



## NO FOOD SECURITY WITHOUT CLIMATE PROTECTION!

### What the 2021 International Climate Conference (COP26) must achieve

It is undisputed that climate change is having a negative impact on food and nutrition security, especially for the most vulnerable people in the Global South. Its mitigation is the central task of member states of the United Nations Framework Convention on Climate Change (UNFCCC), which is meeting for the 26<sup>th</sup> time this year. Progress in international climate policy has so far been insufficient. Greenhouse gas emissions are on the rise again, and pressure is mounting on member states to take decisive action. The climate conference in Glasgow must now deliver more ambitious, national climate targets and packages of measures with sufficient funding for climate protection and adaptation, otherwise achieving food security will become an unmanageable goal.

#### The baseline

The crises we are witnessing today are mutually dependent and reinforcing: global warming and environmental degradation, the loss of biodiversity and the COVID 19 pandemic – they are the expression of an unsustainable way of life. The way food is produced today also has a significant impact on the environment

and the climate.<sup>1</sup> The impacts are felt at all levels of societies, exacerbating food crises and threatening people and ecosystems.

The first part of what is now the sixth Assessment Report of the Intergovernmental Panel on Climate Change<sup>2</sup>, published in August of this year, emphasizes these negative impacts and shows how human influence is warming the atmosphere, ocean and land surfaces. Widespread and rapid changes have occurred in the atmosphere, ocean, cryosphere (the part of the Earth covered by ice) and biosphere, the scale of which is unprecedented for millennia. Effects on weather and climate extremes can now be seen all over the world – including here: Sea levels are rising more than ever, and extreme weather events such as storms, droughts and forest fires are increasing in number and severity. They are undoing decades of development progress, with dramatic consequences for the fight against hunger and poverty.

It is undisputed that people living near or below the poverty line are particularly vulnerable to the impacts of climate change, lose more and are less able to cope with shocks and adapt. Mostly they work on the land and depend on what they produce. Their food security situation is highly unstable and vulnerable to

<sup>1</sup> See on the role of food systems: Hungry for Change. What the German government should achieve at the UN Summit on Food Systems, Welthungerhilfe 2021. <https://www.welthungerhilfe.org/news/publications/detail/hungry-for-change/>

<sup>2</sup> <https://www.ipcc.ch/report/sixth-assessment-report-working-group-i/>

fluctuations. Eroding soils and water shortages lead to crop failures and destroy their livelihoods, and not infrequently turn them into refugees.

## The number of hungry people is increasing worldwide

Last year, up to 811 million people did not have enough to eat, which was 118 million more people than the year before.<sup>3</sup> One reason was the Covid 19 pandemic. But there are more fundamental and far-reaching causes of hunger and malnutrition, which the United Nations Food and Agriculture Organization (FAO) as attributes to progressive climate change, conflict, poverty, and inequality.<sup>4</sup>

The Intergovernmental Panel on Climate Change (IPCC) also underlines the connection between climate change and hunger in its Assessment Report 2021, because the significant increase in heat and droughts as well as heavy rainfall affects agricultural production (availability and quality of food) and thus the food situation. This means that crop failures are inevitable, traditional cultivation regions lose their importance (e.g. coffee) and damage caused by thunderstorms, tornadoes or hail increases. In South Asia alone, heatwaves are now among the events with the worst consequences: Summer temperatures of over 40 degrees Celsius regularly kill thousands of people.<sup>5</sup>

The Intergovernmental Panel on Climate Change (IPCC) has issued a correspondingly urgent warning: at current levels of greenhouse gas emissions, global warming will exceed 1.5 or 2 degrees Celsius in the course of the 21st century and this trend will continue to intensify, noticeably all over the world. The most important lever to reverse this is drastic reductions in CO<sub>2</sub> and other greenhouse gas emissions in the decades immediately ahead.

