C, compared to pre-industrial levels. All this makes the global imperative of adaptation more urgent than ever before.

At the global level, international climate efforts under the United Nations Framework Convention on Climate Change (UNFCCC) continue, despite the postponement of the twenty-sixth session of the Conference of the Parties to the UNFCCC (COP 26), which was put back from November 2020 to November 2021. Consultations and work are proceeding ahead of the first Global Stocktake in 2023,¹ including a political push to further define and operationalize the global goal on adaptation.² To facilitate these discussions the UNFCCC Adaptation Committee also recently published a technical report on approaches to reviewing overall progress towards this goal (UNFCCC Adaptation Committee 2021). However, while promising, such developments have not yet been able to ensure real progress on adaptation tracking methodologies. Nor have they been able to resolve the associated and

persistent difference of opinions, with some Parties maintaining that global indicators are necessary and others stating that they will never adequately capture the full variety and breadth of adaptation across countries (UNFCCC 2021; Beauchamp, da Silva Bernardo and Bueno 2021).

In response to the need for science-based and policy-relevant global perspectives on adaptation, the United Nations Environment Programme (UNEP) has produced the Adaptation Gap Report (AGR) since 2014, making this 2021 report the sixth edition. From the outset, the report has pursued two main goals: firstly, to provide negotiators of Parties to the UNFCCC, the broader UNFCCC constituency and civil society with robust assessments of global adaptation gaps; and secondly to provide information on the status and results of global adaptation efforts under way (box 1.1). As such, while it remains an independent assessment, the objective of the AGR is closely aligned with that of the UNFCCC Global Stocktake.

1.2 The sixth Adaptation Gap Report

The Adaptation Gap Report 2021 – its sixth edition – is part of a new set of reports launched in 2020 in the run up to the 2023 Global Stocktake. It is structured in three parts:

- ▶ **Part I** (chapters 3 to 5) assesses national and global progress on adaptation, covering three central elements of the adaptation process: planning, financing³ and implementation. This part has formed part of each AGR edition and indicates the status and trends of the global adaptation process. Over time, the reports will provide a cumulative record of progress.
- ▶ **Part II** (chapter 6) presents a deep dive into the three elements of part I but focuses on a particular theme or sector of society. The purpose of this deep dive is twofold: first, it provides a more detailed picture of progress in a selected focus area; second, it adds additional perspectives, nuance and detail to the overall assessment of progress contained in the report. The theme or sector is decided by the report's steering committee,⁴ taking into account global developments, international priorities and the needs of the UNFCCC and other global agreements.

¹ The Paris Agreement Global Stocktake is a process for taking stock of the implementation of the Paris Agreement with the aim of assessing the world's collective progress towards delivering on the agreement and its long-term goals. The first Global Stocktake will take place from 2021 to 2023 and the process will be repeated every five years.

² The global goal on adaptation is defined in the Paris Agreement: "enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with a view to contributing to sustainable development and ensuring an adequate response in the context of the temperature goal referred to in Article 2". The temperature goal in question means "holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels" (UNFCCC 2021).

³ Under the UNFCCC, finance is one element of the "means of implementation" (finance, technology and capacity-building). In the context of this report, however, capacity-building and technology transfer are considered to be elements of "implementation" more broadly.

⁴ A steering committee, chaired by UNEP, guides the production of the report, including its thematic content and overall strategic direction, the selection of lead authors, and the review and sign-off of the report's content. The committee includes representatives from UNFCCC, IPCC and WASP, as well as a representative from the upcoming COP host.

Box 1.1 Overview of past Adaptation Gap Reports^a

UNEP, in partnership with sponsoring bodies and other partners, including the World Adaptation Science Programme (WASP),^b produced its first AGR (UNEP 2014) for COP20 in Lima, Peru, in 2014. The report arose in response to requests from UNFCCC Parties for an assessment on adaptation that would complement the annual UNEP Emissions Gap Report (see, for example, UNEP 2020). In particular, the report aimed to provide an independent assessment of the “adaptation gap” to help inform UNFCCC discussions on adaptation ahead of COP21 in Paris in 2015. From the first AGR, it was clear that assessing the adaptation gap was going to be very different and methodologically much more challenging than evaluating the annual emissions gap.

The first AGR proposed defining the adaptation gap as “the difference between actually implemented adaptation and a societally set goal, determined largely by preferences related to tolerated climate change impacts, and reflecting resource limitations and competing priorities” (UNEP 2014). It also provided a preliminary framework for assessing adaptation gaps and proposed three dimensions: the funding gap, the technology gap and the knowledge gap.

- a** All the Adaptation Gap Reports are available at: <https://www.unep.org/explore-topics/climate-change/what-we-do/climate-adaptation/world-adaptation-science-programme-5>.
- b** See www.wasp-adaptation.org and www.unep.org/explore-topics/climate-change/what-we-do/climate-adaptation/world-adaptation-science-programme for more information.

