Toolkit for Youth on Adaptation & Leadership

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MODULE 1

UNDERSTANDING CLIMATE CHANGE

GLOBAL CENTER ON ADAPTATION

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Acknowledgments

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Acronyms

ASAP	The Adaptation for Smallholder Agriculture Programme
CBA	Community based adaptation
CCA	Climate change adaptation
CIS	Climate Information Services
COP	Conference of the Parties
COY	Conference of Youth
CRA	Community Risk Assessment
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EAC	East Africa community
ECOWAS	Economic Community of West African States
GCF	Green Climate Fund
GHGs	Greenhouse gases
IPCC	Intergovernmental Panel on Climate Change
JPA	Joint Principles for Adaptation
LAP	Local Adaptation Plans
LDCF	Least Developed Countries Fund
LLA	Locally Led Adaptation
MDGs	Millennium Development Goals
NAP	National Adaptation Plan
NAPA	National Adaptation Programs of Action
NDC	Nationally determined contribution
NGOs	Non-Governmental Organizations
PPCR	Pilot Program for Climate Resilience
PSP	Participatory Scenario Planning
SCCF	The Special Climate Change Fund
SDG	Sustainable Development Goal
SIDS	Small Islands Developing States
SMART	Specific, Measurable, Achievable, Relevant and Time-bound
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change

WELCOME TO THE TOOLKIT FOR YOUTH ON ADAPTATION & LEADERSHIP!

Who is this toolkit for?

Climate change is reshaping the world young people have inherited and they will bear the costs in the coming decades. However, young people are often excluded from taking on leadership roles and engaging in decision-making activities related to climate change adaptation. This Toolkit for Youth on Adaptation & Leadership equips young people with the knowledge and skills to engage in climate adaptation policy, advocacy and action. This toolkit uses the terms "youth" and "young people" to refer to people between 15 and 35 years old.

What you will learn

The toolkit covers essential materials and offers practical guidance for how you, as a young person, can take part in adaptation policy processes, lead advocacy campaigns, and approach adaptation with an entrepreneurial mindset. It provides tools for designing and implementing your own climate change adaptation actions so that you can be part of the solution to the climate crisis.

The "Toolkit for Youth on Adaptation & Leadership" is a project under the Global Center on Adaptation Youth Leadership Program, developed by the CARE Climate Justice Center with the financial support of Norad. It came together with input from young people who, like you, are concerned about the impacts of climate change and have faced challenges when advocating and taking adaptation action.

How to use the toolkit

The toolkit includes eight modules:

1 Understanding climate change

2 The basics of vulnerability and climate change adaptation

3 Vulnerable groups and climate adaptation planning

4 Learning from youth-led climate adaptation solutions: African case studies

5 Developing soft skills for youth leadership in adaptation

6 Engaging in climate adaptation policies: local, national, and international

7 Designing and implementing your adaptation advocacy strategy

8 Designing your adaptation action

Each module contains four sections:

Warm Up is the place to start. This provides an overview of the module's key concepts, based on the latest research and best practices. It highlights tools you can use to apply what you have learned, and develop your leadership skills.

Heat Wave will deepen your understanding. Find links to supporting scientific research, important publications, and tools for exploring and applying key concepts.

Bright spark is the place to get inspired. Read case studies, watch videos, and listen to podcasts about young climate leaders to get fired up for your own climate change actions!

Cool Down is your last stop. Here, you have space to test your knowledge (with a short quiz) and consider how you can apply what you have learned to your own climate action.

MODULE 1
UNDERSTANDING CLIMATE CHANGE

Climate change is one of the greatest threats and injustices of our time. It threatens the existence of all humans and living things. While climate change affects everyone, it does not affect everyone equally. There is so much to learn about climate change. This module provides you with key information about the causes of climate change, the impact it is having globally, and the responses needed to address the climate crisis. It sets the scene for the subsequent modules in this toolkit.

What will I learn?

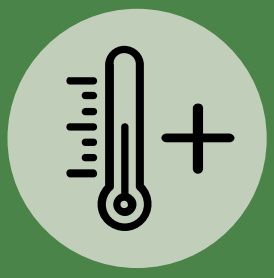
By the end of the module, you will:

- Have gained an understanding of what causes climate change.
- Understand and be able to explain the impacts of climate change globally.
- Know what responses are needed to address the climate crisis.

Glossary

Term	Definition	Source
Climate	Climate refers to how the atmosphere "behaves" over relatively long periods of time (e.g. an average of the past 30 years).	CARE (2022). Introduction to climate change #1: Understanding the climate crisis.
Climate change	Climate change refers to a change in the state of the climate that can be identified (e.g. using statistical tests) by changes in the mean and/or the variability of its properties that persist for an extended period, typically decades or longer. The term "climate change" often refers specifically to anthropogenic climate change (also known as global warming). Anthropogenic climate change is caused by human activity, as opposed to changes in climate that may have resulted as part of Earth's natural processes.	IPCC(2021). Glossary of terms.
Climate change adaptation	In human systems, climate change adaptation refers to the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities. In natural systems, it refers to the process of adjustment to actual climate and its effects; human intervention may facilitate adjustment to expected climate and its effects. In practical terms, adaptation refers to the changes people and institutions make to adjust to observed or projected changes in climate. It is an ongoing process that aims to reduce vulnerability to climate change. Retrieved from: CARE (2019). Climate Vulnerability and Capacity Analysis Handbook: careclimatechange.org/cvca/	IPCC(2021). Glossary of terms.
Climate change mitigation	Climate change mitigation refers to human interventions to reduce emissions or enhance the sinks of greenhouse gases (such as forests or wetlands).	IPCC(2021). Glossary of terms.
Climate justice	Climate Justice is about a future in which the poorest and most marginalized people have significantly improved their wellbeing and can enjoy their human rights due to increased resilience to climate change, increased equality and a global temperature rise that is limited to 1.5°C.	CARE (2020). Climate Justice Strategy 2030.
Climate crisis	Climate crisis is a term increasingly being used by UN agencies, scientists, media and civil society organizations to better reflect the urgency and the severity of the emergency we are facing. It reflects the fact that the climate is changing as a result of human behavior, and that it has and will have dramatic effects on women, men, girls and boys and their environment.	CARE (2022). Introduction to climate change #1: Understanding the climate crisis.

Term	Definition	Source
Effects of climate change	The direct effects of climate change that can be observed by rising maximum and/or minimum temperatures, rising sea levels, ocean temperature, changing rainfall patterns, increase in (heavy) precipitation, glacier melting, heatwaves, cyclones, drought, etc. and that in return lead to more climate related hazards. The effects of these changes on humans and natural environment can be seen in e.g. increased hunger and poverty as a result from failed harvest due to droughts/extreme rain; Health risks as a result from heatwaves; Increased pests from change in temperature; Loss of biodiversity, as flora and fauna cannot adapt to a new climate reality; Reduction in fish from coral bleaching as a result from ocean acidification.	CARE Vision 2030 Core Global Indicators for Measuring Change
Greenhouse gases (GHGs)	GHGs are the atmospheric gases responsible for causing global warming and climate change. The major GHGs are carbon dioxide (CO2), methane (CH4) and nitrous oxide (N20). Less prevalent --but very powerful -- greenhouse gases are hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF6).	UNFCCC Glossary
Intergovernmental Panel on Climate Change (IPCC)	IPCC is the United Nations body for assessing the science related to climate change. The IPCC was created to provide policymakers with regular scientific assessments on climate change, its implications and potential future risks, as well as to put forward adaptation and mitigation options	IPCC
Loss and damage	Loss and damage is a general term used in UN climate negotiations to refer to the consequences of climate change that go beyond what people can adapt to, or when options exist but a community doesn't have the resources to access or make use of them	World Resources Institute
Net zero	Net zero means cutting greenhouse gas emissions to as close to zero as possible, with any remaining emissions re-absorbed from the atmosphere, by oceans and forests for instance	United Nations Net-Zero Coalition.
Weather	Weather describes short term natural events - such as fog, rain, snow, blizzards, wind and thunder storms, tropical cyclones, etc. - in a specific place and time.	Definition from World Meteorological Organization (WMO)



Warm Up

The difference between weather and climate

Earth is getting hotter, largely because of human activities like burning coal, oil and gas. As temperatures rise, the climate is changing. While many people think climate change mainly means warmer temperatures, it's much more than that. The Earth is a system, where everything is connected. A warming planet has consequences that reach across the globe, including intense droughts, water scarcity, catastrophic storms and severe flooding.[1]

To understand climate change, it's important to distinguish between weather and climate.

Weather involves short-term changes. If it's raining on Friday morning but the sun is out by lunchtime - that's a change in the weather. In technical terms, weather is the atmospheric conditions experienced over short periods of time (such as hours or days) at a particular location.[2]

Climate involves long-term changes. If an older person tells you that 40 years ago there was a lot more rain in a particular month where they live than today, they could be talking about a change in climate. Climate is how the atmosphere "behaves" over longer periods of time (an average of the past 30 years), which in turn affects how the rest of the climate system behaves.[3]

Climate change refers to the long-term changes in the Earth's climate. It causes weather patterns to be less predictable, affecting the balance of Earth's precious ecosystems. These changes persist for long periods of time, typically decades or more.[4]

Climate change can be due to natural processes, such as changes in how much energy the sun produces and volcanic eruptions. However, humans are changing the climate by pumping heat-trapping gases from burning fossil fuels into the atmosphere. This is called human-induced or **anthropogenic climate change**[5]. This impact has been so big, and the consequences so dire, that organizations like the United Nations say we are facing a "climate emergency."[6]

The greenhouse effect: making our planet a livable home

Life on Earth is an incredible thing. And it's made possible by the interplay between two key elements: the Sun, which produces heat from 150 million kilometers away, and our atmosphere, the band of air around our planet.

The atmosphere contains several gases. Together, the oxygen we breath and nitrogen make up 99% of the atmosphere. A small portion (0.04%) of the atmosphere is made up of other gases, some of which are known as **greenhouse gases (GHGs)**.

These GHGs allow the Sun's energy to enter the atmosphere but prevent it from leaving, by trapping it close to the Earth's surface. Think of them as a blanket wrapped around the Earth, keeping the planet warmer than it would be without the gases. This is called the **greenhouse effect** (explained in Figure 1).

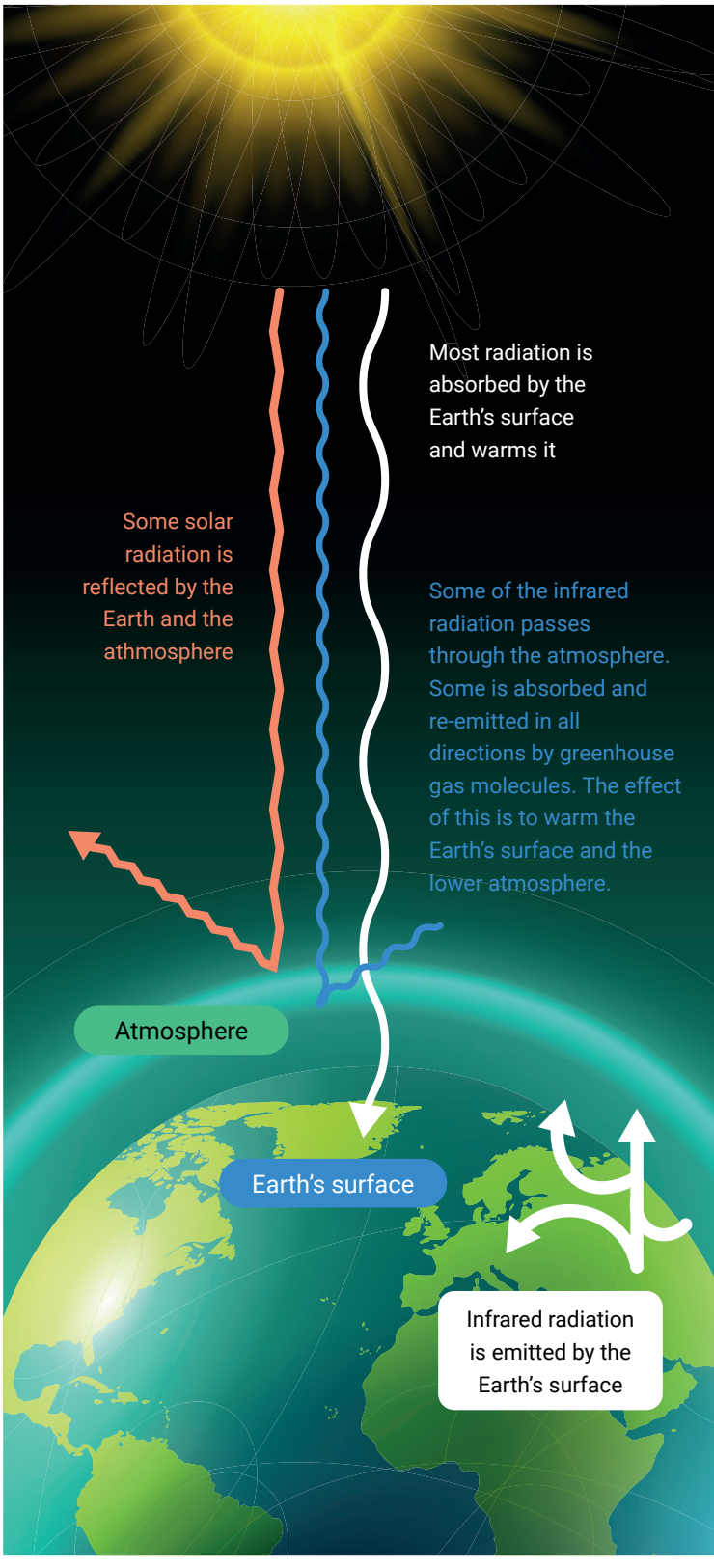


Figure 1: The natural greenhouse effect. The Earth absorbs some of the energy it receives from the sun and radiates the rest back toward space. However, greenhouse gases absorb some of the energy radiated from the Earth and trap it in the atmosphere. These gases essentially act as a blanket, making the Earth's surface warmer than it otherwise would be. Source: EPA, 2012.

The greenhouse effect keeps the planet at a comfortable temperature for us to live. Without it, Earth would be too cold for humans to survive, with an estimated average temperature of –18 °C. Freezing! (Figure 2).

Humans are changing the climate

The greenhouse effect occurs naturally. However, human activities are changing the Earth's climate. As we burn fossil fuels, like coal and oil, we are putting more GHGs into the atmosphere. Too many of these gases cause Earth's atmosphere to trap more and more heat. The Earth is warming up. Research shows that each of the last four decades has been warmer than any previous decade since 1850. The world is warming faster than at any time in at least the last two thousand years.[8]

How the concentrations of key GHGs have been increasing

Since the Industrial Revolution, which saw the introduction of machinery for manufacturing in the 1800s, humans have been putting an increasing amount of GHGs into the atmosphere. Let's look at some of the main GHGs and how they have been increasing.

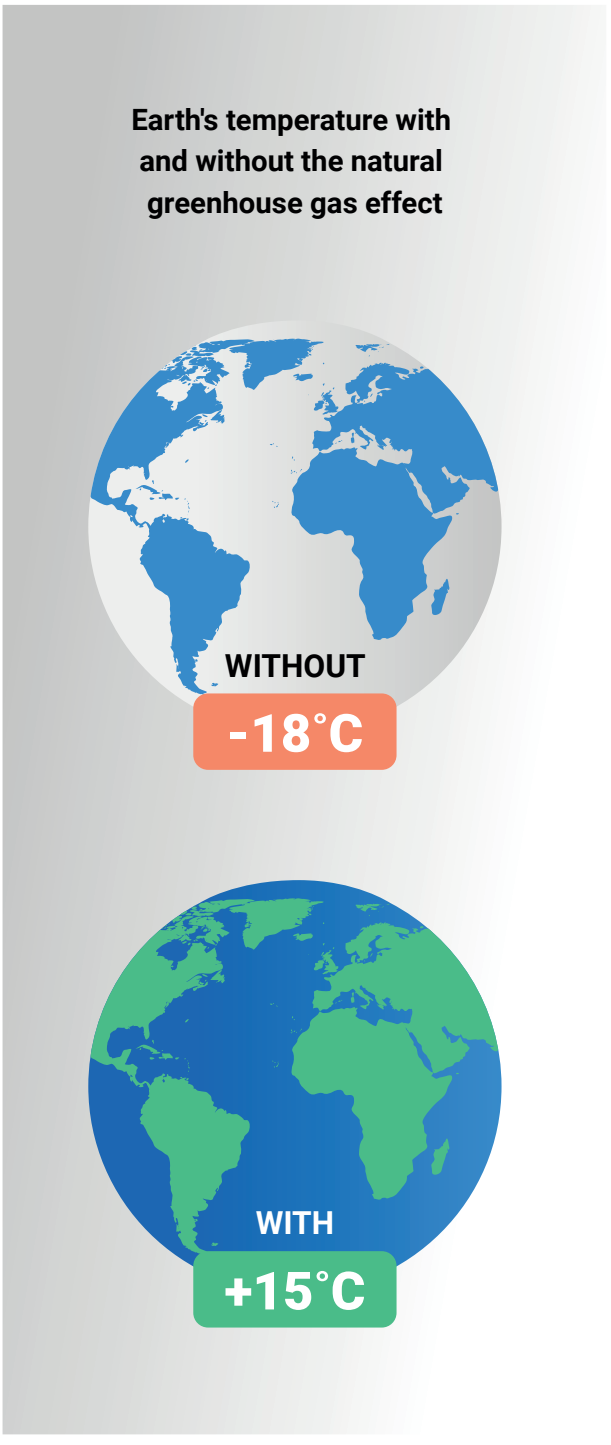


Figure 2: How the Earth's temperature would be with and without the natural greenhouse effect. 15 °C is the Earth's "normal" average temperature. Source: André, C. 2022.

EXPLAINER: Scientists measure atmospheric concentrations of GHGs **in parts per million (ppm) or parts per billion (ppb)**. For example, a concentration of 1 ppm for a particular gas means there is one molecule of that gas in every 1 million molecules of air. A concentration of 1 ppb for a gas means there is one molecule of that gas in every 1 billion molecules of air.

Carbon dioxide

Carbon dioxide (CO_2) is the main GHG emitted by human activities. It is released by burning fossil fuels like coal, natural gas and oil. It also comes from natural sources and is produced when vegetation decomposes and during wildfires. It can also be released from the oceans.

Since the Industrial Revolution, concentrations of carbon dioxide in the atmosphere have been rising rapidly. As you can see in Figure 3, which shows the global average concentrations of carbon dioxide in the atmosphere over the past 800,000 years, there has been a rapid rise in concentrations over the past few centuries, and in recent decades particularly.

Before the Industrial Revolution, atmospheric concentrations of carbon dioxide did not rise above 300 ppm. This changed when humans started burning fossil fuels. Today's concentrations are the highest they have been for at least 800,000 years. (Note: while there are fluctuations over hundreds of thousands of years, these were caused by changes in the Earth's orbit around the sun).[10]

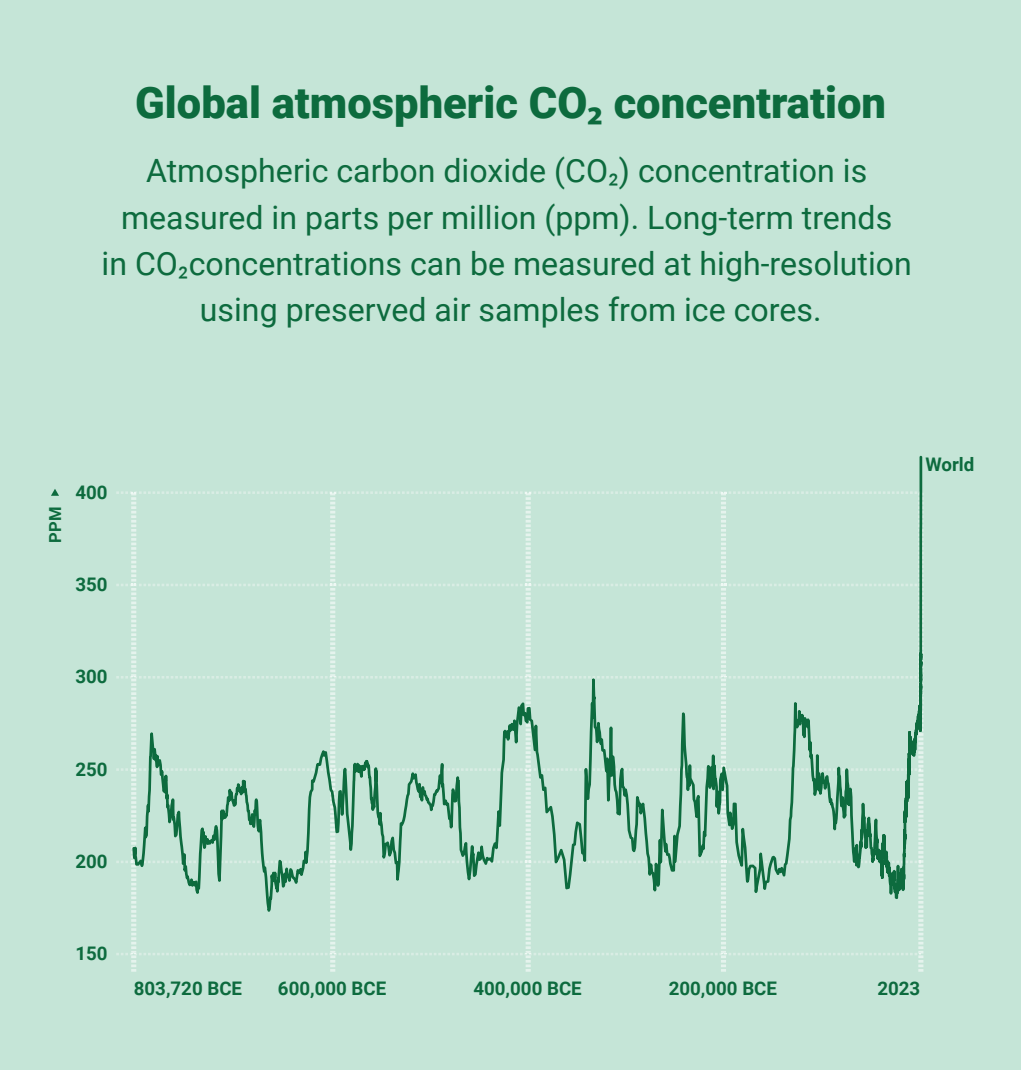


Figure 3: Concentration of carbon dioxide in the atmosphere for the past 800,000 years. (BCE stands for Before the Common Era). Source: Ritchie et al., 2020.[11]

Methane

Methane accounts for about 20 percent of global emissions and is more than 25 times as potent as carbon dioxide at trapping heat in the atmosphere.[12]

Human activities, such as agriculture, burning oil, gas and coal for energy, and increased production of waste from homes and businesses, put methane into the atmosphere. It also comes from natural sources, such as wetlands.

In Figure 4, we see how methane concentrations have more than doubled since the year 1900!

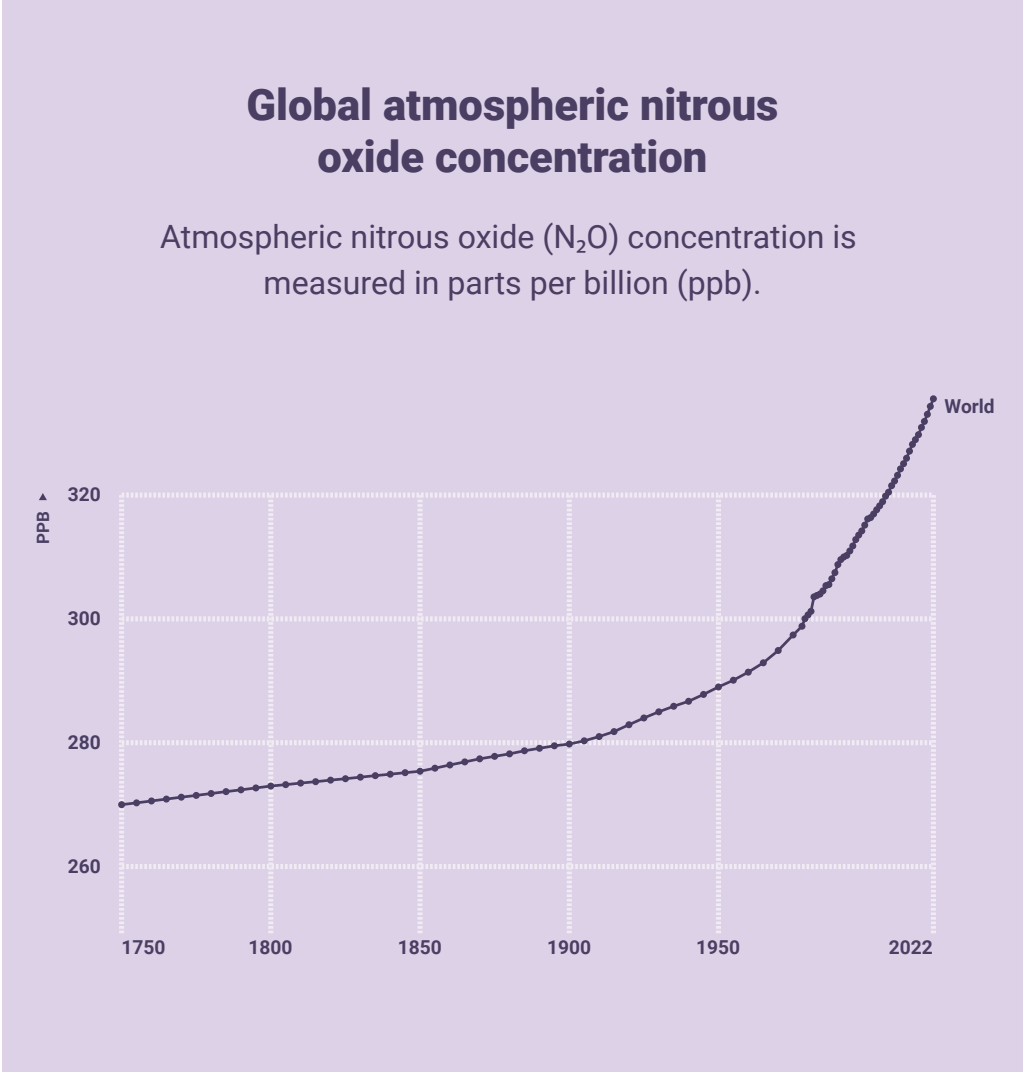


Figure 4: The change in methane concentrations in the atmosphere since 1750. Methane concentrations have been increasing rapidly in recent centuries. Source: Ritchie et al., 2020.[13]

Agriculture is the primary source of nitrous oxide emissions. Credit: Jean Beaufort/Public Domain Images.

Nitrous oxide

Carbon dioxide and methane are the largest drivers of anthropogenic climate change. But nitrous oxide also plays a role. Commonly known as "laughing gas," it is a potent GHG that is 300 times more powerful than carbon dioxide. Globally, about 40% of total nitrous oxide emissions come from human activities. Agriculture is the primary source.

How do we know climate change is linked to rising emissions?

The Intergovernmental Panel on Climate Change (IPCC) is a United Nations body, made up of top scientists from 196 countries, that assesses the science related to climate change. It releases regular reports about climate change and its implications and future risks.
In its 2021 report on the physical science basis of climate change, the IPCC did not mince its words about the links between human activities and climate change. The report opens with these words: "It is unequivocal that human activities have heated our climate. Recent changes are rapid, intensifying, and unprecedented over centuries to thousands of years."
To learn about past temperatures and carbon dioxide concentrations, scientists have analyzed the chemistry of water molecules and air bubbles that have been trapped for centuries in ice layers in Antarctica and Greenland. They have found that carbon dioxide concentrations correlate positively with past temperatures, meaning that samples with higher carbon dioxide concentrations also date from periods when temperatures were higher.[18]

Energy is the main source of GHG emissions

Humans produce GHGs in many ways. But the main culprit is burning fossil fuels to create energy. As you can see in Figure 5, almost 75% of emissions come from energy, while close to 20% come from agriculture and land use (this proportion increases when we consider the food system as a whole and include processing, packaging, transport and retail). The remainder come from industry and waste.[19]

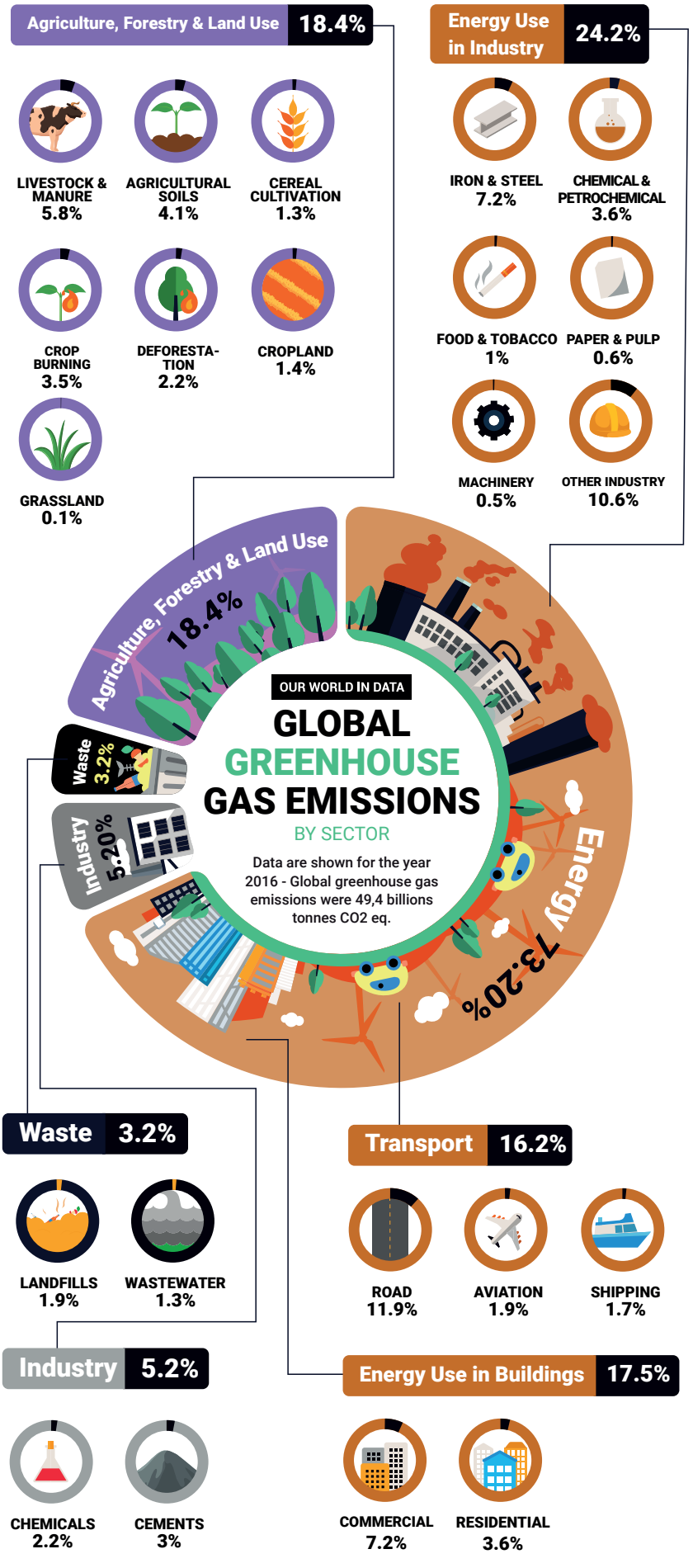


Figure 5: CARE (based on data from Our World in Data[20] and WRI).

Developed countries are responsible for most emissions

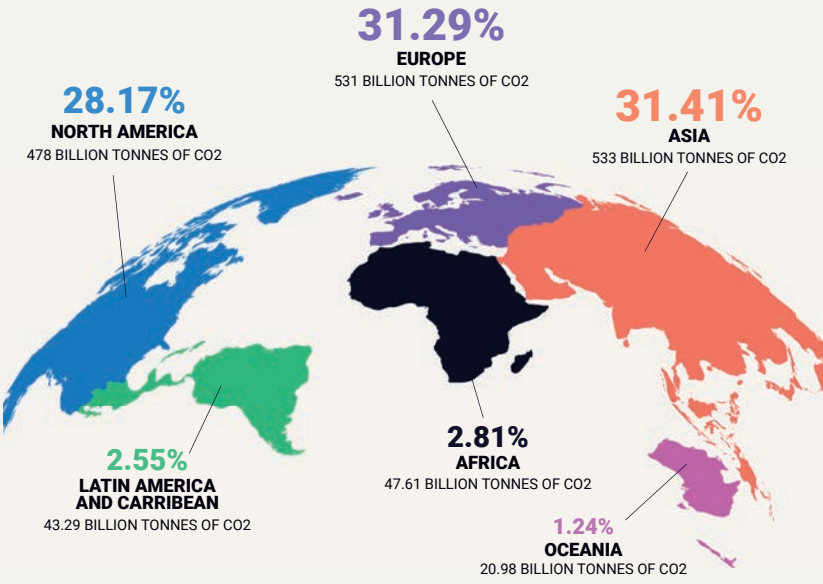
Countries in Europe, Asia and North America are responsible for the largest contribution of GHGs in the atmosphere. Regions with developing countries, such as Africa, Latin America and large parts of Asia, are only responsible for a small proportion of these emissions (Figure 6).

CUMULATIVE CO2 EMISSIONS

FROM 1751 TO 2020 BY REGIONS

This graph presents the cumulative carbon dioxide emissions (CO2) over the period 1751 to 2020 per region detailing emissions of the largest emitters.

It only includes the emissions of countries that have emitted more than 1% except for Africa and Latin America where the 2 largest emitters have been included to give an idea of their cumulative emissions.



ASIA	Billion Tonnes of CO2 (1751-2020)	Share of global cumulative emissions
China	235.56	13.88%
Japan	65.63	3.87%
India	54.42	3.21%
South Korea	18.34	1.085%
Iran	18.91	1.11%
Others	140.14	8.26%

NORTH AMERICA	Billion Tonnes of CO2 (1751-2020)	Share of global cumulative emissions
USA	416.72	24.56%
Canada	33.58	1.98%
Mexico	20.08	1.18%
Others	7.62	0.45%

AFRICA	Billion Tonnes of CO2 (1751-2020)	Share of global cumulative emissions
South Africa	21.16	1.25%
Nigeria	3.91	0.23%
Others	22.54	1.33%

EUROPE	Billion Tonnes of CO2 (1751-2020)	Share of global cumulative emissions
EU-27	290	17.09%
Russia	115.34	6.80%
Ukraine	30.56	1.80%
United Kingdom	78.16	4.61%
Others	16.94	1.00%

LATIN AMERICA AND CARRIBEAN	Billion Tonnes of CO2 (1751-2020)	Share of global cumulative emissions
Brazil	14.2	0.84%
Argentina	8.43	0.50%
Others	20.66	1.22%

OCEANIA	Billion Tonnes of CO2 (1751-2020)	Share of global cumulative emissions
Australia	17.4	1.03%

Source: Our World in Data, Cumulative CO_2 emissions, 2020
https://ourworldindata.org/grapher/cumulative-co-emissions

Figure 6: Cumulative carbon dioxide emissions by countries from 1751 to 2020. Source: CARE International (using data from Ritchie et al., 2022).

Since carbon dioxide added to the atmosphere can stay there for centuries, historical emissions are just as important as – or even more important than – current emissions. This means that although China is the biggest emitter today, historically the United States and Europe are responsible for half of the carbon dioxide emitted since pre-industrial times.

The richest 10% of the world's population are responsible for more than half of global carbon emissions, according to Oxfam. And the richest 1% is responsible for twice the emissions of 3.1 billion people (measured between 1990 and 2015).[21]

Increasing emissions are changing our climate

We are living in a changing climate. Already, the world is witnessing widespread changes as temperatures rise, glaciers melt, and droughts and floods intensify. The impacts of climate change are expected to worsen, which makes it crucial to take climate action now.

Flooding in Bangladesh. Credit: Moniruzzaman Sazal/Climate Visuals Countdown.

The severity of climate change impacts depends on how much and how quickly the world warms. For example, climate-related risks are higher if the world warms by another 1.5 °C above pre-industrial levels by the end of the century. However, they will be even worse if the temperature rises by 2 °C. Climate change also affects regions differently. For example, Africa is warming faster than the global average over both land and oceans.[23]

The climate is changing, and more change is on the way

Scientists with the IPCC have studied how climate change is already affecting the world. They use sophisticated computer models to predict how climate change will impact the planet in future. Below, we look at some of the main changes.

Rising temperatures

The IPCC estimates that human activities have caused the Earth to warm by approximately 1.1 °C above pre-industrial levels by 2020.[24] Figure 7 shows how the temperature has been rising since 1880.

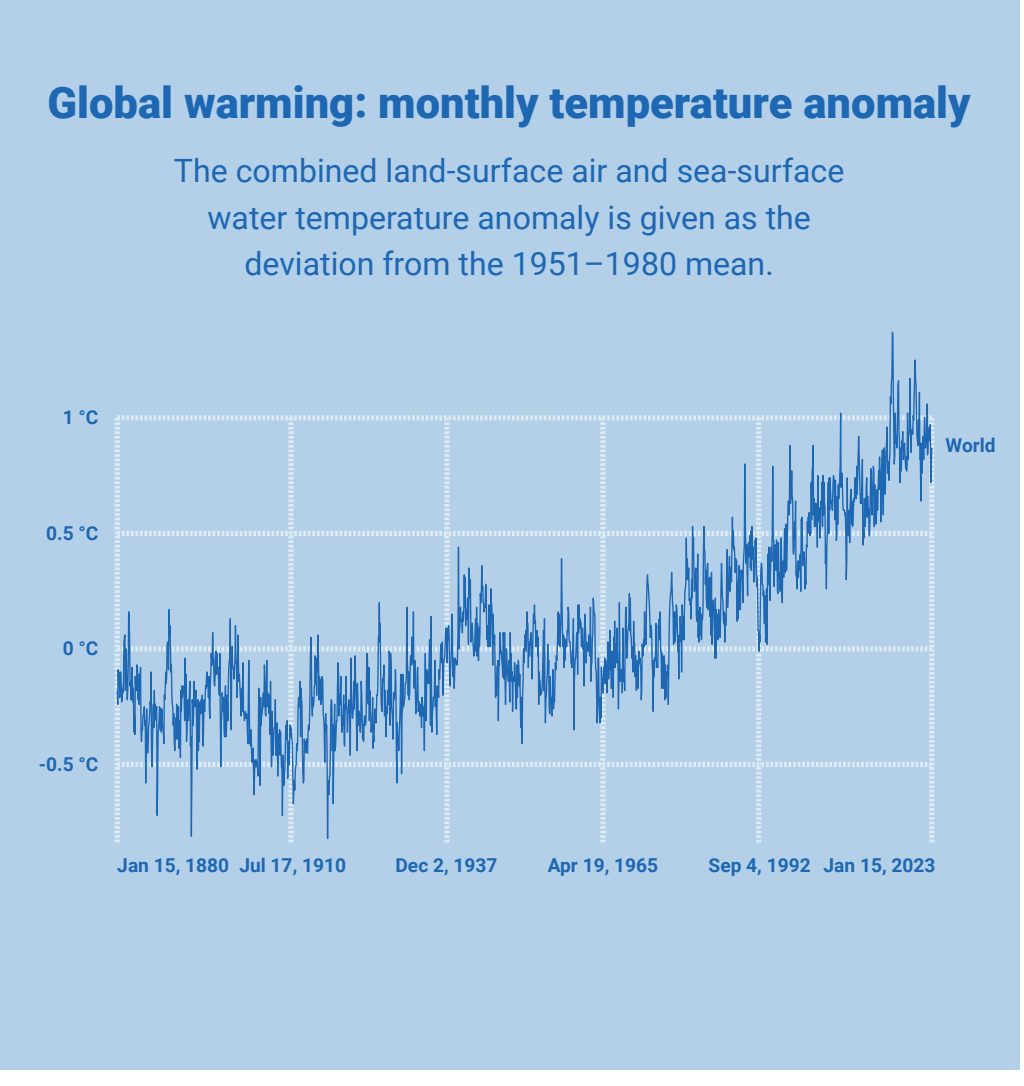


Figure 7: Global warming monthly temperature anomaly from 1880, showing a rapid increase in the Earth's average temperature. Source: Ritchie et al., 2020.[25]

EXPLAINER: A **temperature anomaly** is the difference between an observed temperature and an average, or baseline, temperature. The **baseline temperature** is typically calculated by averaging 30 or more years of temperature data. A **positive anomaly** is when the observed temperature is warmer than the baseline. A **negative anomaly** is when the observed temperature is cooler than the baseline.[26]

Different parts of the world are warming at different rates. The polar regions have experienced the largest increase in temperature (in relation to the global average) while North Africa has experienced the greatest increase in Africa.

Different scenarios are expected to play out depending on how the world deals with emissions.[27] These include situations where carbon dioxide emissions:

(a) Are reduced to a level that allows global warming to be kept to 1.5 °C by 2050 (optimistic scenario).
(b) Are cut rapidly, but not fast enough to limit warming to 1.5 °C by 2050. Temperature is only stabilized at 1.8 °C.
(c) Remain the same as they are now but start to decrease after 2050 and **net zero emissions** are not reached until 2100. This results in global warming of 2.7 °C (middle-of-the-road scenario).
(d) Reach double those of current levels in 2100. This results in a temperature increase of 3.6 °C above pre-industrial levels (dangerous scenario).
(e) Double current levels by 2050. This results in global warming of 4.4 °C above pre-industrial levels ("taking the highway" scenario).

EXPLAINER: Net zero means cutting greenhouse gas emissions to as close to zero as possible, with any remaining emissions re-absorbed from the atmosphere, by oceans and forests for example.[28]

These different scenarios for temperature rise result in different levels of warming across different parts of the world. As you can see from Figure 8, warming by 1.5 °C keeps temperature rise low in most parts of the world, even though the polar regions experience the largest change in average temperature.

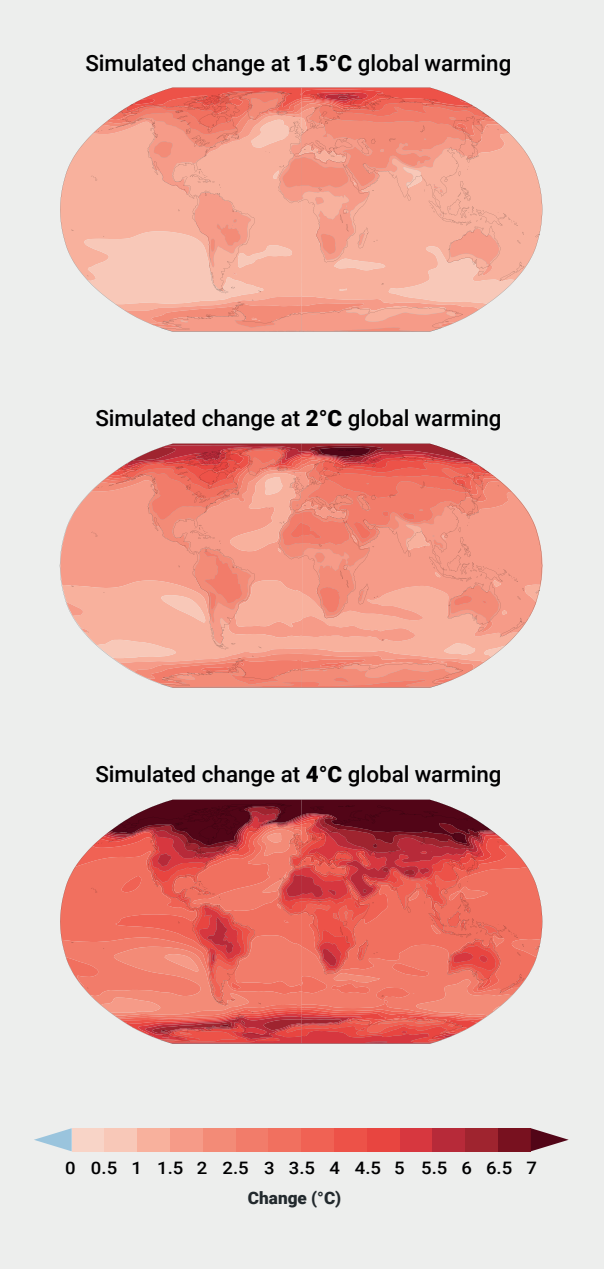


Figure 8: Annual mean temperature change (°C) relative to 1850–1900. Polar regions will experience an even higher increase in average temperature. Source: IPCC, 2021.[29]

If we do nothing to curb emissions, we are on a dangerous path. If the global community does not decrease emissions and follow current climate change policies, global warming is expected to reach 2.6 °C to 2.9 °C above pre-industrial temperature levels by the end of the century.

As it stands, the world needs stronger commitments to climate action. Current policy commitments are unlikely to keep emissions at a level required to limit warming to 1.5°C and will also make it harder after 2030 to limit warming to below 2°C (Figure 9).

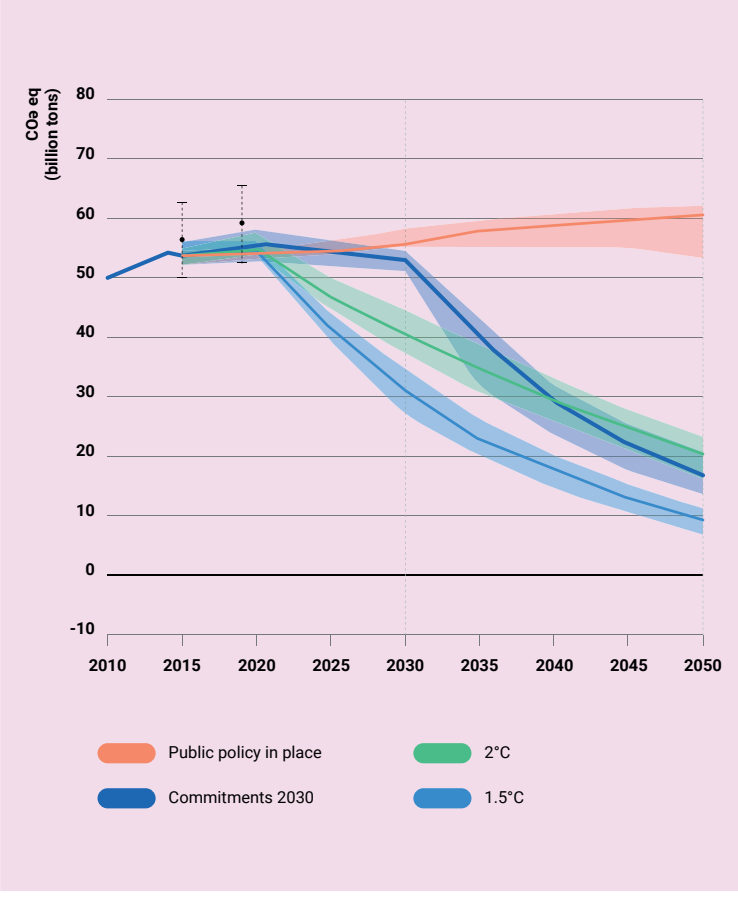


Figure 9: Projected global GHG emissions over 2015-2050 based on current policies and commitments by countries. Source: Adapted from chart produced by Dr. Valérie Masson-Delmotte.[30]

Changing rainfall patterns

With changing rainfall patterns, dry areas are expected to become drier. In future, the Mediterranean, Southern Africa, Southwest Australia, Southern Chile, the West Coast of Mexico, and much of the tropical and subtropical Atlantic Ocean are likely to have less precipitation.

This drying will make droughts more severe. At the same time, models show that when rain does fall, it will become more intense nearly everywhere, increasing the risk of flooding.

Changes in precipitation also impact soil moisture, which affects farmers' ability to grow crops. Parts of the world, such as Central Africa and East Africa, will experience increasing soil moisture levels under all warming scenarios. Others, such as Latin America, will experience drier soil.

Rising sea levels

Since 1990, the sea level has risen by about 80mm globally. The increase is not uniform across the world. The sea has risen higher in some areas than in others. This is mainly due to differences in thermal expansion and salinity (the levels of salt in ocean water) in different places.

EXPLAINER: Sea level rise is caused by several different processes, including melting ice. A big contributor is rising global temperatures, which heat seas and cause **thermal expansion** of water. Thermal expansion happens when water gets warmer, which causes the volume of the water to increase. About half of the measured global sea level rise on Earth is from warming waters and thermal expansion.[33] **Melting ice** can alter the salinity (salt levels) of seawater as freshwater is added to the ocean. Changes in salinity affect seawater density, which can change major ocean currents that transport heat through the ocean driven by the currents, stimulating more climate change.[34]

By 2100, sea levels could rise by up to 1.1 meters, according to the IPCC.[35] If we fail to properly address climate change and cut emissions, this could trigger an irreversible sea level rise of several meters by 2300.[36]

Sea level rise creates big problems for coastal areas, mainly through flooding. It has other impacts too. As the rising sea crawls farther and farther up the shore, in many places it will seep into the freshwater in the ground that many coastal areas rely on for drinking water, contaminating these.

A man salvages bricks from his house as the water encroaches. Shariatpur, Bangladesh.
Credit: Moniruzzaman Sazal/Climate Visuals Countdown.