## "Light years away from climate goals"

But that is not what it looks like at the moment: During the opening of the United Nations General Assembly in September this year, Secretary-General Antonio Guterres declared: "We are light years away from our (climate) targets". According to a study<sup>6</sup> published by the United Nations Framework Convention on Climate Change (UNFCCC), global emissions would have to be reduced by 45% by 2030 to achieve climate neutrality (no increase in greenhouse gases in the atmos-

phere) by the middle of the century. However, against the background of the emission targets currently submitted by the member countries, the study assumes that greenhouse gas emissions in 2030 will be 16% higher than in the comparative year 2010.

This does not bode well for the upcoming climate change conference in Glasgow (26<sup>th</sup> Conference of the Parties, COP) which, chaired by the UK government, has at least three main self-imposed tasks and must ensure that:

1. at least industrialized countries and emerging economies tighten their climate targets by 2030 in order to achieve climate neutrality by the middle of the century,
2. concrete measures are adopted to enable affected people in poorer countries to adapt to the unavoidable impacts of climate change and to protect habitats,
3. to implement both objectives, sufficient financial resources must be made available.

When reviewing the Nationally Determined Contributions (NDCs) of individual countries, it can be seen so far that major greenhouse gas emitters such as Japan, Australia and Brazil are slowing down global ambition with their appallingly weak climate targets. The USA and China – which have not yet submitted ambitious NDCs – must do so as soon as possible. Although Germany has presented climate targets (65% less greenhouse gases by 2030 compared to 1990) and the EU has also presented an ambitious "European Green Deal" (climate neutrality targeted by 2050), it is far from certain that these targets will be met without the implementation of planned measures<sup>7</sup>, and Germany has also failed to meet its climate targets so far.<sup>8</sup>

## "Reducing greenhouse gas emissions is inevitable"

The climate researcher Michael E. Mann explains why the reduction of emissions (primarily the phasing out of fossil fuels) is so important, especially in the context of development policy (and thus for food security).<sup>9</sup> He states: If, under the best of all assumptions, billions of trees were planted on a maximum area of 0.9 billion hectares of the Earth's surface, and regenerative agriculture based on recycling agricultural waste and using compost material, combined with land use practices that enhance soil carbon se-

<sup>3</sup> More than half of the hungry live in Asia and one third in Africa, see also the new World Hunger-Index 2021:

<https://www.globalhungerindex.org/>

<sup>4</sup> <https://www.fao.org/publications/sofi>

<sup>5</sup> <https://www.munichre.com/topics-online/en/climate-change-and-natural-disasters/climate-change/what-do-we-know-about-climate-change.html>

<sup>6</sup> <https://www.un.org/sg/en/node/259106>

<sup>7</sup> According to a survey conducted by Welthungerhilfe in September 2021, 72% of respondents believe that Germany and other industrialized countries have a responsibility to actively protect the climate in order to prevent the living conditions of people in the Global South from deteriorating further. [Climate change survey - Welthungerhilfe](#) (in German only)

<sup>8</sup> <https://www.tagesschau.de/inland/klimaziele-2030-verfehlt-101.html> (dated 8/19/2021)

<sup>9</sup> Michael E. Mann: Anpassung ist nicht genug, in: Blätter für Deutsche und Internationale Politik, issue 9/2021, p. 94

questration, a total of about 22 billion tons of CO<sub>2</sub> per year could be sequestered in the soil. However, fossil fuel combustion currently produces the equivalent of about 55 billion tons of CO<sub>2</sub> emissions per year. This means that even the combined effect of reforestation, climate-adaptive agriculture and land-use practices could at most slow, but not neutralize or reverse, the rise of CO<sub>2</sub> in the atmosphere. This makes it more important that both core components of the solution to this crisis, greenhouse gas reduction and adaptation, are interlinked.

