

# WORKING WITH CLIMATE AND ENVIRONMENT IN DANCHURCHAID



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## INTRODUCTION

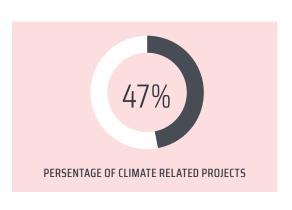
## WHY IS DANCHURCHAID COMMITTED TO ACCELERATE CLIMATE ACTION?

In DCA, we are seeing firsthand how the climate, environment, and biodiversity crises are rapidly escalating and impacting the most vulnerable people the hardest. Despite years of commitments from countries to slash the greenhouse gas emissions that are warming the planet, fossil fuel consumption is still on the rise. At the same time, unsustainable patterns of consumption and production of food, clothing and other products impact severely the ecosystems that we all depend on.

Human-induced climate change is increasing the number and severity of extreme events such as droughts, heavy precipitation, tropical cyclones, and slow onset events like desertification, increasing temperatures, loss of biodiversity, sea level rise, etc. The compound impacts of climate change and environmental degradation are affecting agricultural yields and food production, increasing water insecurity and impacting negatively on the health of people and ecosystems. For the people and communities that are already in a vulnerable situation due to poverty, inequalities, or conflict, these impacts may compromise food security and threaten human health, for example through malnutrition or the spread of infectious diseases. Climate change also has an impact on people's income sources, traditional ways of living, and in combination with other factors, can also lead to displacement or contribute to further conflict. The impacts of climate change are intensifying humanitarian crises and threatening development gains already achieved.

For DCA, this means that it is urgent to enhance our support to the people and communities that are taking action to not only cope with and recover from these crises, but also to adapt to, address its root causes and advance climate justice. There is an immense need for climate and environmental action in the countries where we work. Together with communities, civil society, governments, the private sector, and other stakeholders, we work to co-create inclusive solutions to address these challenges. In 2024 we integrated climate and environment action into 47% of our development and humanitarian projects and we are continuously working to scale-up these efforts.

OVERVIEW OF CLIMATE MAINSTREAMING IN DCA PROJECTS (2024):



#### **DID YOU KNOW THAT....**



#### **Climate Change**

#### ... 2024 was warmest year on record?

The global average temperature rose 1.55°C above pre-industrial levels, and thereby exceeding the limit set by the Paris Agreement established by UN member countries. (The World Meteorological Organisation, 2025)



#### **Environmental Degradation**

#### ... One-third of the planet's land is degraded?

This makes it harder to feed a global population. Around 3.2 billion people, or 40 percent of the global population, are adversely affected by land degradation.

(UN Environment Programme, 2025)



#### **Biodiversity Loss**

### ... One million of the world's estimated 8 million species of plants and animals are threatened with extinction?

This comes as 75% of land and 66% of oceans are altered, with over a third of land and 75% of freshwater used for farming.

(Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, WWF, 2025)

#### A HOLISTIC APPROACH

Addressing the climate and environment crises is complex and cannot be solved with a one-size-fits-all solution. We believe that the best responses are those that are locally led and that effectively contribute to the building of resilient communities. This means that in practice, our projects integrate climate and environmental action together with social and economic resilience elements. For instance, when we support farmers to adapt to climate shocks and stresses like droughts or erratic rainfall, we aim at co-creating solutions that are market-based, that enhance the leadership of local communities and their participation in local governance processes, and that also address other climate and environmental problems. We also work to address the interlinkages between climate and other vulnerabilities such as poverty, environmental degradation, conflict and gender inequality.

Our commitment to climate and environment action is twofold. On one hand we support communities to enhance their resilience to climate change through focused projects, while on the other hand we integrate climate and environment considerations in all our development and humanitarian projects as well as in our operations internationally and in Denmark to ensure that we do no harm to the environment and maximise our positive impact.

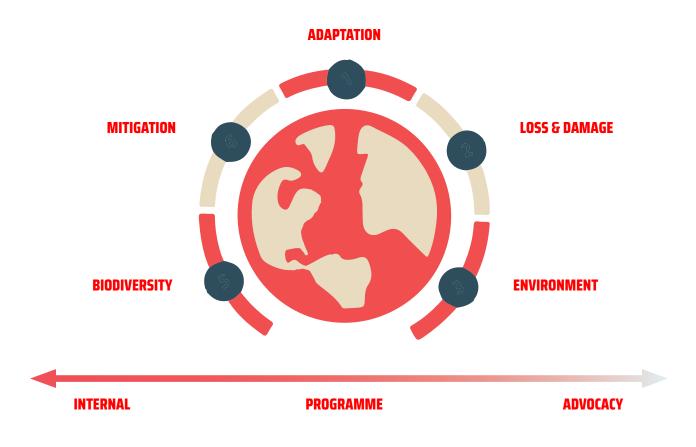
**Agroecology** is an example of a holistic approach promoted from field to policy level by DanChurchAid.