Rising sea levels can negatively affect farmers. The intruding sea can make groundwater used for irrigation saltier and change the soil quality, making it harder to grow crops. Rising sea levels also negatively impact biodiversity in coastal areas and can make the damage from tropical cyclones worse.[37]

In Africa, sea levels are rising faster than the global average.[38] Sea level rise is likely to continue around Africa, resulting in more frequent and severe coastal flooding.

Melting glaciers

Globally, glaciers are disappearing as temperatures rise. more than 600 glaciers have disappeared over the past decades, a staggering loss.[39] Even if there is no further warming, many more glaciers will disappear. It is also likely that some mountain ranges will lose most, if not all, of their glaciers.

Africa's glaciers are melting faster than the global average. The total glacial area on Mount Kenya decreased by approximately 44% between 2004 and 2016.[40] Mount Kilimanjaro is also losing its glaciers.

The loss of glaciers has profound impacts, mainly for the people and ecosystems that rely on the rivers fed by glaciers. When glaciers disappear, there is a tremendous impact on the availability of water across the seasons and, thus, for people living along riverbanks. Melting glaciers also contribute to sea level rise.

Worsening extreme events
Climate change is impacting extreme events, unusually severe weather or climate conditions that can have devastating effects.

Heat waves
Climate change is affecting the frequency, intensity and duration of heat waves. It is likely that human influence has more than doubled the probability of the occurrence of heat waves in some places.[41]

Cyclones
In the 21st century, it is likely that the global frequency of tropical cyclones will either decrease or remain essentially unchanged. However, cyclones will likely have higher maximum wind speeds and rainfall rates, making them more destructive.[42]

Droughts
While changes in future precipitation are uncertain, the drying associated with warmer temperatures will become much more widespread. This means droughts are likely to happen more often. The frequency of droughts is expected to double in southern Africa, Southeast Asia and the Mediterranean.[43]

Part of the rapidly receding glacier on the peak of Mt. Kilimanjaro, Tanzania, Africa (2011).

We need to act now

The science shows that climate change is happening and is expected to get worse. This means we need to take action to limit climate change and deal with its consequences. The two main courses of action are called mitigation and adaptation.

Mitigation involves cutting anthropogenic emissions, through actions such as switching from coal-powered energy to renewables. It also includes actions that help natural systems absorb emissions, such as protecting forests, which naturally remove carbon dioxide from the air.

Adaptation involves managing the current and future impacts of climate change. Because emissions are still rising, and climate change is expected to get worse, we need to adapt to protect people and their livelihoods. Adaptation involves actions such as planting drought-resistant crops or implementing early warning systems to communicate about extreme weather with vulnerable communities.

Unfortunately, people in vulnerable communities do not always have the resources to adapt to climate impacts. In the face of flooding, drought and other extreme events, people may lose their homes, livelihoods and loved ones. This is called loss and damage.

EXPLAINER: Loss and damage is a general term used in UN climate negotiations to refer to the consequences of climate change that go beyond what people can adapt to, or when options exist but a community doesn't have the resources to access or make use of them.[44]

In the face of the climate crisis, innovative adaptation actions are urgently needed to limit loss and damage and protect the most vulnerable in society. In the following modules in this toolkit, you will learn about ways that you can take the lead on driving adaptation action in your community and beyond.

Heat Wave

The climate system

READ more about the climate system in this IPCC overview where you will find detailed technical explanations and deepen your scientific knowledge about the climate system.

WATCH this video, Earth's Energy Budget (3:06) to learn more about how the Earth's climate system works.

Causes and effects of climate change

WATCH the video, Why reducing our carbon emissions matters (a little story about climate change) (3:32) to better understand the links between carbon dioxide emissions and rising temperatures.

EXPLORE the Our World in Data website to learn more about current and historical emissions. You can also explore consumption-based emissions on this site.

WATCH the video What is Climate Change? (6:03). The video defines climate change and explains the greenhouse effect and the role of greenhouse gases in our atmosphere. While it explores the consequences of climate change for our environment – such as rising sea levels, more frequent extreme weather, and damage to our ecosystems – it also suggests big and small changes we can make to protect our Earth.

WATCH this short video from National Geographic, Causes and Effects of Climate Change (3:04), to understand more about the causes of climate change and its main impacts. The video describes the greenhouse effect, how it works (such as causing melting of ice caps in the Arctic regions) and the effects of greenhouse gases on the atmosphere and life on the planet.

WATCH the video What Is the Greenhouse Effect? from NASA (2:30), which further explains the greenhouse effect. It shows how energy from the Sun is integrated into the Earth's system and the role of greenhouse gases in raising the planet's average temperature. The video highlights the different sources of greenhouse gases and how researchers monitor these gases to understand how they affect the planet.

WATCH Global temperature anomalies from 1880 to 2017 (0:36). In the video, you can see how temperatures across different parts of the world have increased over a period of 137 years, with some places warming faster than others. You will notice that the Arctic regions are warming faster, which means that ice in these regions is melting, resulting in sea level rise.

READ more about the causes and impacts of climate change and learn about key concepts with NASA's Global Climate Change website.

EXPLORE temperature graphs on the Climate Action Tracker. The IPCC's sixth assessment report says, "Global surface temperature was 1.09 [0.95 to 1.20] °C higher in 2011–2020 than 1850–1900, with larger increases over land (1.59 [1.34 to 1.83] °C) than over the ocean (0.88 [0.68 to 1.01] °C)." But this starts at relatively late values (1850–1900) and over the last 10-year average, so 1.2 °C is a more appropriate description of where we are now.

EXPLORE the UNDP Climate Box toolkit, an illustrated textbook which provides information on climate change science and impacts, as well as solutions, best practices and case studies on how to reduce your personal carbon footprint and adapt to inevitable impacts.

EXPLORE these posters and illustrative material on climate change impacts, mitigation and adaptation from UNDP's Climate Box.

LEARN how to explain climate change in simple terms with the UNDP's useful Climate Dictionary: an everyday guide to climate change.

LEARN about climate change in simple, non-technical terms by reading the IPCC's Climate Change 2021: Summary for All.

Greenhouse gas emissions

LEARN about current and historical emissions with the Our World in Data website. Here you will see information such as the amount of carbon dioxide emissions that have come from different sectors and changes in emissions.

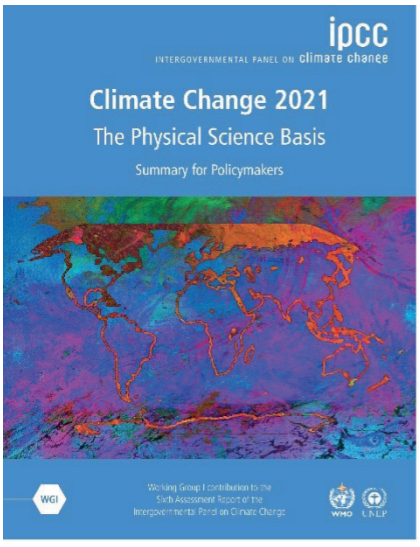
EXPLORE Did you know that there are consumption-based as well as production-based emissions? Consumption-based emissions that are generated through consumption of goods or products. In some instances, these goods or products are not made in the locations where they are consumed. Have a look at Our World in Data to learn more about consumption-based emissions.

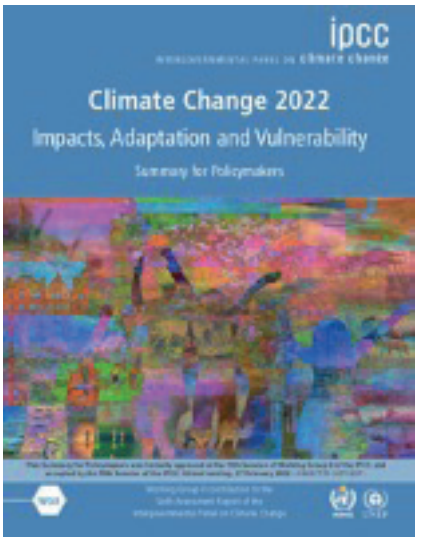
The importance of climate data

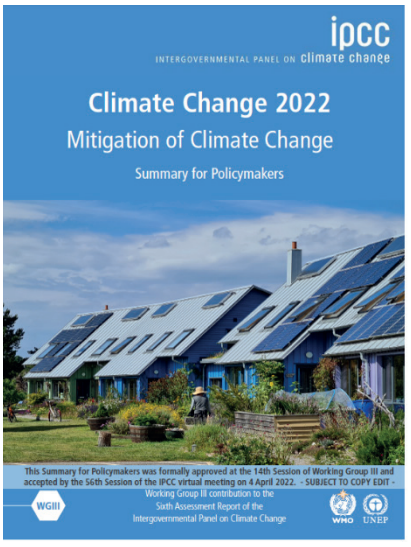
Using up-to-date climate data is key to implementing relevant adaptation projects and programs. It can also help with your advocacy efforts. The list below offers sources to find data on climate change, including current and expected impacts for different regions.

The Intergovernmental Panel on Climate Change

The Intergovernmental Panel on Climate Change (IPCC) is the United Nations body for assessing the science related to climate change. It gathers hundreds of experts from all over the world. The IPCC was created to provide policymakers with regular scientific assessments on climate change, its implications and potential future risks, as well as to put forward adaptation and mitigation options. The last assessment is available here (click on the cover to open the summary for policymakers):







The IPCC also developed a helpful tool for visualizing climate data.

World Bank Climate Change Knowledge Portal

The World Bank Climate Change Knowledge Portal provides global data on historical and future climate vulnerabilities and impacts. You can explore the data via country, region and watershed views. You can also access country profiles to gain deeper insights into climate risks and adaptation actions.

USAID Climate Risk Profiles

USAID provides regional and country climate risk profiles. These include the following information by country: an overview, its climate, projected changes and information on sector impacts, vulnerabilities to climate change, the policy context, and information regarding ongoing climate change projects. Access USAID's climate website where you can find your country's climate risk profile.

Forecast information

Climate research and meteorological institutions may also have more precise and local data for your region. You can access weather-related forecasts at the links below:

- NOAA – Climate Prediction Center (CPC). This website from the National Oceanic and Atmospheric Administration (NOAA) is used to issue information on the El Niño phenomenon every 15 days.

- NOAA – Hurricane Center provides 48-hour tropical weather outlooks.

- IPC (Integrated Food Security Phase Classification) portal regularly publishes national information on the current and expected status.

6. **What is mitigation?**
   (a) all the actions that help manage the current and future impacts of climate change
   (b) the loss and damage people experience because of climate change
   (c) actions that help reduce emissions or help natural systems absorb emissions

BONUS QUIZ: To further test your knowledge of climate change, do this online quiz developed by UNDP. It covers three topics:

- The problem of climate change
- The impacts of climate change
- Mitigating the impacts of climate change

Reflect and prepare for your climate adaptation action

Consider the following questions about climate change:

- What are the current and forecasted impacts of climate change in your country or community?
- Can you name any mitigation and adaptation activities that you have observed in your country or community?
- Do you think current action by countries globally is enough to address climate change?

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- Do you think current action by countries globally is enough to address climate change?

Answers

1. Correct answer: (b) a change in the state of the climate with these changes persisting for longer periods of time (e.g., decades, or longer).
EXPLANATION: Climate change refers to the long-term changes in the Earth's climate. It causes weather patterns to be less predictable, affecting the balance of Earth's precious ecosystems. These changes persist for long periods of time, typically decades or more. Climate change can be due to natural processes, such as changes in how much energy the sun produces and volcanic eruptions. However, humans are changing the climate by pumping heat-trapping gases from burning fossil fuels into the atmosphere. This is called human-induced or anthropogenic climate change.

2. Correct answer: True.
EXPLANATION: The greenhouse effect is the way through which heat is trapped close to Earth's surface by greenhouse gases. These heat-trapping gases allow the sun's energy to enter the atmosphere but prevent it from leaving. These gases can be thought of as a blanket wrapped around Earth, keeping the planet warmer than it would be without the gases.

3. Correct answer: (c) By over 1°C.
EXPLANATION: The IPCC estimates that human activities have caused the Earth to warm by approximately 1.1 °C above pre-industrial levels by 2020.

4. Correct answer: (b) 1.1 meters.
EXPLANATION: According to the IPCC, by 2100 sea levels could rise by up to 1.1 meters.

5. Correct answer: (a) wind speed and (b) rainfall rates.
EXPLANATION: In the 21st century, it is likely that the global frequency of tropical cyclones will either decrease or remain essentially unchanged. However, cyclones will likely have higher maximum wind speeds and rainfall rates, making them more destructive.

6. Correct answer: (c) actions that help reduce emissions or help natural systems absorb emissions.
EXPLANATION: Mitigation involves cutting anthropogenic emissions, through actions such as switching from coal-powered energy to renewables. It also includes actions that help natural systems absorb emissions, such as protecting forests, which naturally remove carbon dioxide from the air.

Endnotes

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Toolkit for Youth on Adaptation & Leadership

MODULE 2

THE BASICS OF VULNERABILITY AND CLIMATE CHANGE ADAPTATION

GLOBAL CENTER ON ADAPTATION

care

Norad

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Acronyms

ASAP	The Adaptation for Smallholder Agriculture Programme
CBA	Community based adaptation
CCA	Climate change adaptation
CIS	Climate Information Services
COP	Conference of the Parties
COY	Conference of Youth
CRA	Community Risk Assessment
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EAC	East Africa community
ECOWAS	Economic Community of West African States
GCF	Green Climate Fund
GHGs	Greenhouse gases
IPCC	Intergovernmental Panel on Climate Change
JPA	Joint Principles for Adaptation
LAP	Local Adaptation Plans
LDCF	Least Developed Countries Fund
LLA	Locally Led Adaptation
MDGs	Millennium Development Goals
NAP	National Adaptation Plan
NAPA	National Adaptation Programs of Action
NDC	Nationally determined contribution
NGOs	Non-Governmental Organizations
PPCR	Pilot Program for Climate Resilience
PSP	Participatory Scenario Planning
SCCF	The Special Climate Change Fund
SDG	Sustainable Development Goal
SIDS	Small Islands Developing States
SMART	Specific, Measurable, Achievable, Relevant and Time-bound
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change

WELCOME TO THE TOOLKIT FOR YOUTH ON ADAPTATION & LEADERSHIP!

Who is this toolkit for?

Climate change is reshaping the world young people have inherited and they will bear the costs in the coming decades. However, young people are often excluded from taking on leadership roles and engaging in decision-making activities related to climate change adaptation. This Toolkit for Youth on Adaptation & Leadership equips young people with the knowledge and skills to engage in climate adaptation policy, advocacy and action. This toolkit uses the terms "youth" and "young people" to refer to people between 15 and 35 years old.

What you will learn

The toolkit covers essential materials and offers practical guidance for how you, as a young person, can take part in adaptation policy processes, lead advocacy campaigns, and approach adaptation with an entrepreneurial mindset. It provides tools for designing and implementing your own climate change adaptation actions so that you can be part of the solution to the climate crisis.

The "Toolkit for Youth on Adaptation & Leadership" is a project under the Global Center on Adaptation Youth Leadership Program, developed by the CARE Climate Justice Center with the financial support of Norad. It came together with input from young people who, like you, are concerned about the impacts of climate change and have faced challenges when advocating and taking adaptation action.

How to use the toolkit

The toolkit includes eight modules:

1 Understanding climate change

2 The basics of vulnerability and climate change adaptation

3 Vulnerable groups and climate adaptation planning

4 Learning from youth-led climate adaptation solutions: African case studies

5 Developing soft skills for youth leadership in adaptation

6 Engaging in climate adaptation policies: local, national, and international

7 Designing and implementing your adaptation advocacy strategy

8 Designing your adaptation action

Each module contains four sections:

Warm Up is the place to start. This provides an overview of the module's key concepts, based on the latest research and best practices. It highlights tools you can use to apply what you have learned, and develop your leadership skills.

Heat Wave will deepen your understanding. Find links to supporting scientific research, important publications, and tools for exploring and applying key concepts.

Bright spark is the place to get inspired. Read case studies, watch videos, and listen to podcasts about young climate leaders to get fired up for your own climate change actions!

Cool Down is your last stop. Here, you have space to test your knowledge (with a short quiz) and consider how you can apply what you have learned to your own climate action.

MODULE 2

THE BASICS OF VULNERABILITY AND CLIMATE CHANGE ADAPTATION

This module explains vulnerability and highlights the impacts of climate change in Africa. It defines climate change adaptation and details available adaptation options. It also provides information about how to respond to the climate crisis through good practices in Community-Based and Locally Led Adaptation.

What will I learn?

By the end of the module, you will:

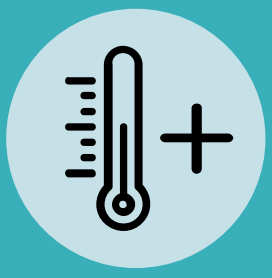
- Be able to explain what causes vulnerability.
- Understand the meaning of climate change adaptation and the various options for adaptation.
- Have gained a better understanding of Community-Based and Locally Led Adaptation approaches and the principles that underpin them.
- Understand the value and role of nature-based solutions in climate change adaptation action.

Glossary

Term	Definition	Source
Community-based adaptation	Community-based adaptation is a set of climate change adaptation activities developed in partnership with at-risk communities to promote local awareness of, and appropriate and sustainable solutions to, current and future climatic conditions.	CARE (2019). Climate Vulnerability and Capacity Analysis Handbook.
Climate change adaptation	In human systems, climate change adaptation refers to the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities. In natural systems, it refers to the process of adjustment to actual climate and its effects; human intervention may facilitate adjustment to expected climate and its effects. In practical terms, adaptation refers to the changes people and institutions make to adjust to observed or projected changes in climate. It is an ongoing process that aims to reduce vulnerability to climate change. Retrieved from: CARE (2019). Climate Vulnerability and Capacity Analysis Handbook: careclimatechange.org/cvca/	IPCC(2021). Glossary of terms. CARE (2019). Climate Vulnerability and Capacity Analysis Handbook.
Climate information	Climate information refers to the collection and interpretation of observations of the actual weather and climate as well as simulations of climate in both past and future periods. Climate information is the collection and interpretation of weather and climate data that is credible, relevant and usable.	CARE (2022) (based on World Meteorological Organization & IPCC)
Climate Information Services (CIS)	CIS involve the provision of climate information in a way that assists decision making by individuals and organizations. They are tools and processes that enable decision makers and user communities to assess, and prevent or prepare for, potential impactful weather and climate events.	CARE (2022) (based on World Meteorological Organization & IPCC)
Ecosystem based adaptation	Ecosystem-based adaptation is a nature-based solution that harnesses biodiversity and ecosystem services to reduce vulnerability and build resilience to climate change.	IUCN (2022). Ecosystem-based Adaptation
Exposure	Exposure is "the presence of people, livelihoods, species or ecosystems, environmental functions, services, and resources, infrastructure, or economic, social, or cultural assets in places and settings that could be adversely affected".	IPCC
Gender	Gender refers to socially constructed characteristics of women and men – such as norms, roles and relations of and between groups of women and men	World Health Organization
Gender inequality	Gender inequality is discrimination on the basis of sex or gender causing one sex or gender to be routinely privileged or prioritized over another.	Save the children

Term	Definition	Source
Locally Led Adaptation (LLA)	LLA allows an approach of empowerment of the different local stakeholders through the implementation of different tools for participatory planning, consensual decision making, accountability and integration of local and scientific knowledge, as well as capacity building by prioritizing local stakeholders. Thus, it is important to understand that local stakeholders better understand their problems and the actions to prioritize in order to solve them. In this sense, locally-led adaptation allows power to be shifted to local stakeholders while they are accompanied by external actors to alleviate the burden of responsibility for adaptation, in order to catalyze effective, equitable and transparent adaptation. Locally-led adaptation, unlike other more common participatory approaches, goes beyond the involvement of local stakeholders and only occurs when they have control over the development and adaptation processes. For CARE, this approach is equivalent to the CBA.	GCA (2021). Principles of locally led adaptation.
Nature-based Solutions	Nature-based solutions are actions to protect, sustainably manage and restore natural and modified ecosystems in ways that address societal challenges effectively and adaptively, to provide both human well-being and biodiversity benefits	IUCN, 2016
Resilience	Resilience is the ability of a system, community or society exposed to hazards to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management. Resilience is the capacity to deal with shocks and stresses, manage risks and transform lives and systems in response to new hazards.	United Nations Office for Disaster Risk Reduction CARE (2019), Online Course - Increasing Resilience Approach and Marker
Risk	Risk is "the potential for adverse consequences where something of value is at stake and where the occurrence and degree of an outcome is uncertain." Risk is a function of vulnerability, exposure and the likelihood of a hazard occurring	CARE (2019). ClimateVulnerability and Capacity Analysis Handbook. (based on IPCC)
Stress	Stresses are continuous, long-term trends or pressures that negatively impact people's lives and the systems they live in.	CARE (2019). Climate Vulnerability and Capacity Analysis Handbook.
Sustainability	Sustainability is the practice of using natural resources responsibly, that meets the needs of the present without compromising the ability of future generations to meet their own needs	United Nations Brundtland Commission (1987)

Term	Definition	Source
Vulnerability	Vulnerability is defined as "the propensity or predisposition to be adversely affected". Vulnerability encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and lack of capacity to cope and adapt. In the context of climate change, vulnerability refers to the potential for negative effects resulting from the impacts of climate change. Vulnerability to the same risks may differ based on gender, wealth, mobility and other factors. It is influenced by adaptive capacity; the higher the adaptive capacity, the lower the vulnerability.	IPCC Glossary, 2014 CARE (2019). ClimateVulnerability and Capacity Analysis Handbook.



Warm Up

Climate change hits poor people hardest

Climate change is one of the greatest threats to achieving a world of hope, tolerance and social justice, where poverty has been overcome and all people live with dignity and security.

Climate change is already making the lives of the poor more challenging. In 2022, the world witnessed record-breaking extreme weather globally, with mighty floods, vast wildfires, enduring heatwaves, and drought on every continent. But Africa is extremely vulnerable. Between 2020 and 2022, more than 52 million people—some 4 percent of the continent's population—were directly affected by drought and floods.[1] Temperatures are increasing across all regions of Africa and the continent is warming faster than the global average over both land and sea.

By 2030, climate change is expected to have a significant impact on poverty, mainly by pushing up food prices and reducing agricultural production in Africa and South Asia. The World Bank estimates that even with rapid, inclusive, and climate-informed development, climate change will increase poverty for between 3 million and 16 million people in 2030. Worse, if there are delays in inclusive, climate-smart development, poverty could increase for between 32 million and 132 million people.[2]

Climate change is also expected to negatively impact people's health in all regions.[3] The magnitude of these impacts will depend on the development choices governments make.

Understanding vulnerability to climate change

Vulnerability

Vulnerability refers to "the conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impact of hazards."[4] Such factors include things like people's income, levels of education, where they live, and access to housing and health care. Vulnerability affects the degree to which people and ecosystems can cope with climate change.

Vulnerability is a function of exposure, sensitivity and adaptive capacity (see Figure 1).

The three components of vulnerability are explained below.

Exposure

Exposure, according to the IPCC, is the "presence of people, livelihoods, species or ecosystems, environmental functions, services, and resources, infrastructure, or economic, social, or cultural assets in places and settings that could be adversely affected."[6] In short, it involves the degree to which people or systems experience, or are expected to experience, climate change impacts.

To conceptualize this, think of a house on a riverbank that often floods in heavy rains. The house has a high level of *exposure* to flooding

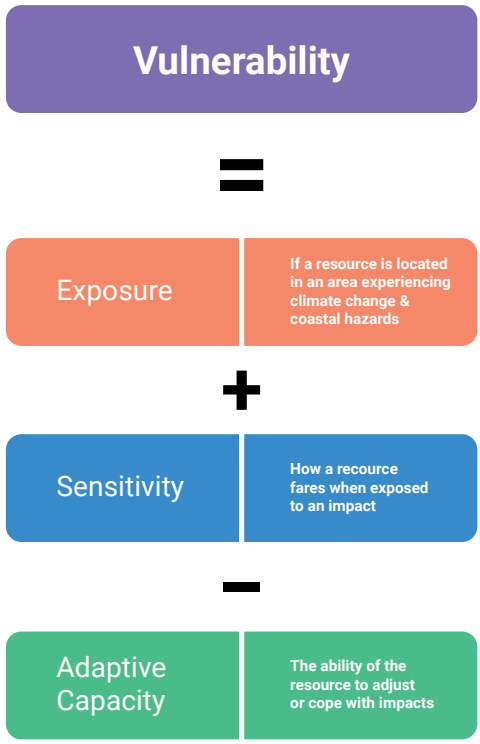


Figure 1: How vulnerability relates to exposure, sensitivity and adaptive capacity. Source: National Park Service, 2022.[5]

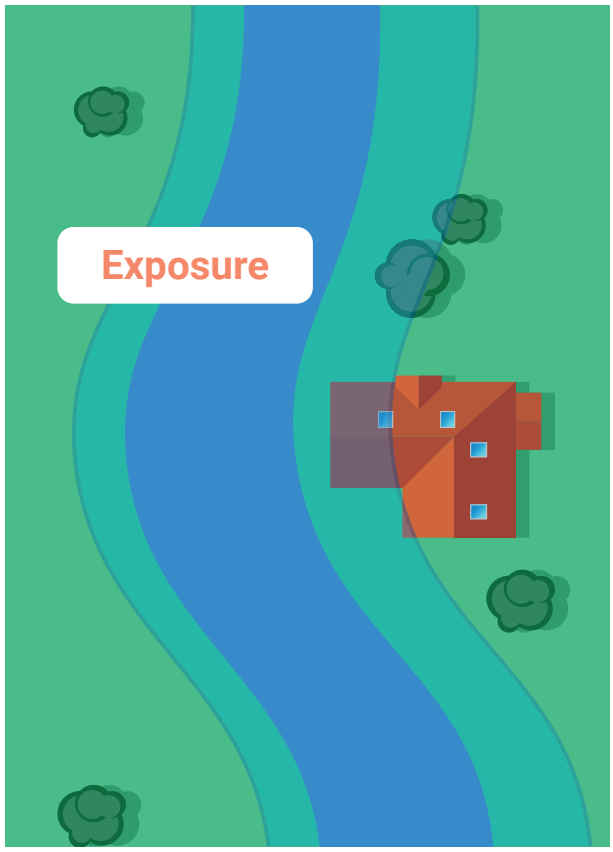


Figure 2: The meaning of exposure: the house is in a place where it is exposed to flooding.
Source: EAUFRANCE, no date.[7]

Sensitivity

Sensitivity, is the "degree to which a system or species is affected, either adversely or beneficially, by climate variability or change."[8]

To conceptualize this, think of the same house on the riverbank. If it was built of poor-quality materials, it would be more likely to be damaged in the floods and have *a higher sensitivity*.

Adaptive capacity

Adaptive capacity, is the "ability of systems, institutions, humans, and other organisms to adjust to potential damage, to take advantage of opportunities, or to respond to consequences."[10] This refers to the ability of social systems to: (a) adjust to better respond to the risks associated with climate change, and (b) learn lessons and adjust after a disaster or shock.

Continuing with our example: if the owners decided to move their house to higher ground, away from the riverbank, they would be *increasing their adaptative capacity*.

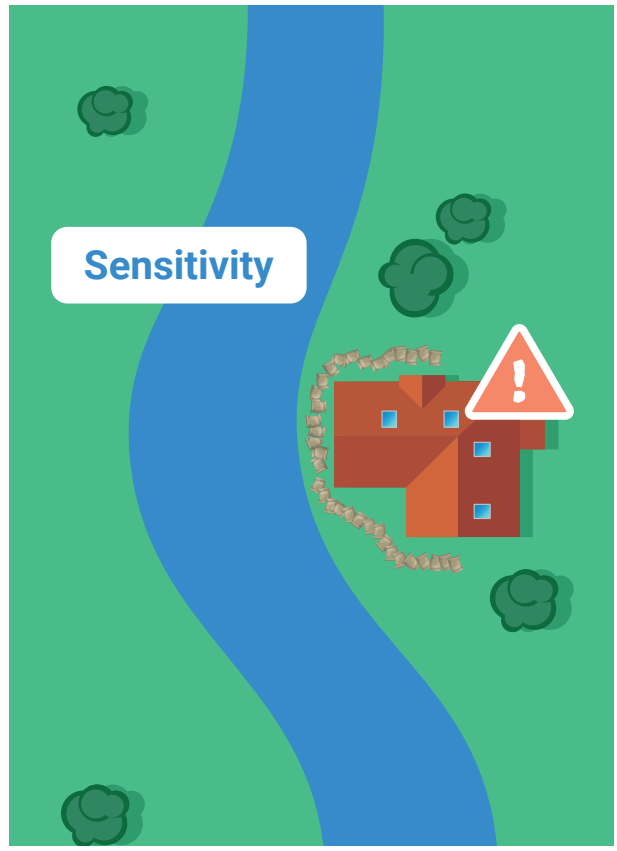


Figure 3: The sensitivity of the house depends on the types of materials used to construct it.
Source: EAUFRANCE, no date.[9]

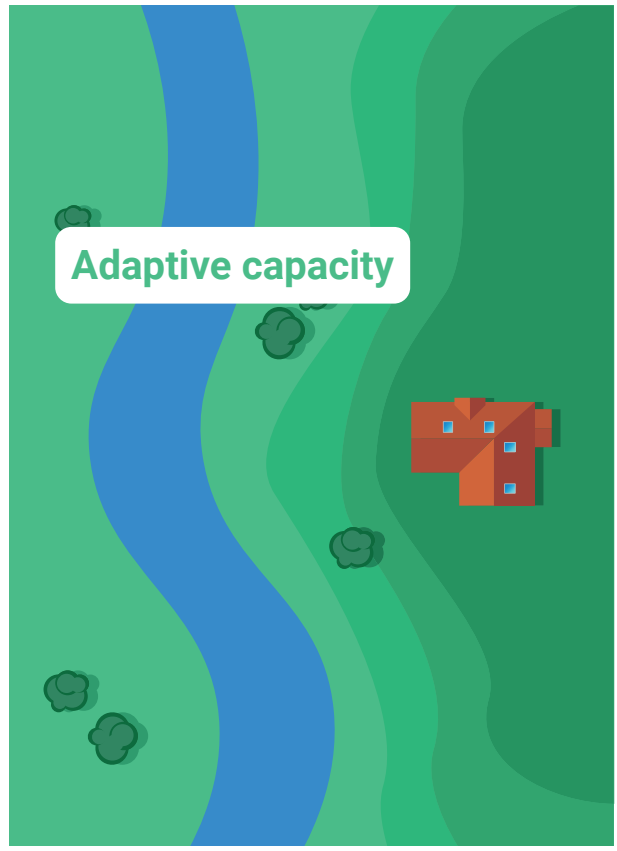


Figure 4: The house is no more susceptible to flooding because it is away from the riverbank and built strong on a higher ground.

How climate change risk is determined

Vulnerability affects the level of **climate change risk** experienced by communities and countries. Figure 5 highlights the interaction between a climate hazard (such as a flood), vulnerability and exposure, to generate climate change risks.

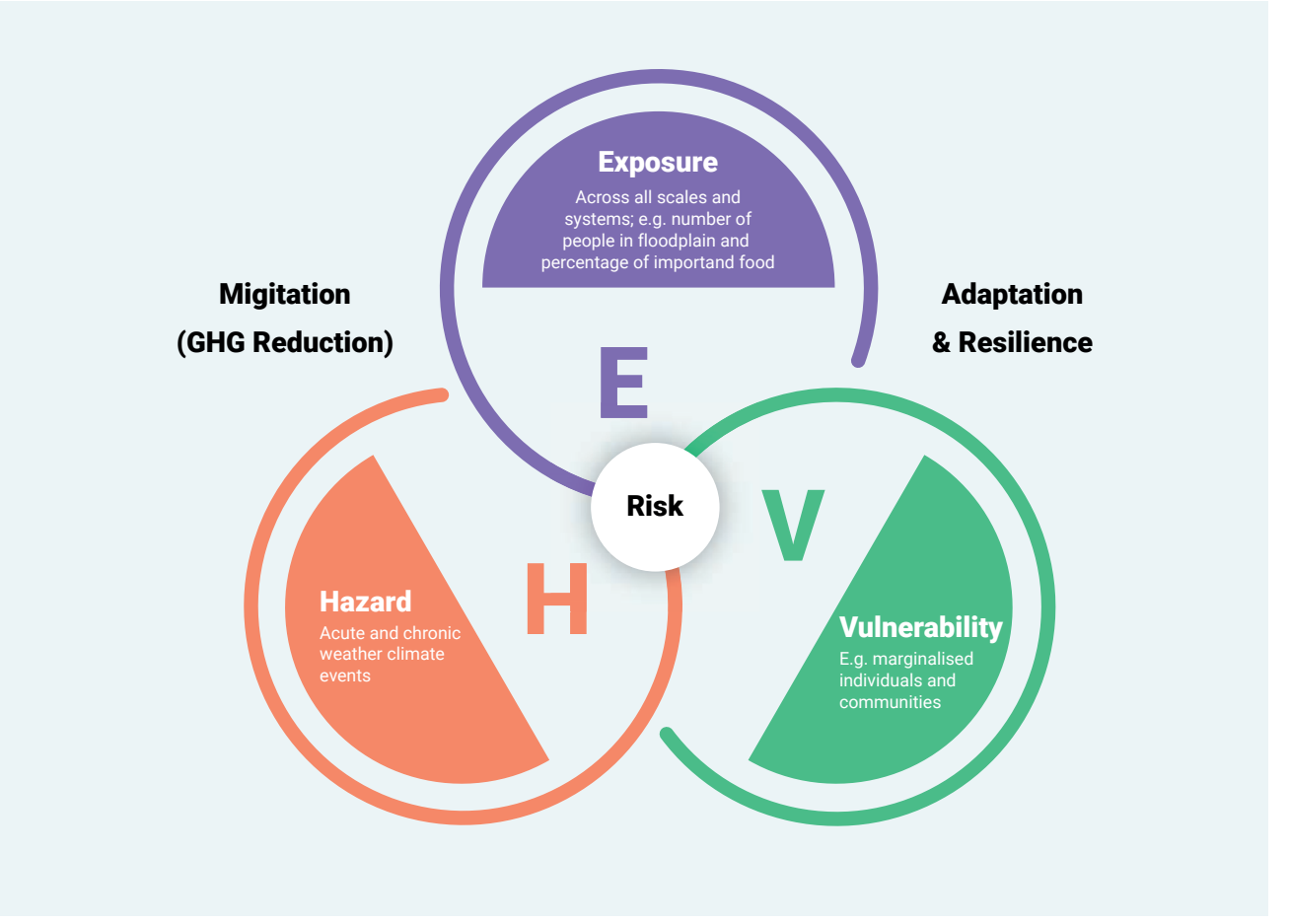


Figure 5: Representation of climate risk as a function of hazard, exposure and vulnerability, based upon the IPCC SREX definition of risk. Source: Viner et al., 2020.[11]

The injustices of climate change

The countries with historically low greenhouse gas (GHG) emissions, and the poorest people, have contributed the least to the climate crisis but are most vulnerable to its impacts. This is at the heart of calls for climate justice.

Climate change is already having negative impacts around the world. As you learned in Module 1, climate change is expected to lead to drops in agricultural productivity, reduced access to water and increased weather extremes. However, these impacts will not be evenly felt around the globe.

How climate change impacts different countries depends on each country's **vulnerability**. Figure 6 shows the countries that are most vulnerable to climate change. You will see that Africa is highly vulnerable.

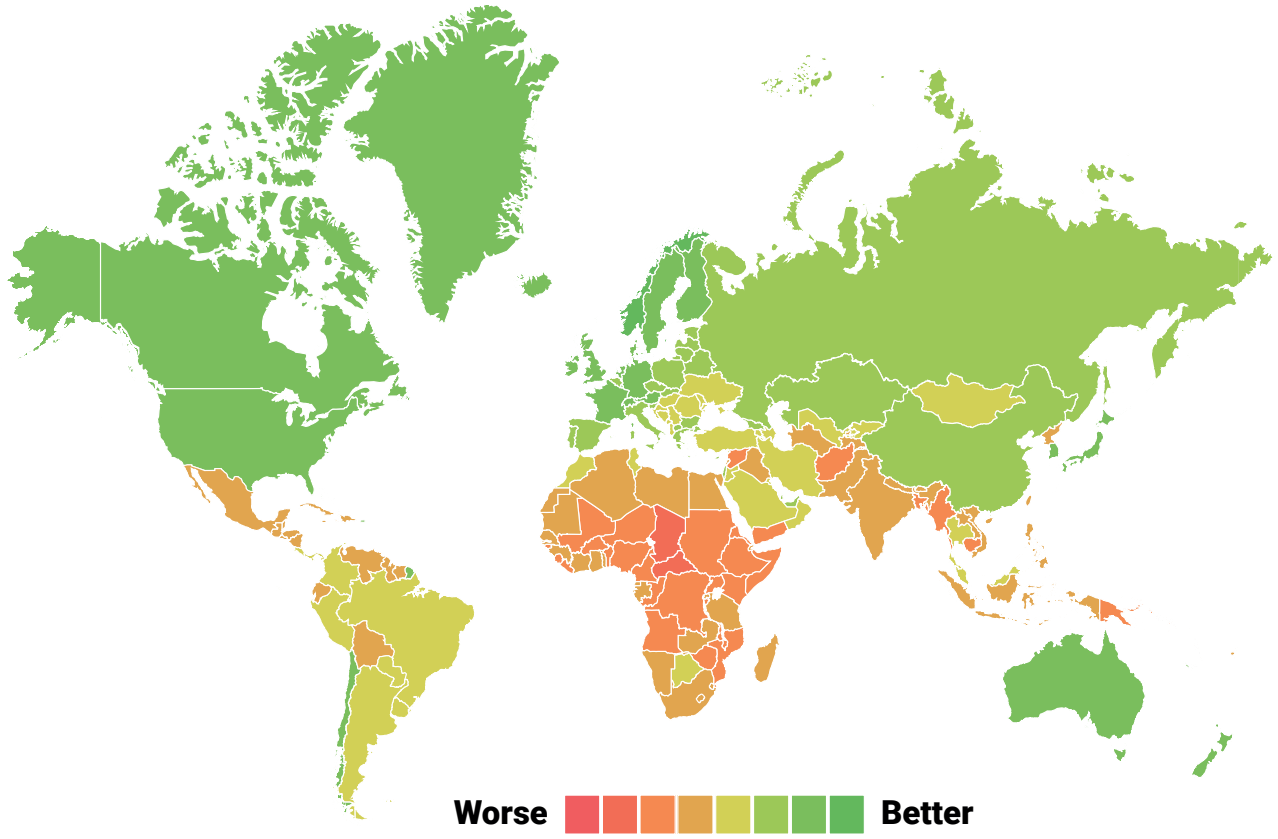


Figure 6: Map showing the most vulnerable countries to climate change. Source: University of Notre Dame, 2022.[12]

Figure 7 shows how different countries rank on the Human Development Index, a tool that shows levels of development based on life expectancy, education and standard of living. The higher a country's ranking, the higher its level of human development. As you can see, many of the countries that have low levels of development (in dark blue) are more vulnerable to climate change.

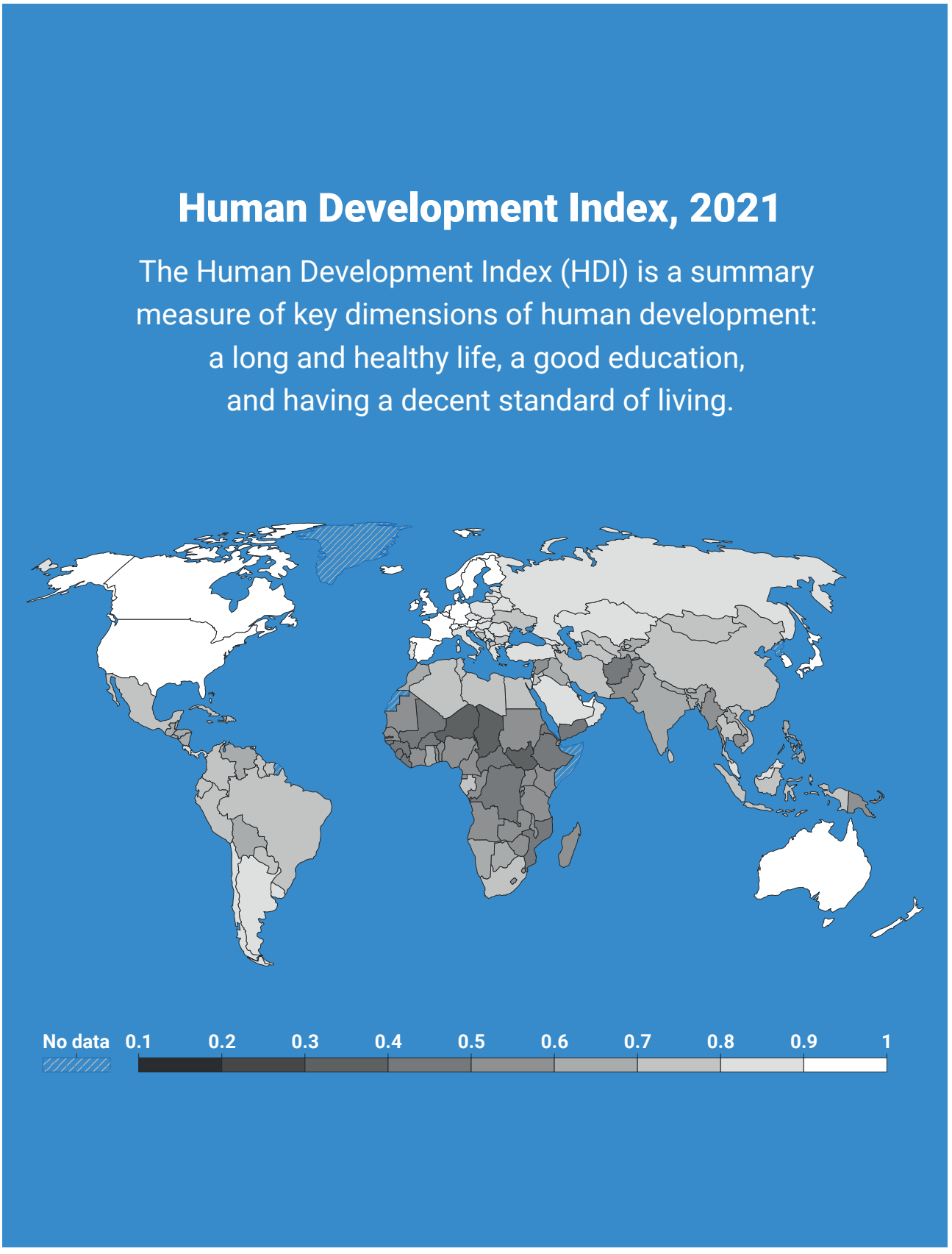


Figure 7: Human Development Index (HDI) map showing countries according to their rank on the Human Development Index. Source: Our World in Data, 2021.[13]

In Figure 8, you can see that the least developed countries, which are most vulnerable to climate change, are typically responsible for the lowest emissions.

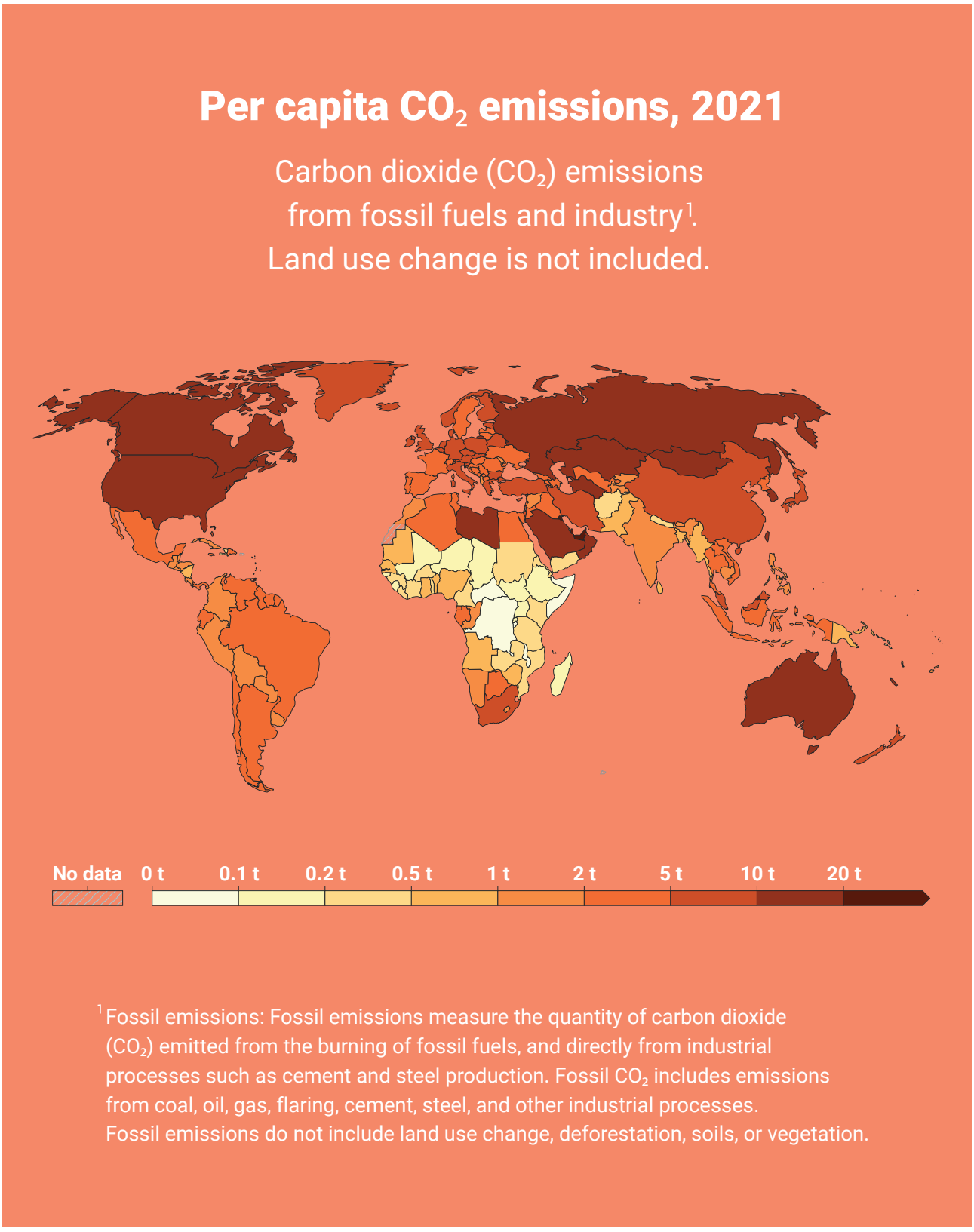


Figure 8: Per capita carbon dioxide emissions in 2021. Source: Our World in Data, 2022.[14]

Africa is vulnerable and prone to extreme climate risks

Africa is one of the most vulnerable continents to climate change and climate variability, a situation aggravated by the interaction of multiple factors such as underdevelopment, conflict and scarcity of resources.

Climate change is already causing systemic risks to Africa's economies, infrastructure investments, water and food systems, public health, agriculture and livelihoods. The risks posed by climate change threaten to undo the continent's hard-fought development and reverse decades of economic progress.

Factors combine to make Africa highly vulnerable

What makes Africa vulnerable? There are numerous factors. For example, rates of poverty are high among the millions of smallholder farmers and the large numbers of people who live in informal settlements in cities, with low access to basic services. At the same time, large portions of Africa – in particular, the dryland areas that cover three-fifths of the continent – are warming twice as fast as the global average, putting half a billion people at risk.

With much of the river system dried up in Kenya's Isiolo County during the drought in 2017, pastoralists living in the Ewaso Ngiro river basin in central Kenya had to dig for water in the riverbed. Credit: Denis Onyodi/KRCS.

Projections estimate that climate change will cause a 2–4% annual loss in gross domestic product (which is a measure of national income) in Africa by 2040. The poor, women, and marginalized or excluded populations will bear the brunt of the impact.

Even if international mitigation efforts keep global warming below 2 °C, the continent is expected to face climate change adaptation costs of USD 50 billion per year by 2050.[15]

On top of these challenges, climate change poses additional threats, including:

- Extinction of species and reduction or irreversible loss of ecosystems and their services, including freshwater, land and ocean ecosystems.
- Risk to food security, risk of malnutrition, and loss of livelihoods due to reduced food production from crops, livestock and fisheries.
- Risks to marine ecosystem health and to livelihoods in coastal communities.
- Increased human mortality and morbidity due to increased heat and infectious diseases.
- Reduced economic output and growth, and increased inequality and poverty rates.
- Increased risk to water and energy security due to drought and heat.

Figure 9 shows a few of the ways climate change is already affecting Africa's social and economic systems.