## Adaptation and...

Adaptation to the impacts of climate change refers to measures of a social, environmental, or economic nature to limit potential damage. Adaptation solutions are context-specific and can range from building flood defenses, setting up early warning systems, building resilient infrastructure, and redesigning farming systems to adopt pest- and drought-tolerant seeds. The aim is usually to make communities more less vulnerable to the risks and more resilient to the impacts of climate change. Decisions must now be made at the climate conference in Glasgow to fund these measures. According to the Organization for Economic Co-operation and Development (OECD), only around a quarter of international climate funds go to adaptation<sup>10</sup>, which is decidedly too little and not geared to the needs of countries from the Global South. This would also be in line with the demands of African

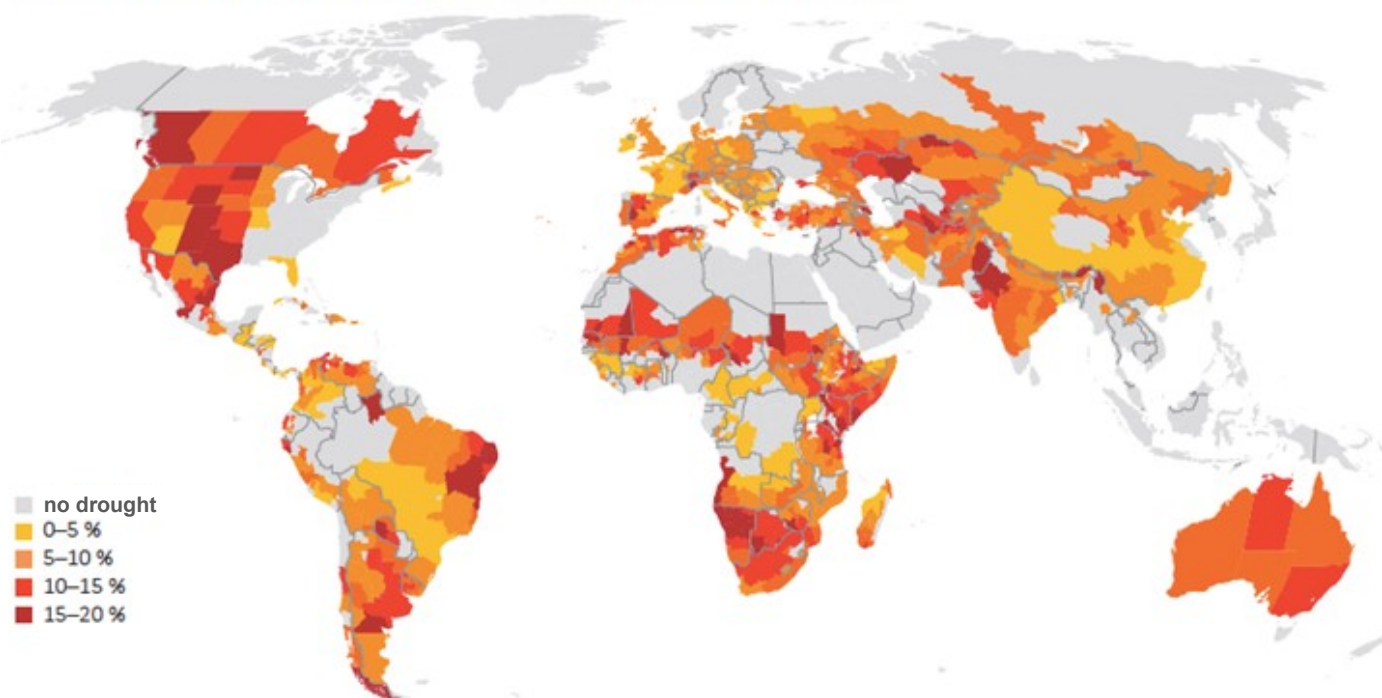
states, which are calling for a massive increase, e.g. in the Accelerated Adaptation Programme for Africa (AAP). According to the president of the African Development Bank, Africa is losing up to fifteen billion US dollars per year due to climate change. And literally, "It is never too late [to bring about change]. What Africa needs is the mobilization of resources ... to rebuild infrastructure, to make it more climate resilient, and to ensure that we have better systems that can withstand many of today's challenges".<sup>11</sup>