The second AGR was produced in 2016, providing an in-depth assessment of the adaptation finance gap, looking at both estimates of the costs of adaptation and the availability of bilateral, multilateral and private sector financing.

The third AGR was released in 2017 and did not assess a thematic gap. Instead, it focused on the methodological issues involved in assessing global progress on adaptation.

In 2018, the fourth AGR introduced a thematic topic alongside the assessment of adaptation progress in terms of enabling environments, adaptive capacity and finance. The focus was on the adaptation gap in the health sector.

The fifth AGR, which was published in 2020, introduced a framing focused on assessing progress by aiming to answer three important questions: What are we doing today to adapt? To what extent are we currently reducing climate risks? To what extent will our adaptation trajectory help us reduce future climate risks? The report also included a deep dive into the answers to these questions, focusing on Nature-based Solutions.

- ▶ **Part III** (covered in [chapters 2](#) and [7](#)) introduces a framework for understanding global progress on adaptation, thus guiding the reader through the analysis of the report, and synthesizes the findings described in Parts I and II to provide an overview of global progress on adaptation. [Chapter 7](#) also provides an overview of future developments and outlines the challenges ahead and intended future work towards improving the assessment of global adaptation.

The topic for Part II of the 2021 Adaptation Gap Report focuses on the **emerging impact of COVID-19 on global adaptation processes**. The reasons for selecting this topic are twofold. Firstly, COVID-19 continues to exert a major influence on the social and economic contexts underpinning adaptation processes, which represents a major challenge in developing countries. Secondly, COVID-19 has led to record levels of financial credit provision and fiscal spending by governments as part of their national

recovery plans. Despite the serious fiscal constraints inherent to this approach, such unprecedented levels of public spending also present great opportunities for scaling up and mainstreaming climate risk considerations for a greener and more resilient recovery from the COVID-19 crisis.

This year’s AGR updates and expands the analysis begun in the 2020 edition of the report by providing information of direct relevance to the UNFCCC Global Stocktake:

- ▶ **Consolidated criteria for assessment of adaptation progress, gaps and contextual elements.** Building on the work initiated in 2020, this year’s report consolidates a methodological framework for assessing progress, gaps and contextual elements in global adaptation. It also expands and strengthens its approach to the assessment of adaptation outcomes, notably through the inclusion of qualitative expert assessments of future outcomes

(a topic with only very limited coverage in the 2020 AGR). These advances represent work in progress and are expected to serve as the first step in a steadily improving and expanding methodology for outcome assessment in the context of the AGR reports.

- ▶ **Updated and expanded assessment of progress in adaptation planning.** The analysis in the planning chapter ([chapter 3](#)) is updated based on 107 new or updated Nationally Determined Contributions (NDCs), 14 National Communications and three National Adaptation Plans (NAPs), which have been submitted since October 2020. This provides a more comprehensive picture of global progress in adaptation planning. It also sheds light on innovative adaptation laws and policies, including evidence for risk reduction from adaptation planning, as well as aspects related to COVID-19.
- ▶ **Updated assessments of financial needs for adaptation.** Many countries have updated their adaptation priorities and associated financing needs in recent NDCs submitted to the UNFCCC

Secretariat. This enables the 2021 AGR report to provide an updated view on adaptation financing from the perspectives of individual countries. It provides key information on how such estimates have changed over time.

- ▶ **Expanded data sets for assessing progress in the implementation of adaptation.** The data sources of implemented adaptation measures have seen a major expansion to include data from major bilateral donors and recent findings on the extent of adaptation measures, their geographic distribution and the potential for transformative change, as assessed by the Global Adaptation Mapping Initiative.⁵
- ▶ **A first look at how the COVID-19 pandemic is affecting the global adaptation process.** The 2021 edition of the report provides a first assessment of the impact of the pandemic on the national adaptation planning process and the availability of financing for adaptation. It also points to some important lessons from fighting the COVID-19 pandemic that can be applied to improve future climate adaptation planning and financing processes and steps.

⁵ The Global Adaptation Mapping Initiative (GAMI) is a collective global effort to systematically gather and synthesize literature on climate change adaptation. The initiative was developed to provide synthesis results to inform the ongoing Intergovernmental Panel on Climate Change (IPCC) 6th Assessment Report (AR6). It seeks to answer the question “are we adapting?” The initiative has come together with no funding and no formal institutional mechanisms. More information can be found at <https://globaladaptation.github.io/>.

In Albania, UNEP is working with the Ministry of Tourism and Environment to improve the capacity of the Kune-Vaini lagoon ecosystem to adapt to climate change and provide vital goods and services to local communities.

Learn more about this project [here](#).

Photo: © UNEP



References

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