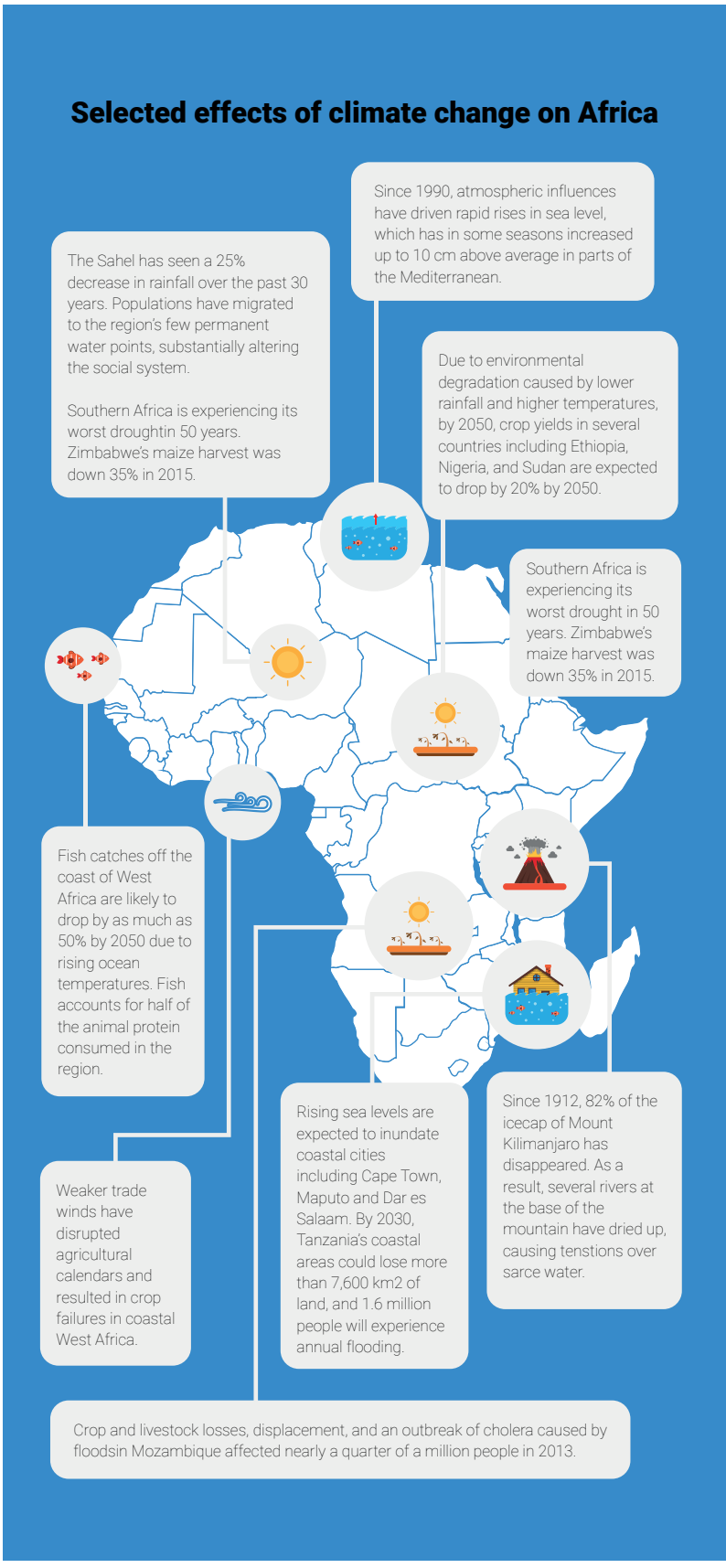


Figure 9: Current and possible future impacts and vulnerabilities for Africa. Source: Africa Center for Strategic Studies, 2016.[15]

Different parts of Africa are affected differently

Although the entire continent is expected to be affected by the climate crisis, some regions will be more seriously affected than others, due to their level of vulnerability and adaptive capacity. The countries likely to be hardest hit are generally located in western, southern and eastern Africa.[18]

Table 1 shows how Africa will experience extreme climate change risks in different ways.

Table 1: Summary of effects of climate change in Africa.[19]

Temperature	Mean annual temperatures are increasing at 0.2 °C to 0.5 °C per decade.
	Under each of the major emissions scenarios, a global temperature increase of 1.5 °C above pre-industrial levels is likely to be exceeded in the next decade or so. By mid-century, all but the lowest emissions scenarios suggest temperature increases of 2 °C or more.
	High-emissions scenarios suggest it is very likely that warming will exceed 3 °C by 2100, except in Central Africa where the estimate is 2.5 °C.
	Modeling suggests the number of days above 35 °C will increase by 20 to 160 days annually, depending on the scenario and region.
	Life-threatening temperatures above 40 °C are projected to increase by 10 to 140 days annually, depending on the scenario and region.
Summary: *Heat waves and heat stress will increase drastically in the worst scenarios.*	
Precipitation	The frequency and intensity of heavy precipitation events are projected to increase almost everywhere in Africa, leading to more flooding.
	Observations are variable, but in many areas, there is evidence of a drying trend, especially in parts of North Africa, west southern Africa and central Africa. Models project that this trend will continue.
	River flood observations suggest there has been some increase in recent decades. Model results vary with scenario and region. These suggest that what are currently once-in-100-year floods could happen as frequently as once in 40 years under low-warming scenarios, and once in 20 years under higher-warming scenarios.
Drought	Droughts are expected to increase in all regions of Africa except the northern parts of East Africa and the Horn of Africa.
Aridity	Observation and modelling suggest increasing aridity (dryness) in North Africa, west and east southern Africa, and Madagascar.
Summary: *Changes in total precipitation are small, but more rain is likely to fall in heavy rainfall events in most regions. The effect of increased precipitation must also be considered alongside the prospect of increasing temperatures. The overall picture is one of drier conditions over most of the continent with more droughts but also more flooding.*	

Ocean impacts	African sea levels are currently rising slightly faster than the global average, although a little slower in parts of the Indian Ocean coast. They are virtually certain to continue rising by 0.4 m to 0.5 m by 2100 under low-warming scenarios, and 0.8 m to 0.9 m under high-warming scenarios.
Ocean temperatures	Marine heat waves are expected to continue to increase in frequency and intensity, especially around the Horn of Africa.
Cyclones	Cyclones are possibly decreasing in frequency, but high-intensity events will become more common, often associated with very heavy rainfall.
Coastal flooding	Projections suggest that what is currently a once-in-100-year flooding event will recur every 10 or 20 years by 2050, and every 5 years to annually by 2100, even under moderate warming.
Fire weather	Likely to increase throughout extratropical Africa.
Summary: *Sea levels and marine heat waves are to continue rising. Cyclones are possibly decreasing in frequency, but high-intensity events will become more common with frequent flooding.*	

Category 4 Cyclone Idai wreaked havoc in Central Mozambique in 2019. Photo Credit: Josh Estey/CARE.

As you can see in Figure 10, in an "optimistic" warming scenario, risk and vulnerability to climate change increases in many African countries by 2050. In a "pessimistic" scenario, this extends to almost all African countries.

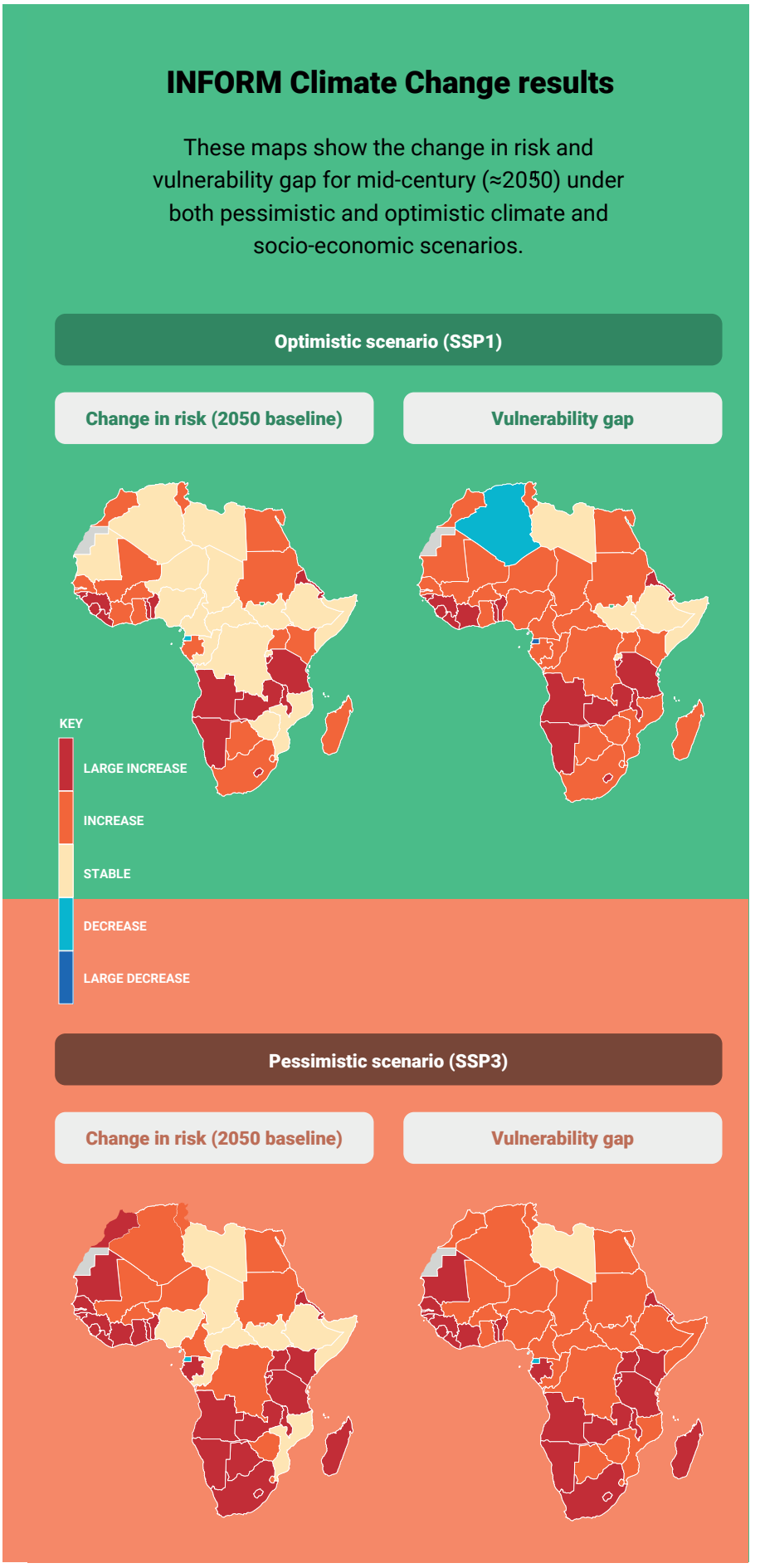
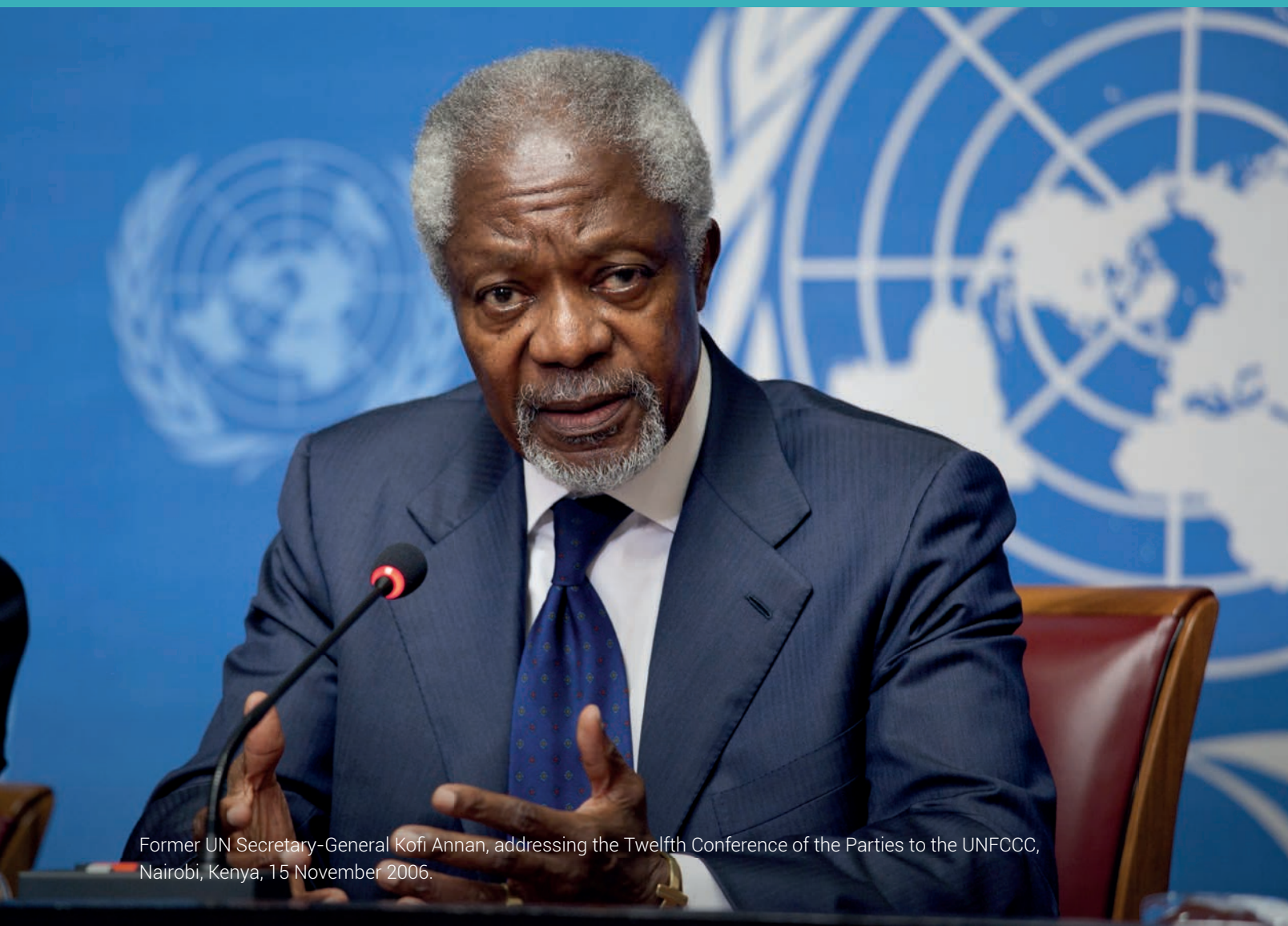


Figure 10: Changes in risk and vulnerability gap across Africa in an optimistic and pessimistic warming scenario. Source: adapted from Throw et al., 2022.[20]

How can Africa adapt to climate change?

To deal with the impacts of climate change, Africa needs to adapt. Adaptation involves actions that support households, communities, and countries to respond to the effects of climate change. Such actions support livelihoods, increase income and ensure that wellbeing is protected even when climate change risks arise. An example is the use of drought-tolerant seed varieties for maize production in many countries in East Africa, which has enabled farmers to generate good agricultural produce even when faced with droughts.

> ***The impact of climate change will fall disproportionately on the world's poorest countries, many of them in Africa. Poor people already live on the front lines of pollution, disaster, and degradation of resources and land. For them, adaptation is a matter of sheer survival.***
>
> Former UN Secretary-General Kofi Annan



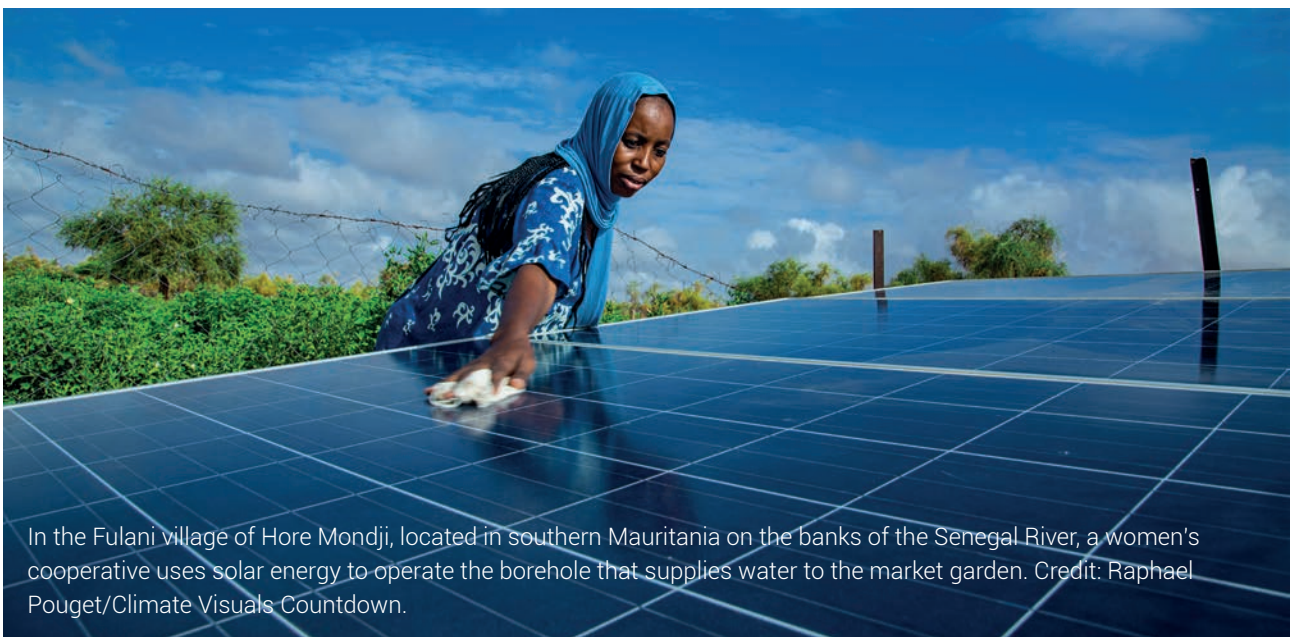
Former UN Secretary-General Kofi Annan, addressing the Twelfth Conference of the Parties to the UNFCCC, Nairobi, Kenya, 15 November 2006.

Adaptation involves adjusting to climate change

As you learned in Module 1, adaptation involves actions that help manage the current and future impacts of climate change. It is a "process of adjustment to actual or expected climate and its effects," according to the IPCC.[21]

Adaptation involves deciding how to cope with climate change. It includes policy decisions that governments and organizations make to predict how best to adjust to climate impacts. For example, coastal communities at risk of sea level rise can build embankments to hold back the ocean and stop erosion.

Men working on the construction of a levee with sandbags for protection against erosion, on a sandy beach in Ihuru, an atoll in the Maldives islands. Credit: Alain Schroeder/Climate Visuals.



In the Fulani village of Hore Mondji, located in southern Mauritania on the banks of the Senegal River, a women's cooperative uses solar energy to operate the borehole that supplies water to the market garden. Credit: Raphael Pouget/Climate Visuals Countdown.

Table 2: Climate impacts and adaptation strategies with potential unintended consequences.

CLIMATE IMPACT	ADAPTATION STRATEGY	POTENTIAL UNINTENDED CONSEQUENCES
Rising sea levels cause more frequent flooding in cities	Build seawalls and pumping systems and change building codes	Seawalls could lead to more intense flooding in other parts of the coastal regions
More frequent droughts cause crop loss	Shift planting patterns to new seasons or introaduce new crops that can adjust to the new climate	New crops can lead to loss of biodiversity if not adapted to the ecosystem
Changes in precipitation	Improve stormwater management	Stormwater management cannot tackle all issues raised by changes in precipitation
More frequent heat waves	Ensure adequate cooling in houses, especially for vulnerable populations	Cooling by air conditioning can lead to an increase in the level of GHG emissions
Intrusion of saltwater in freshwater areas	Introduce salt-tolerant crop varieties and agricultural practices	New crop varieties can damage the environment (for example, if these crops are invasive species that overuse available resources)

Adaptation strategies are not necessarily easy to implement, or low cost. Some of the main challenges of adaptation are complexity and cost. Adaptation requires trade-offs due to the scarcity of resources.

In some cases, adaptation can have negative effects as well. For example, seawalls do not stop sea level rise. They just block it. Building sea walls in one area can push the problem of sea level rise to a different part of the coast.

Although adaptation is one of the most effective ways of responding to climate change risks, there are times when the climate change risks are too severe. When adaptation actions are no longer effective in protecting communities and societies, then an **adaptation limit** has been reached.

Maladaptation happens when adaptation backfires

Sometimes, actions that are intended to support communities or societies to adapt may be ineffective. Instead, they can backfire and make communities more vulnerable to climate change risks, by increasing their vulnerability or reducing their adaptive capacity. This is called **maladaptation**.

Adaptation activities can have a high or low risk of maladaptation. Table 3 highlights examples of low and high-risk adaptation activities.

Table 3: Examples of actions with high and low risk of maladaptation (adapted from Barnett and O'Neill, 2013[22]).

	INCREASING ADAPTIVE CAPACITY	DECREASING SENSITIVITY	DECREASING EXPOSURE
Example used: Sea-level rise	- Strengthening coastal planning institutions - Raising awareness of best practices of coastal managment	- Improving building design (elevating houses) - Siting new developments inland - Building seawalls	- Resettlement of entire communities
Risk of maladaptation	Low risk	Medium risk	High risk
Why this risk	- Not emission-intensive - Not inequitable if targeted at all groups - Relatively inexpensive	- Can be (temporarily) carbon and cost expensive intensive - Things like seawalls can encourage development in high-risk areas	- Large emissions of greenhouse gases - High opportunity costs - Inequitable to those displaced

Three key types of adaptation actions

There are three main categories for adaptation options, according to the IPCC: **social, institutional**, and **physical**.[23] These should be considered overlapping rather than discrete. They are often implemented simultaneously. Examples given here can be relevant to more than one category.

1. Social adaptation options include behavioral, educational and informational options such as:

- hazard and vulnerability mapping
- land and water conservation techniques
- agricultural practices
- livelihoods diversification
- communication campaigns on climate change.

CARE's Growing is Learning project in Tanzania supports women who are farmers to increase their productivity, income and their family's nutrition. Credit: Vanessa Mwingira/CARE.

2. Institutional adaptation options include economic and policy changes such as:

- local development plans that include adaptation
- laws for defining no-building zones in flood-prone areas
- defining forest-protected areas to preserve water sources in areas exposed to water scarcity
- national or regional climate change strategies
- integration of adaptation into sectoral policies
- financial incentives, including taxes and subsidies.

Presentation of community adaptation plans. Credit: Johanna Mitscherlich/CARE.

3. Physical adaptation options include making changes to the built environment using technology and ecosystem-based services. Examples include:

- climate resilient infrastructure, such as quality road surfaces to withstand hotter temperatures, and storm-resistant buildings or shelters
- traditional technologies, such as floating gardens.
- floating houses
- ecological corridors
- food banks and distribution of food surplus.

Clare Mukankusi is a bean breeder in Kawanda, Uganda. She leads efforts for breeding drought-resistant beans, an example of a physical adaptation action. Credit: CIAT/Georgina Smith.

Putting communities at the heart of adaptation

People and communities on the frontlines of climate change are often the most active and innovative in developing adaptation solutions. Yet, too often, they lack access to the resources and agency needed to implement these actions effectively. Adaptation efforts must put communities at the forefront.[24]

Community-Based Adaptation

Community-Based Adaptation (CBA) interventions aim to improve the capacity of local communities and individuals to adapt to climate change. This approach places emphasis on building the **adaptive capacity** of the poorest and most marginalized people.

In CBA initiatives, organizations, governments and others support communities to act and bring about positive changes in their lives. For example, communities might be supported in changing the time of year they plant crops to better align with changing rainfall patterns or build homes that can better withstand high-intensity cyclones.

CBA can also focus on preserving natural systems. For example, many communities might work together to protect and conserve a river basin.[25]

CBA aims to:

- Generate adaptation strategies with communities and other local stakeholders to improve the uptake and sustainability of the adaptation process and develop a strong sense of ownership within a community.
- Enhance communities' awareness and understanding of climate change and uncertainty to create responsive plans and facilitate more flexible and context-appropriate decisions.
- Embed new knowledge and understanding into existing community structures to expand and strengthen those structures as well as institutional mechanisms.

CBA initiatives can be integrated into sectoral projects or implemented as stand-alone projects. While CBA focuses on communities, CBA approaches do not work exclusively at the community level. CBA is rather a "community-led" or "community-driven" process that supports a rights-based approach. This approach builds on communities' economic, ecological and administrative interconnectivity, supporting them to work at higher levels as appropriate.

Four interlinked strategies for Community-Based Adaptation

To build adaptive capacity, the CBA process should incorporate four interlinked strategies, shown in Figure 11.

1. Promote climate-resilient livelihoods

Climate-resilient livelihoods refer to livelihoods that are less sensitive to climate change. To support the development of climate-resilient livelihoods CBA can, for example, promote new agricultural techniques to improve soil moisture or drought-resistant seeds in areas that are becoming drier.

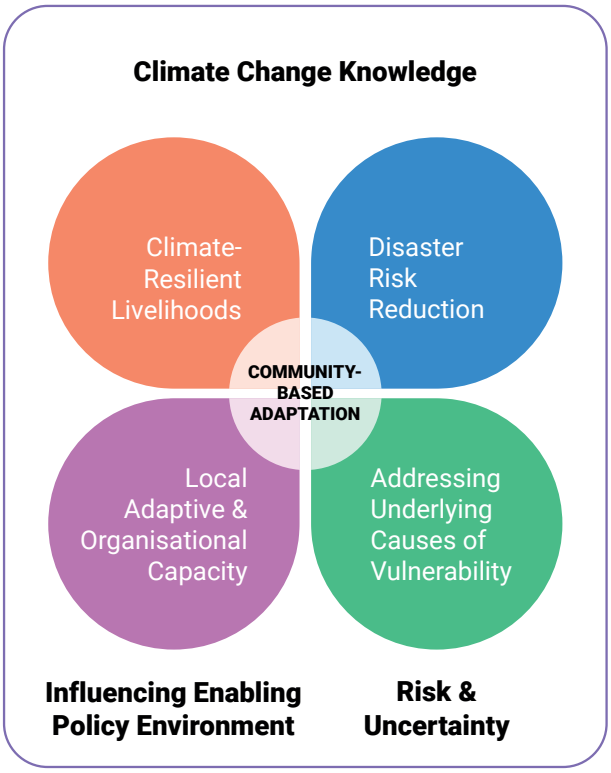


Figure 11: CARE's Community-Based Adaptation Framework includes four interlinked strategies. Source: CARE, 2014.[26]

Climate-smart agriculture to combat climatic shocks in Zimbabwe. Credit: Pauline Hurungudo/CARE.

2. Promote disaster risk reduction

Disaster risk reduction (DRR) includes all activities that can help reduce the impacts of disasters, particularly on vulnerable households and individuals. It includes prevention, preparedness, response and rehabilitation measures such as contingency planning, building storage for food, informing communities about safe locations in case of emergency, and developing early warning systems.

Climate change adaptation and DRR are strongly linked: they both look at climate-related hazards. Climate change adaptation addresses additional gradual effects of climate change, such as sea level rise or temperature rise, while DRR can include non-climate-related hazards, such as earthquakes.

Mariamo Humberto, 16, at her family home, in Beira, Mozambique, that was all but destroyed by Cyclone Idai in 2019. Credit: Josh Estey/CARE.

3. Build local adaptive and organizational capacity

Local adaptive and organizational capacity includes capacity development for local civil society organizations (CSOs) and governmental institutions and local authorities so that they can provide better support to communities in their adaptation efforts. It can include development of local adaptation and contingency plans, and training on climate change for local authorities and CSOs.

Facilitated dialogue about climate-resistant agricultural techniques in Muchava Community, Homoine District, Maxixe, Mozambique, as part of The Southern African Nutrition Initiative. Credit: Tanja Kisslinger/CARE.

4. Address the underlying causes of vulnerability

The underlying causes of vulnerability can refer to poverty, poor governance, environmental degradation, unequal access to and control over resources, limited access to basic services, or gender inequality, depending on the context. These can be addressed through advocacy, social mobilization, and other methods.

Locally Led Adaptation

While CBA provides support to communities, Locally Led Adaptation (LLA) aims to put local institutions and communities in control of the actions that affect them.

It follows eight principles, launched in 2021 (see Figure 12). These were developed by the Global Commission on Adaptation, the International Institute for Environment and Development (IIED), World Resources Institute (WRI), and the International Centre for Climate Change and Development (ICCCAD).

1. Devolving decision making to the lowest appropriate level

Giving local institutions and communities more direct access to finance and decision-making power over how adaptation actions are defined, prioritised, designed and implemented; how progress is monitored; and how success is evaluated.

2. Addressing structural inequalities faced by women, youth, children, people with disabilities and displaced people, Indigenous Peoples and marginalised ethnic groups

Integrating gender-based, economic and political inequalities that are root causes of vulnerability into the core of adaptation action and encouraging vulnerable and marginalised individuals to meaningfully participate in and lead adaptation decisions.

3. Providing patient and predictable funding that can be accessed more easily

Supporting long-term development of local governance processes, capacity, and institutions through simpler access modalities and longer term and more predictable funding horizons, to ensure that communities can effectively implement adaptation actions.

4. Investing in local capabilities to leave an institutional legacy

Improving the capabilities of local institutions to ensure they can understand climate risks and uncertainties, generate solutions and facilitate and manage adaptation initiatives over the long term without being dependent on project-based donor funding.

5. Building a robust understanding of climate risk and uncertainty

Informing adaptation decisions through a combination of local, Indigenous and scientific knowledge that can enable resilience under a range of future climate scenarios.

6. Flexible programming and learning

Enabling adaptive management to address the inherent uncertainty in adaptation, especially through robust monitoring and learning systems, flexible finance and flexible programming.

7. Ensuring transparency and accountability

Making processes of financing, designing and delivering programmes more transparent and accountable downward to local stakeholders.

8. Collaborative action and investment

Collaboration across sectors, initiatives and levels to ensure that different initiatives and different sources of funding (humanitarian assistance, development, disaster risk reduction, green recovery funds and so on) support one another, and their activities avoid duplication, to enhance efficiencies and good practice.

Figure 12: The principles of Locally Led Adaption. Source: IIED, 2021.[27]

Box 1: The difference between Community-Based Adaptation and Locally Led Adaptation

Community-Based Adaptation is a set of climate change adaptation activities developed in partnership with at-risk communities to promote local awareness of, and appropriate and sustainable solutions to, current and future climatic conditions.[28]

Locally Led Adaptation refers to climate adaptation in which local communities, community-based organizations, citizen groups, local government, and local private sector entities at the lowest administrative structure are included as decision makers in the interventions that affect them (World Resources Institute).[29]

Nature-based solutions for adaptation

Combining nature-based solutions with community-oriented adaptation approaches is critical for building the resilience of ecosystems on which poor communities rely for their livelihoods.

What are nature-based solutions?

Nature-based solutions support climate change adaptation and mitigation by using natural systems and processes to restore ecosystems, conserve biodiversity, and enable sustainable livelihoods. They are actions that prioritize ecosystems and biodiversity. They are designed and implemented with the full engagement and consent of local communities and Indigenous Peoples.[30]

Examples include planting trees, restoring wetlands, conserving mangrove forests, or switching to regenerative farming practices.

Figure 13 illustrates the concept of nature-based solutions.

Figure 13: The concept of nature-based adaptation. IUCN, 2020.[31]

What is an ecosystem?
An ecosystem is a dynamic complex of plant, animal and microorganism communities and the non-living environment interacting as a functional unit. Humans are an integral part of ecosystems.[32]

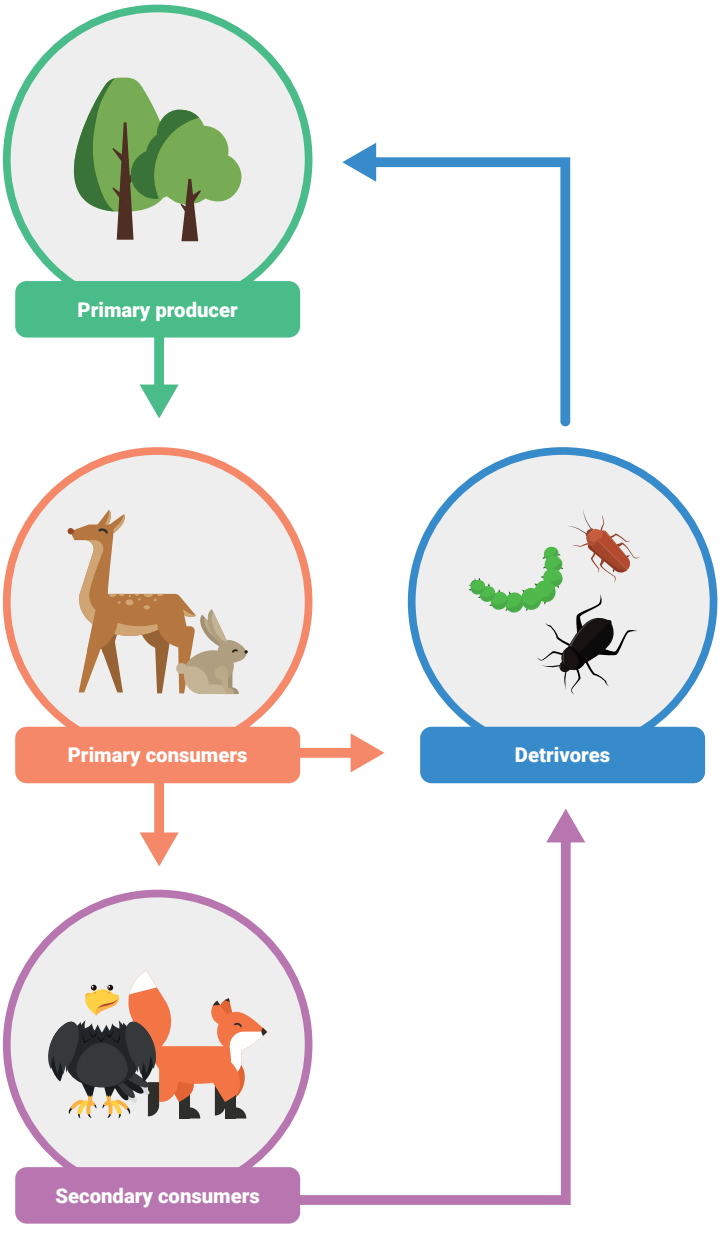


Figure 14: A 'rich' ecosystem.
Source: Project Pangolin

What do nature-based solutions for adaptation look like?

Nature-based solutions may include protecting and restoring forests, rivers, coastal wetlands, mangroves and marshes. Figure 14 shows examples and their associated benefits.

Figure 15: How different nature-based solutions can work together across landscapes to build resilience. Source: Global Commission on Adaptation, 2019.[33]

Nature-based solutions should be an integral part of all climate adaptation strategies. However, these will, unfortunately, become less effective as warming increases, and ecosystems reach their soft and hard adaptation limits.

The role of climate information services

When communities have access to accurate information about weather and climate, it builds their adaptive capacity. For example, when armed with accurate, high-quality data and analyses, tailored to their needs, farmers can plan what to plant and when. Policymakers, such as government ministries and local government representatives, can also use this information to make properly informed decisions. For example, on where to provide food assistance, or on how to design climate change policies. Likewise, if people know about impending extreme events they can prepare in advance.

Broadly speaking, Climate Information Services involve processes for collating, analyzing, packaging and distributing climate data on variables such as temperature, rainfall, wind, soil moisture, ocean conditions and extreme weather indicators to different groups of people so that they can use it to inform decision making.

Heat Wave

Understanding climate hazards, vulnerabilities and impacts in Africa

EXPLORE the tools provided by the IPCC Interactive Atlas, the ThinkHazard tool and the INFORM Climate Change Products to help you identify four or five climate hazards and vulnerabilities. Here, you will learn about the different types of hazards, and the types of vulnerabilities that are determining risk posed by these hazards. You will also be able to explore how these hazards and vulnerabilities differ across different geographies.

READ about the latest climate change adaptation trends in the State and Trends in Adaptation 2022 Report: Africa, from the Global Center on Adaptation.

READ about the effects of climate change in different parts of Africa from the Climate Action Tracker. This will highlight how different parts of the continent are affected by global warming and how this is manifested through different climate change risks.

READ an article on the differentiated vulnerabilities to climate change in Uganda. Here, you will learn about how climate change generates different types of vulnerabilities for different groups of people, and how this affects their daily lives.

READ the IPCC's *4th Assessment Report* chapter on the impacts of climate change and adaptation pathways in Africa. Here, you will learn about the options available to African countries and communities.

READ a highlight of regional initiatives responding to climate change in Africa.

READ an explanation of the difference between adaptation and mitigation, where you will learn about the different characteristics of mitigation and adaptation in different contexts.

Maladaptation

READ more about maladaptation here. You will learn about the different definitions and causes of maladaptation. There are also different examples of how maladaptation has occurred in different contexts across the world.

READ about some guiding principles for avoiding maladaptation.

Community-Based Adaptation

READ about the CBA framework here, where you will learn:

- What Climate Change Adaptation (CCA) is and why we need to accelerate adaptation action
- The importance of locally led approaches to adaptation including CBA, which considers gender and ecosystems
- What CBA looks like in practice.

Locally Led Adaptation

READ about the principles for Locally Led Adaptation. These emphasize the importance of (for example): devolving decision making to the lowest appropriate level; addressing structural inequalities faced by women, youth, children, the disabled and elderly; the importance of funding; and building a better understanding of climate risks.

WATCH the following videos to understand LLA principles.

(a) Youth Adaptation Dialogue: Role of universities and students in Locally Led Adaptation (1:06:19). This video is a recording of a webinar that had some young people as panelists talking about locally led adaptation. It will introduce you to the principles of locally led adaptation, and also highlight the role of young people in advancing it.

(b) Anchoring Event: Locally Led Adaptation (1:59:16). In this video, which is also a recording of a webinar, you will learn about the importance of international collaborations and financing in enabling locally led adaptation. You will hear from people working on adaptation speaking about their experiences on locally led adaptation and how the principles can be operationalized.

Nature-based solutions

READ the Waterways to Resilience report by WWF. With interest in nature-based solutions increasing, the report focuses on the evidence, both from Africa and globally, on their ability to effectively address five key water challenges – water scarcity, degradation of water quality, flood risk, stormwater and urban floods, and coastal erosion and floods.
Adaptation Good Practice Checklist

READ the Adaptation Good Practice Checklist (AGP), which provides guidance on actions and criteria that help to ensure adaptation results in quality, impactful and long-term climate resilience for the most vulnerable people. The nine practices in the AGP checklist define the range of activity areas that are needed for adaptation to climate change.

Climate Information Services

READ the CARE CIS report, which presents a synthesis of CARE's engagement in and learning from CIS work in Africa and Asia, supporting agriculture decision making and early warning early action systems towards climate resilience among climate-vulnerable communities.

LEARN about Climate Information Services and how they contribute to increasing climate resilience and how to implement CIS programs in this online course on the Basics of Climate Information Services.

Bright Spark

Case studies

Participatory Scenario Planning in Ethiopia

In 2020 and 2021, Participatory Scenario Planning (PSP) enabled people to prepare for floods, and to pre-position resources. CARE Ethiopia continues to mainstream PSP through many of its projects, as the approach works as an effective bridge between the technical Ethiopia National Meteorology Agency data and national/regional forecasting and brings it down to the local level, using and blending with indigenous forecasting and information systems.

Participatory Scenario Planning in Ethiopia. Credit: CARE/World Vision.

Where the Rain Falls

In this CARE project, 1300 households were surveyed in eight different countries (Guatemala, Peru, Ghana, Tanzania, Bangladesh, India, Thailand and Vietnam), where people overwhelmingly perceived climatic changes happening today in the form of rainfall variability. In seven of the eight countries, more than 80% (sometimes as many as 90%) already perceived at least one change relating to the timing, quality, quantity and overall predictability of rainfall. These include delayed onset and shorter rainy seasons; reduced number of rainy days per year; increased frequency of heavy rainfall events; and more frequent prolonged dry spells during rainy seasons. In eight research sites, the households whose livelihoods were mainly dependent on agriculture reported that rainfall variability negatively affected food production and food consumption.

Without water there is no life: a case study from Zimbabwe

This case study highlights communities' experiences of climate change, and the effects of climate change on availability of water. It also describes the work done by a project to help communities adapt to climate change.

Podcasts

LISTEN to these podcasts by Future Climate For Africa to hear stories about climate change and how it is impacting Africa.

Videos

WATCH this video (6:46) about Participatory Scenario Planning (PSP) in an Info-Act project in Vietnam. You will learn about the use of a PSP exercise. You will also learn about how it is conducted and what participants and other stakeholders think about its benefits.

WATCH this video (1:49) about a campaign to encourage people to invest in nature. This campaign is titled Time *#fornature*

Cool Down

Test your understanding *answers on page 44*

1 Vulnerability is a function of which three elements?

(a) Exposure
(b) Sensitivity
(c) Risk
(d) Adaptive capacity

2 Using drought-tolerant seed varieties for maize production is an example of which type of climate action?

(a) Mitigation
(b) Adaptation

3 The IPCC classifies adaptation options into three main categories. Write down the missing one in the list below.

(a) Social
(b) Institutional
(c) .....

4 .....is a set of climate change adaptation activities developed in partnership with at-risk communities to promote local awareness of, and appropriate and sustainable solutions to, current and future climatic conditions. Select the missing term.

(a) Locally Led Adaptation
(b) Community-Based Adaptation

5 Which of the following is not an example of a nature-based solution?

(a) Planting trees
(b) Restoring wetlands
(c) Resurfacing roads
(d) Switching to regenerative farming practices

BONUS QUIZ: To further test your knowledge of climate change, do this online quiz developed by UNDP. It covers three topics:

- The problem of climate change
- The impacts of climate change
- Mitigating the impacts of climate change

Reflect and prepare for your climate adaptation action

Consider the following questions about gender and climate change.

- What are some of the norms and beliefs that have contributed towards causing gender inequalities in your community or country? Which groups have been impacted by these inequalities? How have they been impacted?
- What do the gender inequalities mean for how people with different gender identities can engage in climate adaptation action?
- How can you, as a young person, contribute to ensure that people of any gender can equally engage in climate adaptation action?

Answers

1. Correct answer: (a), (b) and (d).
EXPLANATION: Vulnerability is a function of exposure, sensitivity and adaptive capacity. It refers to "the conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impact of hazards."

2. Correct answer: (b) Adaptation.
EXPLANATION: Adaptation efforts in Africa involve actions that support households, communities, and countries to respond to the effects of climate change. Such actions support livelihoods, increase income and ensure that wellbeing is protected even when climate change risks arise.

3. Correct answer: (c) Physical.
EXPLANATION: There are three main categories for adaptation options, according to the IPCC: social, institutional, and physical. These should be considered overlapping rather than discrete. They are often implemented simultaneously.

4. Correct answer: (b) Community-Based adaptation.
EXPLANATION: Community-Based Adaptation is a set of climate change adaptation activities developed in partnership with at-risk communities to promote local awareness of, and appropriate and sustainable solutions to, current and future climatic conditions. Locally led adaptation refers to climate adaptation in which local communities, community-based organizations, citizen groups, local government, and local private sector entities at the lowest administrative structure are included as decision makers in the interventions that affect them.

5. Correct answer: (c) Resurfacing roads.
EXPLANATION: Nature-based solutions support climate change adaptation and mitigation by using natural systems and processes to restore ecosystems, conserve biodiversity, and enable sustainable livelihoods. They are actions that prioritize ecosystems and biodiversity and are designed and implemented with the full engagement and consent of local communities and Indigenous Peoples.

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Toolkit for Youth on Adaptation & Leadership

MODULE 3

VULNERABLE GROUPS AND CLIMATE ADAPTATION PLANNING

GLOBAL CENTER ON ADAPTATION

care

Norad

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Acronyms

ASAP	The Adaptation for Smallholder Agriculture Programme
CBA	Community based adaptation
CCA	Climate change adaptation
CIS	Climate Information Services
COP	Conference of the Parties
COY	Conference of Youth
CRA	Community Risk Assessment
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EAC	East Africa community
ECOWAS	Economic Community of West African States
GCF	Green Climate Fund
GHGs	Greenhouse gases
IPCC	Intergovernmental Panel on Climate Change
JPA	Joint Principles for Adaptation
LAP	Local Adaptation Plans
LDCF	Least Developed Countries Fund
LLA	Locally Led Adaptation
MDGs	Millennium Development Goals
NAP	National Adaptation Plan
NAPA	National Adaptation Programs of Action
NDC	Nationally determined contribution
NGOs	Non-Governmental Organizations
PPCR	Pilot Program for Climate Resilience
PSP	Participatory Scenario Planning
SCCF	The Special Climate Change Fund
SDG	Sustainable Development Goal
SIDS	Small Islands Developing States
SMART	Specific, Measurable, Achievable, Relevant and Time-bound
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change

WELCOME TO THE TOOLKIT FOR YOUTH ON ADAPTATION & LEADERSHIP!

Who is this toolkit for?

Climate change is reshaping the world young people have inherited and they will bear the costs in the coming decades. However, young people are often excluded from taking on leadership roles and engaging in decision-making activities related to climate change adaptation. This Toolkit for Youth on Adaptation & Leadership equips young people with the knowledge and skills to engage in climate adaptation policy, advocacy and action. This toolkit uses the terms "youth" and "young people" to refer to people between 15 and 35 years old.

What you will learn

The toolkit covers essential materials and offers practical guidance for how you, as a young person, can take part in adaptation policy processes, lead advocacy campaigns, and approach adaptation with an entrepreneurial mindset. It provides tools for designing and implementing your own climate change adaptation actions so that you can be part of the solution to the climate crisis.

The "Toolkit for Youth on Adaptation & Leadership" is a project under the Global Center on Adaptation Youth Leadership Program, developed by the CARE Climate Justice Center with the financial support of Norad. It came together with input from young people who, like you, are concerned about the impacts of climate change and have faced challenges when advocating and taking adaptation action.

How to use the toolkit

The toolkit includes eight modules:

1 Understanding climate change

2 The basics of vulnerability and climate change adaptation

3 Vulnerable groups and climate adaptation planning

4 Learning from youth-led climate adaptation solutions: African case studies

5 Developing soft skills for youth leadership in adaptation

6 Engaging in climate adaptation policies: local, national, and international

7 Designing and implementing your adaptation advocacy strategy

8 Designing your adaptation action

Each module contains four sections:

Warm Up is the place to start. This provides an overview of the module's key concepts, based on the latest research and best practices. It highlights tools you can use to apply what you have learned, and develop your leadership skills.

Heat Wave will deepen your understanding. Find links to supporting scientific research, important publications, and tools for exploring and applying key concepts.

Bright spark is the place to get inspired. Read case studies, watch videos, and listen to podcasts about young climate leaders to get fired up for your own climate change actions!

Cool Down is your last stop. Here, you have space to test your knowledge (with a short quiz) and consider how you can apply what you have learned to your own climate action.

MODULE 3
VULNERABLE GROUPS AND CLIMATE ADAPTATION PLANNING

This module will help you understand how climate change affects the most vulnerable people. It provides a tool, developed by CARE, for assessing how climate change affects people with different gender identities differently. It addresses the ways inequalities can impact resilience and demonstrates the need for inclusive climate action.

What will I learn?

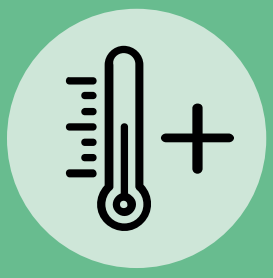
By the end of the module, you will:

- Understand the links between climate change, poverty and gender.
- Understand how climate change impacts people with different gender identities differently.
- Have gained sound basic knowledge about facilitating a climate vulnerability analysis for local climate adaptation planning.

Glossary

Term	Definition	Source
Climate change adaptation	In human systems, climate change adaptation refers to the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities. In natural systems, it refers to the process of adjustment to actual climate and its effects; human intervention may facilitate adjustment to expected climate and its effects. In practical terms, adaptation refers to the changes people and institutions make to adjust to observed or projected changes in climate. It is an ongoing process that aims to reduce vulnerability to climate change. Retrieved from: CARE (2019). Climate Vulnerability and Capacity Analysis Handbook: careclimatechange.org/cvca/	IPCC(2021). Glossary of terms. CARE (2019). Climate Vulnerability and Capacity Analysis Handbook.
Climate information	Climate information refers to the collection and interpretation of observations of the actual weather and climate as well as simulations of climate in both past and future periods. Climate information is the collection and interpretation of weather and climate data that is credible, relevant and usable.	CARE (2022) (based on World Meteorological Organization & IPCC)
Climate vulnerability analysis	Evidence-based analysis conducted to identify 1) the extent to which a human, social and/or ecological system has been or will likely be affected by climate variability and change, and 2) strategies to address these impacts.	USAID (2014). Climate vulnerability assessment.
Gender	Gender refers to socially constructed characteristics of women and men – such as norms, roles and relations of and between groups of women and men	World Health Organization
Gender equality	Gender equality refers to the equal rights, responsibilities and opportunities of women and men and girls and boys. Equality does not mean that women and men will become the same but that women's and men's rights, responsibilities and opportunities will not depend on whether they are born male or female.	UN / UN Women
Gender equity	Gender equity is the process of being fair to women and men. To ensure fairness, strategies and measures must often be available to compensate for women's historical and social disadvantages that prevent women and men from otherwise operating on a level playing field. Equity leads to equality.	UNFPA
Gender inequality	Gender inequality is discrimination on the basis of sex or gender causing one sex or gender to be routinely privileged or prioritized over another.	Save the children
Gender integration	Strategies applied in program planning, assessment, design, implementation and M&E to consider gender norms and to compensate for gender-based inequalities. For example, when a project conducts a gender analysis and incorporates the results into its objectives, work plan and M&E plan, it is undertaking a gender integration process.	CARE (2019). Gender equality and women´s voice.