DanChurchAid works with FAO's 10 elements of agroecology as a framework to strengthen the social, economic, and environmental resilience of smallholder farmers. Agroecology can help build resilience while addressing the impact of the multiple ongoing global crises. It empowers the most vulnerable, improve livelihoods, address biodiversity loss, support communities adapting to the effects of climate change while mitigating them, and address inequalities in the food system.

You can find more information on Learning site: Agroecology Hub



Through this booklet we want to walk you through examples of how we take climate and environmental action in our programmes, advocacy, popular engagement and internal organisational commitments. We want to share stories of the work that we do together with our local partners to support communities to build a more climate-resilient and sustainable future. We hope that these stories will give you hope and inspire you to join us in taking climate action!





#### **Case of Climate Action:**

#### Gender Responsive Climate Action in Nepal

Women and girls are disproportionately impacted by the effects of climate change, particularly in least developed countries. This means that there is need for integrated approaches to address gender inequalities and climate change at the same time and that women should be recognized as important agents of change for climate justice and action.

For example, in Nepal, women are often left behind at home, when their husbands and other male members of the family migrate for work. This means that women are in charge of all care, household and farming responsibilities, while at the same time they face restricted land rights, less access to finance, information and other services. This makes it even more difficult for them to adapt to the increasing droughts and floodings that can destroy their homes and crops.

DCA together with local partners have supported the implementation of gender just climate adaptation approaches while promoting women's leadership in climate adaptation. Through this support, communities can implement climate adaptation solutions, such as greenhouse tunnels, and drip irrigation water systems to prevent crop loss. Simultaneously, the project has provided training for women to take a leading role in promoting climate adaptation, ensuring that solutions are designed and delivered in a more just way that responds to women's needs.

## **ADAPTATION**

#### **IPCC DEFINTION**

The process of adjustment to actual or expected climate and its effects.

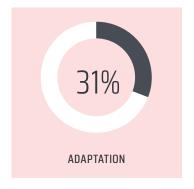
Even if we imagine a complete stop of human-induced greenhouse gas emissions tomorrow, the long lifetime of CO2 in the atmosphere means that temperatures will continue to rise. Our old emissions mean inevitable changes to the climate for the next many years. As climate impacts intensify, there is an urgent need to increase climate adaptation efforts – especially for communities in vulnerable situations.

Climate Adaptation is defined as: Actions taken to anticipate, prepare for and adapt to the impacts of climate change, both those that are already happening and those expected in the future. These actions aim to adjust human and/or natural systems to cope with and reduce adverse impacts or take advantage of opportunities that might arise from a changing climate.

You may already know examples of climate adaptation without thinking of it as "adaptation". For example, in Copenhagen, Denmark, increasingly frequent and severe heavy rainfall

events put the city at risk. In urban built-up areas with impermeable surfaces, 'cloudburst management' is an approach to deal with intense rainfall and reduce the risk of flooding. This is done by combining the creation of green oases to retain and collect rainwater from roads and rooftops with changes to sewer systems in order to lead rainwater into the ocean.

In other parts of the world that are also experiencing the harsh realities of droughts, floods and other climate shocks and stresses, communities and governments face significant challenges in securing the necessary finance for climate adaptation. People in these communities are taking adaptation measures on their own. However, as adaptation needs increase, they need more support to build on their existing capacities and efforts to continue to enhance their resilience. Therefore, it is crucial to scale up financial support for locally led adaptation.



#### PERCENTAGE OF CLIMATE RELATED PROJECTS PER ACTIVE CATEGORY

The analysis is based on 471 projects included in the 2024 annual report, funded by own funds and donors. please note that a project may address one or more dimensions, therefore the percentages reflect overlap.



There are valuable lessons to be learned from the innovative adaptation strategies developed in these regions. Indigenous knowledge, traditional practices, and community-based initiatives play a crucial role in climate adaptation. These approaches offer unique insights and effective solutions that can inform global strategies.

DanChurchAid emphasizes support to locally led adaptation. In the climate adaptation field, DCA is shifting from supporting the implementation of climate resilient agricultural practices at farm level towards more holistic and landscape approaches, such as agroecology that support transformation to more sustainable resource management and food systems. Examples of practices that we support include implementing agroecological measures, such as crop diversification or water conservation measures at farm level, as well as community-led integrated watershed management to effectively address food security, water management, and environmental protection in contexts affected by severe drought.

Another way in which we support climate adaptation is by promoting community-managed disaster risk reduction activities such as localised early warning systems to monitor risks and prepare for extreme weather events like floodings, droughts, landslides, etc. In the past few years, we have also enhanced our efforts to test innovative approaches on anticipatory action to support communities to act ahead of predicted hazards to prevent or reduce acute humanitarian impacts.