## ... losses and damages

"Loss and damages" refer to losses and damages that have already occurred as a result of climate change and future impacts to which it will no longer be possible to adapt (these include destruction due to flooding, salinization of previously fertile soils, acidification of the oceans, loss of habitat due to sea-level rise). A distinction is made between economic (industry, agriculture, tourism, infrastructure) and non-economic losses (quality of life, health, indigenous knowledge, biodiversity, ecosystem services, although many of these non-economic losses truly do have an economic impact). For many of those directly affected, these climate-related losses and damages must be accounted for and reduced; for them, survival is at stake. Here, too, they need financial and technical support, especially in the poorer countries. In the past, there have been repeated attempts in the climate negotiations to address loss and damage, but to date no consensus

### Example of agricultural damage: droughts on pastureland

Percentage of pastureland affected by drought from 2004 to 2018



The map shows the proportion of the world's rangeland that was affected by drought between 2004 and 2018. Source: EU Joint Research Centre (JRC), Anomaly Hotspots of Agricultural Production (ASAP)

<sup>10</sup> <https://www.oecd-ilibrary.org/sites/03590fb7-en/index.html?itemId=/content/publication/03590fb7-en>

<sup>11</sup> [COP26 urged to prioritize adaptation as climate emergency surges | Climate Change News | Al Jazeera](#)



has emerged among the states as to what this might look like. The fear, especially of the industrialized countries, is that they might be called upon to pay compensation (for the loss of their homes or entire ecosystems) is too great. It is therefore important that concrete, workable proposals are developed in Glasgow with the aim of minimizing and coping with loss and damage. A financial mechanism could help in this regard, which could be composed of existing funds (such as the Green Climate Fund, the Adaptation Fund, etc.) as well as fed from other private and public sources. Thus, future funding gaps such as damage and losses from extreme weather events not covered by insurance instruments, slow-onset disasters such as droughts, and non-economic damage and losses could be covered. These measures would contribute to greater food security in affected countries.

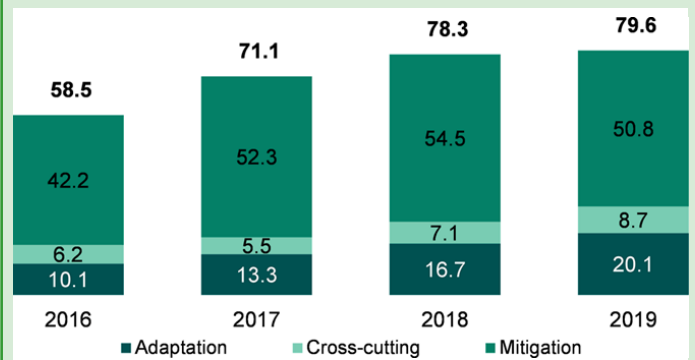


Ethiopia: Dry periods threaten food security of nomads

## Climate Finance

In addition to the urgency of reducing global greenhouse gas emissions, financing climate mitigation and adaptation in poorer countries is also on the agenda of climate conferences. The signatory states to the Framework Convention on Climate Change committed themselves to climate finance in 1992 and renewed this commitment in the Paris Agreement of 2015. Climate finance is not only binding under international law, but also a central component of international climate justice. This means that countries that bear the main responsibility for climate change also pay for the consequences and damages. Financial support for the poorer countries is thus part of a fair contribution by the industrialized countries in the fight against global warming, alongside the commitment to become climate neutral themselves by the middle of the century. At the climate conference in Copenhagen in 2009, it was decided that the industrialized countries would provide poorer and affected countries with 100 billion US dollars per year from 2020 onwards, which corresponded to the needs calculated at the time for the coming years. The decision is valid until 2025, after which a new global funding target is to be set.

## Thematic breakdown of climate finance provided and mobilized (in USD billion)



Note: "Cross-cutting" refers to projects that address both mitigation and adaptation, or climate finance that has not yet been allocated. Source: Based on biennial reports to the UNFCCC, OECD-DAC statistics and Export Credit Group statistics.