Term	Definition	Source
Gender transformative adaptation	Adaptation can be incremental (making step-changes in the way people act but maintaining the system) or transformative (serving to fundamentally change system attributes). Gender-transformative approaches create opportunities for individuals to actively challenge existing gender norms, promote positions of social and political influence for women, and address power inequalities between persons of different genders	CARE & FAO (2019). Gender transformative adaptation
Sex	Refers to the different biological and physiological characteristics of females, males and intersex persons, such as chromosomes, hormones and reproductive organs	World Health Organization



Warm Up

Climate change, poverty and gender in Africa

Climate change risks and impacts are highly diverse and context specific. Different groups have different levels of vulnerability and capacity within and across populations and communities. Differences in gender, social status, wealth, ethnicity, natural resource base, and religion, among others, all affect people's ability to adapt and are important aspects to understand and work with.

The extent to which adaptation actions are effective in helping households and communities adapt to climate change depends on the socioeconomic characteristics of the people targeted by the adaptation actions. These characteristics include age, gender, income and where they live. Most adaptation actions try to incorporate these. In this section, we explore gender to understand what it means, how it intersects with poverty, and how it affects adaptation.

Gender is a social construct. It defines what it means to be a man, woman, boy or girl, gender non-conforming, masculine or feminine in a society. Everyone has specific roles, status and expectations within households, communities and cultures that define their gender roles. Gender roles vary within cultures and change over time.

Gender relates to, but is different from **sex**, which refers to the different biological and physiological characteristics of females, males, and intersex persons, such as chromosomes, hormones, and reproductive organs.[1]

Gender inequality is one of the root causes of poverty. Climate change, in turn, is making poverty worse. This means that, for many women and girls living in poverty, the chances of achieving a better life are threatened by a double injustice: climate change and gender inequality.

Box 1: Differences between gender equality, inequality and equity.

- **Gender equality** is the recognition that different genders have different needs and priorities and that all genders should experience equal conditions for realizing their full human rights and be able to contribute to, and benefit from, national, political, economic, social and cultural development.
- **Gender inequality** acknowledges that people of different genders are not equal. Differences arise from psychology, perceptions, attitudes and cultural norms and beliefs.
- **Gender equity** is the process of being fair to different genders. To ensure fairness, strategies and measures must often be employed to compensate for disadvantages that prevent the different genders from operating on a level playing field. Equity leads to equality.

Box 2: Gender and poverty in Africa: women and girls bear the brunt.

- Due to gender inequality, women are more likely to be poor than men. For every 100 men, aged between 25 and 34, living in extreme poverty in sub-Saharan Africa, there are 127 women.[2]
- In sub-Saharan Africa, boys are more likely to complete secondary school than girls. This means that girls are less likely to transition to formal employment.
- In sub-Saharan Africa, where most of the world's poorest live, the number of women and girls living in extremely poor households is expected to increase from 249 million to 283 million between 2021 and 2030. (Central and southern Asia will also see a resurgence of extreme poverty.)[3]
- When disaster strikes, women and children are 14 times more likely than men to die. Of the 230,000 people killed in the 2004 Indian Ocean tsunami, 70% were women.[4] Gender differences are directly linked to women's economic and social rights. In societies where women and men enjoy equal rights, disasters have caused similar death rates in both sexes. These discrepancies are due to gender inequalities. Men and boys receive preferential treatment during rescue efforts and, following disasters, both women and girls suffer more from shortages of food and economic resources.[5]
- Following a disaster, women are more likely than men to be victims of domestic and sexual violence. They even avoid using emergency shelters for fear of being sexually assaulted.[6]
- Fetching water is often the responsibility of women. It has a disproportionate impact on women's mental and physical health, as well as their income, since they have limited time to engage in other productive activities.[7]

Climate change impacts women and men differently

For women and men, vulnerability to climate change can be a result of gender roles. There are gendered differences in responsibilities, household labor, how people use their time, and food security. There are also differences when it comes to access to, and control over, land, secure housing, money, information, credit, education and health - all of which are not readily accessible to women.[8] Women are also more likely to be subjected to violence.

Social norms compound these constraints by restricting women's freedom of movement, choice and voice. Water, energy and food shortages, caused in part by climate change, result in time-consuming labor as well as increased costs for women and girls because they have to travel further and pay more to collect these resources.

Women are often responsible for gathering water, food, and fuel, along with subsistence farming, caregiving, and cleaning. Most of these are made more challenging by climate change.

In rural Mali, for example, water scarcity is a growing challenge for women who often need to walk long distances to collect water. The cost of water during the dry season in these areas is 20–40 times more than in Mali's major cities.

A woman carrying water buckets in Mali. Source: Curt Carnemark/World Bank.

Case studies from Ghana and Uganda show that one of the most significant social impacts of environmental stress in communities that rely on farming is that women's work becomes more intense and poor households become poorer. This means the impacts of climate change will add additional burdens on women's time. Already, women in rural areas are taking on more agricultural work as men migrate to cities in search of work.

While climate change affects women disproportionately, actions that empower women can reverse poverty and unlock effective climate change solutions.[10]

Age also impacts gender inequalities

Besides sex, age also determines how gender inequalities are generated and how they impact different groups. Age and sex interact to create complexities in gender inequalities that need to be recognized and addressed when working on climate change adaptation.

For example, young people are likely to be excluded from adaptation activities, governance and policies due to their age. Some societies assume that they are either too young or lack the knowledge to engage in issues that affect their lives.

In spaces where young people do have some agency, young women are unlikely to be represented. In certain communities, it is assumed that young women do not have the capacity or interest to engage in decision making about things that affect them. Instead, it is common that decision making about issues that affect young people is left to the elders, or young men.

Climate change and gender: a double injustice

When thinking about climate justice, it is important to recognize the intersectionality of justice issues.

Intersectionality refers to how different social categorizations, such as age, gender and race, apply to groups and create systems that determine discrimination, inequalities and therefore vulnerability to climate change. Simply put, the way these social categorizations interact determines how society treats people that belong to them. This affects how different people experience the impacts of climate change.

For example, in certain communities, younger women or girls are more likely than older women in the same community to be assigned labor-intensive tasks. They may spend their time collecting water and firewood instead of going to school or doing jobs that generate income. This keeps them in a vulnerable position.

Globally, gender inequality is a root cause of poverty. Climate change, in turn, is making poverty worse and exacerbating unequal relations between women and men that have

existed for generations. This means that, for many women and girls living in poverty, the chances of achieving a better life are threatened by a double injustice: climate change and gender inequality.

Women and girls must play a central role in responding to the climate crisis

While women and girls in many regions are hardest hit by the climate crisis, they also play a central role in developing creative and effective climate change solutions. Women and girls cannot be left on the sidelines. They must be supported to play an active role in climate change adaptation in their communities.

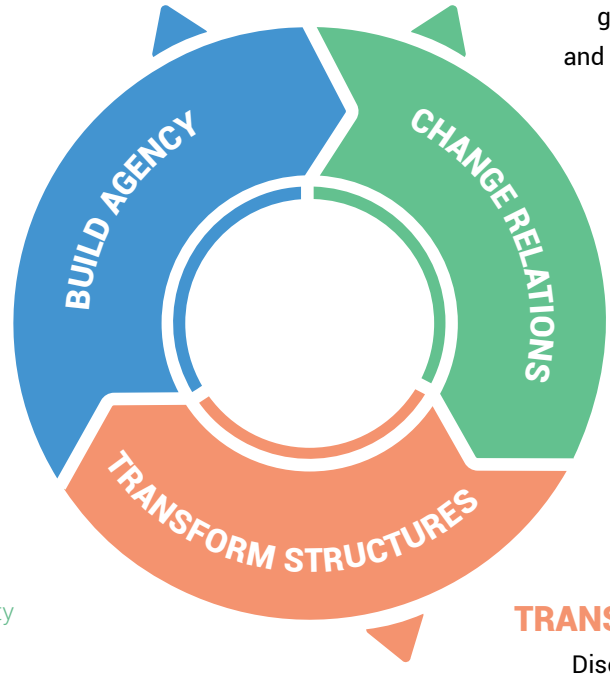
At the same time, women's meaningful participation in climate decision-making and negotiations needs to increase nationally and globally. Governments need to aim for gender parity, ensure that more women take leadership roles in government, and engage with women's rights organizations on the frontlines of the climate crisis.[11]

BUILD AGENCY

Building conciousness, confidence, self-esteem and aspirations (non-formal sphere) and knowlegde, skills and capabalities (formal sphere)

CHANGE RELATIONS

The power relations through which people live their lives through intimate relations and social networks (non-formal sphere) and group membership and activism, and citizen and market negotiations (formal sphere)



TRANSFORM STRUCTURES

Discriminatory social norms, customs, values and exlusionary practices (non-formal sphere) and laws, policies, procedures and services (formal sphere)

Figure 1: CARE's Gender Equality Framework, which focuses on building the agency of groups that are disadvantaged, changing relations, and transforming structures that contribute to gender inequality. Source: CARE, 2018.[13]

CVCA in Phongsaly, Lao. Source: Benjamin Pomerleau/CARE.

CARE's Gender Equality Framework

Advancing gender equality to support climate change adaptation requires approaches that increase the capacity of women, girls and other vulnerable groups. These approaches need to build agency, change power relations, and transform the social structures that lead to gender-based discrimination and vulnerability.

Men and boys need to be included in processes that challenge the norms that inform gender inequalities. To inform this approach, CARE uses a Gender Equality Framework (Figure 1). This framework acknowledges that approaches to empower women and girls must include engagement with men, boys and people of all/diverse genders.[12]

A useful tool for understanding gendered vulnerability to inform local adaptation planning

To plan effective adaptation actions, it is important to use scientific climate information. However, the people living in affected areas hold valuable knowledge, about the climate and how it affects different people. They need to be consulted to inform and influence local policy.

CARE's Climate Vulnerability and Capacity Analysis (CVCA) is a tool for understanding different vulnerabilities to climate change.

The CVCA helps those developing adaptation actions to gather community-level information and broader-level information (territorial, regional, national) to gain a locally specific understanding of vulnerability to climate change and what capacity already exists to cope with it.

The tool pays close attention to gender, ecosystem and governance issues. By exploring gender inequalities in the local context, the CVCA facilitates analysis of the gender-specific barriers, opportunities and options for increasing resilience through gender-responsive approaches to adaptation planning and implementation.

How to use the CVCA

The CVCA Handbook guides you through the process of doing a CVCA. By following the handbook, you can identify adaptation actions tailored for different groups of people, at the community level or more broadly, to support communities in increasing their resilience to climate change. The Handbook can be used for community-level planning and action, awareness and advocacy campaigning and for project and program design (Figure 2).

COMMUNITY-LEVEL PLANNING AND ACTION

The CVCA is one step in developing a community adaptation plan. It also facilitates the inclusion of such community plans in local development plans. If this is how you plan to use the CVCA, stake- holders' involvement is crucial, and additional tools (e.g., visioning) for developing adaptation plans should be used.

AWARENESS AND ADVOCACY CAMPAIGN

CVCA findings can be used as a basis for developing campaigns for systemic change and influence national and subnational adap- tation planning processes. If this is your main objective, you might consider including additional stakeholder mapping exercises.

PROJECTS AND PROGRAMS DESIGN

The CVCA can also be used for integrating climate change risks into project and program design. In that case, it can be used in a slightly lighter way and eventually on a larger scale.

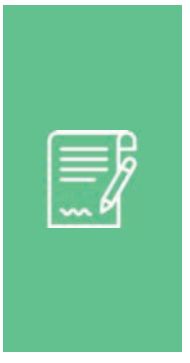


Figure 2: The different uses of a CVCA. Source: CARE, 2019.

The steps do not have to be performed one after the other. In practice, some steps may take place concurrently. You may need to return to earlier steps to refine things as you get further along in the process. Note that these steps should be adapted based on when, how, and why you are using the CVCA.

Figure 3: The CVCA process. Source: CARE, 2019.[14]

Participatory tools used in the CVCA

As you will see, Step 4 of the CVCA process involves participatory research. This is where facilitators can engage community members in dialogue to learn about their experiences and gain their perspectives on climate change and its impacts on their community.

The CVCA Handbook includes details on various participatory tools, shown in Table 1. (For detailed guidelines, consult CARE's Climate Change CVCA[15]).

Table 1: Participatory tools to use during the CVCA process.

FIELD GUIDE #	NAME OF THE TOOL	PURPOSE OF THE TOOL
1	Hazard Map	The Hazard Map provides an introduction to the community, its surroundings and the hazards that affect it. It identifies key livelihood strategies, the resources they require and where they are practiced.
2	Historical Timeline	The Historical Timeline provides an overview of important events in the community. It enables analysis of hazard trends and changes based on community perceptions.
3	Seasonal Calendar	The Seasonal Calendar identifies important livelihood activities throughout the year and provides a basis for discussing seasonal changes observed by communities.
4	Daily Clock	The Daily Clock explores gender differences in daily tasks, providing insights into gender-specific roles and responsibilities.
5	Pile Sorting	The Pile Sorting exercise explores gender differences in decision-making power in the household. It promotes discussion on the value of joint decision making.
6	Impact Chains	Impact Chains facilitate assessments of direct and indirect impacts of hazards on livelihoods, providing a basis for discussing how people are currently responding to the impacts.
7	Vulnerability Matrix	The Vulnerability Matrix identifies priority livelihood assets and hazards, both climate-related and other. It also assesses the degree of impact that the hazards have on the livelihood assets.
8	Venn Diagram	The Venn Diagram identifies the institutions that interact with the community members and the services that they provide.
9	Adaptation Pathways	Adaptation Pathways identify options for adaptation and resilience building and assess the opportunities and barriers to putting them in place.

In Module 8 of this toolkit, you will learn about the process of developing a community adaptation action plan. Remember to come back to Module 3 and refresh yourself on the importance of including gender dimensions, engaging people of all gender identities, and using participatory tools. This will ensure that your adaptation actions support gender equality and promote the role of women, girls, and other vulnerable groups as key agents in the development of climate change solutions.

Heat Wave

Understanding gender and vulnerability to climate change

READ UNDP's article on why responses to climate change are gender blind. It highlights how responses to climate change fail to recognize its differential impacts on different genders and the effects on those who are overlooked.

READ CARE's introduction to gender basics to learn about the basic terms that are used in discussions on gender and climate change (e.g., the difference between gender and sex and the meaning of gender inequalities).

READ IUCN's Disaster and gender statistics to learn about what research has found to reflect the gender inequalities between different genders during disasters.

READ an article from One Earth to learn Why women are key to solving the climate crisis.

READ CARE's courses on climate and gender justice to learn about how climate justice and gender justice are linked and what is needed to implement gender-transformative and gender-responsive interventions.

READ about how gender impacts adaptation in this brief, Gender-Transformative Adaptation: From Good Practice to Better Policy, by CARE.

WATCH the video Genderbread Cookie (7:14) to learn more about gender and how it differs from sex.

READ UNDP's guide about the importance of youth participation in climate action and how to enable it.

Tools for gender and vulnerability assessments

READ the CARE CVCA Handbook to learn how to conduct a Climate Vulnerability and Capacity Analysis (CVCA). It will give you a more detailed breakdown of the steps for doing a CVCA and how the findings can be used to inform policy and practice on climate change.

READ CARE's introduction to CVCA, which is a course you can take to learn more about the CVCA and its applicability to understanding the differential impacts of climate change on people with different gender identities.

READ A step-by-step description of the CVCA from start to finish.

READ the training guide on gender and climate change research in agriculture and food security for rural development. It will give you pointers on how to conduct research on gender and climate change in the agricultural sector. The toolkit can also help you do research in any other sector that demonstrates high gender inequalities, such as fisheries, trade and others.

WATCH the video The CARE CVCA Tool in 2 min (2:40) to learn more about the CVCA.

WATCH the video The double injustice of climate change and gender inequality (12:42). The video will introduce you to how social norms generate gender inequalities. You will also learn about the difference between gender and sex, and how gender inequalities spread across age and sex.

Bright Spark

Case studies

Communities Care in Somalia and Sudan
The Communities Care project by UNICEF in Somalia and Sudan challenged the gender norms around gender-based violence through peer-facilitated dialogue. In this project, communities came together to discuss and understand the drivers of gender inequalities that caused gender-based violence against women. These dialogues helped the communities towards an increased awareness about gender-based violence and enabled them to have an intergenerational conversation about the harmful impacts of this type of violence. Young people and adults had conversations about norms and behaviors that exacerbated such violence and identified ways of eliminating these norms and behaviors.

Blue Ventures supporting fishing women in Comoros
Blue Ventures is working with fisherwomen in Comoros to help them progress and make more value from their fisheries. The women work through a local association made up of women from three villages who fish for octopus, shells and fish on reef flats while also working to preserve and manage the marine resources that provide them with this fishing livelihood. The women have since learned about fish and octopus preservation techniques such as salting, drying and smoking.

Gender in climate-smart agriculture in Mali
In 2017, a UN Women-led program called Agriculture Femmes et Dévelopement Durable (AgriFed) partnered with Groupe d'Animation Action au Sahel, a local non-governmental organization in Mali, on a project to help women improve their crop yield, income and wellbeing. The project worked with women farmers to modernize their farming techniques, which strengthened livelihoods and increased income. Read about the case study (p.44).

Videos

WATCH The Challenges and Opportunities of Addressing Gender-Based Violence in Africa (51:27). It is a recording of a webinar where Naana Otoo-Oyortey, a young person and activist, shares the importance of young feminist leadership and strengthening African women's voices in the movement to eliminate gender-based violence.

WATCH this video recording of young people from Africa talking about The Role of African Youth in Gender-Based Violence Movements (1:05:25). They discuss the power of activism and advocacy, but also the importance of solidarity by helping survivors of gender-based violence.

WATCH the video Young African Leaders Initiative Town Hall (1:12:02), which features a speech by former US President Barrack Obama to African young people. Obama challenges young people to rise up and address the challenges of today through empowerment and leadership.

WATCH the video of Manon Giovinazzo (2:12), a Girls Education Specialist in UNICEF Djibouti. Manon Giovinazzo is 26 years old and arrived in Djibouti to join UNICEF as a Girls Education Specialist. She notes how her work has helped her change and deepen how she understands the educational gap between boys and girls.

WATCH this video of Mariam Mmbaga (1:40), an African Union Youth Volunteer at UNICEF Nairobi. Mariam says that ensuring equal access to opportunities for boys and girls requires the involvement of boys and men.

Cool Down

Test your understanding *answers on page 24*

1 True or false? Due to gender inequalities, women are more likely to be poor than men.

(a) Exposure
(b) Sensitivity
(c) Risk
(d) Adaptive capacity

2 For women and girls living in poverty, the "double injustice" threatening their chances of achieving a better life refers to the combination of which two elements:

(a) climate change
(b) lack of education
(c) food insecurity
(d) gender inequality

3 What is gender equality? Select the correct answer from the options below.

(a) Equal rights, responsibilities and opportunities for women and men (and all genders).
(b) Fair treatment of women and men, according to their respective needs.
(c) Roles, behaviors, attributes considered appropriate for women or men.

4 Fill in the gap. According to CARE's Gender Equality Framework, to be gender transformative, Community-Based Adaptation should focus on building agency, transforming structures and …...

(a) building women's skills
(b) changing social norms
(c) changing relations
(d) changing laws

5 **CARE's CVCA Handbook can be used for three main activities. Select the correct three from the options below:**

(a) community-level planning and action
(b) awareness and advocacy campaigning
(c) climate change modeling
(d) project and program design

BONUS QUIZ: To further test your knowledge of climate change, do this online quiz developed by UNDP. It covers three topics:

- The problem of climate change
- The impacts of climate change
- Mitigating the impacts of climate change

Reflect and prepare for your climate adaptation action

Consider the following questions about gender and climate change.

- What are some of the norms and beliefs that have contributed towards causing gender inequalities in your community or country? Which groups have been impacted by these inequalities? How have they been impacted?
- What do the gender inequalities mean for how people with different gender identities can engage in climate adaptation action?
- How can you, as a young person, contribute to ensure that people of any gender can equally engage in climate adaptation action?

Answers

1. Correct answer: True.
EXPLANATION: Gender inequality is one of the main causes of poverty. Women are more likely to be poor than men. For every 100 men, aged between 25 and 34, living in extreme poverty in sub-Saharan Africa, there are 127 women.

2. Correct answer: (a) and (d).
EXPLANATION: Gender inequality is one of the root causes of poverty. Climate change, in turn, is making poverty worse. This means that, for many women and girls living in poverty, the chances of achieving a better life are threatened by a double injustice: climate change and gender inequality.

3. Correct answer: Correct answer: (a) Equal rights, responsibilities and opportunities for women and men (and all genders).
EXPLANATION: Gender equality is the recognition that different genders have different needs and priorities and that all genders should experience equal conditions for realizing their full human rights and can contribute to and benefit from national, political, economic, social and cultural development.

4. Correct answer: (c) changing relations.
EXPLANATION: Changing relations enables people to relate differently, which is important for how society defines gender norms and addresses gender inequalities. For example, this could include training women and girls in leadership and gender equality while at the same time creating structured spaces where men and boys can be engaged to reflect on masculinities, gender, power, and privilege in their lives and the role of women as actors and decision-makers within communities.

5. Correct answer: (a), (b) and (d).
EXPLANATION: The CVCA Handbook guides you through the process of doing a CVCA. By following the handbook, you can identify adaptation actions tailored for different groups of people, at the community level or more broadly, to support communities in increasing their resilience to climate change. The Handbook can be used for community-level planning and action, awareness, and advocacy campaigning and for project and program design.

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Toolkit for Youth on Adaptation & Leadership

MODULE 4

LEARNING FROM YOUTH-LED CLIMATE ADAPTATION SOLUTIONS: AFRICAN CASE STUDIES

GLOBAL CENTER ON ADAPTATION

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Acronyms

ASAP	The Adaptation for Smallholder Agriculture Programme
CBA	Community based adaptation
CCA	Climate change adaptation
CIS	Climate Information Services
COP	Conference of the Parties
COY	Conference of Youth
CRA	Community Risk Assessment
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EAC	East Africa community
ECOWAS	Economic Community of West African States
GCF	Green Climate Fund
GHGs	Greenhouse gases
IPCC	Intergovernmental Panel on Climate Change
JPA	Joint Principles for Adaptation
LAP	Local Adaptation Plans
LDCF	Least Developed Countries Fund
LLA	Locally Led Adaptation
MDGs	Millennium Development Goals
NAP	National Adaptation Plan
NAPA	National Adaptation Programs of Action
NDC	Nationally determined contribution
NGOs	Non-Governmental Organizations
PPCR	Pilot Program for Climate Resilience
PSP	Participatory Scenario Planning
SCCF	The Special Climate Change Fund
SDG	Sustainable Development Goal
SIDS	Small Islands Developing States
SMART	Specific, Measurable, Achievable, Relevant and Time-bound
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change

WELCOME TO THE TOOLKIT FOR YOUTH ON ADAPTATION & LEADERSHIP!

Who is this toolkit for?

Climate change is reshaping the world young people have inherited and they will bear the costs in the coming decades. However, young people are often excluded from taking on leadership roles and engaging in decision-making activities related to climate change adaptation. This Toolkit for Youth on Adaptation & Leadership equips young people with the knowledge and skills to engage in climate adaptation policy, advocacy and action. This toolkit uses the terms "youth" and "young people" to refer to people between 15 and 35 years old.

What you will learn

The toolkit covers essential materials and offers practical guidance for how you, as a young person, can take part in adaptation policy processes, lead advocacy campaigns, and approach adaptation with an entrepreneurial mindset. It provides tools for designing and implementing your own climate change adaptation actions so that you can be part of the solution to the climate crisis.

GLOBAL CENTER ON ADAPTATION

The "Toolkit for Youth on Adaptation & Leadership" is a project under the Global Center on Adaptation Youth Leadership Program, developed by the CARE Climate Justice Center with the financial support of Norad. It came together with input from young people who, like you, are concerned about the impacts of climate change and have faced challenges when advocating and taking adaptation action.

How to use the toolkit

The toolkit includes eight modules:

1 Understanding climate change

2 The basics of vulnerability and climate change adaptation

3 Vulnerable groups and climate adaptation planning

4 Learning from youth-led climate adaptation solutions: African case studies

5 Developing soft skills for youth leadership in adaptation

6 Engaging in climate adaptation policies: local, national, and international

7 Designing and implementing your adaptation advocacy strategy

8 Designing your adaptation action

Each module contains four sections:

Warm Up is the place to start. This provides an overview of the module's key concepts, based on the latest research and best practices. It highlights tools you can use to apply what you have learned, and develop your leadership skills.

Heat Wave will deepen your understanding. Find links to supporting scientific research, important publications, and tools for exploring and applying key concepts.

Bright spark is the place to get inspired. Read case studies, watch videos, and listen to podcasts about young climate leaders to get fired up for your own climate change actions!

Cool Down is your last stop. Here, you have space to test your knowledge (with a short quiz) and consider how you can apply what you have learned to your own climate action.

MODULE 4

LEARNING FROM YOUTH-LED CLIMATE ADAPTATION SOLUTIONS: AFRICAN CASE STUDIES

In this module, you will learn about examples of inspirational youth-led climate adaptation solutions in Africa. The module also explores what makes a climate adaptation solution a success and showcases what can be learned from existing initiatives.

What will I learn?

By the end of the module, you will:

- Be knowledgeable about some innovative youth-led climate adaptation solutions across Africa.
- Understand how to apply lessons learned from existing youth-led adaptation initiatives to your own climate adaptation actions.
- Be able to identify potential challenges to overcome when designing and implementing youth-led climate adaptation solutions.
- Know more about some of the opportunities for innovating with Climate-Smart Agriculture.

Glossary

Term	Definition	Source
Climate-Smart Agriculture (CSA)	Climate-Smart agriculture (CSA) is an integrated approach to managing landscapes—cropland, livestock, forests and fisheries — that address the interlinked challenges of food security and climate change.	The World Bank (2021)
Hydroponics	Hydroponics is a method of growing plants using mineral nutrient solutions in water without soil.	University of Illinois Extension (nd)

Young entrepreneurs of Kimplanter Seedlings and Nurseries training Maasai women to establish climate-smart vertical kitchen gardens where nutritious vegetables can grow with minimal water. Credit: Global Center on Adaptation.

Warm Up

What it takes it be a leader: insights from six African adaptation innovators

In these interviews, six young leaders share valuable advice on what it takes to make it is as an entrepreneur with bright ideas for adaptation solutions. The featured trailblazers are some of the winners of the 2021 and 2022 African Youth Adaptation Solutions Challenge (also known as the YouthADAPT Challenge), an annual competition for youth-led enterprises (50% women-led). It is jointly organized by the Global Center on Adaptation, the African Development Bank and Climate Investment Funds.

Learn from their experiences and get inspired for your own adaptation actions!

NOTE: In this document, we share shortened versions of the original interviews. To read the interviews in full, please visit the Toolkit website.

Juveline Ngum, Founder and CEO of BleaGlee (Cameroon)

Tell us more about the project

BleagLee is a waste management and recycling company providing software for drones to quickly detect poor waste disposal in drainage channels, fields and other physical sites. We work with indigenous waste collectors and youth environmental groups (eco-groups) to collect the waste, [adhering to] hygienic standards, and then properly dispose of it, or sell it to recycling companies.

BleagLee uses drones to find waste in drainage channels, which is then collected and recycled. Credit: Supplied by BleaGlee.

What inspired you to start the project?

As a teenager, I experienced firsthand the effects of poor waste disposal, causing floods in my community and respiratory issues when burned. Overwhelmed by extreme poverty in Western Cameroon and the audacious levels of waste pollution, I began the journey of [finding] an "eco-solution" to reduce waste pollution and poverty. My co-founder and I then designed the waste management tech solution after independent research and studying a publication by the World Health Organization which showed that improper waste disposal is a major cause of multi-hazard scenarios.

What were some of the main challenges you faced (in the initial phase and/or throughout)?

Some of Cameroon's most marginalized people pick untreated waste to try and make a living. These waste pickers, many of them women, often live below the poverty line, work in appalling conditions, and are shunned by society. We are overcoming these challenges by onboarding these marginalized people in a more "formal" way to work with us.
We provide training on how to collect waste with hygienic standards, provide them with personal protective equipment, and then empower them to work part time or full time to collect waste with us. This creates new job opportunities for low-income people and provides dignified livelihoods for them.

What were some of the lessons learned?

Before, many people thought that waste was worthless. But now, they see that waste can be turned into wealth. Trash is treasure, garbage is gold. If properly segregated and managed, so much good can be derived from waste: livelihood, cleanliness, no floods, no water

contamination, protected environment, more productive lands for people rather than for landfills and dumpsites, and more savings from reduced use of gas-driven garbage trucks, all contributing to climate resilience.

What recommendations do you have for your peers who would also like to start an initiative?

First, be passionate about what you want to do. Starting an initiative is not easy and you're going to be in it for the long run, so make sure you're highly committed through the ups and downs. Let your passion shine through. Your clients, partners and co-workers will see it in your eyes and feel it in your actions.

Second, have a plan and frame your passion in a structured and effective way. You need to take time to think and reflect on where you plan to take your initiative in the months to come. Make sure that you have a plan clearly laid out on paper. You should also be able to explain your plan in a clear and concise way.

Finally, be open to advice. You may already demonstrate leadership or management skills, but that doesn't mean you know it all. People will respect your willingness to heed advice and learn, and your curiosity and openness.

Chris Ayale Wakomya, CEO of KivuGreen (DRC)

Tell us more about the project

KivuGreen is a web-mobile and SMS-USSD platform that connects small-scale farmers to markets and agricultural information such as agricultural weather, market prices and advice on responsible, profitable

Chris Ayale Wakomya, CEO of Kivugreen.
Credit: Supplied by KivuGreen.

and sustainable agriculture in the face of climate change. This innovation works with or without an internet connection and with or without a smartphone.

What inspired you to start the project?

The suffering of the farmers. I, as an elder son of a small farmer, noticed that after each harvest season my father always had trouble selling his produce. In the value chain, he had several intermediaries who set the prices. He had difficulty knowing when he would or would not get rain and this caused a huge loss in agricultural inputs. And he didn't know when, how and where to plant a crop or how to select a good seed for a given location.

KivuGreen is a web-mobile and SMS-USSD platform that connects small-scale farmers to markets and agricultural information. Credit: Supplied by KivuGreen.

What were some of the main challenges you faced (in the initial phase and/or throughout)?

- Lack of funding for the implementation.
- Having a competent workforce.
- How to find a business model.
- User experience of small farmers too low.
- Literacy of smallholder farmers.
- Lack of information about the negative effect of climate change by farmers in their sectors.

What were some of the lessons learned?

The agricultural sector is seriously threatened by this great challenge of climate change. It is important that agriculture is adapted to the unpredictability of the current climate by providing more technological solutions for increasing agricultural productivity, yield and profitability to improve food security and boost the rural economy. Digital platforms and the use of a mobile phone remain an easy way to deliver innovations to beneficiaries.

What recommendations do you have for your peers who would also like to start an initiative?

Before bringing a solution into the climate change framework, it is prudent to make a good analysis of the problem by organizing field visits in the areas of your beneficiaries. This will help you develop a solution that adapts to the local context and to find a solid economic model.

Carolyne Mwangi, founder and CEO of Kimplanter Seedlings and Nurseries (Kenya)

Tell us more about the project

Kimplanter Seedlings and Nurseries Ltd is based in Kenya and operates from Ruiru Sub-County, Kiambu County. The company buys certified seeds from reputable seed companies, sows them in propagation trays, takes care of them for the nursery stage and, when they are ready, sells them to farmers ready to transplant seedling/ young crops. Kimplanter Seedlings provides drought-resistant seedlings that can grow in harsh climatic conditions.

What inspired you to start the project?

I started farming at a young age as a hobby. As I advanced in the industry, I grew concerned with the many challenges affecting smallholder farmers. I identified a gap in access to good quality seeds, farm inputs and lack of knowledge on crop management practices. These challenges and other underlying factors, such as drought, heat spells and floods, leave farmers very vulnerable to low yields, losses and extreme poverty. Having interacted with the farmers about these problems, I picked a niche in seedlings propagation to solve the problem by offering farmers a healthy start in their farming project.

Carolyne Mwangi, founder and CEO of Kimplanter Seedlings and Nurseries, a seedlings propagation company specializing in horticultural crops, fruit and tree seedlings. Credit: Supplied by Kimplanter/HefPix.

What were some of the main challenges you faced (in the initial phase and/or throughout)?

Limited capital investment for infrastructure and working capital, incapacities in research development, and lack of other resources, such as land and reliable sources of water. We have overcome these challenges through priority placement measures, such as plowing earnings into the business, leasing instead of buying land, and adopting renewable energy for our water irrigation needs. Our big break, however, was winning the YouthAdapt competition.

What were some of the lessons learned?

- Always conduct needs assessments for all the innovations and new products.
- Understand your market segment and market niche.
- Be dynamic and receptive to new trends.
- Be investor-ready and fundraise to grow the business.

What recommendations do you have for your peers who would also like to start an initiative?

Climate change is a big menace. Let's curb its effects through adaptation and mitigation measures that are creative, innovative and unique to our generation. We are the future. There are many problems facing our continent. Analyze, pick one, and specialize in it to offer a solution.

Carolyne Mwangi, founder and CEO of Kimplanter. Credit: Supplied by Kimplanter.

Global Farms and Trading aims to enhance adaptation and resilience strategies among these farmers. Credit: Supplied by Global Farms and Trading.

Suleman Saamani Elisha Mahama, CEO of Global Farms & Trading (Ghana)

Introduction to the project

Our project is focused on building the capacity of smallholder farmers to strategically enhance climate actions and food security in Ghana and Africa as a whole. The project's main goal is to impart knowledge to smallholder farmers on climate change, its impact on the environment and the adoption of best mitigation strategies, so they can improve farming activities in rural settings. We aim to enhance adaptation and resilience strategies among these farmers.

What were some of the main challenges you faced (in the initial phase and/or throughout)?

Access to information was one of the challenges. Some of the participants either did not want to give out information or gave inaccurate or wrong responses. Punctuality and meeting deadlines for activities in the project plan is a major challenge if strict supervision is not enforced.

What recommendations do you have for your peers who would also like to start an initiative?

Putting farmers in small farmer groups or cooperative unions is recommended when engaging smallholder farmers in such initiatives, as it gives more reach in terms of farmer numbers or population.

Tahiru Jamila is the Co-Founder of Global Farms and Trading. Credit: Supplied by Global Farms & Trading.

Global Farms and Trading was inspired by the urgent need to educate smallholder farmers on climate change while adopting strategies to mitigate the impact of climate change on the farmers' livelihoods, especially women, who are the most affected. Credit: Supplied by Global Farms & Trading.

What qualities make an effective youth leader?

An effective youth leader is one who is goal driven, confident in making decisions – especially tough ones – but also a team player with the mindset of looking out for others and lifting them up. Discipline, patience with him- or herself and other people, and a positive attitude to always deliver no matter the difficulties facing them make for an effective youth leader.

Some final tips and words of encouragement?

Every failed experiment is one step closer to success!

Tahiru Jamila is the Co-Founder of Global Farms and Trading. Credit: Supplied by Global Farms & Trading.

Oluwadamilola Olowoseunre, founder and CEO, Pazelgreen (Nigeria)

Tell us more about the project

Our project is a cold storage system designed to be climate smart by making use of innovative technology and renewable energy, but at a lower cost than solar-powered options.

The waste from horticultural crops generates methane, a greenhouse gas known to be over 80 times more potent than carbon dioxide over a 20-year period. Methane emission sets the pace for warming in the near term and is responsible for about 25% of global warming. If we keep producing more methane without the proper cold chain infrastructures in place, we are not only aiding global warming, but we are spiraling deeper into other major challenges like hunger, malnutrition, nutrition deficiency and loss of income.

How long did it take you to develop this project? What were the different steps that you had to take?

It's been a year and some months now and work is still in progress. Besides the normal procedures we are all aware of, like problem, market, and customer research, I had to prepare myself mentally and emotionally to deal with the tough terrain associated with the Nigerian business ecosystem.

I researched and consulted with experts in different fields that cut across the development of the product and the business as a whole. I sought key advisors. I make sure networking is always one of my top priorities. Everything is not all about having money. Strategic networks are needed to access the right resources needed to start, grow and scale.

After creating the vision, mission and core values, I formed a team that is also passionate about making the project a reality...I have also taken steps with regards to getting the best from various entrepreneurship programs that offer diverse values and support for success while putting the right structures in place.

What qualities make an effective youth leader?

- Your journey as a leader begins as a faithful follower. Integrity is key!
- Be a leader that shows the way, leads the way, and walks the way.
- Be respectful but assertive when making your thoughts known.
- The ability to do "extra" in getting the job done.
- Be empathetic and have self-control.
- Know and understand your limitations and get help when necessary. This prevents unnecessary frustration which can seep into your leadership.
- Be openminded with an active listening ear.
- Understanding that leadership is a privilege not an entitlement.

Some final tips for your peers?

It is a different level of satisfaction to be a part of something bigger than you. Give your very best always, contributing your quota to building solutions that will help to mitigate and adapt to climate change. We should see our solutions as not just products but a movement towards a better world.

Interview: Eric Onchonga, CEO of Irri-Hub IRRI-Hub (Kenya)

Introduction to the project

We provide climate-smart irrigation solutions for smallholder farmers in Kenya. We combine rainwater harvesting technology with solar-powered drip irrigation to help farmers increase their productivity and build resilience against climate change.

What inspired you to start this project?

I grew up in a farm set-up and farmers around me planted sugarcane as their main cash crop. The sugarcane farmers had only one harvesting season and depended heavily on rain to get better yields. They had the potential for investing in short-term, high-value crops but they were limited by irrigation technology. That's how the idea of rainwater harvesting came about with the use of drip irrigation which is solar enabled.

Irri-Hub provides climate-smart irrigation solutions for smallholder farmers in Kenya. Credit: Supplied by Irr-Hub Ke.

How long did it take you to develop this project? What were the different steps that you had to take?

It took me two years to develop the whole project. The steps we took were:

- Identify a technical team to help in developing the product.
- Develop a prototype.
- Identify farmers to use as a case study with our prototypes.
- Monitoring and evaluation of the system.
- Develop a marketing strategy and deployment strategy.
- Come up with a pricing model for the innovation.
- Release the product to the market and get customers to embrace it.

What are some of the lessons learned?

We learned that we needed to come up with innovative financing models that would be used by farmers to afford the system. We also learned that farmers take time to make decisions before purchasing. Getting the right team that is aligned with your mission and vision is also very important for the success of a project. We also learned that farmers are keen on solutions that increase their productivity and income.

What qualities make an effective youth leader?

You must be an inspiration to team members, provide a listening ear to every view given by team members, and have patience. Every activity has issues and every individual has flaws. As a team leader, you should learn how to accommodate the pressure as you focus on the main goal, and how to foster partnerships. Always be willing to listen and embrace different opinions and consider partnerships that help you leverage the other team members' strengths to achieve a common goal.

Further inspiration from youth-led climate adaptation initiatives

Take a look at these short case studies to learn more about adaptation innovation.

Youthinkgreen: empowering youth to tackle sustainability challenges in Egypt

Youthinkgreen focuses on fostering sustainability and entrepreneurship among young people via educational programs and events, pushing hundreds of entrepreneurs on the innovation road to create clean solutions to challenges in renewable energy, energy management, the energy-food-water nexus, water sustainability and waste management.

Rais'Eau: saving water in Morocco

Rais'eau is a start-up that fights water wastage through production, sale and installation of technologies for recycling wastewater in households and public spaces. It introduces students and graduates to environmental and social problems. For example, Sara Ladouy, an entrepreneur from Orange Corners Morocco, has found an innovative way to increase the production of solar distillation systems. Sara's project has reduced water consumption in households and supported nine graduate students who have launched six prototypes to reduce water consumption.

Salubata Technological Solutions: turning plastic waste into shoes in Nigeria

Salubata uses recycled plastic, taken out of waterways and the sea, as a raw material to make some seriously stylish shoes. Converting plastic to footwear reduces carbon emissions and reduces risk of flooding from blocked drainage systems. Salubata has processed 1 million tonnes of plastic waste and commits 5% of its profits to empowering women in local communities. Salubata was one of the winners of the 2021 YouthADAPT challenge.

Maima General Dealers Limited: making organic fertilizer from chicken waste in Zambia

Maima General Dealers Limited farms poultry. They convert the manure from their chickens into organic fertilizer, which is sold to local subsistence farmers who cannot afford conventional organic fertilizer. They also collect and pay for waste from a network of other poultry farmers. The enterprise works with 1250 farmers who are clustered into cooperative societies consisting of 50 farmers each.

Testing soil health in Western Kenya. Credit: CIAT/Georgina Smith.

Opportunities to innovate with digital solutions for Climate-Smart Agriculture

As digital technology continues to evolve at a rapid pace, there are many opportunities for using tech to solve agricultural challenges. Technologies for collecting, storing, analyzing, and sharing information digitally, including via mobile phones and the internet, can help improve the food system in the face of climate change. Such tools can be used to support Climate-Smart Agriculture (CSA).

For example:

- Climate-smart tools can be linked through the "Internet of Things" to manage crop irrigation. For example, sensors collect data about soil conditions for a particular crop and transmit this information to farm irrigation systems. When there is not enough water in the soil, the water sprinkler turns on.
- Farmers can receive daily and seasonal real time alerts via SMS on impending weather events that could have negative impacts on their crops. This information empowers farmers with the knowledge to prepare and enables them to minimise their losses.
- Videos with agricultural advice can be shared with smallholder farmers, in facilitated settings, or via apps like WhatsApp.

Digital solutions can be a game-changer in sustainably boosting agricultural productivity and resilience in Africa. The technologies enable actors within the food system to make informed decisions, improve productivity and incomes, and achieve better nutrition, health and resilience outcomes. They can also be applied to food e-commerce, thereby helping to match buyers with sellers, shortening agricultural value chains, providing access to new markets, reducing transaction costs, and creating new business opportunities within the food system.

To encourage the uptake of digital tools in agriculture, the technologies should be user-friendly and require low-level skills and literacy for use.

Heat Wave

Young people at the forefront of climate action

LEARN more about the African Youth Adaptation Solutions Challenge. The annual competition invites young entrepreneurs and micro, small, and medium-sized enterprises in Africa to submit innovative solutions and business ideas that can drive climate change adaptation and resilience.

READ about the Global Center on Adaptation's Youth Advisory Panel. This is a gender and geographically-balanced team of young people built on the principles of openness, inclusion and transparency. The Panel provides strategic advice to the GCA on youth engagement to drive the adaptation agenda.

READ about the United Nations Secretary General's Youth Advisory Group on Climate Change. This is a group of young people who are taking on the international climate change policy space and advising the Secretary General on how the United Nations can contribute to addressing young people's issues, needs and concerns.

READ an article from The Conversation on how the terror of climate change is transforming young people's identity. The article talks about how young people across the world have mobilized to challenge the culture that has caused the climate crisis.

READ an article from UNDP about how different programs are tapping into the power of young people for climate action. The article talks about how young people have been instrumental in international platforms on climate change, such as COP26.

WATCH a video by Aljazeera that asks "Can young climate activists save Africa?" (25:40). The video notes that young activists from countries including Uganda, Nigeria, South Africa and Kenya are demanding that domestic, regional and global decision makers take climate change more seriously, not least because younger generations will inherit a world profoundly altered by global warming.

Bright Spark

Below you can find an overview of podcasts, videos, online interviews and articles on climate change challenges faced by young people in different parts across Africa and the actions they are taking to implement solutions. We hope you feel inspired!

Podcasts

LISTEN to WWF South Africa's Youth Climate Champions (YCC) Podcast, which aims to support youth by being both a repository of resources, as well as a platform for various stakeholders to facilitate engagement on climate policy and activism issues. Available on Spotify and Anchor.

LISTEN to episode four of The Anthill podcast, Where does the youth climate movement go next? Locked out of conferences and company boardrooms, young people have tried to influence the international response to the climate crisis with strikes and protests. What effect does this youth activism have? And where will the movement go next? Available on Youtube, Spotify and other platforms.

Videos

WATCH this video about Carolyne Mwangi (2:18), CEO of Kimplanter, to learn about the company's approach to propagating seedlings.

WATCH this video about BleaGlee (3:42) to learn more about how the company is using drones for waste collection in Cameroon.

WATCH this TEDx Talk, Africa's Youth as a solution to Africa's problems (13:13), by Emmanuel Nana Boakye Ababio, an advocate for sustainable development. Emmanuel delves into the characteristics of young people which make them ideal candidates for changing the continent's narratives and spearheading positive change.

WATCH this TEDx Talk, The Demographic Dividend: Unlocking Africa's Youth Potential (19:57) by Dr Julitta Onabanjo, Regional Director of the United Nations Population Fund, East and Southern Africa. Dr Onabanjo talks about the importance of investing in young people and outlines strategies that countries can employ to reap the demographic dividend and achieve sustainable development.

WATCH the Deutsche Welle video Ivory Coast solutions to climate change, environmental protection (4:35). It features three young environmental activists in Côte d'Ivoire looking for inclusive ways to stop global warming. They are involved in tree planting, awareness raising and developing new waste disposal solutions.

WATCH the video On the frontlines of climate change in Zimbabwe (2:04), featuring Nkosilathi Nyathi, a UNICEF climate activist from Victoria Falls, Zimbabwe. He walks us through changes he has seen first-hand as a result of climate change. He feels that although young people can see and feel the effects of climate change, many don't know what's happening and he wants to change that.

Dialogues and webinars

WATCH this video of the Earthday.org and African Youth Initiative on Climate Change (AYICC) Intergenerational dialogue (33:38). The dialogue features questions about climate change from young people for government ministers.

WATCH this video from GCA of the Youth Adaptation Dialogue: Skills for Climate Jobs and Entrepreneurship (1:09). The session showcases young leaders who are taking advantage of the negative impacts of climate change and creating solutions that protect people and the planet.

WATCH this video from GCA of the Youth Adaptation Dialogue: Role of Universities and Students in Locally Led Adaptation (1:06:19). The session highlights case studies on Locally Led Adaptation from Uganda, Paraguay and the Netherlands.

Articles

READ this article from UN Women Africa, Four Youth Climate Activists Making a Difference in Africa. It features four women on the frontlines of climate change action.

READ CARE's article Three Environmental Activists Making a Difference in Africa and Around the World. It features three young activists in Ghana, Kenya and Uganda who are taking action in their communities and mobilizing their peers to rally for climate justice.

Cool Down

Test your understanding *answers on page 26*

1. **In Cameroon, the environmental innovators at BleaGlee use drones to do what? Choose the correct answer.**
   (a) Monitor soil conditions
   (b) Find waste in drainage channels and other areas
   (c) Identify locations to plant drought-resistant seeds
   (d) Monitor sea level rise

2. **According to Chris Ayale Wakomya, CEO of KivuGreen in DRC, three of the main challenges for developing the KivuGreen platform were:**
   (a) Lack of funding
   (b) How to find a business model
   (c) Lack of information about the negative effect of climate change by farmers
   (d) Poor mobile phone connectivity in rural areas

3. **Carolyne Mwangi, founder and CEO of Kimplanter Seedlings and Nurseries in Kenya, lists which of the following as her main lessons learned?**
   (a) Always conduct needs assessments for all the innovations and new products
   (b) Understand your market segment and market niche
   (c) Be investor-ready and fundraise to grow the business
   (d) All of the above.

4. **Suleman Saamani Elisha Mahama, CEO of Global Farms & Trading in Ghana, explains that effective youth leaders have which of the following attributes?**
   (a) They are goal driven
   (b) They are confident in making decisions
   (c) They are team players
   (d) All of the above

5. **Fill in the blank. Oluwadamilola Olowoseunre, founder and CEO of Pazelgreen in Nigeria, says a leader should show the way, lead the way and ..... the way.**
   (a) Talk
   (b) Walk
   (c) Push
   (d) Dream

6. **For Eric Onchonga, CEO of Irri-Hub in Kenya, what were two of the main lessons learned about his company's climate-smart solutions for agriculture?**
   (a) Farmers aren't interested in climate change
   (b) Farmers care most about solutions that increase their productivity and income
   (c) Farmers don't trust Climate-Smart Agriculture
   (d) Farmers take time to make decisions before purchasing irrigation solutions

BONUS QUIZ: To further test your knowledge of climate change, do this online quiz developed by UNDP. It covers three topics:

- The problem of climate change
- The impacts of climate change
- Mitigating the impacts of climate change

Reflect and prepare for your climate adaptation action

Based on what you have learned about how young people are leading on climate adaptation action in Africa, consider the following questions.

Who or what inspired you most in this module?

- Why did this person or project inspire you?
- How do you plan to use whatever inspired you in this module in your daily work and life?