#### How do we avoid maladaptation in DCA?

Poor planning and design flaws in adaptation strategies can lead to maladaptation, which is when actions aimed at supporting climate adaptation create conditions that actually worsen the situation and increase people's vulnerabilities. To avoid maladaptation in DCA, we promote locally-led initiatives that integrate gender-based and other inequalities into the core of the adaptation action, encouraging the meaningful participation in decision-making of those that are more vulnerable. Furthermore, we aim for our adaptation projects to be informed by the best available information on climate risks and to be monitored using adaptive management to adjust activities based on evidence generated along the way.

#### **Case of Adaptation:**

### Community Managed Disaster Risk Reduction in South Sudan

In addition to conflict and economic challenges, South Sudan is also grappling with the impacts of climate change. The country has experienced repeated extreme weather events, including widespread flooding, which has recently affected over 1.4 million people across 43 counties. These floods have destroyed infrastructure, displaced communities, and heightened food insecurity, leaving millions without adequate resources for survival.

DanChurchAid worked with local civil society partners to support community managed disaster risk reduction (CMDRR) in the Upper Nile State, Jonglei and the Greater Pibor Administrative Area. Through a series of projects, communities have implemented adaptation measures such as constructing dykes and drainage systems by community structures (CMDRR committees) that received emergency response training by DCA and partners. The training included knowledge on the links between floodings and climate change and explored how the causes of vulnerabilities in the communities can be addressed. For example, training explores how the planting of more trees can help catch and hold rainwater and reduce the risk of floodings. These projects also provided cash for work to community members for the construction of the dykes and drainage systems. The projects promoted the participation of both men and women in the committees as well as more equal participation in community-level decision making. By engaging communities to take the lead on disaster preparedness and risk reduction we aim to increase the capacities of communities to adapt to, withstand and cope with climate-related events.

#### **Project Highlights:**

**Location:** South Sudan

Type of project: Adaptation, Disaster Risk Reduction

**Climate hazard:** Recurrent floodings

**Local partner:** National Relief & Development Corps (NRDC) in Upper Nile State and Nile Hope in Jonglei and the Greater Pibor Administrative Area

#### **Keu Results**

- 160 Community Managed Disaster Risk Reduction Committees and flood task forces formed, trained and guided to develop action plans
- More than 22.650 people participated in cash for work activities to implement adaptation measures.

#### **Donors:**

- Ministry of Foreign Affairs of Denmark, DANIDA
- Diakonie Katastrophenhilfe, German Federal Foreign Office (Back donor)

Link to story of one of the projects in this series: <u>Empowering Communities: Tackling Protection and Socio-Economic Challenges - DanChurchAid</u>

#### **Case of Adaptation:**

## Community Led Adaptation and Green Income Opportunities in Ethiopia

Rural communities in Ethiopia's East Bale and Amhara, Waghimra zones are confronted with multifaceted challenges, including from increasingly erratic rainfall and recurrent drought that accelerates land degradation and loss of biodiversity. The vulnerability of the communities is deepened by practices like unsustainable agricultural practices, deforestation, and overgrazing, threatening the communities' existence.

DanChurchAid and local partners in these areas have supported innovative, locally led climate change adaptation approaches that not only enhance the resilience of the communities but also empower them as active agents of change. By emphasizing community driven and locally led initiatives, the project recognizes the inherent strengths, knowledge, and resilience within these rural communities.

Through this project, diverse agroecological practices were supported such as the promotion of diversified vegetable and fruit production, climate-resilient crop production, sustainable rangeland management, as well as climate mitigation initiatives, such as small-scale solar power systems to provide energy for irrigation systems, tree planting and distribution of fuel-saving stoves which reduce the need for firewood. These changes in practices have led to improvements in food security, income generation, environmental conservation and climate adaptation and mitigation.



#### **Project Highlights:**

**Location:** East Bale and Waghimra zones, Ethiopia **Type of project:** Ecosystem based Adaptation **Climate hazard:** Variable rainfall, recurrent droughts

**Local partners:** Action for Development (AFD) and Ethiopian Evangelical Church Mekane Yesus - Development and

Social Service Commission (EECMY- DASSC)

#### **Key Results:**

- Rehabilitation of 718 hectares of degraded lands
- More than 20.000 different tree and fruit seedings planted
- 1,220 community members participating in the implementation of diverse adaptation practices
- Solar panel driven irrigation structures were installed
- 1.500 improved energy efficient cooking stoves were distributed
- Improved water security through water harvesting

#### Donor:

• Ministry of Foreign Affairs of Denmark, DANIDA

Link to story in the website: <u>Community Led Adaptation for Climate Resilience and Green Income Opportunities in</u> Ethiopia - DanChurchAid

The project's cornerstone is community-led integrated watershed management. It empowers rural communities to take the lead in managing their local ecosystems and natural resources and promote sustainable land use, community based natural resource management, and gender-responsive interventions. Additionally, the project addresses the critical issue of income diversification. By introducing sustainable income opportunities, it lessens the communities' reliance on agriculture and firewood, reducing the pressure on their land and forests.