The challenge, however, is that neither the Framework Convention nor the Paris Agreement have quantified the decisions, meaning that the level of financial contributions is left to the donors in each case. At the G7 summit in June of this year, Germany pledged to increase annual funding from the federal budget for climate financing from the current \$4.8 billion to over \$6 billion by 2025 at the latest (German climate and development organizations, including Welthungerhilfe, have called for a doubling to \$9.6 billion).<sup>12</sup> The USA has announced that it will provide 5.7 billion US dollars per year until 2024, the United Kingdom 4 billion US dollars per year. In total, these pledges are still not enough to reach the 100 billion per year. And so they have not been reached yet. Meanwhile, the more the earth continues to warm, the more money will be needed for adaptation in the future.

## Regulate internationally, implement nationally

The situation is heating up quickly. Rapid global warming is affecting everyone, whether in Germany or in the Global South, and it is spreading ever further - and with full force. In the interest of the millions of small-holder farmers and landless people in the countries of the Global South, as well as future generations, it is necessary not to worsen the situation and to adapt to the consequences. Stabilizing today's climate is an important building block of sustainable development and thus of food security. This does address another central aspect of climate justice, and the reduction of climate-damaging emissions is also an important goal of development cooperation. Development efforts must not worsen the state of the climate and climate protection must not hinder development. To this end, international climate policy must be building the foundation, and implementation must take place at national level.

<sup>12</sup> More on the website: [German climate financing](#)



Bangladesh 2020: Victims of a flood disaster caused by heavy monsoon rains

Welthungerhilfe pursues climate-sensitive development measures to help achieve these goals. On the one hand, WHH aims to be climate neutral by 2025, and on the other hand, it implements programs supporting communities in the Global South to adapt to the overwhelming climate challenges they face. To this end, it promotes nature-based solutions such as the protection and restoration of soils and forests to create carbon sinks, while at the same time preserving biodiversity. The right kind of sustainable agriculture, adapted to local conditions, not only secures food but can help mitigate climate change with sustainably managed soils and biodiversity conservation. Intact soils, peatlands, forests, wetlands and grasslands are important carbon stores.

Many of Welthungerhilfe's projects serve to mitigate extreme weather events such as heavy rain and storms. Early warning systems help to bring people to safety from cyclones or floods in good time. To this end, Welthungerhilfe analyses possible risks in advance, develops emergency plans and supports the development of necessary and appropriate infrastructure. With the instrument "forecast-based financing" (within the context of anticipatory humanitarian aid), action is taken even before disasters occur. In this way, losses and damage are proactively avoided.<sup>13</sup>

## What countries need to decide at the 26th climate conference:

- 1. Reduce CO<sub>2</sub>-emissions:** In particular, the industrialized and emerging economies of the G20 must present new or updated greenhouse gas reduction targets that are compatible with the goal of achieving climate neutrality by the middle of the century. These targets must be backed up with concrete catalogues of measures and timetables.
- 2. Support those affected:** The target of 100 billion US-dollars per year for international climate finance from 2020 has not yet been reached. Countries need to significantly increase their contributions. At least half of the sum must be available for adaptation measures to increase people's resilience to unavoidable climate impacts.
- 3. Securing food through site-specific agriculture as a pillar for sustainable and climate-adapted development:** Agriculture and food security must play a central role at the climate conference. Cultivation methods should be geared towards a diversity of plants and varieties. All aspects of agriculture (such as growing crops, raising livestock, and harvesting forest products) must incorporate the requirements of adaptation to climate change and the demands of sustainability and ensure food security without harming the climate and violating the right to food.
- 4. Expand climate and disaster risk financing:** Financing gaps of damages and losses from extreme weather events, rising sea levels and land loss, and increasing droughts need to be urgently addressed. The creation of a dedicated financing mechanism should help address this. Preventive measures, including anticipatory humanitarian aid, must be given increased financial support.

<sup>13</sup> See also: [Development of Forecast-based Action mechanism addressing drought induced food insecurity in Madagascar - Anticipation Hub \(anticipation-hub.org\)](https://www.anticipation-hub.org/)

Cover photo: Emergency relief measures after Cyclone Idai in Mozambique

Bonn/Berlin, 21. October 2021

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