What climate adaptation solution would be helpful to have in your community?

- If you were to develop such a project, what would be your first steps?
- What potential challenges do you foresee?

What do you think is important for engaging young people in adaptation action?

- Think about what you would need so that you, and other young people, could be engaged in climate adaptation actions in your community or country. Can you list those requirements? How might you access what you need?

Answers

1. Correct answer: (b) Find waste in drainage channels and other areas.
EXPLANATION: BleagLee is a waste management and recycling company providing software for drones to quickly detect poor waste disposal in drainage channels, fields and other physical sites. BleaGlee works with indigenous waste collectors and youth environmental groups (eco-groups) to collect the waste, [adhering to] hygienic standards, and then properly dispose of it, or sell it to recycling companies.

2. Correct answer: (a), (b) and (c).
EXPLANATION: Chris Ayale Wakomya lists the following as challenges for developing KivuGreen: Lack of funding for the implementation, having a competent workforce, how to find a business model, user experience of small farmers too low, literacy of smallholder farmers, lack of information about the negative effect of climate change by farmers in their sectors.

3. Correct answer: (d) All of the above.
EXPLANATION: Carolyne Mwangi lists four lessons learned from starting and running Kimplanter. These include:

- Always conduct needs assessments for all the innovations and new products.
- Understand your market segment and market niche.
- Be dynamic and receptive to new trends.
- Be investor-ready and fundraise to grow the business.

4. Correct answer: (d) All of the above.
EXPLANATION: Suleman Saamani Elisha Mahama says an effective youth leader is one who is goal driven, confident in making decisions – especially tough ones – but also a team player with the mindset of looking out for others and lifting them up. Discipline, patience with him- or herself and other people, and a positive attitude to always deliver no matter the difficulties facing them make for an effective youth leader.

5. Correct answer: (b) Walk.
EXPLANATION: Oluwadamilola Olowoseunre advises that to be effective, a youth leader should be "a leader that shows the way, leads the way, and walks the way."

6. Correct answer: (b) and (d).
EXPLANATION: When asked about lessons learned, Eric Onchinga says: We learned that we needed to come up with innovative financing models that would be used by farmers to afford the system. We also learned that farmers take time to make decisions before purchasing. Getting the right team that is aligned with your mission and vision is also very important for the success of a project. We also learned that farmers care most about solutions that increase their productivity and income.

Endnotes

1 Interviews have been edited for length and clarity.

2 Digiteum (2019). How to Build an IoT-based Irrigation System for Smart Agriculture. https://www.digiteum.com/iot-solutions-agricultural-irrigation-system/ (accessed January 2023).

3 United Nations Climate Change (no date). Use of Agro-Weather Tool for Enhancing Early Warning and Adaptation for Farmers – Kenya. https://unfccc.int/climate-action/momentum-for-change/activity-database/use-of-agro-weather-tool-for-enhancing-early-warning-and-adaptation-for-farmers (accessed January 2023).

4 AgDevCo (2019). Video as a tool to enhance farmers' skills and knowledge: A guide for agribusinesses working with smallholder farmers. https://www.agdevco.com/site/assets/files/1423/agdevco_farmersvideoguide_jan2020.pdf (accessed January 2023).

5 Global Center on Adaptation (GCA) (2021). State and Trends in Adaptation Report 2021. https://gca.org/wp-content/uploads/2022/08/GCA_STA_2021_Complete_website.pdf (accessed November 2022).

Toolkit for Youth on Adaptation & Leadership

MODULE 5

DEVELOPING SOFT SKILLS FOR YOUTH LEADERSHIP IN ADAPTATION

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WELCOME TO THE TOOLKIT FOR YOUTH ON ADAPTATION & LEADERSHIP!

Who is this toolkit for?

Climate change is reshaping the world young people have inherited and they will bear the costs in the coming decades. However, young people are often excluded from taking on leadership roles and engaging in decision-making activities related to climate change adaptation. This Toolkit for Youth on Adaptation & Leadership equips young people with the knowledge and skills to engage in climate adaptation policy, advocacy and action. This toolkit uses the terms "youth" and "young people" to refer to people between 15 and 35 years old.

What you will learn

The toolkit covers essential materials and offers practical guidance for how you, as a young person, can take part in adaptation policy processes, lead advocacy campaigns, and approach adaptation with an entrepreneurial mindset. It provides tools for designing and implementing your own climate change adaptation actions so that you can be part of the solution to the climate crisis.

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The "Toolkit for Youth on Adaptation & Leadership" is a project under the Global Center on Adaptation Youth Leadership Program, developed by the CARE Climate Justice Center with the financial support of Norad. It came together with input from young people who, like you, are concerned about the impacts of climate change and have faced challenges when advocating and taking adaptation action.

How to use the toolkit

The toolkit includes eight modules:

1 Understanding climate change

2 The basics of vulnerability and climate change adaptation

3 Vulnerable groups and climate adaptation planning

4 Learning from youth-led climate adaptation solutions: African case studies

5 Developing soft skills for youth leadership in adaptation

6 Engaging in climate adaptation policies: local, national, and international

7 Designing and implementing your adaptation advocacy strategy

8 Designing your adaptation action

Each module contains four sections:

Warm Up is the place to start. This provides an overview of the module's key concepts, based on the latest research and best practices. It highlights tools you can use to apply what you have learned, and develop your leadership skills.

Heat Wave will deepen your understanding. Find links to supporting scientific research, important publications, and tools for exploring and applying key concepts.

Bright spark is the place to get inspired. Read case studies, watch videos, and listen to podcasts about young climate leaders to get fired up for your own climate change actions!

Cool Down is your last stop. Here, you have space to test your knowledge (with a short quiz) and consider how you can apply what you have learned to your own climate action.

MODULE 5

DEVELOPING SOFT SKILLS FOR YOUTH LEADERSHIP IN ADAPTATION

This module will equip you with important skills necessary to become an effective youth leader in adaptation. It includes success stories of effective youth leaders to inspire you.

What will I learn?

By the end of the module, you will:

- Have gained an understanding of what it means to be a leader.
- Have gained knowledge about the essential characteristics of young leaders in the climate adaptation space.
- Have deepened your knowledge of essential leadership skills, including facilitating groups negotiating agreements, and developing an effective “elevator pitch.”

Warm Up

What is leadership?

In a complex and ever-changing world, what is leadership? How is it defined? And what are some of the qualities of an effective leader? Before discussing what leadership is, it's helpful to understand what it is not. According to Kevin Kruse, CEO of coaching platform LEADx, leadership has nothing to do with seniority or one's position within a hierarchy. Leadership has nothing to do with titles or personal attributes, and leadership is not management.[1]

> ***Your actions matter. No action or voice is too small to make a difference.***
>
> Vanessa Nakate, climate justice activist and leader.

Vanessa Nakate, Founder of Rise Up Climate Movement, Uganda. Credit: World Economic Forum/Manuel Lopez.

Rather, as Figure 1 shows, leadership involves:

- Social influence to ensure that the work of others contributes toward achieving a defined goal.
- Taking risks and challenging the status quo to achieve specific outcomes.
- Accomplishing a goal through the direction of human assistants.
- Influencing other people to follow.

In all these definitions, you can see that a leader works with others toward a desired goal or outcome.

Figure 1: The different definitions of leadership. Sources: Kruse (2013)[2], Emeritus (2022)[3] , Prentice (2004)[4] and MindTools (no date).[5]

Figure 2: The 10 characteristics of a good leader.
Source: Center for Good Leadership, no date.[6]

What characteristics make a good leader?

The climate crisis requires innovative leaders to shape an agenda that will lead to sustainable, fair and lasting solutions. But what are the qualities of a good leader? Figure 2 shows 10 key characteristics that make a good leader. We unpack each below.

1. **Integrity** means being honest and having strong moral principles. Leaders need to be guided by strong moral principles. This enables others to trust them.
2. **Delegation** means entrusting responsibilities to others in your team. A good leader should trust their team members to complete tasks and deliver results. Delegating is one of the core responsibilities of a leader. The end goal is to free yourself up, to enable others to grow, facilitate teamwork and provide autonomy, thus leading to better decision making.
3. **Communication** is essential. The best leaders are skilled communicators who can express themselves and pass on information to others effectively. A good leader must be able to listen to, and communicate with, a wide range of people across roles, geographies, social identities, and more. Communication is vital for young climate changemakers to enable them to put forward convincing arguments and speeches, advocate for policy changes, and convince people to get on board with their ideas for positive change.
4. **Self-awareness** involves the ability to look at yourself and reflect on your way of interacting with the world and the people within it. The better you understand yourself, and recognize your strengths and weaknesses, the more effective you can be as a leader.
5. **Gratitude** can make you a better leader. This involves expressing your appreciation for the work of your colleagues. Being thankful can lead to higher self-esteem, reduced depression and anxiety, and better sleep. However, few people regularly say thank you, even though most employees say they'd be willing to work harder in an environment where they feel appreciated.
6. **Learning agility** is about knowing how to learn on the job. It enables you to learn something new in one place and then apply what you've learned elsewhere in a different situation. If you're a "quick study" or can excel in unfamiliar circumstances, you might already be learning agile. Great leaders are great learners.
7. **Influence** is an important trait for inspiring, effective leaders. Influence is quite different from manipulation, and it needs to be done authentically and transparently. It requires emotional intelligence and trust.
8. **Empathy** correlates with emotional intelligence and leadership effectiveness. By exhibiting more inclusive leadership and empathetic behaviors, good leaders set themselves up for success.
9. **Courage** is a key trait of good leaders since it can be hard to speak up, especially in relation to sensitive topics such as climate change. Rather than avoiding challenging conversations and topics, having courage enables leaders to step up and move things in the right direction.
10. **Respect** can be shown in many ways. Treating people with respect is one of the most important things a leader can do. It will ease tensions and conflict, create trust and improve effectiveness. Respectfulness starts with seeking to understand the experiences of others.

Box 1: Applying CARE's Gender Equality Framework to leadership

As you learned in Module 3, CARE's Gender Equality Framework supports climate adaptation approaches that strengthen the capacity of women, girls and other vulnerable groups. The Framework can also be helpful for developing your leadership skills.

Ultimately, the Framework is about empowering yourself and others. To be an effective leader you need to pay attention to each of its three components (shown in Figure 3).

- **Agency:** to build your agency as a leader you can equip yourself with the skills and knowledge required to lead.
- **Relations:** as a leader, you need to be able to relate to people, communicate clearly, delegate tasks and inspire others in your team. You also need to build your network.
- **Structure:** as a leader, you need to influence those people and structures around you that can support your leadership, creating an enabling environment for meeting your goals. This connects to the work of climate change adaptation advocacy (the focus of Module 7).

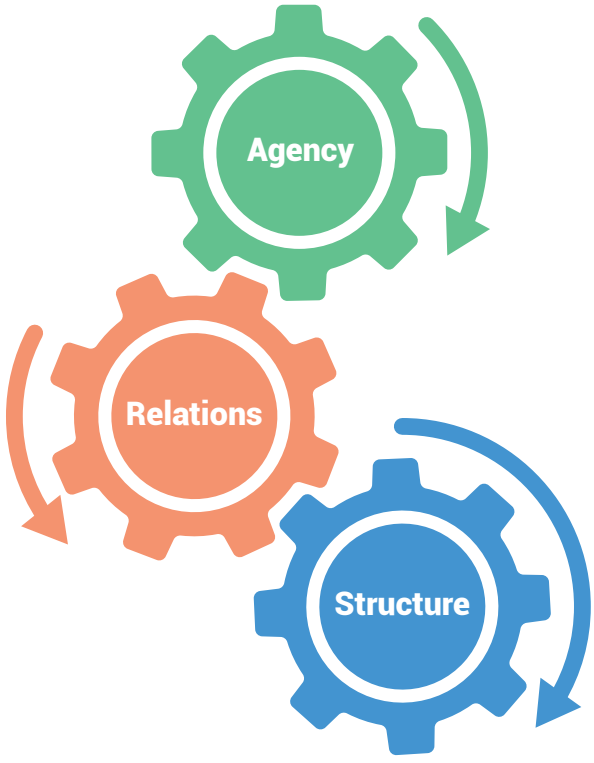


Figure 3: CARE's Gender Equality Framework also applies to building leadership skills. Source: CARE.

Develop your leadership skills

In this section, we highlight activities for developing your leadership ability, along with key leadership skills – facilitation, negotiation and communication.

Activities to bring out your leadership abilities

Draw your leadership dreams into reality

Many of us have big dreams for our lives and who we want to be in the world. But it can be easy to put these off for another time or be sabotaged by doubting voices. If you have ambitions of being a climate change adaptation leader you need to make your vision a reality.

A good first step is to "draw your dreams into reality," a strategy used by Patti Dobrowolski, a change agent and business consultant. You don't need to be an artist for this. Just get hold of a paper and pen and start scribbling. To draw your vision for your future:

1. Draw your current state (where you are in your life currently).
2. Draw your desired new reality as a leader (where you want to be in future).
3. Identify the steps you need to take to get from where you are to where you want to be.

TIP: Watch the video where Dobrowolski explains how to do this, allowing your creativity to shape your future vision. Doing so will provide you with a "roadmap for change," a way to work toward your ambitions of becoming a young climate leader.

Identify what you can learn from other leaders

One way to build your leadership skills is to apply what other great leaders are doing to motivate their teams and drive action. Look around at the people you admire as leaders. These could be leaders in your community, or at your work or school. They could be national or international figures, such as climate change advocates or inspirational businesspeople.

Identify three to five people you think are great leaders. For each person, ask yourself:

- What makes them a good leader?
- Which of the 10 characteristics of a good leader (featured earlier in this module) do they embody?
- What can you learn from them about leadership and apply in your own life?

Find opportunities to volunteer and support climate change adaptation
Working as a volunteer can teach you valuable leadership skills. If you can get involved in local climate change initiatives, you can also build your knowledge of the sector.

- If you have already done some volunteering work, write down your experiences and consider what leadership skills you have built through them.

- Consider ways you could volunteer in climate change adaptation initiatives and what leadership skills you could build through doing so. Choose volunteer opportunities that give you a chance to lead and work with other young people.

Community members and volunteers grow an educational garden in Morocco. Photo Credit: CARE Morocco.

Learn to facilitate a group

As a youth leader, you may need to facilitate groups. For example, you may be asked to facilitate a discussion and/or training session about climate adaptation for other young people.

To be an effective facilitator you need to:

- Have **sufficient expertise** on the topic under discussion and be able to think on your feet.
- Be a **good communicator**. This means that you can pass on accurate information to the audience, in ways the audience can understand, and respond to different types of questions when asked.
- Be **organized** and structure a dialogue or training session so that all activities can be completed in the time allotted.
- Apply an **analytical mindset** so that you have a good understanding of the audience's learning needs and different ways of meeting them.
- Be **innovative and a lifelong learner** so you can update your content and delivery to meet your audience's needs.
- Be a **good listener and observer** so that you can make people feel included and heard.
- Be a **self-evaluator,** which involves welcoming feedback and assessing your performance.
- Be **highly adaptable** so that you can deal with unexpected challenges that arise during the facilitation process.[9]

Facilitating participatory training on gender and agriculture in Burundi. Source: Irene Nduwayezu/CARE

Learn to negotiate

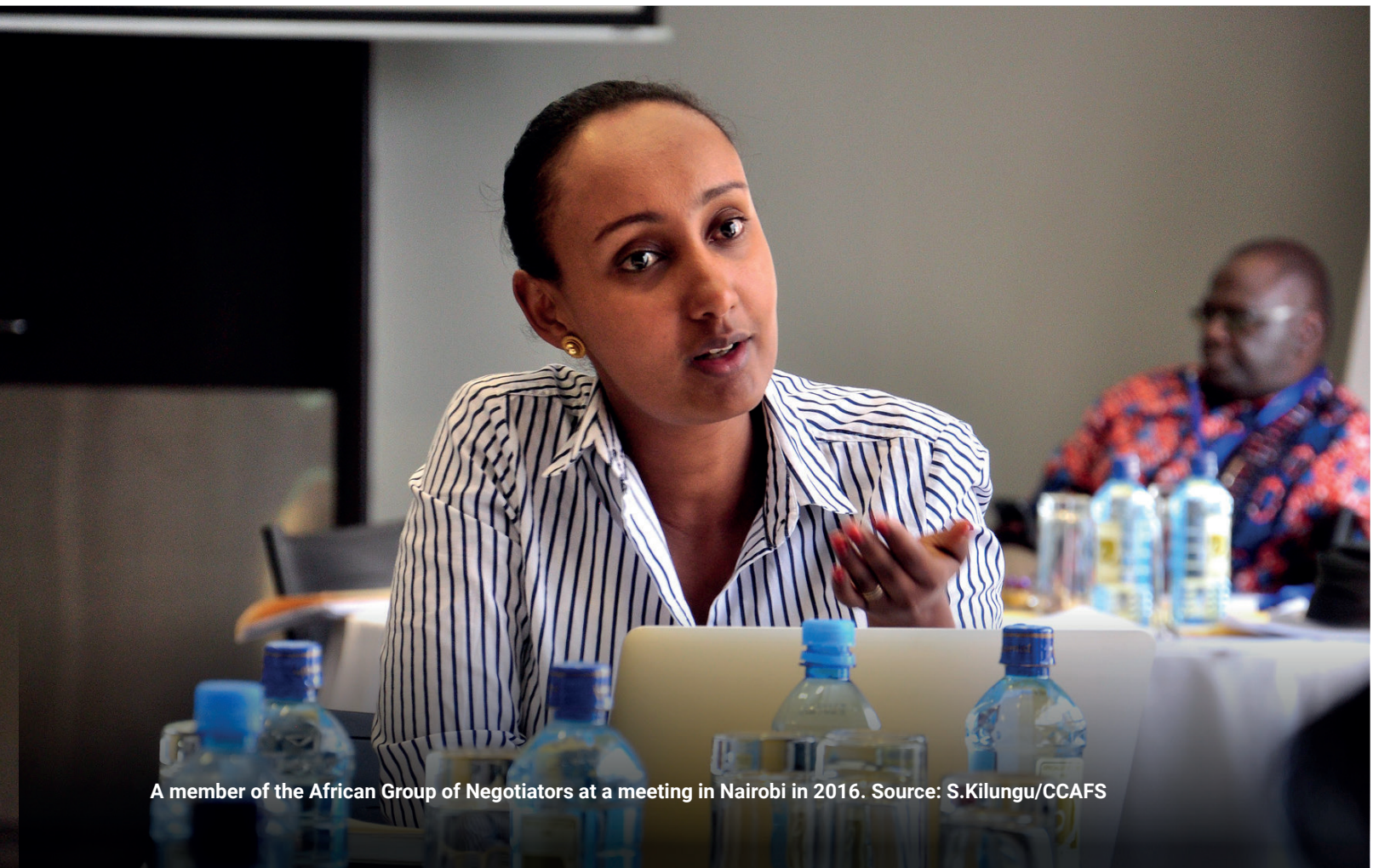
As a leader, you will need to negotiate with fellow young people and other members of society. Negotiation skills enable you to achieve your goals while ensuring that you are respectful of other people's needs and beliefs.

There are numerous situations where you may need to negotiate as a climate adaptation leader. For example, when speaking to your local government representative about adaptation solutions you want to see implemented, or when speaking to a local non-governmental organization about funding for a project that engages youth in your community on climate change.

To negotiate effectively, follow the steps below:

Step 1: Prepare for the negotiation

- Make sure you take the time to prepare for your negotiation.
- Research the person you are negotiating with and learn about the history and context of the negotiation.
- Devise your negotiation strategy (what you aim to achieve, allowing for some movement and reaching agreement, and how you will approach the negotiation).
- Prepare your case (how you will present and substantiate your arguments).
- Plan your tactics (timing, the appropriate means of communication, location).



A member of the African Group of Negotiators at a meeting in Nairobi in 2016. Source: S.Kilungu/CCAFS

Step 2: Open the negotiation

This requires that you first set the scene, for example through personal introductions, highlighting the purpose of the meeting and making sure that everyone has access to the background information relating to the topic or problem being discussed.

Do: listen well; ask open questions; check that you clearly understand the other person's position; summarize; withhold judgement.

Don't: interrupt; immediately put down the other person's position; reveal all your negotiating currency, answer questions too specifically.

Step 3: Conduct the negotiation

Here you explore the options and positions that are available for solving the problem. You can present the different ways the problem under negotiation can be resolved, carefully citing the information and sources you have consulted. You should guide the conversation to find a common understanding of a solution while also identifying sticking points (areas where there are disagreements).

Do: focus on the topic or problem, not the person; concentrate on issues, not positions, even if the gap between the positions seems large; listen for common ground and possible sticking points; ask probing and clarifying questions; listen for what is not being said; observe the other person's body language to pick up any contradictions in what is being said; summarize and check understanding; make notes where relevant.

Don't: interrupt; talk too much or allow the other person to talk too much; be tempted to present counter arguments; start to become entrenched in your position; think in terms of "right" and "wrong" – it is more helpful to think in terms of difference.

Step 4: Move toward agreement

Now you can direct the negotiation towards coming to an agreement. This is where you identify concessions – issues or demands that you are willing to forego or offer – while also identifying your contribution to the proposed solution.

Do: aim for a win/win outcome; summarize as you proceed; be open about your motives; give reasons before making a proposal or a decision; anticipate counterarguments; ask questions; keep focused on the central theme; gain concessions; build on common ground; pitch any other offers at the right level depending on the context.

Don't: make threats or use sarcasm; use irritating phrases such as "I'm sure you'll want to accept my extremely generous offer"; let the discussion lose focus; become defensive or attack the other person; insult the other person; question the other person's motives; rejects arguments out of hand; force decisions prematurely.

Step 5: Reach agreement

You reach an agreement by identifying the areas where you and the other group, or person, you have been negotiating with agree. It may be possible that an agreement is not reached, and instead people need more time to think about your offer. In this case, you can recommend that you adjourn the meeting to another time.

Do: record all decisions in writing and make sure they are witnessed; use the law of reciprocity or other face-savers; give people time to consider their acceptance; check that all parties are committed to the decision and will abide by the agreements; make sure that both sides of the negotiation acknowledge their own and the other person's contribution to the successful outcome; make sure that all parties are clear about the next steps.

Don't: rush decisions through before everyone has stated that they agree; leave any actions to be followed up open-ended; gloat.

Step 6: Follow up on the negotiation

The last step is following up after a negotiation, where you either finalize the deal (if the outcome was positive) or arrange the next steps (if the negotiation ended with an agreement that another meeting was needed). If the negotiation was unsuccessful, an appropriate follow-up would be to thank those who participated.

Do: Send a note or e-mail to all parties summarizing the agreements reached and reminding them of the next steps; carry out all your agreed actions by the agreed deadline; inform all relevant parties, including those who were not directly involved in the negotiation, about the conclusions that have been reached; send a letter of thanks to those involved in the negotiation.

Don't: forget to follow up!

Learn to deliver a compelling elevator pitch

Whether you're running a business and meeting with potential investors or leading a climate change adaptation campaign and want to influence people in power, knowing how to deliver a powerful "elevator pitch" is an essential skill.

As the name suggests, an elevator pitch is a short speech (think 2-5 minutes) that tells people exactly who you are, what you do, and why it's important. It communicates what solutions you offer, or what you aim to achieve with a product or campaign. You use it to quickly capture someone's attention and secure their interest for a further, deeper discussion.[11]

Your elevator pitch should give your audience:

- A **concise, basic description** of your climate change adaptation solution, campaign, or business.
- An **indication of the need, or growing demand**, for what you are proposing.
- An understanding of the value your solution, campaign, or business brings.
- A **positive impression of you and your team**, and an indication of your expertise and why you are the best people for the job.

Knowing how to deliver an effective elevator pitch is an essential leadership skill. Credit: PICHA Stock/Pexels.

Box 2: Elevator pitch keys to success

- Know who you are talking to before you start.
- Practice, practice, practice.
- If people ask recurring questions, this show's your pitch is missing something. Revise it.
- Have a 1–2-minute version ready for networking events and impromptu meetings.
- Have a five-minute version ready for longer pitch events.
- After your pitch, exchange contacts and follow up with an executive summary about your adaptation solution, campaign, or business.

Where to use your leadership skills

As a young climate change leader and advocate for adaptation, you will have many opportunities to apply your leadership skills. Also remember that leaders continue to learn, remaining agile and open to new knowledge and ways of doing things.

Ways you might use your leadership skills include:

- **Building partnerships** with civil society organizations, businesses, youth advocacy groups and government.
- **Engaging in local adaptation actions** (learn more about this in Module 8).
- **Influencing politicians** to make changes to climate change adaptation policy.
- **Training other young people** on climate change adaptation and leadership.
- **Starting a business** that provides climate change adaptation solutions.
- **Engaging with the media** to raise public awareness of climate change adaptation.
- **Running an advocacy campaign** to drive positive changes that promote adaptation (learn more about this in Module 7).

Heat Wave

Understanding leadership

READ the Harvard Business Review article, Understanding leadership for a detailed overview of leadership.

READ this article by Kevin Kruse in Forbes on What is leadership?

READ this article at Emeritus, What is leadership? Definition, Meaning and Importance to learn more about key concepts in leadership.

READ the article at MindTools, What is leadership, to enhance your understanding of how to become a more effective leader.

Tools for developing leadership skills

READ the advice from the Harvard Business School about how to assess yourself as a leader, which lists four ways to assess your leadership qualities.

READ the report, A New Green Learning Agenda, from the Brookings Institution. It offers a framework for conceptualizing the green skills needed by young people to catalyze technical and social transformation in response to climate change.

READ UNICEF's "Prepare to act! Practical tips for climate advocacy and action." This is a toolkit for young climate activists in Latin America and the Caribbean created by young people who, as activists, have faced many challenges when advocating and taking climate action.

EXPLORE this toolkit from The Transformative Action Institute to learn about different activities that you can use to develop your leadership skills.

EXPLORE the tool from UN Women for organizations to self-assess how they support women's leadership and meaningful participation in disaster and climate risk reduction, recovery, climate change adaptation (CCA), post-disaster recovery, and resilience building.

Learn about emotional intelligence in leadership

READ about why emotional intelligence is important in leadership in an article by Lauren Landry of the Harvard Business School. Emotional intelligence is the ability to perceive, use, understand, manage, and handle emotions. People with high emotional intelligence can recognize their own emotions and those of others, use emotional information to guide thinking and behavior, discern between different feelings and label them appropriately, and adjust emotions to adapt to environments.

Portia is a young climate leader from Ghana working to reduce carbon emissions from coal.
Copyright: Portia Adu-Mensa

Bright Spark

Case studies

Adaptation action led by girls in Mali, Somalia and Zimbabwe
As part of a CARE International project, adolescent girls took the lead on actions in rural communities severely affected by climate change. In these contexts, traditional gender norms contribute to high rates of early marriage and other forms of gender-based violence and exclusion, which disproportionately affects girls' education.

In Mali, 1,027 young leaders conducted activities with other students and out- of-school children in their communities to help mitigate the impact of climate change. They took part in reforestation, demonstrated drought-adapted agriculture techniques, and improved water management and sanitation in their communities.

In Zimbabwe, girls took the lead in a project using solar energy to get water for menstrual health management and to maintain school gardens. They developed their leadership skills and helped the community improve its water management system.
In Somalia, actions focused on the barriers faced by pastoralist girls displaced by recurrent droughts, including supporting enrollment, tracking cases of absenteeism and dropout, preventing early marriage, and enhancing awareness of menstrual health management and gender rights.

Read the case studies in full in this report from the Inter-agency Network for Education in Emergencies.

Platforms for young people's voices

LEARN about The United Nations Climate Change Conference, the world's biggest and most important climate change conference. Known as the COP, this event brings world leaders together each year. There is plenty of space for young people to engage with days and events dedicated to learning more about issues affecting youth and to amplify youth voices. For example, COP27 (in 2022), featured a Youth and Future Generation Day, where young people showcased success stories and challenges and engaged with key climate decision makers.

Competitions for climate advocacy and solutions

CHECK OUT UNEP's Young Champions of the Earth Competition, a global competition for entrepreneurs and innovators aged 18–30 with big ideas to secure a sustainable future. All these ideas address urgent environmental issues in bold and creative ways. The Young Champions of the Earth is a forward-looking prize designed to breathe life into the ambitions of young environmentalists. Watch this video of 2020 winner Nzambi Matee, whose company Gjenge Makers produces building materials from recycled plastic.

CHECK OUT the African Youth Adaptation Solutions (YouthADAPT) Challenge, an annual competition and awards program for youth-led enterprises (50% women-led). Jointly organized by the Global Center on Adaptation, the African Development Bank and Climate Investment Funds, the competition seeks to boost sustainable job creation through support for entrepreneurship and youth-led innovation in climate change adaptation and resilience across Africa. Read about the 2022 winners.

Podcasts

LISTEN to an episode of the Africa Renewal podcast on African Youth and the Climate Crisis. Adenike Oladosu, a Nigerian youth climate change activist, talks about the impact of climate change on women and girls and why "delaying [action] is denying the urgency of the climate change crisis in Africa."

LISTEN to this episode of the TED Climate podcast, featuring Indonesian climate activist Melati Wijsen, who has been pushing for environmental protection on the island of Bali, where she lives. Wijsen offers three pieces of advice for young people seeking to make lasting, sustainable progress as well as how young changemakers can keep from burning out.

LISTEN to Y Talk Climate. The goal of this podcast is to educate youth in British Columbia, Canada, and around the world about the climate crisis, and empower them to turn expert insights into action. Listen to Episode 4: "A conversation with Youth Climate Leader, Marina Melinidis" (38:50), one of Canada's Top 30 Under-30 Sustainability Leaders and Top 25 Under-25 Environmentalists.

Climate poetry

WATCH this video (2:38) of young poet Jordan Sanchez delivering her poem, 'On climate denial.' Sanchez was one of the high school students who took part in a 2019 poetry slam event about climate change, hosted by New York's Climate Museum.

Cool Down

Test your understanding *answers on page 26*

1 When it comes to leadership, social influence refers to which one of the following?

(a) having lots of followers on social media
(b) being continually in the public eye
(c) having friends in high places
(d) ensuring that the work of others contributes toward achieving a defined goal

2 Which of the following is not one of the 10 characteristics of a good leader?

(a) respect
(b) integrity
(c) self-awareness
(d) commanding

3 Which one of the following attributes is important for a facilitator?

(a) good communicator
(b) mind reader
(c) good-looking
(d) emotional

4 Which one of the following should you not do when you are negotiating?

(a) Call adjournments where necessary
(b) Ask probing and clarifying questions.
(c) Rush decisions through before everyone has stated that they agree
(d) Send a letter of thanks to those involved in the negotiation

5 True or false? An "elevator pitch" should take about 15 minutes and include in-depth details about your climate change adaptation solution, campaign, or business idea.

(a) True
(b) False

BONUS QUIZ: To further test your knowledge of climate change, do this online quiz developed by UNDP. It covers three topics:

- The problem of climate change
- The impacts of climate change
- Mitigating the impacts of climate change

Reflect and prepare for your climate adaptation action

As a young person who is working on becoming a leader in the world of climate change adaptation:

- What qualities do you already have that will help you be an effective leader?
- Based on what you have learned in this module, what qualities do you feel you need to develop further? How could you develop, or strengthen, those qualities?
- What opportunities do you see in your community or country for taking a leadership role in climate change adaptation action? Map out your vision for how you will move from your current state to your desired role as a leader, identifying concrete steps you can take to make your dreams a reality.

Answers

1. Correct answer: (d) ensuring that the work of others contributes toward achieving a defined goal.
EXPLANATION: In the case of leadership, social influence means having the ability to ensure that the work of others (e.g., in a team or group you are leading) contributes toward achieving a defined goal.

2. Correct answer: (d) commanding.
EXPLANATION: a good leader does not need to command. Other than respect, integrity and self-awareness, a good leader should be able to delegate, communicate, show gratitude, have learning agility, exercise influence, show empathy and be courageous.

3. Correct answer: (a) good communicator.
EXPLANATION: A good facilitator should be able to communicate the message to the audience in a way and a language that they will understand, while also translating their messages to others.

4. Correct answer: (c) Rush decisions through before everyone has stated that they agree
EXPLANATION: You reach an agreement by identifying the areas where you and the other group, or person, you have been negotiating with agree. It may be possible that an agreement is not reached and instead people need more time to think about your offer. In this case, you can recommend that you adjourn the meeting to another time.

5. Correct answer: (b) False.
EXPLANATION: As the name suggests, an elevator pitch is a short speech (think 2-5 minutes) that tells people exactly who you are, what you do, and why it's important. It communicates what solutions you offer, or what you aim to achieve with a product or campaign. You use it to quickly capture someone's attention and secure their interest for a further, deeper discussion.

Endnotes

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Toolkit for Youth on Adaptation & Leadership

MODULE 6

ENGAGING IN CLIMATE ADAPTATION POLICIES: LOCAL, NATIONAL, AND INTERNATIONAL

GLOBAL CENTER ON ADAPTATION

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Acronyms

ASAP	The Adaptation for Smallholder Agriculture Programme
CBA	Community based adaptation
CCA	Climate change adaptation
CIS	Climate Information Services
COP	Conference of the Parties
COY	Conference of Youth
CRA	Community Risk Assessment
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EAC	East Africa community
ECOWAS	Economic Community of West African States
GCF	Green Climate Fund
GHGs	Greenhouse gases
IPCC	Intergovernmental Panel on Climate Change
JPA	Joint Principles for Adaptation
LAP	Local Adaptation Plans
LDCF	Least Developed Countries Fund
LLA	Locally Led Adaptation
MDGs	Millennium Development Goals
NAP	National Adaptation Plan
NAPA	National Adaptation Programs of Action
NDC	Nationally determined contribution
NGOs	Non-Governmental Organizations
PPCR	Pilot Program for Climate Resilience
PSP	Participatory Scenario Planning
SCCF	The Special Climate Change Fund
SDG	Sustainable Development Goal
SIDS	Small Islands Developing States
SMART	Specific, Measurable, Achievable, Relevant and Time-bound
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change

WELCOME TO THE TOOLKIT FOR YOUTH ON ADAPTATION & LEADERSHIP!

Who is this toolkit for?

Climate change is reshaping the world young people have inherited and they will bear the costs in the coming decades. However, young people are often excluded from taking on leadership roles and engaging in decision-making activities related to climate change adaptation. This Toolkit for Youth on Adaptation & Leadership equips young people with the knowledge and skills to engage in climate adaptation policy, advocacy and action. This toolkit uses the terms "youth" and "young people" to refer to people between 15 and 35 years old.

What you will learn

The toolkit covers essential materials and offers practical guidance for how you, as a young person, can take part in adaptation policy processes, lead advocacy campaigns, and approach adaptation with an entrepreneurial mindset. It provides tools for designing and implementing your own climate change adaptation actions so that you can be part of the solution to the climate crisis.

GLOBAL CENTER ON ADAPTATION

The "Toolkit for Youth on Adaptation & Leadership" is a project under the Global Center on Adaptation Youth Leadership Program, developed by the CARE Climate Justice Center with the financial support of Norad. It came together with input from young people who, like you, are concerned about the impacts of climate change and have faced challenges when advocating and taking adaptation action.

How to use the toolkit

The toolkit includes eight modules:

1 Understanding climate change

2 The basics of vulnerability and climate change adaptation

3 Vulnerable groups and climate adaptation planning

4 Learning from youth-led climate adaptation solutions: African case studies

5 Developing soft skills for youth leadership in adaptation

6 Engaging in climate adaptation policies: local, national, and international

7 Designing and implementing your adaptation advocacy strategy

8 Designing your adaptation action

Each module contains four sections:

Warm Up is the place to start. This provides an overview of the module's key concepts, based on the latest research and best practices. It highlights tools you can use to apply what you have learned, and develop your leadership skills.

Heat Wave will deepen your understanding. Find links to supporting scientific research, important publications, and tools for exploring and applying key concepts.

Bright spark is the place to get inspired. Read case studies, watch videos, and listen to podcasts about young climate leaders to get fired up for your own climate change actions!

Cool Down is your last stop. Here, you have space to test your knowledge (with a short quiz) and consider how you can apply what you have learned to your own climate action.

MODULE 6

ENGAGING IN CLIMATE ADAPTATION POLICIES: LOCAL, NATIONAL, AND INTERNATIONAL

This module takes a closer look at climate adaptation policies at the local, regional, national and international levels. It highlights key adaptation plans and policies, including National Adaptation Plans and Nationally Determined Contributions. It includes guidance for how young people can get involved in shaping adaptation policy processes. It also examines key issues related to climate finance and the adaptation funding gap.

What will I learn?

By the end of the module, you will:

- Have a broad understanding of international climate governance and the main United Nations climate change policy processes.
- Know about the main climate adaptation policy frameworks at global, national and local levels.
- Understand the importance of youth engagement in climate adaptation policy processes and know more about how to engage in these processes.
- Understand global climate finance mechanisms and some of the challenges in accessing climate funds for adaptation.

Glossary

Term	Definition	Source
Adaptation finance gap	Adaptation finance gap refers to difference between the estimated costs of adaptation and the actual number of financial resources needed to support adaptation efforts. The estimated adaptation costs in developing countries are five to ten times greater than current public adaptation finance flows, and the adaptation finance gap is widening.	UN
Adaptation for Smallholder Agriculture Programme (ASAP)	ASAP was launched by the International Fund for Agricultural Development (IFAD) in 2012 to make climate and environmental finance work for smallholder farmers. A multi-year and multi-donor financing window, ASAP provides a new source of co-financing to scale up and integrate climate change adaptation across IFAD's new investments.	IFAD
Adaptation Fund	The Adaptation Fund is a global fund established to finance concrete adaptation projects and programmes in developing countries that are parties to the Kyoto Protocol and are particularly vulnerable to the adverse effects of climate change. It pioneered Direct Access, empowering countries to access funding and develop projects directly through accredited national implementing entities.	The Adaptation Fund
Advocacy	Advocacy is the deliberate process of influencing those who make decisions about developing, changing and implementing policies.	CARE international Advocacy Handbook
Cancun Adaptation Framework (CAF)	The Cancun Adaptation Framework is a set of guidelines and measures that were established during the UNCCC held in Cancun in 2010. The CAF aims to strengthen action on adaptation in developing countries through international cooperation. It will support better planning and implementation of adaptation measures through increased financial and technical support, and through strengthening and/or establishing regional centres and networks. The framework will also boost research, assessments and technology cooperation on adaptation, as well as strengthen education and public awareness.	UNFCCC
Climate Finance	Climate Finance refers to local, national or transnational financing—drawn from public, private and alternative sources of financing—that seeks to support mitigation and adaptation actions that will address climate change.	UNFCCC
Climate Funds Update	Climate Funds Update is an independent website that provides information and data on the growing number of multilateral climate finance initiatives designed to help developing countries address the challenges of climate change.	Climate Fund Update

Term	Definition	Source
COP (Conference of Parties)	The COP is the supreme decision-making body of the Convention. All States that are Parties to the Convention are represented at the COP, at which they review the implementation of the Convention and any other legal instruments that the COP adopts and take decisions necessary to promote the effective implementation of the Convention, including institutional and administrative arrangements.	UNFCCC
Green Climate Fund (GCF)	GCF is a unique global platform to respond to climate change by investing in low-emission and climate-resilient development. GCF was established by 194 governments to limit or reduce greenhouse gas (GHG) emissions in developing countries, and to help vulnerable societies adapt to the unavoidable impacts of climate change. Given the urgency and seriousness of this challenge, GCF is mandated to make an ambitious contribution to the united global response to climate change.	Greenclimatefund
Kyoto Protocol	The Kyoto Protocol is an international treaty that was adopted on 11 December 1997. Owing to a complex ratification process, it entered into force on 16 February 2005. Currently, there are 192 Parties to the Kyoto Protocol. In short, the Kyoto Protocol operationalizes the United Nations Framework Convention on Climate Change by committing industrialized countries and economies in transition to limit and reduce greenhouse gases (GHG) emissions in accordance with agreed individual targets.	UNFCCC
Least Developed Countries Fund (LDCF)	The LDCF is enabling Least Developed Countries to prepare for a more resilient future. LDCF funding helps recipient countries address their short-, medium- and long-term resilience needs and reduce climate change vulnerability in priority sectors and ecosystems. LDCF backing helps countries implement National Adaptation Programs of Action (NAPAs) – country-driven strategies for addressing their most urgent adaptation needs. It also supports the implementation of the National Adaptation Plan (NAP) process, and the Least Developed Country work program under the UNFCCC	The Global Environment Facility
National Adaptation Plans (NAPs)	The National Adaptation Plan (NAP) is a process that was established under the Cancun Adaptation Framework (CAF). It enables Parties to formulate and implement national adaptation plans (NAPs) as a means of identifying medium- and long-term adaptation needs and developing and implementing strategies and programmes to address those needs. It is a continuous, progressive and iterative process that follows a country-driven, gender-sensitive, participatory and fully transparent approach.	UNFCCC
National Adaptation Programs of Action (NAPAs)	NAPAs provide a process for the least-developed countries (LDCs) to identify priority activities that respond to their urgent and immediate needs with regard to adaptation to climate change - those needs for which further delay could increase vulnerability or lead to increased costs at a later stage. The rationale for NAPAs rests on the limited ability of the LDCs to adapt to the adverse effects of climate change. In the NAPA process, prominence is given to community-level input as an important source of information, recognizing that grassroots communities are the main stakeholders.	UNFCCC

Term	Definition	Source
National Communication (NC)	National Communication is a report that each country that is a Party to the UNFCCC must submit. These reports highlight development priorities, objectives and national circumstances, including ongoing action and needs for meeting adaptation and mitigation goals and the objectives of the Convention. Parties are required to submit their first NC within three years of entering the Convention, and every four years thereafter.	UNFCCC
Nationally Determined Contributions (NDCs)	Nationally Determined Contributions (NDCs) are climate action plans to cut emissions and adapt to climate impacts. Each Party to the Paris Agreement is required to establish an NDC and update it every five years.	UN
Paris Agreement	The Paris Agreement is a legally binding international treaty on climate change. It was adopted by 196 Parties at COP 21 in Paris, on 12 December 2015 and entered into force on 4 November 2016. Its goal is to limit global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels. To achieve this long-term temperature goal, countries aim to reach global peaking of greenhouse gas emissions as soon as possible to achieve a climate neutral world by mid-century.	UNFCCC
Pilot Program for Climate Resilience	Pilot Program for Climate Resilience is a program that supports developing countries and regions in building their adaptation and resilience to the impacts of climate change. First, the PPCR assists governments in integrating climate resilience into strategic development planning across sectors and stakeholder groups. Second, it provides concessional and grant funding to put the plans into action and pilot innovative public and private sector solutions.	Climate Investment Fund
Sustainable Development Goals (SDGs)	SDGs are seventeen global goals, adopted by all United Nations Member States in 2015 as part of the 2030 Agenda for Sustainable Development. The SDGs provide a shared blueprint for peace and prosperity for people and the planet, now and into the future and are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests.	SDG
Special Climate Change Fund	The Special Climate Change Fund is a fund that is established under the Convention in 2001 to finance projects relating to: adaptation; technology transfer and capacity building; energy, transport, industry, agriculture, forestry and waste management; and economic diversification. It is managed by the GEF.	The special Climate Change Fund
United Nations Framework Convention on Climate Change (UNFCCC)	The UNFCCC is an international treaty that entered into force on 21 March 1994. Today, it has near-universal membership. The 198 countries that have ratified the Convention are called Parties to the Convention. Preventing "dangerous" human interference with the climate system is the ultimate aim of the UNFCCC.	UNFCCC

Warm Up

Climate change and the 2030 Agenda for Sustainable Development

The 2030 Agenda for Sustainable Development is a United Nations plan of action for People, Planet and Prosperity (famously known as the 3 Ps). The Agenda's 17 Sustainable Development Goals (SDGs) and 169 targets demonstrate its scale and ambition. The SDGS are the global framework for sustainable development. The global goals set targets to guide countries in formulating and implementing national development plans.

The SDGs are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. Without urgent climate action (SDG 13), it will be impossible to reach the other SDGs by 2030.

All SDGs are deeply interconnected with SDG 13 on climate action. If climate change is not stopped, the entire Agenda is threatened. Figure 2 shows how climate change affects other SDGs.

Figure 1: The 17 Sustainable Development Goals (SDGs) are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. Source: United Nations, no date.[1]

Without urgent action, climate impacts could push an additional 132 million people into poverty by 2030.[2]

Climate change poses severe and distinct threats to food security and could subject an additional 600 million people to malnutrition by 2080. By the 2080s, land unsuitable for agiculture in sub-Saharan Africa due to severe climate, soil or terrain constraints may increase by 30 million to 60 million hectares.[4]

Climate change affects the social and environmental determinants of health – clean air, safe drinking water, sufficient food and secure shelter. Between 2030 and 2050, climate change is expected to cause approximately 250,000 additional deaths per year from malnutrition, malaria, diarrhea and heat stress. The direct damage costs to health are estimated to be between USD 2 billion and 4 billion per year by 2030.[6]

Childhood exposure to climate shocks, such as droughts and floods, has an unequal impact on children's development, affecting their nutrition and access to education. This impedes their learning progress, with the poorest children most affected.[7]

Women face widespread discrimination in the distribution of assets, services and information – such as secure and adequate land, credit, education and training, employment opportunities, mobility, climate and market information services, inputs, and technologies.[8] They are less likely to be able to access information and support that could help them better manage the impacts of climate change.

More than 2 billion people live in countries experiencing high water stress. The situation will likely worsen as populations and the demand for water increase, and as the impacts of climate change intensify. With the existing climate change scenario, by 2030 water scarcity in some arid and semi-arid places will displace between 24 million and 700 million people.[10] Furthermore, following climate-induced disasters, women and girls often lack access to safe and adequate facilities for menstrual hygiene management.[11]

The climate impacts associated with the other SDGs indicate why it is essential to take urgent and ambitious climate action. One of the targets for SDG 13 is to strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

Figure 2: How the impacts of climate change affect other SDGs.

International climate governance and adaptation policies

Tackling the climate crisis requires national and regional action and international cooperation. Policies are necessary to help reduce emissions sufficiently and ensure resilient societies. Due to the global nature of climate change, global cooperation and rules are required.

The United Nations Framework Convention on Climate Change (UNFCCC) plays a key role in developing global policy frameworks and objectives, which set the stage for national climate action and plans.

The UNFCCC is the key policy framework, with the Paris Agreement adopted in 2015 being the universal tool for its implementation. The processes supporting implementation of the Paris Agreement have become multi-layered over time. The Conference of Parties (COP) is the annual main event. Preparatory sessions for all governments and constituted bodies focus on specific themes (such as adaptation, finance, mitigation, capacity building, loss and damage). The Parties to the Convention have met annually from 1995 to assess progress in dealing with climate change.

The aim of the Convention is to stabilize greenhouse gas (GHG) concentrations "at a level that would prevent dangerous anthropogenic (human-induced) interference with the climate system."[12] The Convention states that "such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened, and to enable economic development to proceed in a sustainable manner."[13]

The UN Climate Change Conference of Parties (COP)

The COP takes place every year. It is the supreme decision-making body of the UNFCCC. All 198 Parties to the Convention are represented at the COP. Countries use the COP to review the implementation of the UNFCCC and other legal instruments the COP adopts, such as the Paris Agreement. The COP informs decisions governments make to promote implementation of the Convention, including institutional and administrative arrangements.

The timeline in Figure 3 highlights the evolution of the adaptation landscape under the UNFCCC. In the early stages of the UNFCCC, there were moderate considerations for adaptation. Parties were requested to submit assessments of climate change impacts to highlight the need for adaptation in their national communications.

Press conference at COP27, Sharm El Sheikh, Egypt. Credit: UNFCCC.

The IPCC's Third Assessment Report in 2001 highlighted that mitigation alone would not be enough to respond to climate change, and that adaptation was essential. Parties started planning and implementing adaptation actions. The least-developed countries (LDCs) were supported to prepare and implement **National Adaptation Programmes of Action (NAPAs)** to help plan and implement immediate adaptation actions.

In 2010, Parties emphasized that adaptation must be addressed with the same priority as mitigation and developed several mechanisms for ensuring this. In 2013, work on enhancing knowledge and improving coordination for adaptation was launched, which fed into the Paris Agreement.

Figure 3: Evolution of the United Nations Framework Convention on Climate Change (UNFCCC). Source: UNFCCC (no date).[14]

The evolution of the adaptation landscape under the UNFCCC

1 UNFCCC (1992)

2 COP 2 (1996): National Communications
Observing impacts, assessing risks and vulnerabilities

3 COP 7 (2001): LDC support through NAPAs, LEG, LDCF, SCCF and AF
Moving to planning and pilot implementation

4 COP 11 (2005): Nairobi Work Programme (NWP)
Sharing knowledge and lessons learned

5 COP 13 (2007): Bali Action Plan
Scaling up implementation

6 COP 16 (2010): Cancun Adaptation Framework (CAF): Adaptation Committee, National Adaptation Plans, Working Programme on Loss and Damage) Green Climate Fund
Building coordinated and coherent action

7 COP 19 (2013):
Enhancing knowledge products and improving universal agreement engagement

8 COP 21 (2015):
Paving the road to a universal agreement

The Paris Agreement

The Paris Agreement is the first climate deal that establishes common obligations for all countries (except for the provision of financial support, which is only an obligation for developed countries). It was adopted at COP21 in December 2015 and came into force in November 2016.

Before 2015, there had been negotiations that focused on developing agreements for climate change, but these had different levels of success. The Kyoto Protocol, which was adopted in 1997 and sought to implement binding emission reductions, experienced several drawbacks, including a failure to implement the set target. In Copenhagen in December 2009, parties failed to come to a consensus on an agreement that would replace it.

The Paris Agreement's objective is to keep the increase in global temperatures well below 2 °C above pre-industrial levels, while making efforts to limit the increase to 1.5 °C. The Agreement addresses adaptation to climate change, financial and other support for developing countries, technology transfer and capacity building, as well as loss and damage.

To drive up ambition, the Paris Agreement requires each country to submit an updated Nationally Determined Contribution (NDC) every five years. An NDC is a climate action plan to cut emissions and adapt to climate impacts. Starting in 2023, and then five years thereafter, governments will take stock of their actions to assess the collective progress towards achieving the goals of the Agreement. This regular "global stocktake" informs the next round of NDCs.

Figure 4: Key steps to enhance Ambition.
Source: Franzen et al., 2017.[15]

National climate adaptation policies - what you need to know

As a young climate advocate, it's important to know about the different elements of national adaptation policies – so you understand the processes and ways you can engage. This will help you play your part in shaping local and national climate change adaptation plans and strategies.

Nationally Determined Contributions (NDCs)

As already discussed, an NDC is a country's climate action plan to cut emissions and adapt to climate impacts. Governments submit their updated NDCs to the UNFCCC Secretariat every five years. The NDCs generally contain high-level information on expected climate impacts, mitigation and adaptation priorities, and reduction targets for each country.

It is important to know when these submissions will take place. They are an opportunity for you to input on NDCs about what you want to see in national and international policies (see Figure 5 for the NDC timeline). To learn more about your country's NDC submissions visit the United Nations' NDC registry.

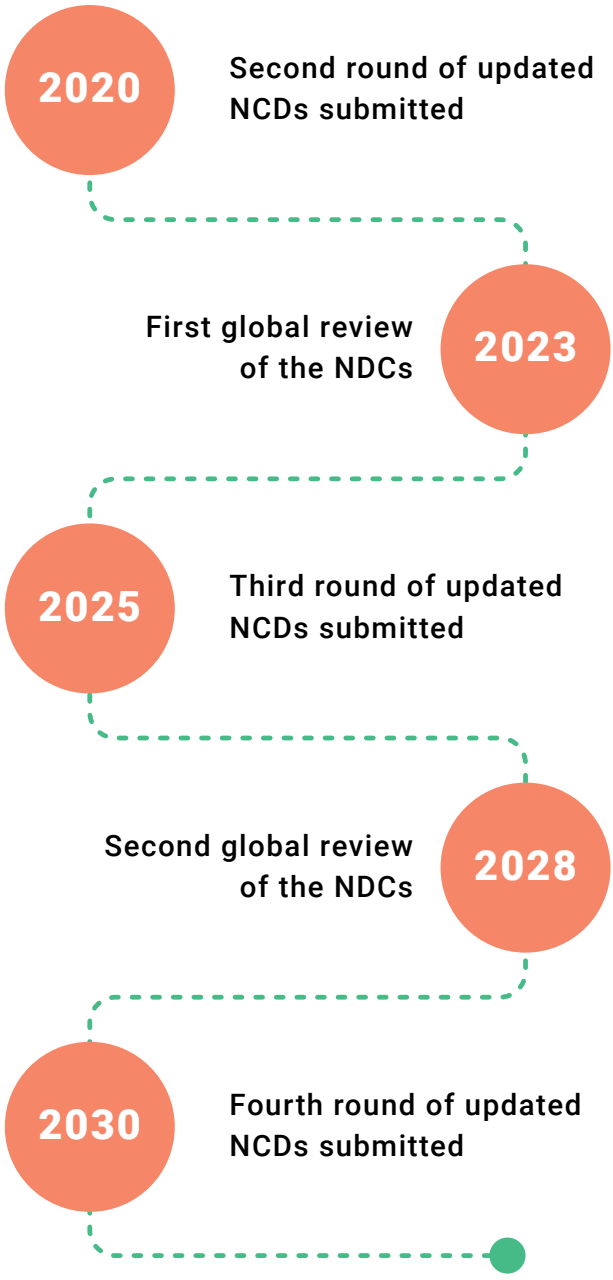

Figure 5: The NDC updating timeline.
Source: UNICEF/UNDP, no date.[16]

National Adaptation Programmes of Action (NAPAs)
A National Adaptation Programme of Action (NAPA) is a process for identifying priority actions to respond to urgent adaptation needs – those for which further delay could increase vulnerability in a particular country. NAPAs are specifically for LDCs, to support them in addressing the challenge of climate change, given their high vulnerability. (You can access existing NAPAs via the UNFCCC's website).

National Adaptation Plans (NAPs)
On top of the NAPAs, LDCs developed (or are developing) National Adaptation Plans (NAPs). These strategic documents complement the NAPAs. They identify a country's medium- and long-term adaptation priorities, and the strategies for addressing and tracking them.

The structure and form of NAPs vary by country and may include sectoral plans and sub-national plans for addressing adaptation needs. All NAPs include information on current and future climate change impacts and adaptation priorities.

National Communications
To keep track of how countries are progressing with their climate actions, the UNFCCC requires a group of countries known as Non-Annex 1 countries (most of which are developing countries) to submit reports (known as National Communications) periodically.

These reports highlight development priorities, objectives and national circumstances, including ongoing action and needs for meeting adaptation and mitigation goals and the objectives of the Convention.

Countries are expected to submit these reports within three years of joining the Convention, and every four years thereafter. Most African countries have submitted at least one National Communication. (You can find all submitted National Communications at the UNFCCC's website).

Continental and regional climate adaptation strategies

While African countries have their own adaptation plans and processes, there are also strategies for the continent, as well as certain regions.

- The African Union has a continental climate change strategy, the Climate Change and Resilient Development Strategy and Action Plan (2022–2032).[19]
- The East Africa Community (EAC) has a climate change policy, a climate change strategy and a climate change master plan.[20]
- The Economic Community of West African States (ECOWAS) adopted its first Regional Climate Strategy in 2022 to inform long-term climate action.[21]
- The Southern African Development Community (SADC) has a Climate Change Strategy and Action Plan, which outlines coordinated regional and national actions to respond to the impacts of climate change.[22]

Local-level climate adaptation policies

Influencing policies, and planning to address climate change and prepare for its impacts, is relevant globally and nationally. Climate change adaptation is context specific, so local action matters.

Where provinces or districts take planning and investment decisions, even if they are just implementing national-level plans, some of these can be climate-smart, others less so. In Kenya, the Bungoma County climate change policy and environment policy, developed in 2020, is a good example of a local-level adaptation policy.[23]

Young Climate Activists at COP27. Credit: UNFCCC.

How young people can engage in adaptation policy making

There are numerous ways you can engage in adaptation policy processes and make your voice heard.[24]

1 UNFCCC

- Collaborate with other youth organizations that participate in the UNFCCC to work together in the climate adaptation space. Look to connect with organizations that represent different groups, including young people, environmental organizations, indigenous peoples, women and people with different gender identities.
- Join YOUNGO, the official Children and Youth Constituency of the UNFCCC. You can contact YOUNGO focal points to organize and participate in meetings (including the COPs), talks and events.
- Join the Global Centre on Adaptation's Youth Adaptation Network, a platform to access adaptation knowledge and campaigning materials, with opportunities to implement adaptation action on the ground, and connect with leaders at the forefront of the global response to climate change.
- Write an email to your country's UNFCCC Head of Delegation asking to join COP as a youth representative. (A list of national focal points is available from the UNFCCC website).

2 The Paris Agreement

- Learn more about this monumental agreement from the resources provided in this toolkit and from the UNFCCC. As a climate advocate who wants to engage in adaptation policy, it's important to be familiar with the Paris Agreement.

3 NDCs

- Participate in NDC processes if these are established in your country. If these processes are not in place, advocate for creating mechanisms to involve young people in the process of formulating, implementing and updating NDCs.
- Conduct youth consultations on NDCs to provide recommendations for improvements to decision makers and increase ambition.
- Monitor the results of the different parts of the NDC process. This will help you identify challenges in the process that you may help to improve.

4 NAPs

- Engage with decision makers to ensure young people are integrated as part of the NAP.
- Share simplified information on NAPs with other young people to promote engagement and increase the pool of young climate advocates who can monitor how NAPs are implemented.

5 Regional and local-level climate adaptation policies

- Urge your country to adopt a climate change strategy. If it already exists, find out how it is being implemented.
- Advocate for integrating young people into regional and local climate adaptation strategies.
- Train future generations (adolescents and children) on climate advocacy and climate adaptation issues so that knowledge is passed from generation to generation, and the movement continues to grow.
- Organize or join an awareness-raising campaign to encourage public understanding of climate change, its effects, and the actions young people can take to mitigate its anticipated impacts.
- Write a lobby letter and/or meet with the Minister of Climate Change (if your government has one) and/or your member of parliament who sits on the parliamentary committee on climate change.
- Start a petition for a climate change adaptation policy issue.

6 Stay informed and share what you know

- Monitor your country's climate reports. Your government may publish these online. Reading these reports will provide you with information to help develop climate action in your community and country.
- Read your country's adaptation communication. You can find all submitted National Communications at the UNFCCC's website.
- Share information about climate change and adaptation actions on your social networks.
- Start a social media campaign using #Youth4Adaptation.

Box 1: YOUNGO: bringing young peoples' voices to international climate negotiations

If you have ambitions of getting involved in the UNFCCC process, check out YOUNGO, the official children and youth constituency of the UNFCCC. This global network of young activists (up to 35 years old) and youth NGOs helps shape intergovernmental climate change policies and empowers young people to formally bring their voices to UNFCCC processes.

YOUNGO has working groups that focus on different aspects of the UNFCCC negotiations and beyond. These work to ensure that the perspectives of young and future generations are considered in the international decision-making processes. YOUNGO members observe and report on climate negotiations and the implications of their outcomes.

Each year YOUNGO plans and hosts the Conference of Youth (COY), which takes place right before the COP, in the host country. The COY prepares young people to participate in COP.

YOUNGO membership is free. You can sign up using the YOUNGO membership registration form.

Box 2: Did you know? You can engage in the COP without travelling there

As a young climate advocate, you may not have the funds or ability to travel to the annual COPs. But this doesn't mean you can't participate. There are many ways you can influence the world's biggest climate change meeting. To take part you can:

- Share position papers in advance of the COP with policymakers and/or the media.
- Request a meeting with the country's delegation in advance of the COP to explain your organization's positions and demands.
- Provide concrete suggestions for the text in negotiation documents that governments are working on.
- Approach policymakers via social media.
- Engage in marches and demonstrations, which often take place in many countries during or around a COP.

Young Climate Activists participating in a climate march in Germany. Credit: CARE/Christoph Heinrich.

Civil society action at COP27. Credit: UNFCCC/Kiara Worth.


COP27 side event presentation: capacity-building for youth on leadership and adaptation.
Credit: Global Center on Adaptation.

The adaptation finance gap

All the plans and policies for addressing climate change and adapting to its impacts cost a substantial amount of money. For example, the money needed for global adaptation efforts could reach USD 140-300 billion per year in the 2030s, and up to USD 500 billion per year in the 2050s.[25]

While money is needed for adaptation, large investments are also needed for technology and infrastructure to reduce emissions. The money that goes toward climate change mitigation and adaptation efforts is called **climate finance**. This is drawn from public, private and alternative sources of financing.

The UNFCCC, the Kyoto Protocol and the Paris Agreement call for developed countries to provide financial assistance to developing countries for climate action, adaptation and mitigation. International adaptation finance to developing countries continues to rise. It reached USD 28.6 billion in 2020, representing a 34% share of total climate finance to developing countries in 2020.[26] However, there is still a huge financing gap.

UNEP estimates that for developing countries, the money needed for adaptation could be five to 10 times greater than current international public adaptation finance flows. This discrepancy between the finances needed and those available to developing countries is known as the "**adaptation finance gap**."[27] This means that there needs to be a significant acceleration in how much money is made available for adaptation finance.

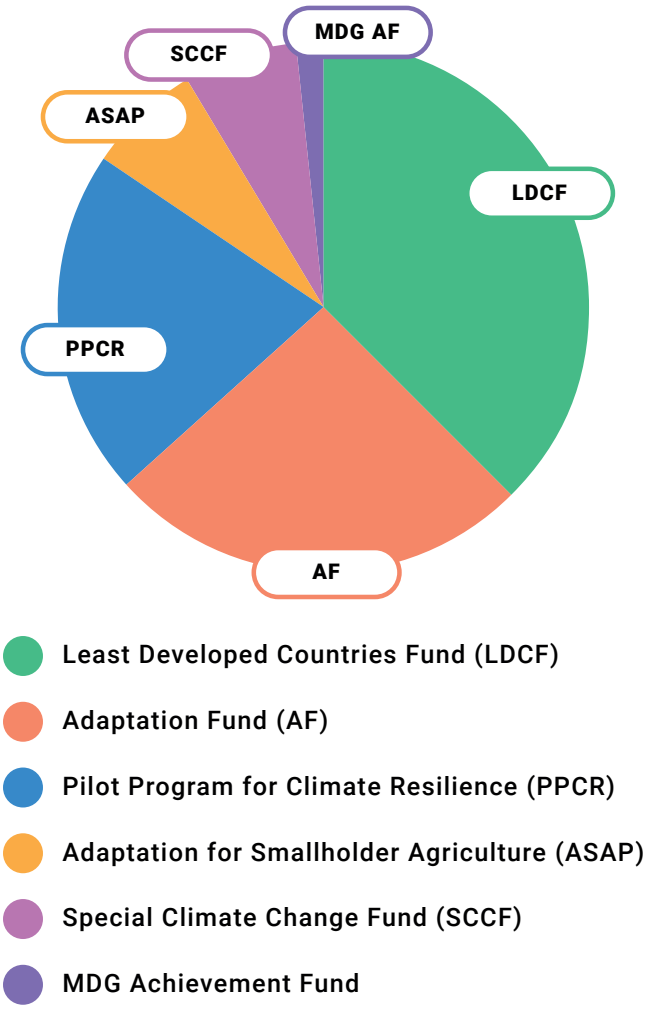

Figure 6: The different international climate finance mechanisms. Source: Climate Funds Update, 2019.[29]

Adaptation funds

There are a handful of funds dedicated to supporting adaptation. You can learn more about the six main ones, and what each is worth, via the interactive Climate Funds Update website.[28]

For an overview of the main adaptation funds and who is providing and receiving adaptation funds, read this report, Climate Finance Thematic Briefing: Adaptation Finance.[30] You can access this brief and others on the Climate Funds Update website.

The Green Climate Fund

The Green Climate Fund (GCF) was created in 2010 to promote a "paradigm shift towards low-emission and climate-resilient development pathways by providing support to developing countries to limit or reduce their greenhouse gas emissions and to adapt to the impacts of climate change."[31]

The GCF is the world's largest climate fund and a critical element of the Paris Agreement. It supports developing countries in realizing their NDC ambitions. Its mandate is to deliver a 50:50 balance between the money it allocates for mitigation and adaptation in developing countries. Given the urgency and seriousness of the climate crisis, the GCF is mandated to make an ambitious contribution to the united global response to climate change.

Challenges in accessing climate funds

While various climate financing mechanisms exist, there are several challenges to accessing climate funds. A 2021 report from IIED highlights the following challenges:[32]

1. **Climate finance is not balanced as agreed under the Paris Agreement, with adaptation** finance making up just 20% of overall climate finance flows. Only a fraction of climate finance goes to LDCs and small island developing states (SIDS). Of the funds that go to LDCs, more than half is in the form of loans. Less than 10% of global climate finance, meanwhile, is committed to local action.
2. **Development finance itself is scarce, particularly in light of the COVID-19 pandemic.** Even without the pandemic, estimates suggest that USD 1 trillion is needed to meet the SDGs, which requires an increase of 750% above current levels. Currently, just over half of official development assistance (ODA) is aligned to the goals of the Paris Agreement.

How young people can engage with climate finance

As already highlighted, there is a need for more finance for climate change adaptation. As a young person working to secure a better future through climate action, it's important to understand and engage with climate financing. There are various ways you can do this:

- Create a networking platform for youth engaged in climate action and help them organize community projects and participate in designing climate change adaptation projects at the national, sub-national and local levels.
- Track how climate change adaptation finance is spent in your country. This involves looking at how much is channeled to adaptation versus mitigation, who benefits, and whether projects are protecting the rights of local communities. The Climate Funds Update website is a useful tool for tracking climate finance, as is the GCF. If climate finance is being channeled through a non-governmental organization, you may be able to see how the money is being used if the organization is willing to share its data or has it freely available. Once you know where adaptation projects are taking place, you may be able to organize field visits for monitoring and evaluation. You can then engage with communities to see if they are benefitting from projects and find out if their rights are being protected. (Note: to do this, you will first need to get approval from the organizations implementing the projects).
- You can be a key player in advocacy around key climate finance issues. For example, you may advocate to ensure that programs that seek funding from the GCF and other international climate finance mechanisms are designed to include the needs of vulnerable groups, such as women, girls and children.

Heat Wave

The Sustainable Development Goals

WATCH the video Do you know all 17 SDGs? (1:24) to learn about the global goals.

WATCH the video SDG Climate Action 13 (11:18) to learn more about SDG 13 on climate action. The video explains the goal's five targets and related indicators and the progress made so far.

EXPLORE the online tool SDG Tracker to keep track of global progress on the SDGs.

UNFCCC, COP and the Paris Agreement

READ this guide for first timers at the COP, COP for Newbies, from YOUNGO.

EXPLORE this interactive timeline of the UNFCCC negotiations, which shows key milestones in the evolution of international climate policy.

READ UNICEF's booklet Paris Agreement for Young People to learn more about the Paris Agreement.

WATCH the video What is the Paris Agreement and how does it work? (1:39) by UN Climate Change to learn more about the Paris Agreement.

LISTEN to this recording (4:22) about the history of adaptation in international negotiations from the establishment of the UNFCCC to 2015 in Paris.

National climate change policies

EXPLORE all the NDCs available at the NDC Registry. Some countries have regional or local strategies for climate change that you can find either online or by meeting regional and local authorities.

EXPLORE the available National Adaptation Plans and National Adaptation Programmes of Action.

EXPLORE the Grantham Institute's Climate Change Laws of the World database to learn about climate change policies and laws of countries across the world. Can you find the policies and regulations for your own country?

WATCH this video on Liberia's National Adaptation Plan (15:04) to learn more about how one African country is planning for a future with climate change.

LEARN about gender integration in NDCs with a deep dive via CARE's online course on NDCs and the Gender in NDCs online course.

WATCH this video, CARE Partners for Resilience compilation video (2:46) to learn more about CARE's national-level advocacy work.

WATCH this video, PS. In Theory: Nationally Determined Contributions (2:44) to learn more about NDCs.

International climate finance and the Green Climate Fund

EXPLORE the Climate Funds Update website to learn about the growing number of multilateral climate finance initiatives designed to help developing countries address the challenges of climate change.

READ UNEP's 2022 Adaptation Gap Report, Too Little, Too Slow: Climate adaptation failure puts world at risk to further understand the gaps between adaptation finance needs and commitments.

LEARN about the GCF by taking this Introduction to the Green Climate Fund online course, where you will get a better understanding of what the GCF is, what it has been set up for, and why it is unique.

READ the Green Climate Fund Proposal Toolkit 2017, produced by Acclimatise and the Climate and Development Knowledge Network, to learn how to develop a project proposal for the GCF.

LEARN about key considerations when developing and implementing GCF projects, and the role of civil society organizations in accessing the GCF by taking this short online course, Developing and Implementing GCF Funding Proposals.

READ this funding proposal template for the Adaptation Fund.

READ Sick of waiting: Poor countries prepare to fight climate change alone, an article by Climate Home News, to understand how some developing countries are taking matters into their own hands.

LEARN how to prepare proposals that are aligned with the GCF's requirements with a short online course: Developing and Implementing GCF Funding Proposals. You will gain a better understanding of how to develop GCF proposals, taking GCF investment criteria into account along with key considerations for developing and implementing GCF projects. The course also covers how to integrate gender into GCF project proposals and the role of civil society organizations in accessing the GCF and project design.

WATCH this short video (4:20) to learn about the mandate, role and structure of the GCF.

Issues with climate finance for adaptation

READ the report Climate Adaptation Finance: Fact or Fiction? to find out how adaptation finance flows are overestimated, as large amounts of climate finance have been allocated to projects that have nothing to do with adaptation, such as the "Nhat Tan Friendship Bridge" in Vietnam. In fact, this project corresponds to a financial commitment to fund the construction of a bridge to meet Hanoi's traffic demands and link the city center with Noi Bai Airport.

READ Delivering Real Change, a working paper from IIED that highlights how adaptation finance is not reaching the local level. According to researchers, and despite compelling evidence that in many cases more effective, efficient, and sustainable climate change action can be achieved at the local level, less than 10% of climate finance committed from international climate funds by 2016 was prioritized for local-level activities.

READ how adaptation finance is not integrating gender by looking at Chapter 7 'Mainstreaming gender equality' in Climate Adaptation Finance: Fact or Fiction. About 47% of adaptation projects do not mainstream gender equality, and either have a gender marker of zero or are not marked at all.

READ the United Nation's report Accessing Climate Finance: Challenges and opportunities for Small Island Developing States for more information on barriers to accessing climate finance, and in particular getting international climate finance to the local level.

Bright Spark

Case studies

Building resilience and promoting inclusive governance
Learn about the Strengthening Resilience and Promoting Inclusive Governance Program (STRENPO) program, which aims to build resilience among women and young people in vulnerable, natural resource-dependent communities, including refugee settlements, to shocks and stresses from natural resource degradation, climate change, and conflict and displacement.

Strengthening capacity for local adaptation planning

As part of the Africa Climate Change Resilience Alliance (ACCRA), CARE in Mozambique was involved in developing an approach for participatory Local Adaptation Plans (LAPs) as a national climate-resilience planning model. This approach was also adopted by the government. With further government funding, the initiative was scaled up to include 60 communities.

STRENPO program in Uganda. Credit: CARE International in Uganda 2019.

Tools to inspire action

EXPLORE the CliMates international laboratory of ideas and actions for inspiration. CliMates brings together volunteers, students and young professionals around climate issues. It is a collective of serious and creative young people, sharing a vision for a transition to a low carbon society by informing, empowering and engaging young people in collaborative research, international advocacy and popular mobilization.

LEARN about practical tips for engagement with UNICEF's Prepare to act. Practical tips for climate advocacy and action.

EXPLORE UNICEF's Toolkit for Young Climate Activists in the Middle East and North Africa Region/Arab States Region.

Get involved in UNFCCC processes

JOIN YOUNGO by completing and submitting the YOUNGO membership registration form. You can find the details for YOUNGO focal points at the UNFCCC website.

LEARN more about how to participate in UNFCCC processes by reading the report, Youth Participation in the UNFCCC Negotiation Process: The United Nations, Young People and Climate Change. The report looks at how youth participation has taken place at UNFCCC, starting with COP5, and highlights increased efforts by young people to advocate for effective climate change solutions.

Videos

WATCH "Please Open Your Hearts" (6:14) and get inspired by Kenyan climate activist Elizabeth Wathuti speaking at the Opening Ceremony of the World Leaders Summit at COP26.

WATCH Vanessa Nakate's address "Humanity will not be saved by promises" (7:14) at COP26, where she urges world leaders to act on climate change for future generations.

WATCH a Nation TV Kenya interview Turning Down the Heat: Road to Glasgow (1:18:55), where you will learn more about what was needed at COP26 in Glasgow.

WATCH the video Fighting Climate Change. Featuring CARE-Climate-Heroine Minet from the Philippines (10:15), developed as part of the CARE Climate Heroines campaign, showcases the work of local and global women who have taken strong action on the climate crisis.

Interviews

LISTEN to this interview (on YouTube) with Julius Ng'oma from the Civil Society Network on Climate Change (CISONECC) to learn about experience from Malawi on influencing the National Adaptation process.

Cool Down

Test your understanding *answers on page 35/36*

1 **The COP is the supreme decision-making body of the UNFCCC. What does COP stand for? Select the correct answer.**
(a) Conference of the Parties
(b) Council of Pioneers
(c) Club of Paris
(d) Caretakers of the Planet

2 **Countries that are signatories to the Paris Agreement must submit Nationally Determined Contributions (NDCs). An NDC is a country's climate action plan to cut emissions and adapt to climate impacts. How often must countries update and submit their NDCs? Select the correct answer.**
(a) Every year
(b) Every three years
(c) Every five years
(d) Every 10 years

3 **True or false? The National Adaptation Plan (NAP) process seeks to identify and address medium- and long-term adaptation needs.**
(a) True
(b) False

4 **Which of the following is a way you can influence regional and local climate adaptation policies? Select the correct answer.**
(a) Urge your country to adopt a climate change strategy
(b) Advocate for integrating young people into regional and local-level climate adaptation strategies
(c) Write a lobby letter and/or meet with the Minister of Climate Change (if your government has one) and/or your member of parliament who sits on the parliamentary committee on climate change

5 **The amount of money needed to fund adaptation efforts in developing countries is estimated to be how many times greater than what is currently available from public adaptation finance flows? Select the correct answer.**

(a) 2-3 times
(b) 5-10 times
(c) 12-15 times
(d) 20 times

BONUS QUIZ: To further test your knowledge of climate change, do this online quiz developed by UNDP. It covers three topics:

- The problem of climate change
- The impacts of climate change
- Mitigating the impacts of climate change

Reflect and prepare for your climate adaptation action

Climate action starts at home. Now that you have learned about the ways young people can engage in adaptation policy processes, think about how you could influence local climate adaptation policy in your area.

- Which policy process would you like to engage in?
- Why is this process important? And what impact could you have by engaging?
- What can you learn about this process and the key actors involved before you take the steps to get involved?
- What steps will you take to get involved in this process? Who do you need to contact?
- What activities do you plan to be involved in for this process?
- What resources do you need to be involved?
- What outcomes do you expect? How will your engagement benefit you, other young people, your community or country?
- How will you share what you have learned with other young people?

Answers

1. Correct answer: (a) Conference of the Parties.
EXPLANATION: The COP (Conference of the Parties) occurs every year under the UNFCCC. The COP is the supreme decision-making body of the UNFCCC. All 198 Parties (197 countries and the European Union) to the Convention are represented at the COP. Countries use the COP to review the implementation of the UNFCCC and any other legal instruments the COP adopts, such as the Paris Agreement, and take decisions necessary to promote the effective implementation of the Convention, including institutional and administrative arrangements.

2. Correct answer: (c) Every five years.
EXPLANATION: Governments submit their updated NDCs to the UNFCCC Secretariat every five years. The NDCs generally contain high-level information on expected climate impacts, mitigation and adaptation priorities, and emissions reduction targets for each country.

3. Correct answer: (a) True.
EXPLANATION: On top of the National Adaptation Programmes of Action (NAPAs), LDCs developed (or are developing) National Adaptation Plans (NAPs). These strategic documents complement the NAPAs. They identify a country's medium- and long-term adaptation priorities and the strategies for addressing and tracking them.

4. Correct answer: (d) All of the above
EXPLANATION: As a young climate advocate, there are numerous ways to engage in adaptation policy making processes and make your voice heard. At the regional and local levels, you can:

- Urge your country to adopt a climate change strategy. If it already exists, find out how it is being implemented.
- Advocate for integrating young people into regional and local-level climate adaptation strategies. Train future generations (adolescents and children) on climate advocacy and climate adaptation issues so that knowledge is passed from generation to generation, and the movement continues to grow.
- Organize or join an awareness-raising campaign to encourage public understanding of climate change, its effects, and the actions young people can take to mitigate its anticipated impacts.
- Write a lobby letter and/or meet with the Minister of Climate Change (if your government has one) and/or your member of parliament who sits on the parliamentary committee on climate change.
- Start a petition for a climate change adaptation policy issue.

5. Correct answer: (b) 5-10 times.
EXPLANATION: UNEP estimates that for developing countries, the money needed for adaptation could be five to 10 times greater than current international public adaptation finance flows. This discrepancy between the finances needed and those available to developing countries is known as the "adaptation finance gap."

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Toolkit for Youth on Adaptation & Leadership

MODULE 7

DESIGNING AND IMPLEMENTING YOUR ADAPTATION ADVOCACY STRATEGY

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Acronyms

ASAP	The Adaptation for Smallholder Agriculture Programme
CBA	Community based adaptation
CCA	Climate change adaptation
CIS	Climate Information Services
COP	Conference of the Parties
COY	Conference of Youth
CRA	Community Risk Assessment
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EAC	East Africa community
ECOWAS	Economic Community of West African States
GCF	Green Climate Fund
GHGs	Greenhouse gases
IPCC	Intergovernmental Panel on Climate Change
JPA	Joint Principles for Adaptation
LAP	Local Adaptation Plans
LDCF	Least Developed Countries Fund
LLA	Locally Led Adaptation
MDGs	Millennium Development Goals
NAP	National Adaptation Plan
NAPA	National Adaptation Programs of Action
NDC	Nationally determined contribution
NGOs	Non-Governmental Organizations
PPCR	Pilot Program for Climate Resilience
PSP	Participatory Scenario Planning
SCCF	The Special Climate Change Fund
SDG	Sustainable Development Goal
SIDS	Small Islands Developing States
SMART	Specific, Measurable, Achievable, Relevant and Time-bound
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change

WELCOME TO THE TOOLKIT FOR YOUTH ON ADAPTATION & LEADERSHIP!

Who is this toolkit for?

Climate change is reshaping the world young people have inherited and they will bear the costs in the coming decades. However, young people are often excluded from taking on leadership roles and engaging in decision-making activities related to climate change adaptation. This Toolkit for Youth on Adaptation & Leadership equips young people with the knowledge and skills to engage in climate adaptation policy, advocacy and action. This toolkit uses the terms "youth" and "young people" to refer to people between 15 and 35 years old.

What you will learn

The toolkit covers essential materials and offers practical guidance for how you, as a young person, can take part in adaptation policy processes, lead advocacy campaigns, and approach adaptation with an entrepreneurial mindset. It provides tools for designing and implementing your own climate change adaptation actions so that you can be part of the solution to the climate crisis.

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The "Toolkit for Youth on Adaptation & Leadership" is a project under the Global Center on Adaptation Youth Leadership Program, developed by the CARE Climate Justice Center with the financial support of Norad. It came together with input from young people who, like you, are concerned about the impacts of climate change and have faced challenges when advocating and taking adaptation action.

How to use the toolkit

The toolkit includes eight modules:

1 Understanding climate change

2 The basics of vulnerability and climate change adaptation

3 Vulnerable groups and climate adaptation planning

4 Learning from youth-led climate adaptation solutions: African case studies

5 Developing soft skills for youth leadership in adaptation

6 Engaging in climate adaptation policies: local, national, and international

7 Designing and implementing your adaptation advocacy strategy

8 Designing your adaptation action

Each module contains four sections:

Warm Up is the place to start. This provides an overview of the module's key concepts, based on the latest research and best practices. It highlights tools you can use to apply what you have learned, and develop your leadership skills.

Heat Wave will deepen your understanding. Find links to supporting scientific research, important publications, and tools for exploring and applying key concepts.

Bright spark is the place to get inspired. Read case studies, watch videos, and listen to podcasts about young climate leaders to get fired up for your own climate change actions!

Cool Down is your last stop. Here, you have space to test your knowledge (with a short quiz) and consider how you can apply what you have learned to your own climate action.

MODULE 7

DESIGNING AND IMPLEMENTING YOUR ADAPTATION ADVOCACY STRATEGY

This module demonstrates how to identify policy gaps and design advocacy strategies for climate adaptation that work to fill the gaps. It details an eight-step process for planning and implementing an advocacy strategy. It covers how to identify key target audiences and highlights different tactics advocates can use to influence these audiences.

What will I learn?

By the end of the module, you will:

- Have learned how to identify the gaps in adaptation policy and understand the enabling environment you will be working in as an advocate.
- Have learned how to design an advocacy strategy following CARE's eight-step process.
- Be equipped with relevant skills and tools to influence climate change adaptation policies at the local level and participate in their implementation.

Glossary

Term	Definition	Source
Advocacy	Advocacy is the deliberate process of influencing those who make decisions about developing, changing and implementing policies	CARE international Advocacy Handbook
Goals	Goals are the specification of what an advocacy initiative should accomplish. Goals need to be SMART: specific, measurable, achievable, realistic and time-bound. They should clearly state what will change, who will make that change, by how much, and when. When goals are poorly articulated or ambiguous, it can be difficult to understand what the advocacy initiative is trying to achieve, to maintain focus and to evaluate efforts.	CARE international Advocacy Handbook
Integrated risk management law and policy (IRM) checklist	This checklist can be used as a basis for advocacy strategies aiming to integrate Disaster Risk Reduction, Climate Change Adaptation and Ecosystem Management and Restoration into laws, policies and their implementation on the ground.	CARE Integrated Risk Management
Joint Principles for Adaptation (JPA)	The Joint Principles for Adaptation (JPA) is a statement by civil society organizations from across the world on what they consider to be a benchmark for good adaptation planning and implementation. It is a tool for ensuring that national policies and plans meet the needs and fulfil the rights of the most vulnerable people to adapt to climate change.	CARE Jointed Principles for Adaptation
Objectives	Objectives are specific and measurable targets that must be achieved in order to realize the broader goals. These objectives are concrete and medium-term and provide a clear direction for the organization and individuals in achieving the goal.	CARE international Advocacy Handbook
PESTLE analysis	PESTLE stands for: Political, Economic, Social Technological, Legal and Environmental factors or trends. It is helpful to break down the process of undertaking a context analysis into manageable chunks using a PESTLE analysis. This tool promotes a systematic understanding of the wider environment. It can also help to identify new issues and opportunities on the horizon; to create scenarios; and to develop a coherent vision.	CARE international Advocacy Handbook
Primary targets	Primary targets are the people who have the power to make the changes needed to achieve the advocacy objectives. They are often known as decision-makers. It is vital to know who makes the decisions so as not to waste time or resources targeting the wrong people.	CARE international Advocacy Handbook
Problem tree	Problem Trees is a graphic tool that helps find solutions by mapping out the anatomy of cause and effect around an issue in a similar way to a Mind Map, but with more structure. The policy-related problem or issue is written in the centre of the flip chart and becomes the trunk of the tree. The causes and consequences of the focal problem become the roots. The question of 'why' an issue is a problem needs to be repeatedly asked to find the root cause.	CARE international Advocacy Handbook

Term	Definition	Source
Secondary targets	Secondary targets are individuals or groups who have the potential to influence or persuade the primary target, who may be difficult to reach or persuade directly. Secondary targets could be people to whom the primary target is accountable, advisors, local government officials, media, public opinion, personal contacts, celebrities, or academics. By persuading these secondary targets, the hope is that they can then influence the primary target to change their stance or take a desired action.	CARE international Advocacy Handbook
SMART	SMART stands for specific, measurable, achievable, realistic and time-bound. These indicators can be used for monitoring and evaluation.	CARE international Advocacy Handbook

Warm Up

The role of advocacy

Advocacy is the "deliberate process of influencing those who make decisions about developing, changing and implementing policies."[1] Influencing those who hold power involves both direct and indirect advocacy, which can be coordinated for effectiveness.

Direct advocacy relates to lobbying, litigation and activism, while **indirect advocacy** relates to educating those you aim to influence and organizing action. Most advocacy falls into one or more of the five approaches shown in Figure 1.

Civil society advocacy at COP27. Credit: UNFCCC/Kiara Worth.

Advocacy can be external, such as when a civil society organization tries to influence the government or private companies. It can also be internal. Internal advocacy occurs within an organization or institution. It aims to build organizational and political support for changes in policies, services, funding, or priorities that will benefit staff, the organization, consumers, or the wider community. For example, local governments could advocate to national authorities for more climate adaptation funding.

Developing your advocacy strategy: a step-by-step approach

For any advocacy to be successful you need a clear strategy. This is a plan that will take you from first identifying what issue, or issues, you want to do advocacy on, through defining your goals and understanding who you need to influence to achieve them, to evaluating how successful your advocacy has been.

There is a tendency in advocacy to jump straight in, organizing demonstrations, writing to the media and generating a social media storm around climate issues. But unless you do your homework and devise a sound strategy, you can end up wasting a lot of time and effort. Ultimately, the success of your advocacy rests on the strength of your strategy.

Let's look at what to do at each stage of the strategy process.

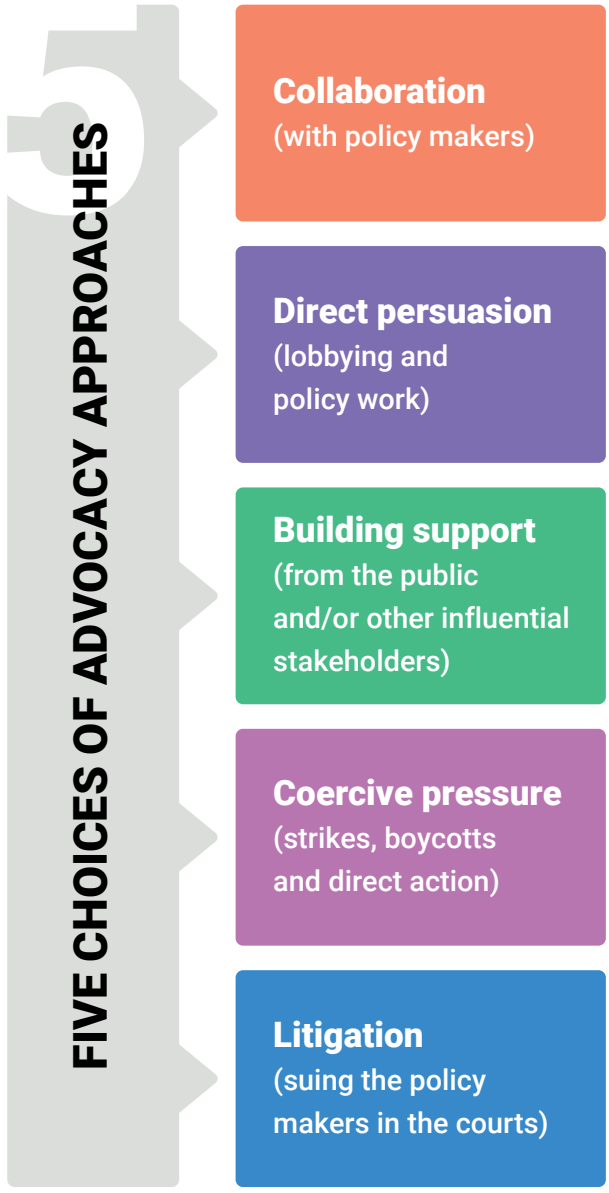


Figure 1: Five choices of advocacy approaches. Source: Southern Voices, 2014.[2]

Analyze policy and identify the gaps
Doing a **policy analysis** is a crucial first step. It will help you identify the gaps in adaptation policy and define what needs to change (the issue you will aim to influence). It will also inform your understanding of the enabling environment – the political, social and economic conditions you are operating in.

A critical tool for policy analysis: the Joint Principles for Adaptation
The Joint Principles for Action (JPA) are a benchmark for good adaptation planning and implementation.[3]

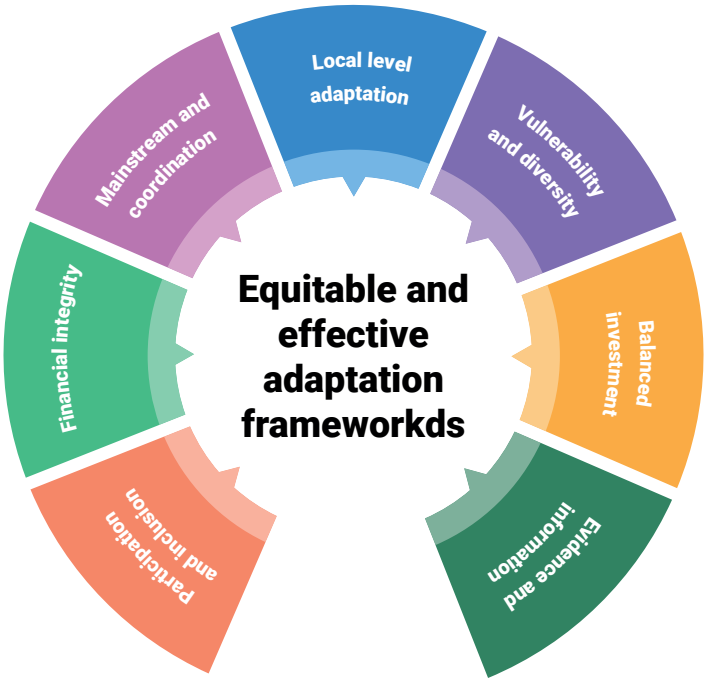


Figure 2: Joint Principles for Adaptation. Source: Southern Voices, 2015.[4]

According to the JPA, climate change adaptation policies are more equitable and effective when they follow seven principles (figure 2):

- Adaptation policies and plans are participatory and inclusive.
- Funds for adaptation are used efficiently and managed transparently with integrity.
- All government sectors and levels of administration have defined responsibilities and appropriate resources to fulfil them.
- Local adaptation plans are developed through approaches that build the resilience of communities and ecosystems.
- The resilience of groups who are most vulnerable to climate change is promoted.
- There is appropriate investment in building skills and capacities for adaptation, as well as in physical infrastructure.
- Plans and policies respond to evidence of the current and future impacts of climate change.

You can use the JPA to analyze existing policies and plans to see where they fall short and then define focus areas for advocacy. There is a JPA assessment tool you can use to produce a scorecard for how policies measure up to the principles.

Plan your advocacy strategy

Once you've identified gaps in policy, it's time to home in on your advocacy issues and plan your strategy. CARE's eight-step guide (Figure 3) guides you through how to plan (steps 1-6), implement (step 7) and evaluate (step 8) your advocacy strategy. We'll go through each step below. (For full details on every step, see The CARE International Advocacy Handbook[5]).

Figure 3: CARE's eight-step advocacy planning and implementation cycle. Source: CARE,2014[6]

Step 1: Identify a relevant advocacy issue or problem

Here, you should ask: What is the adaptation problem we need to solve? Knowing what your problem is will help uncover some of its root causes and potential solutions.
When selecting advocacy issues ensure they meet the following criteria:

- The issue should be related to a **certain norm, policy or practice**. For example: an ineffective or non-existent law around climate change adaptation.
- The issue should be a **genuine concern** for those involved. There should be evidence to support your reasoning for why things need to change.
- The issue needs to be **real**.

Use a problem tree

Problem tree analysis identifies the **root causes** and **consequences** of an issue. It is often done as a participatory exercise. A problem tree helps you identify solutions to a problem and express these as goals for change.

Steps for developing a problem tree:

1 Identify the advocacy issue or problem. This is represented by the tree's trunk. In the example in Figure 4, the impacts of climate change for people living in climate hotspots is the problem/issue.

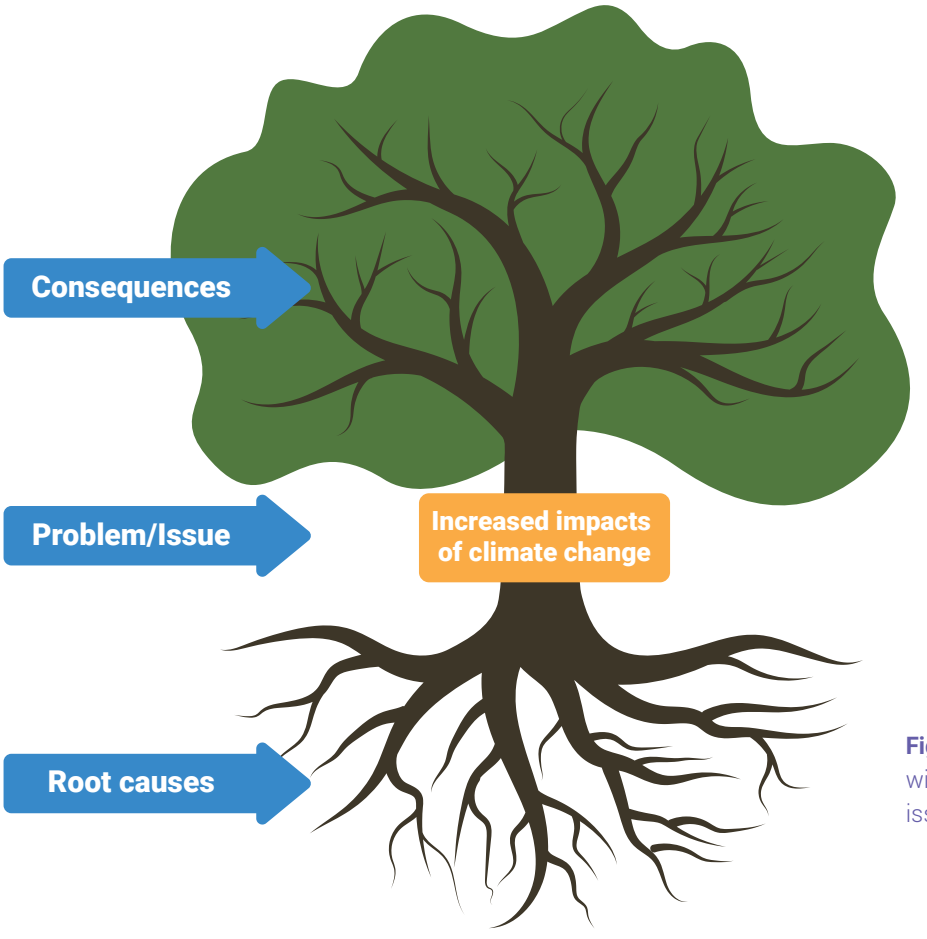


Figure 4: Problem tree with main advocacy issue/problem identified.

2 Identify the root causes of the problem. Write these on the root of the tree. Some root causes can then be unpacked to show what contributes to the root causes. In Figure 5-1, the root cause 'crops and livestock are not resilient to climate change' can be broken down to include contributing factors, such as 'climate-smart agriculture practices (e.g., tolerant seeds) are not being used' and 'no risk insurance on crops/ livestock.'

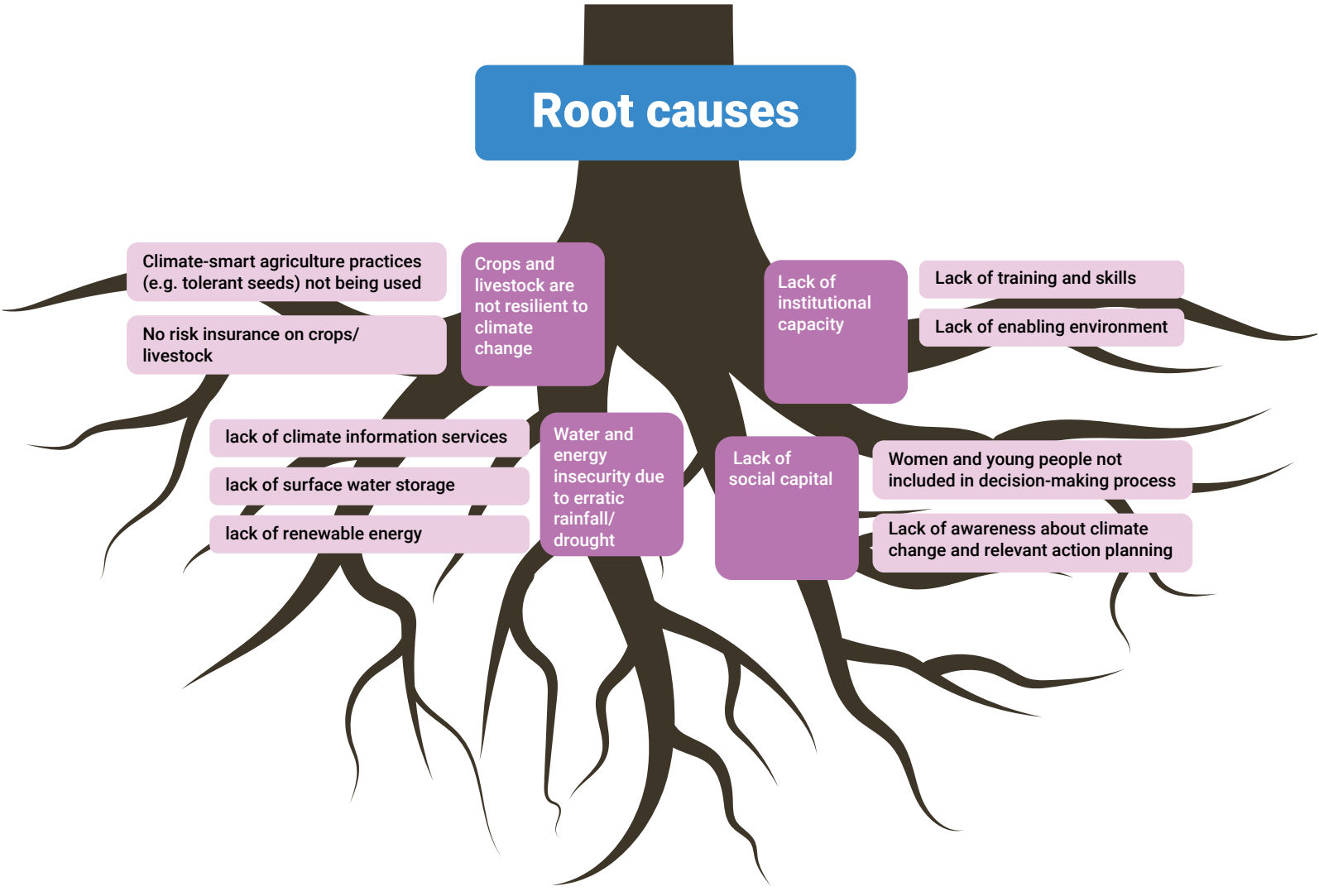


Figure 5-1: Problem tree with root causes

3 The final step is to identify the consequences of the problem/issue and write them as the branches of the tree. Again, these consequences can be unpacked to show what results from them. In Figure 5-2, the consequence 'low crop yield' leads to issues like 'loss of jobs' and 'economic losses.'

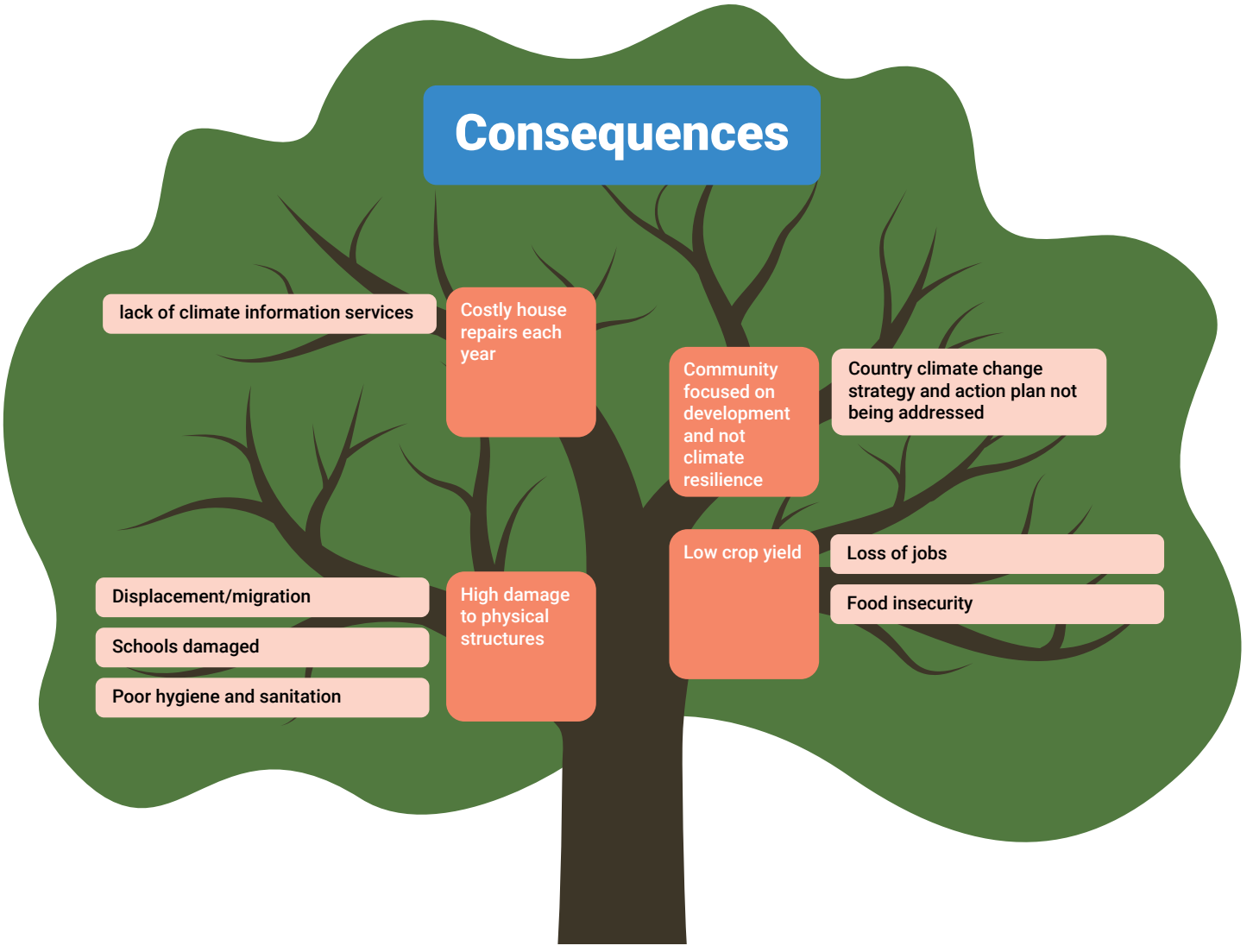


Figure 5-1: Problem tree with consequences.

Step 2: Understand the broader context surrounding your advocacy initiative
This step involves identifying what is relevant and achievable within the circumstances in your country.

This can be done with a **PESTLE analysis**. PESTLE stands for: **P**olitical, **E**conomic, **S**ocial **T**echnological, **L**egal and **E**nvironmental factors or trends. This tool helps you identify new issues and opportunities, create scenarios, and develop a coherent vision for your advocacy objectives.

Questions to ask in a PESTLE analysis

- What are the relevant **political factors** and trends in the country? (including the government, legislature, control/lack of control over the judiciary, as well as other political movements and pressure groups)?
- What are the **economic factors** and trends in the country (including where the government gets its money, the main private sector employers, income distribution and levels of poverty)?
- What are the relevant **social factors** and trends in the country (including demographic information, education and health statistics, employment rates, land ownership, media freedom, religious affiliations of different parts of society)?
- What are the **technological factors** and trends in the country (including information technology, infrastructure, access to telecommunications and broadcast media)?
- What are the legal factors and constraints that are relevant to the advocacy work?
- What are the major **environmental trends** in the country (including deforestation, pollution, drought/flooding, agriculture)?

TIP: For more detail about the questions to ask for each category, see The CARE international Advocacy Handbook

How to do the PESTLE analysis

- List the external factors which could affect the causes or consequences of the problem/ issue you've identified, using PESTLE categories.
- Identify which of these may be most significant – either as opportunities or threats. Think about how they affect people of different genders.
- Agree on five key trends that are most important for the issue.
- Do further research on these five if needed.

It is helpful to represent your PESTLE analysis in **two columns**, itemizing the positive and negative factors your strategy needs to contend with. Table 1 can serve as a template. It includes examples of positive and negative factors.

Table 1: Template and examples of positive and negative factors based on PESTLE analysis.

	POSITIVE FACTORS	NEGATIVE FACTORS
Political	Existing political champions who support the issue	Lack of communication between local, provincial and national level government
Economic		Lack of funding to implement the change
Social	Appreciation of education in the culture	
Technological		Lack of access to telecommunication infrastructure makes it difficult to reach vulnerable groups
Legal	Strong policies in place (even though they may not be enforced)	
Environmental	Strong environmental laws	

Step 3: Define your advocacy goals and objectives

Here, the question is: What must change? This high-level thinking will help you define your goals. Once you have identified your goals, you can then flesh out the specific objectives that support them.

- A **goal** defines what policies need to be created, changed or enacted and what impact they will have on climate change adaptation. A goal should be as specific as possible, highlighting who needs to make the policy change and when.
- An **objective** defines what needs to happen to achieve this goal. You will likely have multiple objectives for each goal.

TIP: Download this advocacy strategy template and use it to define your goals, objectives and tactics.

BOX 1: EXAMPLE OF A CLIMATE CHANGE ADAPTATION ADVOCACY GOAL WITH SUPPORTING OBJECTIVES

After doing your policy analysis, you might have identified that your national government does not have a National Adaptation Programme of Action (NAPA) in place. Knowing that a NAPA is vital to guide adaptation policy, you may then decide that you want to advocate for the government to develop a NAPA.

Your **goal** could be:

- By 2026, the Ministry of Environment will have submitted a NAPA, that has been developed in collaboration with civil society and youth organizations, to the UNFCCC.

Your **objectives** could be:

- By the end of 2023, the Ministry of Environment has agreed to develop a NAPA.
- By the end of 2024, the Ministry of Environment has conducted dialogues with civil society and youth organizations working on climate change adaptation issues to inform the adaptation priorities listed in the NAPA.
- By the end of 2025, the Ministry of Environment has invited civil society and youth climate advocates to review the NAPA, and share inputs for improvement, before submitting the final version.

Make sure your goals and objectives are SMART

When defining your goals and objectives, it pays to be specific. Aim for goals and objectives that are **SMART**. This means they are **S**pecific, **M**easurable, **A**chievable, **R**elevant and **T**ime-bound.

In the real world, it may not be possible to meet all the SMART criteria. Your goals and objectives might have just some of the main elements. So, it may be more realistic to see SMART goals as something to work towards rather than a hard-and-fast rule.

Your analysis with the problem tree, and understanding of the broader policy context from your PESTLE analysis, will help you define your SMART goals and objectives.

One you have clarified your goals and objectives you can test them against what is known as a **Theory of Change**. This is a testable hypothesis used to guide decision making and action during the development and execution of an advocacy strategy. It explains the process of change and helps you evaluate whether your advocacy actions are leading to the expected outcomes.

BOX 2: EXAMPLE OF A THEORY OF CHANGE

A Theory of Change is typically expressed in the format: "If X … then Y … because …"

IF youth organizations are empowered to engage in analysis and decision-making to inform climate change adaptation

THEN government will adopt better climate resilience and adaptation practices

BECAUSE youth organizations will hold government accountable and input on adaptation policy processes.

Step 4: Identify who you need to persuade to make the change
The question you need to ask is: Who has the power to make the change I want to see?

As with your goals, here it pays to be specific. Identify the specific individuals in positions of power you need to engage with. For example, you wouldn't target the Ministry of Environment as a whole, since it's too big. Rather, you would identify people in the Ministry, such as the Minister, her policy director, or a director within her department. Identify these people by name.

When deciding who to engage, specify your primary and secondary targets.

- **Primary targets are decision-makers:** people who have the power to make the change, such as politicians, government officials, community leaders and individuals in the private sector.
- **Secondary targets are power-holders:** people who have influence over the primary target, such as a Minister's advisors, constituents, celebrities, academics, local government and the media. Where primary targets are difficult to reach, you may be able to access them through these secondary targets.

Also, consider how you can best reach these people.

Policy review meeting in Uganda. Credit: CGIAR Climate/Elisabeth Van de Grift.

Step 5: Craft your policy asks and key messages

Policy asks are the specific, real-world actions that you want your targets to take to achieve your advocacy goal(s).

Key messages are the main points you make about your advocacy issues. They include key information and arguments to persuade your targets to act.

Whether your advocacy audiences are policymakers, political elites, the business community, international agencies or members of the public, you must be clear what message you want to get across about climate change adaptation.

To be effective, your policy asks and key messages need to:

- Be effective and credible.
- Consider people's current understanding and attitudes around your advocacy issue.
- Be targeted, precise and straight to the point.
- Lead to the acceptance of taking meaningful action to implement adaptation solutions.

Step 6: Identify resources for your advocacy strategy

Before developing a budget and action plan for advocacy work, it is essential to make a realistic assessment of existing resources and identify potential sources of funding to support the work. It is helpful at this stage to identify possible donors and/or funding opportunities to finance your advocacy project. Here, you could draw up a list of potential donors to approach for funding.

Implement your advocacy strategy

Once you've planned out what you will do and know who you will engage to advocate for change, it's time to go out and do your advocacy, using the tactics you think will be most effective.

Step 7: Implement your advocacy tactics

You might feel like you want to just jump in and start creating things like videos, writing press releases and starting petitions. But doing this without a clear strategy is not a good use of your time and energy. Make sure that each tactic clearly supports your goal(s) and your strategy for reaching the people you aim to influence. Choose the appropriate tactics based on their cost, level of risk and chances of success in the existing political environment.

While it's important to decide on an initial set of tactics to help you achieve your goal(s), you will need to remain flexible. It's important to seize opportunities that may emerge (around political processes, or media opportunities, for example), even if it means changing your original plan.

Common tactics include:

- A well-written **op-ed** (an opinion piece for a newspaper, magazine, or online publication) can hold government accountable, questioning whether it is doing everything it should do, or has agreed to do. Op-eds can help influence members of the public to support your cause.
- Well-researched **reports** are a great way to present evidence that supports your policy demands.
- **Policy briefs** can be used for lobbying and inputting on key policy decisions.
- You can use **social media** to raise awareness. Successful social media campaigns can show government that others are paying attention.
- **Petitions** show parliamentarians that there are others who support of your demands.

BOX 3: TACTICS YOU COULD USE IN YOUR COMMUNITY[7]

- **Send letters to your local representatives** and politicians highlighting your, or your group's, stance on key climate adaptation issues. What groups are represented in decision making? Is this a fair representation of your region? What is your local government doing about the climate crisis?
- **Design and put up posters** in your neighborhood to get people talking about the adaptation issue you are advocating about.
- **Write a press release and communicate with local media** about the climate adaptation work you are doing. Let them know your core aims in a simple straightforward way.
- **Hand out flyers** or post letters through people's doors.
- **Set up an information desk at local events** to share information about adaptation and your advocacy around key issues.
- **Start an online advocacy campaign** with a hashtag or images about climate adaptation (see the Heatwave section for ideas on using TikTok).
- **Stage a rally or public protest** in a place where you will get a lot of attention. (Note: only if it is safe to do so in your country context).

IMPORTANT: Know your rights and keep yourself safe! In many countries the right to free assembly is limited in certain circumstances. Make sure you have read up on your rights before engaging in more high-risk forms of advocacy such as protesting.

BOX 4: CONSIDER HOW PEOPLE WILL REACT TO YOUR CALL FOR CHANGE WITH THE 5 CS OF CHANGE

According to research by The Management Centre Learning, there are five main reactions to change. Use these "five Cs" to reflect on how people will react to your call for change. You need to be prepared and plan an approach for each of them.

Champions
Perhaps 5–10% of the total. These are people who are prepared to stick their necks out, run with an idea, and own what happens. You need to treat champions cautiously since they generally champion everything. Their enthusiasm could give you a false impression of how everyone else is feeling.

Chasers
Roughly 15–20% of the total. Chasers don't immediately respond positively to your proposal for change. At the end of a briefing, they look around to see who's signed up. They want to discuss your idea with others before forming a judgment and will generally look to a key opinion maker or "trigger" person for guidance.

Converts
About 30–50% of the total. Converts are the biggest single group in your change audience. They listen in silence to the proposed change and don't ask questions. Converts want solid evidence in favour of the change in order to come on board.

Challengers
15–20% of the total. They ask difficult questions initially and then ... continue to do so. Their approach is to confront and be awkward because they have a strong stake in the outcome. Take this as an opportunity to be rigorous in your thinking and address issues that others may have, even before they come up.

Change-phobics
Roughly 5–10% of the total. They will never be convinced. They can slow down or even derail change. They cause dissent and are essentially immovable.
When you engage in advocacy for change consider how you might deal with the 5Cs.

Evaluate your strategy

So, you've gone out and done your advocacy. Using appropriate tactics, you engaged with your primary and secondary targets with the aim of influencing them to make change. But how can you know if you have really achieved your goals? Or if your strategy is actually working?

That's where the crucial step of evaluation comes in. Evaluating your strategy allows you to document your wins, highlight where you could have taken a different approach, and gives you a chance to redesign and plan new advocacy strategies.

Step 8: Monitor and evaluate progress

Effective monitoring and evaluation require careful planning. It is vital to establish what information is necessary for tracking progress, and how it can be obtained, before the strategy is implemented.

Make sure you assign time for periodic reviews to adjust your strategy and tactics and update your monitoring and evaluation systems accordingly. No matter how much preparation goes into your strategy, advocacy initiatives rarely follow a set plan and anticipated timelines. It is important to acknowledge this by incorporating moments for reflection and learning. Develop a learning plan or timeline for sessions that review the data your team has collected and reflect on lessons learned and changes that need to be made.[9]

Assess whether you achieved your goals and objectives

When you defined your goals and objectives (in Step 3), you will have set timeframes for achieving these. Some of these might have a long-term horizon. But it's good to frequently assess which of your goals and objectives you have met, using appropriate milestones.

Questions to ask include:

- Which of my goals and objectives have I fully met?
- Which of my goals and objectives have I partially met?
- Which of my goals and objectives have I failed to meet?

Assess your target audience

When evaluating your advocacy strategy, it's important to assess what impacts it has had on the people you targeted and look to see if there are new targets to engage.

Questions to ask include:

- Were the people originally identified as key targets the right ones for effecting change?
- Have any of them changed over time? How?
- Have you encountered new stakeholders who need to be factored in?
- Have you learned anything new about your key target audiences?

Adapt your tactics

Based on your understanding of how effective you have been at reaching your goals, and what you know about your target audiences, you can then review your tactics along with your Theory of Change.

Questions to ask include:

- Are your tactics appropriate for your primary and secondary targets, given what you know about how they have responded to them?
- Do you still think your tactics will lead to your planned outcomes? Do your assumptions still make sense?
- How might you adapt your tactics, or try something new, to be more effective in your advocacy?

Heat Wave

Climate change advocacy tools and tactics

EXPLORE Youth Leadership in Climate Policy: Turning knowledge and skills into action for climate empowerment, a workbook and facilitator's guide by Plan International. It includes problem tree worksheets and gives ideas on how to connect with stakeholders, including tips on messaging and useful tactics.

READ the Climate Justice Toolkit for Youth for ideas on advocacy methods (see page 15).

READ the UNDP's Aiming Higher: Elevating Meaningful Youth Engagement for Climate Action, especially pages 19–26 which provide a framework for meaningful youth participation in climate action.

READ Gender and Climate Change Advocacy Strategy for inspiration on designing a strategy that advocates for gender responsive climate change adaptation policies. This 25-page strategy has been developed by the Gender and Climate Change Working Group in Kenya.

Planning campaigns

EXPLORE this online course from CARE, The Basics of Advocacy Strategy Design. Dig a little deeper into the first three steps in the advocacy planning and implementation cycle.

READ The CARE International Advocacy Handbook, (also available in French). This manual provides guidance on how to plan and implement advocacy strategies and actions and presents different advocacy tools that can be used. The Handbook features a wide variety of CARE's advocacy initiatives along with several climate change advocacy initiatives.

READ the Southern Voices Climate Change Advocacy Toolkits, a handy resource for the different steps to develop and implement an advocacy strategy.

READ Plan International's Youth Toolkit to learn how to design a campaign. It provides tips on how to design and analyze campaigns using PESTLE, problem tree analysis and a systems mapping tool.

READ UNICEF's Prepare to Act booklet, which has many useful tips on how to engage with influencing policies and tactics to use in advocacy.

READ Oxfam's Quick Guide to Power Analysis. This brief article discusses how unequal power relations manifest themselves and why having a more complete understanding of the power relations at play helps you identify appropriate strategies and entry points for programs.

READ the journal article Using evidence to influence policy: Oxfam's experience, which combines insights from policy studies with specific case studies of Oxfam campaigns. It describes different ways to promote the uptake of research evidence in policy.

Organizing public events

READ Youth participation in events by Contextual Safeguarding, which highlights the things you should keep in mind when inviting other young people to a public event.

READ this planning guide on how to hold a youth summit, a step-by-step outline for what to do when planning a public youth summit.

Policy analysis

EXPLORE the Joint Principles for Adaptation (JPA) assessment tool and use it to analyze adaptation policies.

LEARN about the Integrated Risk Management (IRM) Law and Policy Checklist, developed by the Partners for Resilience (PfR) Programme. It will help you identify areas for improvement within current legislation, policies and implementation.

WATCH this video (6:25) to learn more about the Integrated Risk Management (IRM) Policy checklist. Your analysis can be used as a basis for climate change adaptation advocacy strategies.

Theory of Change

LEARN about how to define a Theory of Change with these slides from CARE.

Monitoring, evaluation and learning resources for advocacy

READ Power Tool: Developing a low-cost, low-tech Advocacy MEL (Monitoring, Evaluation, and Learning) System (English, French) by CARE. This consists of multiple tools for developing a simple system to measure and track progress on your advocacy goals.

READ Monitoring and Evaluation for Advocacy and Influencing. This guide provides options to choose from, depending on who you are trying to influence, how you aim to influence, how you want to capture the effects of your advocacy effort, and what resources you have to achieve this.

EXPLORE the Advocacy Tracker and Advocacy and Influencing Impact Reporting Tool (AIIR Tool) (English, Arabic). Advocacy Tracker focuses on documenting small or intermediate achievements throughout the advocacy process. The AIIR Tool is an easy template for documenting and communicating an advocacy win. It can be incorporated into existing MEL systems.

Bright Spark

Case study

Raising awareness in Turkana County and empowering Kenya's young people to take part in climate advocacy: Ekai Nabenyo

Ekai Nabenyo is from Lorengelup, a small community in Turkana County, Northern Kenya, a dry and arid region. In this pastoralist community, people's livelihoods depend on livestock. Ekai took an interest in climate change when studying climate law at university. He noticed that the indigenous community members, despite being severely impacted by the effects of climate change, were not part of the discussions around climate impacts and responses.

In 2012, he started the Lorengelup Community Development Initiative. The organization focused on raising awareness about climate change and other development issues in the community.

Ekai faced many challenges. For one, there was no existing platform for young people to participate in climate policy processes and Ekai struggled to gain access to decision-making processes. However, he persevered and his work on climate change awareness gained international attention. He was sponsored to attend COP21 to share his story with the rest of the world.

Ekai has since expanded his work and changed the name of the organization to Article 43, which operates across Kenya and has reached more than 20,000 community members. (Read the full case study in the Youth Climate Advocacy Special Report from the South African Institute of International Affairs).

Policy briefs by youth organizations

READ The African Youth and Climate Change Policy Brief developed by The Youth Café (TYC), a non-profit, pan-African "youth-led and youth-serving" organization headquartered in Nairobi, Kenya. The brief highlights the challenges African young people face in participating in climate change matters and provides recommendations on how global and national leaders can address these challenges.

READ A Regional Perspective: Youth Voices on Climate Action & Recovery. This brief,

developed by Green Africa Youth Organization, elevates the voices and ideas of youth across the Global South based on evidence-based, participatory workshops.

READ this Policy brief by Zimbabwean youth in the Nationally Determined Contributions (NDCs) enhancement process. It highlights how the revised NDCs can address young people's concerns about climate change.

Inspiring examples of young advocates from across Africa

WATCH this video featuring Nkosilathi Nyathi (1:42), a young changemaker from Zimbabwe. He uses his public speaking skills to speak about how he is experiencing climate change. He attended COP25 where he had conversations with a range of people and presented at the High-Level Political Forum, where the Declaration on Children, Youth and Climate Action was signed.

WATCH this video featuring Davidzo Chizhengeni (4:40), who works as a small-scale farmer and is the founder of KVD Consultancy based in Zimbabwe. Davidzo invests his knowledge on farming to improve the livestock industry in his country and advocates for better farming practices.

WATCH this feature about African Youth from Kenya and Uganda who are using art to engage in advocacy on climate change (3:24). They use songs, visual art and games, which all involve creativity, storytelling and visual tools to communicate about the causes and effects of climate change and to propose solutions to these problems.

Polish your writing skills

WATCH the video by Future Learn (3:30) for useful tips on academic writing.

LEARN about creative learning skills through the Start Writing Fiction course offered by the Open University. This course is free.

LEARN to write an op-ed with guidance from the OpEd Project.

LEARN how to develop a policy brief with guidance from the IDRC.

READ tips from Microsoft on how to write better emails.

Visual storytelling for adaptation advocacy

LEARN how visual storytelling proved to be a successful method for women to influence National Adaptation Processes in Kenya.

Social media tactics

Whether your favorite social app is Facebook, Instagram, Twitter, YouTube, or TikTok, there are countless, creative ways to communicate your climate adaptation advocacy and actions and contribute to policy changes!

Time is TikTok Ticking!

Are you active on TikTok or just a casual viewer? Then you are part of **over a billion** TikTok users globally. TikTok has seen significant audience growth all over the world and its popularity continues to rise in Africa. For instance, the app's market share in Nigeria is now over 31%.

TikTok Tips!

1 Catchy is King but Quality is Queen Snappy videos often perform better on TikTok. While the recommended length is 21–34 seconds, you do not have to limit yourself to this. After all, climate adaptation advocacy messages should be clear, persuasive and evidence-based! Make your videos concise without compromising quality.

2 Cross-posting is Key!
Share your TikTok video on other platforms to reach more audiences and attract more engagement.

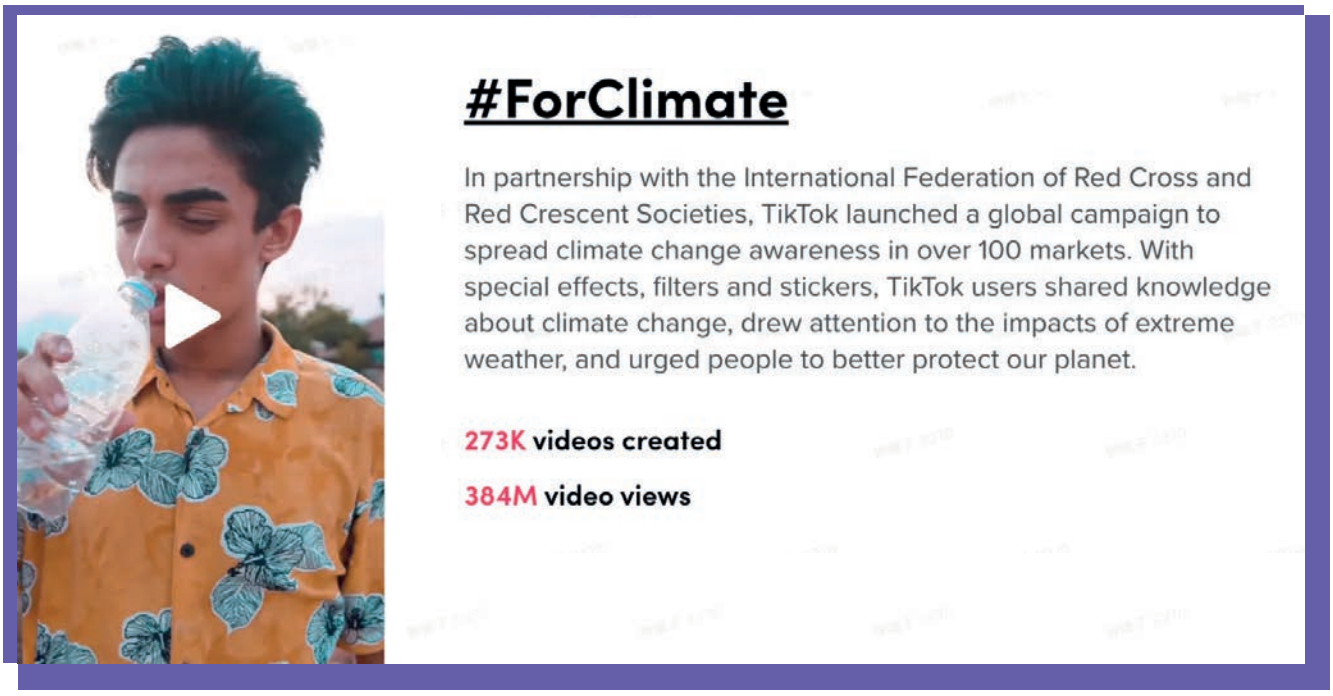
Tip: Cross-post it on Instagram as a Reel!

3 No Harm in Hashtags
Like-minded young people can find your content more easily and join the conversation if you use relevant hashtags. Choose hashtags intentionally and keep to five hashtags at most. Be on the lookout for trending hashtags and use them if relevant!

Sample hashtags: #ClimateChange #ClimateCrisis #ClimateAction #SDG13 #ClimateJustice or #ForClimate. What other hashtags would you add?

4 Calendar your Content
Post your content on relevant International Days like Earth Day (April 22), World Environment Day (June 5), Zero Emissions Day (September 21), International Day of Climate Action (October 24) and others. Do you have local climate and environment-related days in your country? Post on those days too and use local hashtags!

Get inspired: #ForClimate goes viral on TikTok!



Screenshot of the #ForClimate campaign. Source: TikTok.

In their 2019 year-end review, the International Federation of Red Cross and Red Crescent Societies shared that almost half a billion people watched #ForClimate videos on TikTok that year!

Are you inspired to use TikTok to spread your messages and gain support for climate adaptation?

Cool Down

Test your understanding *answers on page 35/36*

1 Which of the following is not one of the Joint Principles for Adaptation (a tool used for adaptation policy analysis)?

(a) The formulation, implementation and monitoring of adaptation policies and plans is participatory and inclusive
(b) Funds for adaptation are used efficiently, and managed transparently and with integrity
(c) The resilience of groups who are most vulnerable to climate change is promoted
(d) Funding for adaptation should be equal to, or greater than, funding for mitigation

2 When developing your advocacy strategy, at which step in CARE's eight-step process would you make use of a problem tree? Choose the correct answer.

(a) Step 8: Monitor and evaluate progress
(b) Step 1: Identify a relevant advocacy issue or problem
(c) Step 7: Implement your advocacy tactics
(d) Step 5: Craft your policy asks and key messages

3 A ……. refers to what policies need to be created, changed or enacted and what impact they will have on climate change adaptation.

(a) Goal
(a) Objective

4 When identifying people that you aim to target with your advocacy, the Minister of Environment would fall under the category of a secondary target. True or False?

(a) True
(b) False

5 **Participating in debates, dialogues, roundtables and panel discussions on climate change is an advocacy tactic that falls under which of the following categories? Select the correct answer.**
(a) Public education
(b) Building coalitions/lobbying
(c) Accountability
(d) Public mobilization

BONUS QUIZ: To further test your knowledge of climate change, do this online quiz developed by UNDP. It covers three topics:

- The problem of climate change
- The impacts of climate change
- Mitigating the impacts of climate change

Reflect and prepare for your climate adaptation action

To identify a potential advocacy issue, consider:

- What is needed in your community with regards to climate adaptation that is not there currently?
- Can you identify a problem that you would like to engage with through advocacy?

Then, think about how you could build an **advocacy strategy** based on what you have learned in this module. To get started, consider the following questions:

1 What is the adaptation problem I need to solve?
2 How does the context affect the problem and what I can achieve through advocacy?
3 What are my goals and objectives? (Make these as specific as possible, following the SMART model)
4 Who do I need to target with my advocacy? (Identify primary and secondary targets)
5 What are my main policy asks and key messages? (Write these in clear and concrete language)
6 What resources are available to support my advocacy? Which organizations or individuals might I approach for funding or partnerships?
7 What tactics will I use to reach the people I am trying to influence?
8) How will I evaluate the success of my advocacy? (Tie this answer to your answer for question 3 and consider the timeframes you will use to measure your progress)

Once you've answered these questions and are ready to move forward, you can then further define and flesh out your strategy using the information in this module.

Answers

1. Correct answer: (d) Funding for adaptation should be equal to, or greater than, funding for mitigation.
EXPLANATION: According to the JPA, national frameworks for climate change adaptation are more equitable and more effective when they follow these seven principles:

- The formulation, implementation and monitoring of adaptation policies and plans is participatory and inclusive.
- Funds for adaptation are used efficiently and managed transparently and with integrity.
- All government sectors and levels of administration have defined responsibilities and appropriate resources to fulfil them.
- Local adaptation plans are developed through approaches that build resilience of communities and ecosystems.
- The resilience of groups who are most vulnerable to climate change is promoted.
- There is appropriate investment in the building of skills.
  and capacities for adaptation, as well as in physical infrastructure.
- Plans and policies respond to evidence of the current and future manifestations and impacts of climate change.

2. Correct answer: (b) Identify a relevant advocacy issue or problem.
EXPLANATION: A "problem tree" is a useful tool for Step 1. Problem tree analysis identifies current root causes and consequences around an issue. It is often done as a participatory exercise between stakeholders and leads to a shared feeling of understanding, purpose and action. Using a problem tree can help you identify the solutions to your problem, and to express them as goals for policy or structural change.

3. Correct answer: (a) Goal.
EXPLANATION: A goal defines what policies need to be created, changed or enacted and what impact will they have on climate change adaptation. An objective defines what needs to change to achieve this goal.

4. Correct answer: (b) False.
EXPLANATION: Primary targets are decision-makers: people who have the power to make the change, such as politicians, government officials, community leaders and individuals in the private sector. Secondary targets are power-holders: people who have influence over the primary target, such as a Minister's advisors, constituents, celebrities, academics, local government and the media.

5. Correct answer: (b) Building coalitions/lobbying.
EXPLANATION: Building coalitions/lobbying involves various tactics. These include participating in debates, dialogues, roundtables and panel discussions on climate change; face-to-face meetings with "secondary" targets who can influence your "primary" targets; informal influencing during receptions, among personal contacts and others; taking part in working groups, UN cluster groups, parliamentary committee; and policy briefings and letters.

Endnotes

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Toolkit for Youth on Adaptation & Leadership

MODULE 8

DESIGNING YOUR ADAPTATION ACTION

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Acronyms

ASAP	The Adaptation for Smallholder Agriculture Programme
CBA	Community based adaptation
CCA	Climate change adaptation
CIS	Climate Information Services
COP	Conference of the Parties
COY	Conference of Youth
CRA	Community Risk Assessment
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EAC	East Africa community
ECOWAS	Economic Community of West African States
GCF	Green Climate Fund
GHGs	Greenhouse gases
IPCC	Intergovernmental Panel on Climate Change
JPA	Joint Principles for Adaptation
LAP	Local Adaptation Plans
LDCF	Least Developed Countries Fund
LLA	Locally Led Adaptation
MDGs	Millennium Development Goals
NAP	National Adaptation Plan
NAPA	National Adaptation Programs of Action
NDC	Nationally determined contribution
NGOs	Non-Governmental Organizations
PPCR	Pilot Program for Climate Resilience
PSP	Participatory Scenario Planning
SCCF	The Special Climate Change Fund
SDG	Sustainable Development Goal
SIDS	Small Islands Developing States
SMART	Specific, Measurable, Achievable, Relevant and Time-bound
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change

WELCOME TO THE TOOLKIT FOR YOUTH ON ADAPTATION & LEADERSHIP!

Who is this toolkit for?

Climate change is reshaping the world young people have inherited and they will bear the costs in the coming decades. However, young people are often excluded from taking on leadership roles and engaging in decision-making activities related to climate change adaptation. This Toolkit for Youth on Adaptation & Leadership equips young people with the knowledge and skills to engage in climate adaptation policy, advocacy and action. This toolkit uses the terms "youth" and "young people" to refer to people between 15 and 35 years old.

What you will learn

The toolkit covers essential materials and offers practical guidance for how you, as a young person, can take part in adaptation policy processes, lead advocacy campaigns, and approach adaptation with an entrepreneurial mindset. It provides tools for designing and implementing your own climate change adaptation actions so that you can be part of the solution to the climate crisis.

GLOBAL CENTER ON ADAPTATION

The "Toolkit for Youth on Adaptation & Leadership" is a project under the Global Center on Adaptation Youth Leadership Program, developed by the CARE Climate Justice Center with the financial support of Norad. It came together with input from young people who, like you, are concerned about the impacts of climate change and have faced challenges when advocating and taking adaptation action.

How to use the toolkit

The toolkit includes eight modules:

1 Understanding climate change

2 The basics of vulnerability and climate change adaptation

3 Vulnerable groups and climate adaptation planning

4 Learning from youth-led climate adaptation solutions: African case studies

5 Developing soft skills for youth leadership in adaptation

6 Engaging in climate adaptation policies: local, national, and international

7 Designing and implementing your adaptation advocacy strategy

8 Designing your adaptation action

Each module contains four sections:

Warm Up is the place to start. This provides an overview of the module's key concepts, based on the latest research and best practices. It highlights tools you can use to apply what you have learned, and develop your leadership skills.

Heat Wave will deepen your understanding. Find links to supporting scientific research, important publications, and tools for exploring and applying key concepts.

Bright spark is the place to get inspired. Read case studies, watch videos, and listen to podcasts about young climate leaders to get fired up for your own climate change actions!

Cool Down is your last stop. Here, you have space to test your knowledge (with a short quiz) and consider how you can apply what you have learned to your own climate action.

MODULE 8
DESIGNING YOUR ADAPTATION ACTION

This module demonstrates how to develop climate adaptation actions and implement these in your communities and at the local level. This module will also equip you with relevant skills and tools to evaluate your adaptation actions. It provides guidance on how to scale up your adaptation action, identify adaptation funding opportunities and engage with potential investors.

What will I learn?

By the end of the module, you will:

- Have learned how to map climate risks, vulnerabilities and capacity gaps in communities and identify potential actions to address these.
- Understand how to develop a Community Adaptation Action Plan.
- Know about the key elements for creating a Monitoring, Evaluating and Learning (MEL) framework for your adaptation actions.
- Understand what you need to consider when scaling up your adaptation actions.
- Know more about adaptation funding opportunities and the basics of how to approach investors for financing.

Glossary

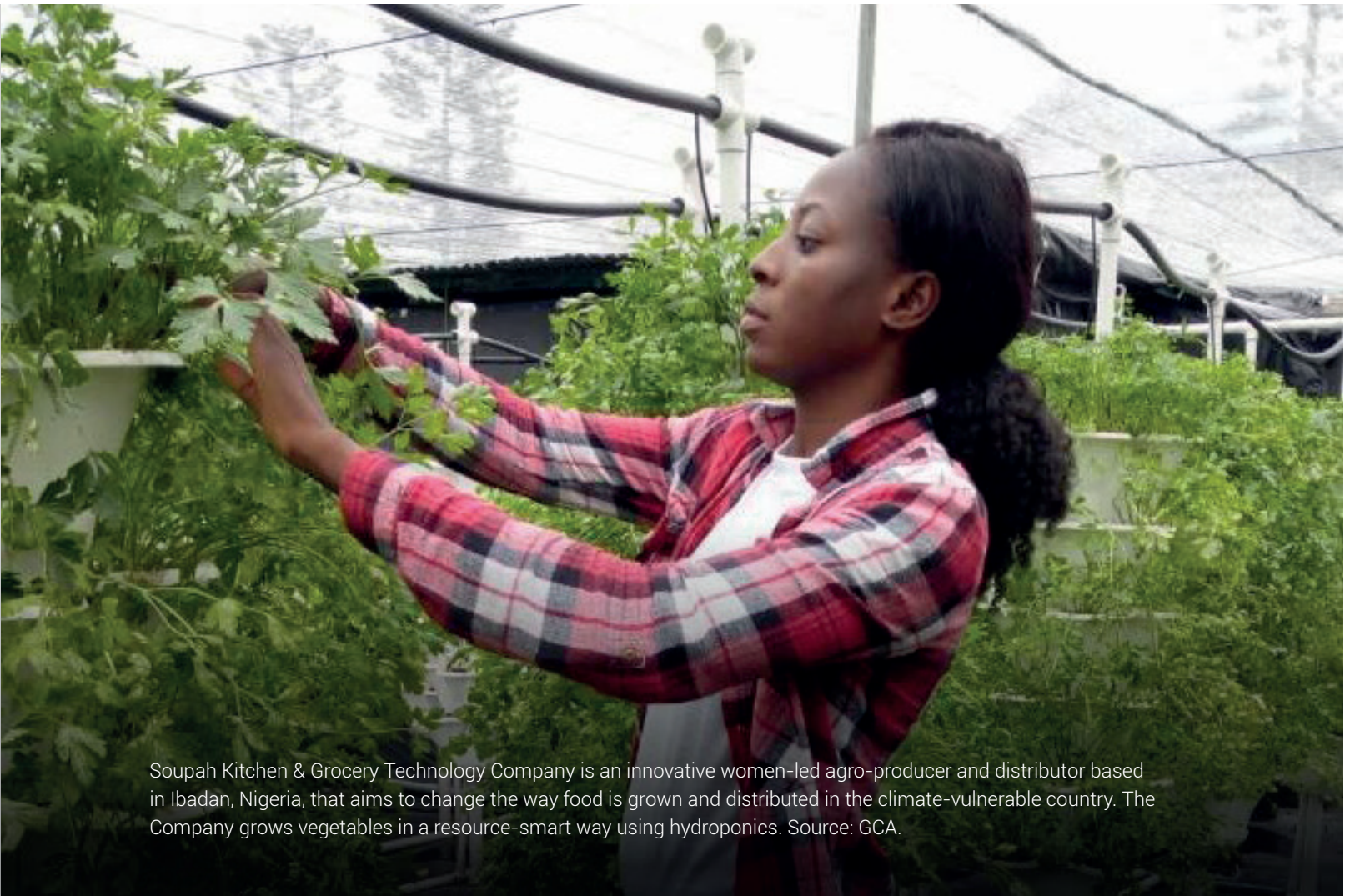
Term	Definition	Source
Accredited entities	Accredited Entities partner with GCF to implement projects. Accredited Entities can be private or public, non-governmental, sub-national, national, regional or international, as long as they meet the standards of the Fund. Accredited Entities carry out a range of activities that usually include the development of funding proposals and the management and monitoring of projects and programmes. Countries may access GCF resources through multiple entities simultaneously.	Green Climate Fund
Hazard	Hazard is a potentially damaging physical event, phenomenon and/or human activity, which may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation.	Asian Disaster Risk Reduction Centre
Monitoring, Evaluation, and Learning (MEL)	Monitoring, evaluation, and learning (MEL) practices have the purpose of applying knowledge gained from evidence and analysis to improve the effectiveness, efficiency and, ultimately, the outcomes and impact of their projects/initiatives and ensure accountability for the resources used to achieve them.	CARE
Results chain	Results chains are a visual tool for showing what a project is doing and why. They explain all the links in the chain from project actions to market actor changes, through to impacts on target groups, in detail, for a particular intervention. They can be used to monitor change and adapt strategy on an ongoing basis.	Practical Action
Risk	Risk is "the potential for adverse consequences where something of value is at stake and where the occurrence and degree of an outcome is uncertain." Risk is a function of vulnerability, exposure and the likelihood of a hazard occurring.	CARE (2019). ClimateVulnerability and Capacity Analysis Handbook. (based on IPCC)
Shocks	Shocks are short-term events or disruptions that have negative effects on people's well-being, assets, livelihoods, safety or their ability to withstand future shocks.	CARE (2019). Climate Vulnerability and Capacity Analysis Handbook.
Stresses	Stresses are continuous, long-term trends or pressures that negatively impact people's lives and the systems they live in.	CARE (2019). Climate Vulnerability and Capacity Analysis Handbook.

Warm Up

Youth-led climate adaptation actions

As a young person, you can take the lead on climate adaptation action in your community. As you'll remember from Module 2, **adaptation actions** support households, communities, and countries to respond to the effects of climate change.

Adaptation actions can take various forms. Many at the community level involve civil society groups that work to strengthen the ability of vulnerable people to adapt to climate change. As you learned in Module 4, these actions can also be entrepreneurial. Young innovators from around the continent have started businesses that provide adaptation solutions – such as clearing waste from waterways to reduce flooding risks or providing climate-smart irrigation to farmers.



Soupah Kitchen & Grocery Technology Company is an innovative women-led agro-producer and distributor based in Ibadan, Nigeria, that aims to change the way food is grown and distributed in the climate-vulnerable country. The Company grows vegetables in a resource-smart way using hydroponics. Source: GCA.

Young people we surveyed when developing this Toolkit, highlighted several ways to engage in climate adaptation action.[1]

- **Building capacity for local planning that integrates climate**. This can involve using climate risk and/or vulnerability analysis processes to inform local planning, and implementing community-based adaptation actions that empower young people, women and girls.
- **Accessing climate information services.** This means making use of weather forecasts and climate information to prepare for potential weather or climate events, sharing early warnings, and preparing communities for extreme weather.
- **Changing behaviors and norms towards climate change adaptation.** To do this, young people can educate others about practices like planting trees, reusing and recycling waste, collecting and storing water for irrigation, and not cutting down trees and forests.
- **Promoting accessible and resilient infrastructure**. Young people can help with building flood protection walls, drainage systems, shelters, homes and resilient community structures.
- **Mobilizing resources for local actions.** This may involve working to unlock government resources for local adaptation actions, or setting up a community savings system as a financial buffer for recovering after a climate shock or stress.
- **Promoting climate-smart technology.** This is technology that supports the efficient use of energy for lighting, irrigation, transportation and other systems.
- **Promoting climate-smart agriculture.** This involves diversifying crops and promoting stress-tolerant crops and livestock that can withstand stresses, such as droughts.
- **Promoting climate adaptation entrepreneurship.** This involves creating entrepreneurial ventures that address adaptation needs in your community.

Designing your plan for local adaptation action

First do your homework

To be successful in your mission, it is important to plan your approach, be informed and build relationships for collaboration. Questions to ask yourself at the start include:

- What climate adaptation actions are already happening in your community?
- Who else might be working on similar issues?
- Can you find allies and/or opportunities to partner with others?

Knowing what is already happening and who is involved will prevent you from wasting time trying to reinvent the wheel. It will also open your eyes to partnership opportunities that could help make your action a success.

What is an effective adaptation partnership? Relationships based on mutual trust, equality and learning, with an agreed vision, and clear accountability for all parties. Such partnerships engage the complementary strengths of those involved. Partners collaborate on specific objectives, challenges and opportunities in ways that achieve greater impact than they could achieve alone.

Follow this step-by-step process for planning your adaptation action

To develop your climate adaptation actions, you can use the Community Adaptation Action Planning (CAAP) process as a model. It brings local stakeholders together in an empowering learning process. The aim is to create tangible but flexible plans for communities to build their adaptive capacity and reduce their vulnerability to climate change over time. It can be used at the community level or more broadly.

Tip: Communities could already have development or disaster risk reduction plans in place. Adaptation should be integrated into these, instead of developing a separate adaptation plan.

How the CAAP process works

- It involves four steps that aim to empower communities and build their ownership of adaptation plans and actions. These are shown in Figure 1 (steps 2, 3, 4 and 5).
- The steps (1, 6 and 7) aim to establish the existing processes and the linkages between communities and other governance levels (e.g., local adaptation plans and broader policies).
- Steps 1 to 4 can be done over a few months, depending on circumstances. The full process is an ongoing cycle of activities that should become self-sustaining.

For the purpose of this module, we'll look at Steps 1-5 in detail.

Tip: For full details of the various stages and tools used during the CAAP, see CARE's Adaptation Planning with Communities Report.

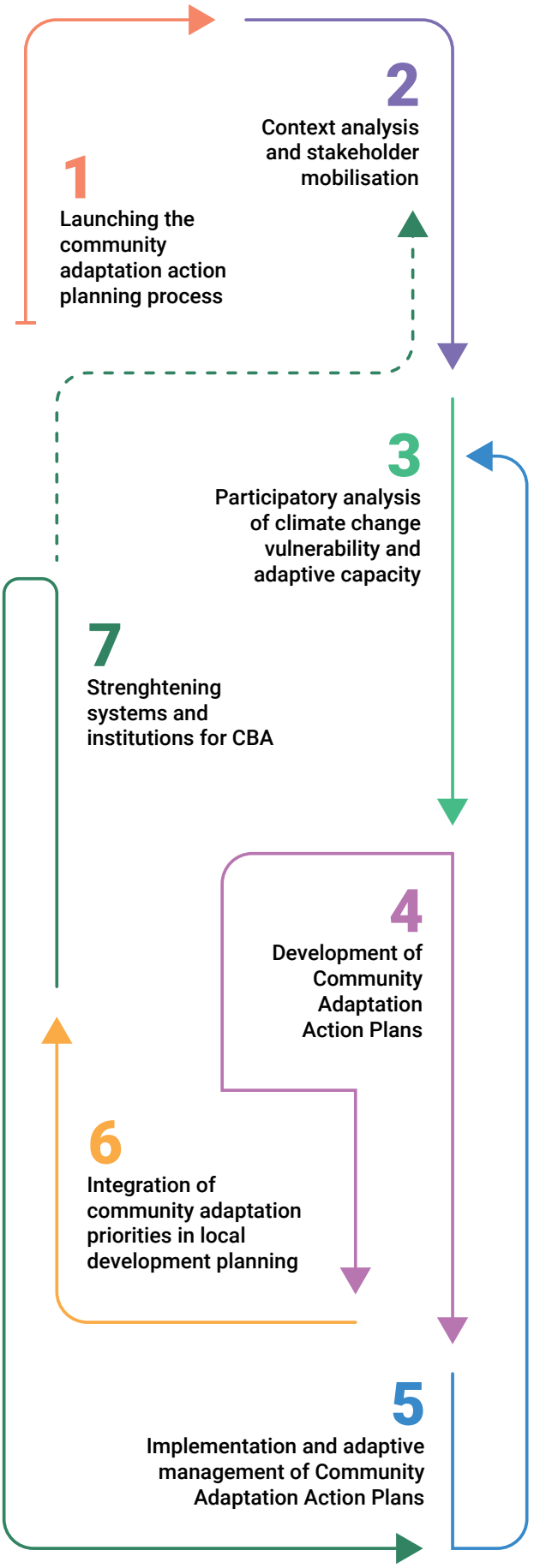


Figure 1: CARE's Community Adaptation Action Planning process. Source: CARE, 2016.[3]

Step 1: Launching the Community Adaptation Action Planning process

Firstly, identify the purpose, process and stakeholders you'll engage to start planning your adaptation actions.

Establish your team and devise a plan for what you need to do. Conduct initial background research, do a stakeholder analysis (as detailed in this guide from CARE), and make sure your team has been trained in necessary skills, such as facilitation (covered in Module 5).

Step 2: Context analysis and stakeholder mobilization

Second, understand the overall context and mobilize people to support and/or participate in the adaptation action planning process.

Here, you might also do background research, institutional mapping (which involves identifying the ways different institutions, and power relations, interact with and affect adaptation), and analysis of existing programs.

You can mobilize key stakeholders through interviews and meetings with communities and institutions that engage in adaptation and related issues.

Tools for step 2

Develop a workplan

By the end of step 2, you will be ready to develop a workplan for rolling out your CAAP process. Table 1 is an example of a workplan format for CAAP facilitators. You can adjust it to suit your needs.

Table 1: Workplan sample for CAAP facilitators.

Task number	Location	Activity	Time and date	To-do (by what time)	Person responsible	Notes
1		Preparation				
2		Day 1: morning session				
		Exercise 1				
		Exercise 2				
		Exercise 3				
3		Day 1: afternoon session				
4		Day 2: morning session				

Step 3: Participatory analysis of climate change vulnerability, risks and adaptive capacity
This step focuses on understanding the need for your local adaptation action. It allows you to build a common understanding of climate change risks, vulnerability and the adaptive capacity of institutions and groups within the community.

Here, you can do gender and diversity analysis to ensure your action meets the needs of the most vulnerable (covered in Module 3).

Tip: Community participation is key for developing impactful adaptation actions and plans. Step 3 is where you can start using participatory tools to help empower communities and give them ownership of adaptation plans and actions.

Once you have identified the potential adaptation pathways, you then discuss which are most urgent and which can be done by individuals or require collective action. These can be used to generate solutions, which can feed into your adaptation action plan (Figure 4).

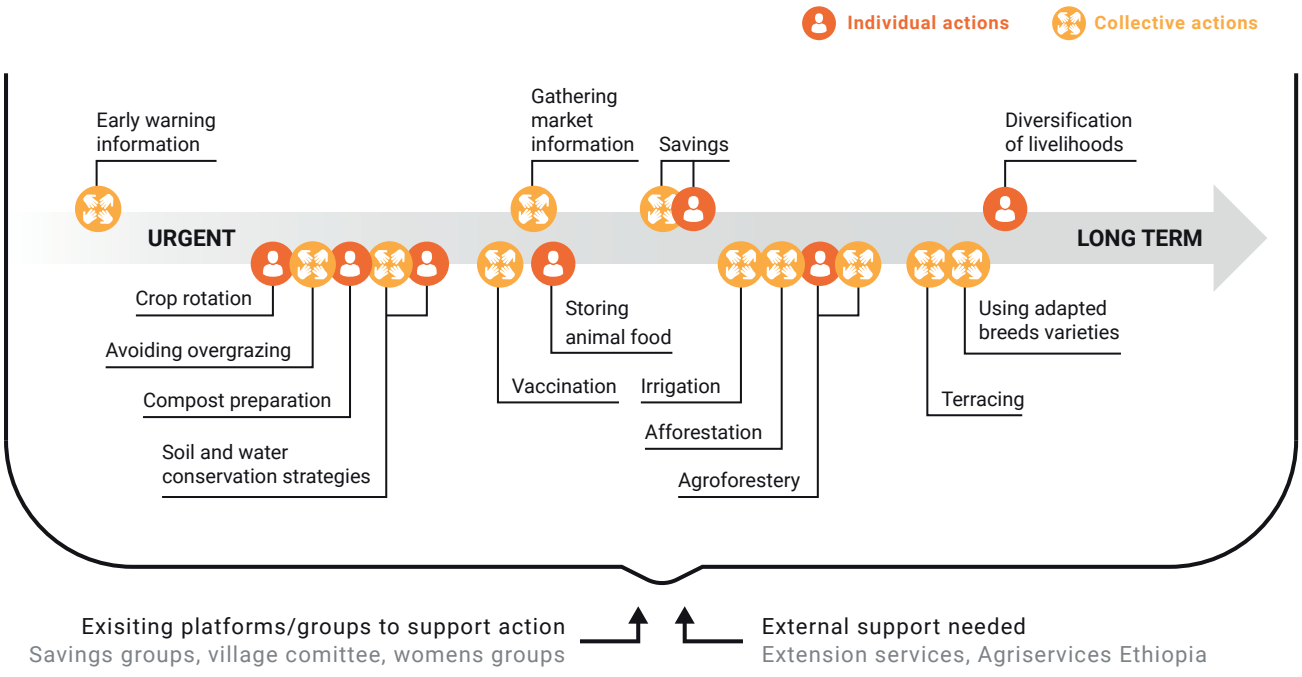


Figure 4: Adaptation pathways with potential solutions. Source: CARE, 2019.[10]

Step 4: Development of a community adaptation action plan

Now that you have mapped and identified key climate change risks and vulnerabilities, it's time to co-develop a Community Adaptation Action Plan.

The plan will determine your strategy for addressing the climate change risks, vulnerabilities and adaptation pathways you identified in Step 3 and identify actions to take. It can also be used to support requests for funding.

Tools to use in step 4

Community visioning for a future with climate change

CARE's "Community Visioning" approach brings together different people in the community to think about an ideal future in five, 10 or 20 years, in the context of climate change. It reveals how people's expectations of the future within one community can be different. It helps a group reach a consensus about a common or shared vision.

How it works

- You start by reminding participants of past, present and expected future situations based on scientific climate information and the information from previous participatory exercises.
- Then, you ask participants to relax, close their eyes and clear their minds, and ask them to picture the future. You ask them a few questions, such as: What do you want to see in your community in 20 years? And what will the village look like?
- You then ask them to open their eyes and draw their vision individually.
- Finally, you compare different participants' visions and try to reach a consensus.

Practical information

- This activity should take roughly 2 hours: 1 hour to imagine and draw the visions and 1 hour to discuss and develop a shared vision.
- It should ideally be done with a representative group of people since the vision will drive the whole adaptation planning process. Aim to be as inclusive as possible.

Tip: In certain instances, young people and women and girls may not feel comfortable voicing their concerns in the same forum as men. To ensure everyone participates, the visioning exercise can first be done in separate groups for men and women. The vision of each can be discussed afterward in plenary to come up with a shared vision that reflects the hopes and dreams of all participants.

BOX 1: KEY CLIMATE TERMS

In this step, you will need to be familiar with key climate change terms.

Risk: The probability of harmful consequences, or expected losses (deaths, injuries, property, livelihoods, economic activity disrupted or environment damaged) resulting from interactions between natural or human-induced hazards and vulnerable or capable conditions.[4]

Hazard: a potentially damaging physical event, phenomenon and/or human activity, which may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation.[5]

Shocks: short-term events or disruptions that have negative effects on people's well-being, assets, livelihoods, safety, or their ability to withstand future shocks. Examples include sudden extreme weather events or disruptions, such as flash floods, cyclones and heatwaves.[6]

Stresses: continuous, long-term trends or pressures that negatively impact people's lives and the systems they live in. Examples include prolonged droughts, erratic weather patterns, rising sea levels, increased desertification and natural resource degradation.

Find more terms in module 1, 2 and 3.

Tools to use in Step 3

Participatory tools are designed to encourage joint analysis, learning and action. Below, we highlight how CARE's Climate Vulnerability and Capacity Analysis (CVCA) can be used to analyze community-level vulnerabilities to climate change, and capacities to adapt. (To refresh yourself on the CVCA, refer to Module 3).

Mapping climate vulnerabilities

The CVCA helps you map climate vulnerabilities and capacities in a community, paying particular attention to gender, ecosystem and governance issues. It allows you to prioritize adaptation actions based on the needs of those most vulnerable to climate change.

To map vulnerabilities, you can:

- Interview key people and run workshops and dialogues with community stakeholders.
- Do research into climate change vulnerability at broader levels.

The analysis allows you to identify specific actions for increasing climate resilience, which can be tailored for different groups. The CVCA combines scientific and indigenous knowledge and ensures that all voices are heard.

Mapping climate risks and impacts

As part of the CVCA process, it is important to identify the main climate shocks and stresses that pose a risk to your community and country.

Use a table to list shocks and stresses

You can start by drawing a simple table (like Table 2) that lists possible shocks and stresses. Place a tick next to all the shocks and stresses your community faces.

Table 2: Sample for identifying shocks and stresses in your community and country.

Tick	Shocks	Tick	Stresses
	Typhoons, cyclones, hurricanes, storm surges		Droughts
	Floods, Flash floods, Glacial Lake outbursts		Rising sea levels and associated saltwater intrusion and coastal erosion
	Landslides		Increasing temperatures
	Heatwaves		Glacial retreat
	Wildfires		Changes in average rainfall
	Extreme cold		Ocean acidification
	Excessive rainfall		Erratic weather patterns including changing monsoons dynamics
	Other ….		Land and forest degradation/natural resource degradation

Tip: Be sure to research a full range of shocks and stresses so you don't miss any of the important ones!

Do the hazard map exercise with your community

A hazard map allows you to become familiar with the community and how it is perceived by different groups. During the exercise, community members identify important livelihood resources along with hazards affecting the community (climate-related and other). (For more information see the Field Guide section of the CVCA 2.0 Handbook).

Community members map their village as part of a CVCA process in Phongsaly Province in Northern Laos.
Credit: Benjamin Pomerleau/CARE.

Use the impact chains tool

You can use this tool (shown in Figure 2) to identify direct and indirect impacts of climate-related shocks and stresses on people's livelihoods. It provides a basis for discussing how people are responding to these shocks and stresses.

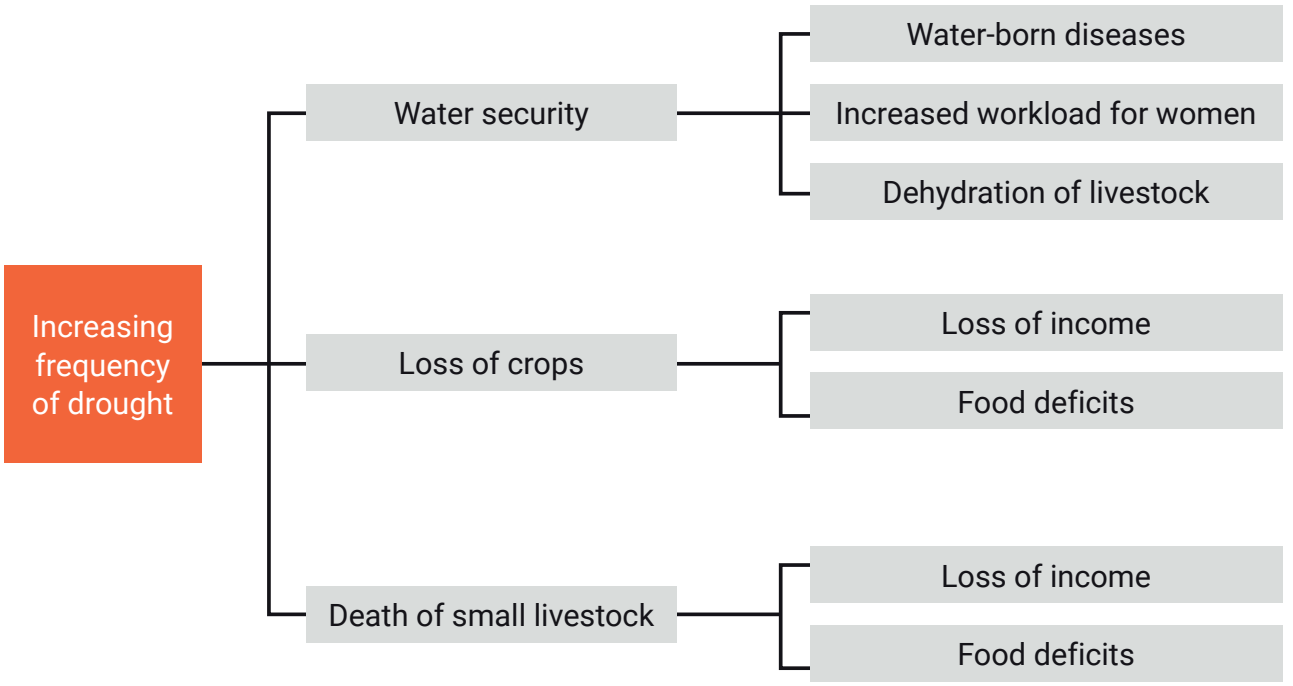


Figure 2: Impact Chains tool.
Source: CARE, 2019.[8]

Use the adaptations pathway tool

After looking at impact chains, you can use the adaptations pathway tool to get community input on what changes they could make to reduce the negative effects of the identified shocks and stresses (Figure 3).

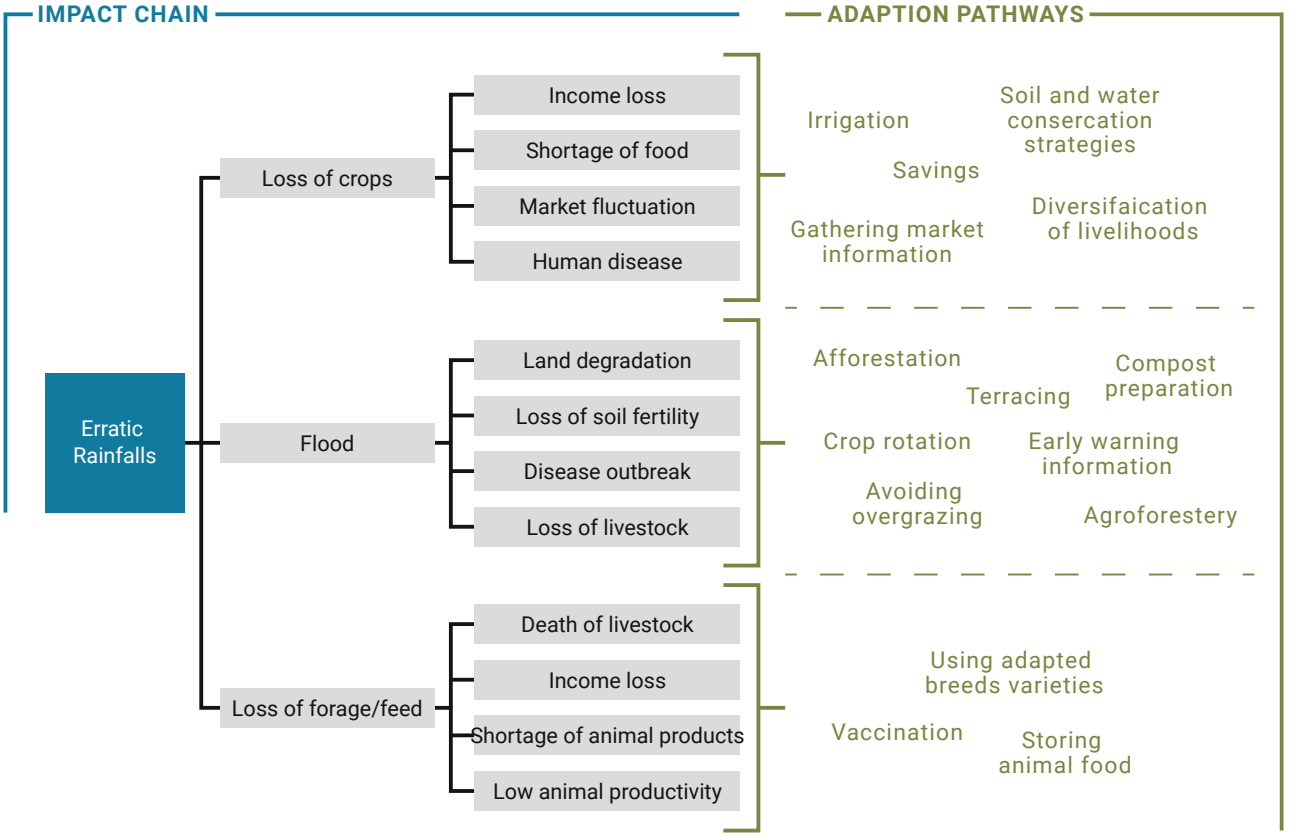


Figure 3: Adaptation pathways based on identified impacts. Source: CARE, 2019.[9]

Adaptation options comparison table

The adaptation options comparison table helps you and your community finalize adaptation options, compare them using a list of criteria, and prioritize which ones to address (see Table 3 for an example).

How it works

- You start by reminding participants of the vision they agreed on and the list of adaptation options they already proposed during previous participatory exercises.
- Then, you discuss if those actions will enable you to reach the vision and discuss any missing options.
- You will need to collectively decide on the criteria for comparing the different options proposed.
- Once each option has been assessed, you facilitate a discussion to see if the scoring reflects participants' views and if anything needs to be adjusted.

Practical information

- This activity should take approximately 2 hours: 1 hour to come up with the different adaptation options based on the vision and 1 hour to do the prioritization and have further discussion.
- Before this exercise begins, the facilitators should identify a list of potential adaptation options per sector.
- Keep in mind that the community is in the driving seat. They should first identify what they feel are the most relevant and appropriate adaptation options for specific climate vulnerabilities. The facilitators can suggest other options based on available information.

Tip: One of the key criteria can be the positive contribution to gender equality. If this is the case, it is important to define what this means and eventually use a specific gender matrix to analyze the differentiated effects of the adaptation options on things like workload, relations, power dynamics, arising gender-based violence, and see who will benefit more as a result of the activity.[12]

Table 3: Example of an adaptation option comparison table.[13]

GOALS	ADAPTATION OPTIONS	CRITERIA FOR EVALUATION						
		Using locally available resources	Benefiting women as well as men	Not exploiting climate sensitive natural resources	Addressing specific climate and disaster risks	Long term benefits for the climate	Government approval	Total
'Better education'	Vocational training institute		XX	XXX			X	6
	Teaching in local language	X	XX	XXX				6
'A large and protected forest'	Community management of forests	XXX	XXX	XX	XXX	XXX	X	15
	Planting more mangroves	XX	XX	XXX	XXX	XXX	XX	15
'Higher and sustainable income from farming'	More diversified crops	XX	XX	XX	XXX	XX	X	12
	Expansion into 3 rice crops per	X	X				XXX	5
	Organic shrimp raising	X	X	X	XX	XXX	X	9
'Improved infrastruture'	Freshwater storage facilities	X	XX			X	X	5
	Higher bridges and roads	X	XXX	X	XX		XX	9
	Shelter or evacuation center	X	XXX	XX	XXX		XXX	12

Community Adaptation Action Plan (CAAP)

The CAAP merges all results from previous tools into a detailed action plan showing clear community-driven adaptation actions in response to identified climate change impacts and vulnerabilities. The plan provides a way forward, showing who the adaptation action(s) will target, who will implement the actions, when these will be implemented, and what resources are needed (see Table 4 for an example).

How it works

- You work with participants to fill in the adaptation plan. The facilitators need to fill it in in advance with the priority adaptation options agreed on during previous sessions and the information already gathered on those options.
- You present the plan at the start of the session to explain how everything links together. Then, the facilitators discuss each adaptation option to fill the additional columns for target group, who will implement, when, resources and success indicators.

Practical information

- This activity should take approximately 1 hour and 30 minutes. An hour to develop the plan, 30 minutes for discussion.
- This activity requires preliminary work to pre-fill the plan format and save time for discussion with participants.
- The format can vary according to the context. Table 4 is a template for developing the CAAP.

Table 4: Template for Community Adaptation Action Plan.

Community Vision	**INSERT VISION FROM TOOL 1 – Visioning**									
Climate change effect or hazards	**Impacts**	**Adaptation Options**	**Target group**	**Who will implement?**				**When**	**How? Resources**	**Indicators of success**
				HH*	**Community**	**Govt.**	**Other**			
Insert info from CVCA and other CAAP tools	Insert info from CVCA and other CAAP tools	Insert adaptation options selected with comparison table								

*HH= Household *CAAP = Community Adaptation Action Plan

Implement the Community Adaptation Action Plan

Step 5: Implementation of community adaptation action plan

This step is about implementing planned adaptation actions to strengthen adaptive capacity and reduce the vulnerability of different groups to climate risks.

Within this step, there are numerous things you will need to do. These are broken down into three main activities.

- Assessing and improving your actions.
- Prioritizing which actions you will pursue.
- Deciding how to monitor and evaluate your adaptation actions.

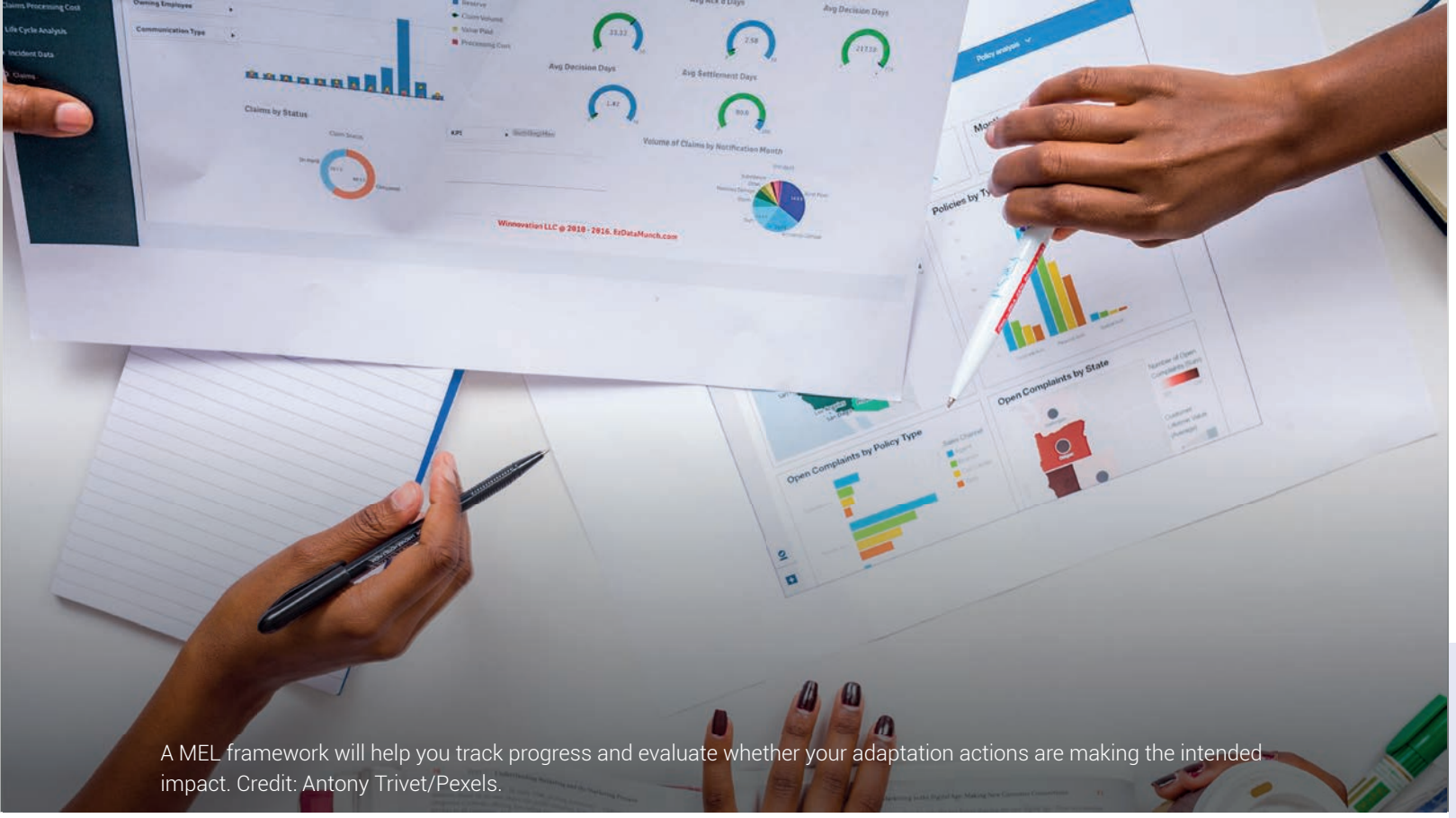
Let's look at each in more detail.

Assess your actions with the Adaptation Good Practice Checklist

Whatever actions you plan to undertake, it is important to assess them against the Adaptation Good Practice (AGP) Checklist. This will ensure that adaptation results in quality, impactful and long-term climate resilience for the most vulnerable people.

Assess your implementation plan against the checklist's nine criteria (Figure 5) and make any necessary changes.

Figure 5: The Adaptation Good Practice Checklist. Source: CARE, 2016.[14]



A MEL framework will help you track progress and evaluate whether your adaptation actions are making the intended impact. Credit: Antony Trivet/Pexels.

Prioritize which adaptation actions to implement

Once you have assessed your adaptation actions with the AGP checklist, and made any refinements, it's time to prioritize the actions you will implement.

Consider what is feasible. Ask yourself:

- Are the actions **technically feasible**? Do you have the necessary technological resources to implement them?
- Are the actions **financially feasible**? Do you have the necessary financial resources? If not, how might you secure funding?
- Do you, or your team, have the **capacity** to implement the actions?
- How will the actions **impact the community**?

Decide how to monitor and evaluate your adaptation actions

When your adaptation actions are up and running, you will need to keep track of their progress and evaluate whether they are making the intended impact. That's where **Monitoring, Evaluation, and Learning (MEL)** comes in.

You should design a MEL framework before implementing your adaptation actions. This means you can learn from and update your actions as you progress. A MEL framework can inspire you as you track your achievements.

Additionally, a MEL framework will help you demonstrate impact when you are communicating about your work to others, which is important when trying to convince donors and partners to support and collaborate.

The three elements of MEL each have distinct purposes and processes.

- **Monitoring:** continual and systematic collection of data to provide information about your adaptation action(s).
- **Evaluation:** user-focused, systematic assessment of the design, implementation, and results of an ongoing or completed action.
- **Learning:** having processes and a culture in place that enables you and your team to reflect on the work and make informed decisions based on experience.

The MEL system is only effective when these three pieces are aligned.

BOX 2: MEL TERMINOLOGY – WHAT YOU NEED TO KNOW.

- **Impact (long-term):** sustainable, significant and measurable changes in resilience and adaptive capacity for a particular population. Changes at the impact level are influenced by those factors directly addressed by an action, as well as other factors.
- **Outcomes (immediate and intermediate):** changes in individual behaviors (e.g., individuals putting into practice new knowledge, attitudes or commitments) and changes that are structural or systemic (e.g., policy changes) that can be seen in different populations. Outcomes are often a result of what participants do on their own, influenced by the adaptation action, or other factors.
- **Outputs:** the products an adaptation action generates through implementation of its activities. Outputs could include the results of a training, such as the number of farmers trained on climate-smart agricultural techniques.
- **Activities:** these are targeted at individuals, families, community organizations, the private sector and public sector, and civil society organizations. Activities are what the organization or individual implementing an action does rather than what the beneficiaries (or participants) will do.
- **Inputs:** the set of resources needed by an adaptation action to deliver its commitments. These include the human and financial resources, physical facilities, equipment, materials, logistics, in-kind contributions and operational policies that enable services to be delivered.
- **Indicator:** a signal that shows whether or not progress is being made. When designing an indicator, ask: What does the result (change) mean? How do I know that the result (change) has happened?
- **Assumptions:** the conscious and unconscious beliefs we each have about how the world works. When identifying the logic of an adaptation action, you should also identify the assumptions being made about its rationale, the context and people involved, and the conditions needed to implement it.
- **Results chain:** the logical sequences of interim changes that need to occur to reach the intended impact. These interim changes include changes in the focus population but also other actors who are instrumental in bringing about change.

How to design a basic MEL framework

First, establish a results chain with SMART indicators.

This shows how a particular action will lead to a desired result. Table 5 provides an example results chain for your inspiration.

Remember, the results chain should be accompanied by **SMART indicators** for your adaptation action(s) so you can measure success. As you learned in Module 7, **SMART** stands for **S**pecific, **M**easurable, **A**chievable, **R**elevant and **T**ime-bound.

The model should address key questions, including:

- What is your desired impact?
- How do you believe change will take place? (this links to your Theory of Change, explained in Module 7).
- What assumptions need to hold true for the change to occur?
- How will you measure and track progress?

Table 5: The results chain.

Inputs	Activity [Immediate]	Outputs [Short term]	Outcomes [Medium term]	Impact [Long term]
Financial, human and material	1. Organize adaptation training for young people. 2. Provide early warning materials.	1. XXX young people trained on climate adaptation. 2. XXX community volunteers received megaphones.	1. Farmers have improved knowledge on climate resilient agriculture techniques – Lower-level outcome 2. Farmers practice climate smart agriculture on their farms - High level outcome [behavior change]	1. Increased food security reduced loss and damage. 2. Farmers have improved yields resulting in higher income from crop sales.
Sample indicators		1. Number of young people trained on climate adaptation. 2. Number of megaphones distributed to community volunteers	1. Number or % of farmers who have improved knowledge on climate resilient agriculture techniques. 2. Number or % of farmers who have practiced climate smart agriculture on their farms.	1. Number or % of population that is food secure. 2. % of population that reported reduced loss and damage after disaster struck. 3. % of farmers who have improved yields resulting in higher income from crop sales.

Tip: To learn more about the basics of MEL and how to design and implement a MEL system, check out CARE's Getting started with MEL for Climate Adaptation.

Then, develop a plan for how you will collect and analyze the necessary data and information.
Consider how you will collect and analyze the data and information you need to evaluate your adaptation action(s).

In our example above, you would consider how to collect data on the various indicators.

- For the Outputs indicator 1, you would look at how to track the number of young people trained on climate adaptation.
- For the Impact indicator 3, you would look at how to measure the percentage of farmers who have improved yields, and analyse it, to see if you are meeting your intended impact.

You would also need to decide on what types of tools (e.g., software) and processes you will use to crunch the numbers.

Tip: To identify the right milestones and indicators for your adaptation action, use CARE's Framework of Milestones and Indicators for Community-Based Adaptation.[15]

Once you have analyzed your data and drawn conclusions, decide how to communicate your results
Decide who you will share your MEL results with. Your audience will likely be community members who took part in your adaptation action, partners, donors and local government. Here, it is important to know your audience and understand their needs. Make sure you communicate your results in a way your audience can interpret and that makes an impression.

You will also use the results of your MEL analysis to learn as a team. Ask yourself:
- What worked well?
- What could be improved? And how can we use what we have learned to improve the adaptation action?

Scaling up your adaptation actions
After implementing your adaptation action in its initial stage, and evaluating the outcomes, you might be pleased to see that it has been successful and has potential for scaling up. At this stage, it's important to consider how the intervention supports effective adaptation.

Check to see that your action supports effective climate change adaptation

- **Technical feasibility:** can the intervention withstand variations in climate? Can it be easily used by your target community without the need for help from specialists?
- **Financial viability**: is the intervention cost-effective and can it be sustained financially over the short, medium and long term?
- **Social acceptability:** does the intervention disrupt social cohesion or create division among members of a community? If so, how might you build bridges between people and bring people with different opinions together to create a shared understanding of the benefits of the action?
- **Gender dimensions:** does the adaptation action support the agency and wellbeing of women and girls?

Use the Business Model Canvas to define your value proposition

When thinking about scaling up your adaptation action, you need to have a clear understanding of the value it brings, the costs involved, and how these will be paid for. Here, it pays to think about your adaptation action in business terms.

The Business Model Canvas (BMC) helps you easily define and communicate your adaptation action concept visually. It helps you define a problem and the proposed solutions and implementation processes. It can be used to determine whether an adaptation action should be scaled up or not.

Figure 6 below is an example from CARE Bangladesh. It shows how the BMC was applied to the problem of low-income communities not having access to safe and reliable water.

Problem:
Low Income Communities (LIC) in urban Bangladesh do not have access to safe, reliable and adequate water for domestic consumption.

Municipal authorities do not supply water in the slums as they are out of formal holding tax process. LICs have no choice but to rely on local traders for water at a higher price. To meet domestic needs, women spend 3-4 hours a day in the queue to fetch water and often they face harassment. Limited access to safe water results into various water borne diseases. Lack of water sources in those highly compacted areas, vincreases the risk of fire incidents.

Cost:
The approximate cost for the establishment of water supply system is USD 5318.75 on an average, if it is solely carried over by CARE project along with community co-financing up to 23-36% (approx. USD 2,133.05) for pipeline networking, electricity connection and others.

But if we go in a private sector partnership approach, then the upfront cost could be minimized in a large scale as there will be installment/ community entrepreneurship. Each system covers 100-150 households.

Solution:
'The Water Collective' is a community managed women friendly solution co-created by CARE in co-financing mechanism to solve out water scarcity of the slums.
The system, where communities have full control, ensured access to safe water 24/7 at a cheater price at their doorsteps.
A group of selective community members voluntarily collects the fees from households to manage operational costs and maintenance. Remaining balance is being deposited in bank. The water collective has a formal links with the municipal authority for sustainability.

Key Metrics:
1. Water cost has been reduced (nearly halved).
2. According to community, fire incidents are now lower than before.
3. Water borne diseases get visibly lower.
4. Incidents of Gender Based Violence has been reduced.

Revenue Streams:
- Monthly collection fee
- There is a bank account for the Water Collective where the monthly fees from customers get deposited. A small amount of Interest also came from bank savings.

Value Proposition:
Users:
- LIC members getting available safe water at doorsteps in a half price than before.
- Finding no way local traders in the neighboring slums reduce the costs.
- Due to collective ownership it is accessible to all. Most importantly by being involved in the system they get rid of the dependency on private water traders.

Scalers:
Actors (municipal authorities and NGOs producers) want to address water crisis and build resilience would find it as a feasible solution which could be scale up easily in collaboration with Private Sector.
Private sector manufacturer/input sellers who wants to increase their market would find the system as an opportunity to sell out water pumps and accessories in instalments which would help minimize upfront costs.

Channels:
To reach users: The Key benefit (low cost & availability) attracts the customers from adjacent communities. Additionally, meeting, social gathering, community marketing, group formation is helping to reach users.
To reach Scalers: National events, advocacy, meeting with private sector, local elected bodies and City Corporations; social networking, blogs, publicity materials etc.

Comparative Advantage:
- LIC members especially women and girls can access to safe running water at doorsteps. It reduces risk of gender based violence and increases women's productive time.
- It helps women and adolescent girls to maintain their menstrual hygiene.
- It reduces the risk of water borne diseases.
- It increases the community resilience against fire. The system has fire hydrant inbuilt with hose-pipe to extinguish fire at the very beginning.

"Customer" Segments:
Users:
- Urban Low income community specially women.
- Slum dwellers with high dependency on local water traders or surplus water of nearby factories/industries.

Scalers:
- NGOs/Community entrepreneurs
- Public & private sector
- City Corporation

Non-financial Resources:
- Land
- Oriented and skilled staffs
- community mobilization
- water management committee
- voluntary labor from community
- The model itself

Figure 6: BMC table example. Source: CARE Bangladesh.

How to access funding to support your adaptation actions

As you learned in Module 6, there is funding available for adaptation actions (although this is still not enough to meet the need).

As a young person with innovative ideas for adaptation actions that need financial support there are various options available:

Apply for grants for young people with innovative adaptation solutions

There are various small grants and competitions available for climate change initiatives led by young people. Some of these are focused on Africa, or the Global South. A few are listed below.

- The African Youth Adaptation Solutions Challenge (YouthADAPT Challenge) is an annual competition and awards program for youth-led enterprises (50% women-led). The challenge supports entrepreneurship and youth-led innovation in climate change adaptation and resilience across Africa. Winners receive USD 100,000 in grant funding and join an accelerator program.
- The Global Youth Climate Action Fund provides micro-grants for projects on sustainable agriculture, clean energy, technological innovation and more.
- The Youth Climate Fund from the Open Collective provides small grants for activities that foster impactful climate actions, activities and events, and can be implemented within 3 months.
- The Hey Global Climate Fund assists young climate activists with projects that focus on climate change and health, climate change and gender, climate advocacy and climate entrepreneurship. In 2022, the fund provided three young people with USD 5000 each.

Apply for funding from the Green Climate Fund or Adaptation Fund

You cannot access these funds directly. You will need to be part of a youth organization that can be part of a Green Climate Fund (GCF) or Adaptation Fund (AF) proposal development process led by **"accredited entities."** These can be private or public, non-governmental, sub-national, national, regional or international, as long as they meet the GCF's standards.
If you put forward good ideas and make active contributions, the accredited entity might identify you as a credible implementing partner if the proposal is awarded. This would give you an excellent opportunity to implement your suggested activity as a key implementing partner and be provided with the necessary funds to do so.

Tip: To know where in your country proposals are being developed and which accredited entities to approach, you can contact the national focal points for the GCF or AF.

It is good to build a relationship with them so you know exactly what is going on and when. To find out who your focal point is, ask your Ministry of Environment.

Apply for government funds

Governments are an important source of climate finance. Many climate-vulnerable countries have started including resources for climate action in their annual development programs. Do some research into what options are available in your country and what processes you need to go through to apply for funding.

Seek investor funding for your climate change adaptation solution

As you learned in Module 4, young people are turning their innovative adaptation ideas into businesses. If you have developed an adaptation action with business potential, then you can try to secure investor funding.

What investors are looking for

If you have developed a trailblazing adaptation action, you may be so excited that all you can focus on is the smart solution that you're offering to a climate change problem. But investors will need to know more before they're willing to invest. They will want to know:[17]

- What is the market size for your product? This shows if you can guarantee a return on their investment.
- How much traction do you have? And what metrics is this based on? This shows if your product is selling and demonstrates the demand for it.
- How is your business governed? This shows how your business is managed and run.
- What is the impact and how do you measure this? This indicates if your business aligns with "triple bottom-line success," which means it benefits people and planet while making profit.
- What is your financial model? This helps investors see what returns your business can generate.
- What is your competitive advantage? This shows what gives you the edge over your competitors.

BOX 3: DOS AND DON'TS OF ENGAGING WITH INVESTORS.

Photo credit: Pavel Danilyuk/Pexels.

DO

- Prepare, practice, update pitches and presentations.
- Meet your projections.
- Be concise in your communications, but have backup detail ready.
- Consider and adapt content to your audience.
- Network before you start actively seeking capital.
- Treat "no" as a feedback and networking opportunity.
- Be confident and coachable.
- Be upfront about risks, weaknesses—and how to address them.
- Research and target the most appropriate investors.
- Personalize all investor communication.

DON'T

- Lie, be misleading or evasive.
- Be overly confident or reject feedback.
- Rely on the product or service alone to entice investors.
- Make up answers.
- Expect fundraising to be easy or quick.
- Be discouraged by rejection (but do learn from it!).
- Send mass emails soliciting investment.
- Send your pitch to info@xyzventurecapital.com.

Top tip: No matter what source of funding you are trying to secure, you will need to draw up a budget that shows how much money you will need. Take a look at this guide from ASANA.[18]

Heat Wave

Youth-led climate adaptation actions

READ Adapt for Our Future: A Background Paper on Youth and Climate Change Adaptation to understand more about the main drawbacks for effective youth engagement in climate adaptation globally. The paper shows that most National Adaptation Plans and Disaster Risk strategies only recognize young people as beneficiaries, hence making their engagement in national efforts passive rather than active. The paper proposes a transformation within current institutional structures so that youth-led actions are supported and included in national climate change adaptation strategies.

READ this case study (page 8 of linked document) about young people taking action in Ghana. Young people have been involved with Ghana's Community Resilience Early Warning (CREW) project, doing risk assessments and updating of risk maps for effective early warning systems. Young people in hazard-prone communities share weather information from the Ghana Meteorological Organization with the broader community during the rainy season. In situations where floods are inevitable, they organize to establish short-term coping mechanisms, such as building makeshift levees with sandbags and clearing drainage systems.

Designing community adaptation actions

WATCH this video to learn more about CARE's Climate Vulnerability and Capacity Analysis (CVCA) tool and how you can use it to map vulnerabilities in your community.

READ CARE's CVCA Handbook for the full details on how to conduct participatory activities when designing your Community Adaptation Action Plan.

LEARN how to use the CVCA with these short online courses: CVCA #1 – The Basics of Climate Vulnerability and Capacity Analysis and CVCA #2: The CVCA Step-by-Step.

LEARN how to identify the right milestones and design appropriate indicators for your adaptation actions with this guide, Framework of Milestones and Indicators for Community-Based Adaptation, from CARE.

LEARN how to design a full participatory MEL system for your adaptation action with CARE's Participatory Monitoring, Evaluation, Reflection and Learning Manual.

READ the CARE Planning for Resilience manual for step-by-step guidance on how to do participatory, gender responsive local adaptation planning. It has tools and resources that will help when doing the planning process.

READ CARE's Community-Based Adaptation (CBA) Framework to understand a range of strategies that need to be in place for effective Community-Based Adaptation to occur.

EXPLORE Ashoka's 4 Levels of Impact model, designed for social entrepreneurs to help define the intended impact of an initiative. Changemaking can occur at multiple "levels" that require different tactics and strategies. For example, if you are focusing on plastic pollution, specifically bottles from drinks, you have many options for where to focus your efforts. The Ashoka model provides structure when planning for what 'level' your intended initiative will operate. This helps you identify your change making level and identify the stakeholders you need to collaborate with to achieve your intended impact.

Implementing your local adaptation actions

LEARN how to design a full participatory MEL system for your adaptation action with CARE's Participatory Monitoring, Evaluation, Reflection and Learning Manual.

READ this checklist on gender-inclusive actionable agro-advisories to learn about integration of gender in Climate-Information Services work. The checklist aims to assist producers and translators in developing agro-advisories (forecast and forecast based advice) that are gender-inclusive and useful for both men and women farmers.

READ about Participatory Scenario Planning (PSP). This approach uses seasonal climate forecasts to inform decisions for more resilient livelihoods and risk management, thereby strengthening adaptive capacity. PSP workshops create a multi-stakeholder platform for collective interpretation of meteorological and local forecasts and their probability and uncertainty.

EXPLORE the full Adaptation Good Practice Checklist to make sure your adaptation actions meet the criteria for actions that result in quality, impactful and long-term climate resilience for the most vulnerable people.

LEARN about what an Adaptation Fund proposal looks like with this funding proposal template.

LEARN how to prepare proposals that are aligned with the GCF's requirements with a short online course: Developing and Implementing GCF Funding Proposals.

Bright Spark

Examples of young people innovating for climate adaptation

WATCH this video featuring Mariama Mamane, UN Environment Young Champion of the Earth for Africa (2:53). Learn how her initiative offered a three-in-one solution to some of Africa's biggest environmental problems. Her project uses the water hyacinth, which chokes waterways across the continent, to create sustainable energy and environmentally friendly fertilizers. Mariama, 27, who lives in Burkina Faso, is one of six winners – each representing a region of the world – awarded the new prize by UN Environment and polymer-producing giant Covestro.

WATCH the short film Adaptation Voices (4:00) by the Climate and Development Knowledge Network (CDKN). This film describes how young people are working with local communities in Kenya to scale up local ecological farming techniques to support adaptation. (To hear more from African adaptation experts on the possibilities for accelerating action, including inspiring case studies, visit CDKN).

WATCH Changing Africa's Narrative (14:00) by TEDx Lusaka. Kelvin Doe talks about the importance of Africans changing their own narrative about the continent. Kelvin Doe is a self-taught Sierra Leonean engineer. A true inventor by age fifteen, Kelvin built his own radio station using discarded scrap metal and electrical items that he found in his hometown. Kelvin finds solutions to problems in his community, for example, making batteries to light homes in Sierra Leone where electricity supply is inconsistent, or building a generator.

WATCH Youth for Climate Action: Breaking Barriers (2:30) by UN Climate Change Learn to get inspired to do more to address climate change. Reuben and Yande, from Zambia, are tired of inaction. They don't want to sit idly while the world is facing the climate crisis. Hear their message and take a stand.

Cool Down

Test your understanding *answers on page 39/40*

1 **Which of the following are participatory tools you would use to map risks, vulnerabilities, and adaptive capacities in a community? (Select all that apply)**
(a) Hazard map
(b) Interviews with people and workshops and dialogues with community stakeholders
(c) Impact Chains Tool
(d) Business Model Canvas

2 **When developing a Community Adaptation Action Plan, you should check proposed adaptation actions against the .....(fill in the missing word).**

3 **When developing your framework for Monitoring, Learning and Evaluation, the first step is to: (select the correct answer)**
(a) Collect data for your adaptation action
(b) Decide how you will communicate your results
(c) Develop a results chain
(d) Facilitate a reflection and learning session with your team

4 **Fill in the blank. When thinking about scaling up your adaptation action, you should check that it is technically feasible, financially viable, socially acceptable and pays attention to.....**

5 **Which of the following should you not do when engaging with investors? (select the correct answer)**
(a) Treat "no" as a feedback and networking opportunity
(b) Rely on the product or service alone to entice them
(c) Be confident and coachable
(d) Be upfront about risks, weaknesses—and how to address them

BONUS QUIZ: To further test your knowledge of climate change, do this online quiz developed by UNDP. It covers three topics:

- The problem of climate change
- The impacts of climate change
- Mitigating the impacts of climate change

Reflect and prepare for your climate adaptation action

Consider the following questions to get you started with developing your own adaptation action plan.

1. **Adaptation needs in your community:**
   a. What are the main climate change risks and vulnerabilities in your community?
   b. What climate adaptation actions are already happening to address these?
   c. What gaps exist? Are there actions you think are needed but not being implemented by anyone else?

2. **Partners and participants:**
   a. Which organizations, individuals, community groups or institutions are already doing adaptation work in your community? Which of these might you partner with?
   b. Which marginalized groups in your community do you need to include in your adaptation action planning? How can you include them?

3. **Possible funding:**
   a. What sources of funding are available to support local adaptation actions led by young people in your area? (Do some research to see what's out there).
   b. How might you access this funding?
   c. If you need to work with a larger youth organization to access funding, how can you approach them and encourage them to partner with you?

Answers

1. Correct answer: Correct answer: (a), (b) and (c)
EXPLANATION: Community participation is key for developing impactful adaptation actions and plans. Participatory tools help empower communities and give them ownership of adaptation plans and actions. CARE's Climate Vulnerability and Capacity Analysis Handbook provides tools such as the Hazard Map and Impact Chains Tool. You can also interview key community members and host workshops and dialogues.

2. Correct answer: Adaptation Good Practice Checklist.
EXPLANATION: Whatever adaptation actions you plan to undertake as part of your Community Adaptation Action Plan, it is important to assess them against the Adaptation Good Practice (AGP) checklist. The checklist's nine criteria help ensure that adaptation results in quality, impactful and long-term climate resilience for the most vulnerable people.

3. Correct answer: (c) Develop a results chain.
EXPLANATION: Your first step when developing a MEL framework is to develop a results chain. This shows how a particular action will lead to a desired result. The results chain should be accompanied by SMART indicators for your adaptation action(s).

4. Correct answer: gender dimensions.
EXPLANATION: After implementing your adaptation action in its initial stage, and evaluating the outcomes, you might be pleased to see that it has been successful and has potential for scaling up. At this stage, it's important to consider how the intervention supports effective adaptation. Check to see that your action supports effective climate change adaptation. Consider:

- Technical feasibility: can the intervention withstand variations in climate? Can it be easily used by your target community without the need for help from specialists?
- Financial viability: is the intervention cost-effective and can it be sustained financially over the short, medium and long term?
- Social acceptability: does the intervention disrupt social cohesion or create division among members of a community. If so, how might you build bridges between people and bring people with different opinions together to create a shared understanding of the benefits of the action?
- Gender dimensions: does the adaptation action support the agency and wellbeing of women and girls?

5. Correct answer: (b) Rely on the product or service alone to entice them.
EXPLANATION: When engaging with investors, you will need to show them that you can guarantee a return on investment, have traction in the market, have good governance structures in place for your business, have a sound financial model and a competitive advantage, among other things.

Endnotes

1 Based on survey conducted with 228 African young people across 8 African countries as part of the Toolkit needs assessment, July 2022: Egypt, Ethiopia, Ghana, Kenya, Malawi, Tanzania, Uganda and Zimbabwe.

2 Adapted from CARE (2021). Partnership in CARE. https://www.care-international.org/sites/default/files/2022-12/PARTNERSHIP-IN-CARE.pdf (accessed February 2023).

3 CARE (2016). Adaptation Planning with Communities: Learning from Practice in Embu County, Kenya. https://careclimatechange.org/wp-content/uploads/2019/06/Adaptation-Planning-with-Communities-Learning-Report.pdf (accessed February 2023).

4 Asian Disaster Risk Reduction Centre (no date). Risk awareness and assessment. https://www.adrc.asia/publications/LWR/LWR_pdf/Chapter%202%20Section%202_1.pdf (accessed February 2023).

5 Asian Disaster Risk Reduction Centre (no date). Risk awareness and assessment.

6 CARE (2019). Climate Vulnerability and Capacity Analysis Handbook. Informing community-based adaptation, resilience and gender equality. https://careclimatechange.org/cvca/ (accessed February 2023).

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