While the project is focused on activities helping communities to adapt to climate change, mitigation initiatives are also included, providing a good example for how both adaptation and mitigation objectives can be integrated.

## **LOSS AND DAMAGE**

#### **IPCC DEFINTION**

Harm from (observed) impacts and (projected) risks and can be economic or noneconomic.

Although humans have a remarkable capacity to adapt, we are and will be increasingly confronted with climate change impacts to which people and ecosystems are not able to fully adapt. In other words, there are limits to adaptation and when these are crossed communities and ecosystems suffer losses and damages. Insufficient access to finance, weak governance structures, political instability, lack of political will, and other factors that prevent communities from taking adaptation action often put further hindrances in the way.

The term climate-related losses and damages, refers to harms that are irreversible (losses) and harm that can be repaired (damages) occurring as consequences of climate change that go beyond what people can adapt to. Losses and damages can be economic, for example when farmers lose their harvests due to a drought or flooding and therefore, they lose their source of income. It can also be when infrastructure, for example a school or a bridge, is damaged because of flooding. But they can also be non-economic, for example the pain and sorrow that follows a disaster when a family loses their home and is displaced in search of shelter and safety. It could also be associated with losses of lives, loss of a traditional way of life or identity, or loss of species or entire ecosystems, which cannot be restored like coral reefs.

When working with projects that address losses and damages, DanChurchAid aims at addressing both economic and non-economic losses and damages, while integrating, when feasible, long-term adaptation so to reduce future climate-related losses and damages.



#### PERCENTAGE OF CLIMATE RELATED PROJECTS PER ACTIVE CATEGORY

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#### **Case of Loss and Damage:**

## Anticipatory Action: Connecting Adaptation and Responses to Loss and Damage in Nepal

In Nepal, climate change is experiencing record-breaking rainfall events which increase occurrences of flooding and landslides. Due to high levels of poverty and other vulnerabilities, the country is severely affected by these hazards.

The area around the Mahakali River Basin in Western Nepal is an example of an area which is being affected by extreme flooding events. DanChurchAid has therefore, with partners, established a project called 'B-Ready'. Through this project an anticipatory humanitarian system based on impact-based forecasting and risk analyses was established to complement early warning systems used in Nepal. Impact-based forecasting differs from the usual weather forecasting, by not only telling people "How much it will rain" on a given day, but also "which areas are at risk of flooding".

Impact-based flood forecasting models were co-designed and tested and the capacity of local government and communities was enhanced so that they were prepared to respond timely to the available forecast information. In July 2024, the Department of Hydrology and Meteorology recorded unprecedented precipitation levels. In response to specific pre-determined triggers, the municipality activated its early action protocol. DanChurchAid and local partners made it possible to implement the critical forecast-based early actions, including evacuations and Early Warning System (EWS) communications. Furthermore, through the financial support of DCA's Humanitarian Crisis Fund, group cash transfers were facilitated in selected at-risk communities as a proactive measure ahead of the impending flood disaster.

**Anticipatory Action** refers to actions taken in anticipation with local communities to mitigate the impact of a crisis before it occurs. When Anticipatory Action addresses climate risks, it can be considered an adaptation action in that this lessens the risks of losses and damages occurring - and it can pave the way for more effective early action that responds to loss and damages immediately after a disaster.

In general, this project has made it clear, that there is a need to integrate anticipatory action in disaster risk management strategies and to set up pre-arranged financing that is guaranteed and available for local actors to act timely when a trigger is activated.

This project addressed losses and damages, as it responded to flooding that occurred, but at the same time it strengthens the communities' adaptive capacity and resilience regarding future floodings.

#### **Project Highlights:**

**Location:** Makahali River Basin, Nepal **Type of project:** Anticipatory Action

**Climate hazard:** Increase in extreme rainfall events

**Local partners:** Nepal National Social Welfare Association (NNSWA), Institute of Himalayan Risk Reduction

(IHRR), NAXA private Ltd. and Viamo (digital technology partners)

#### **Key Results:**

- Co-designed and tested impact-based flood forecasting model for effective anticipatory actions.
- Over 2,000 households participated in vulnerability assessments, empowering them to respond effectively to warnings.
- Close collaboration with local government authorities at municipal level
- Cash support for livelihood rehabilitation was provided through 10 Group Cash Transfers for a total of 521.950 NPR (approx. 3.700 USD).

#### Donor:

• Ministry of Foreign Affairs of Denmark, DANIDA

#### Links to story in website:

B-Ready: Flood Proofing Nepal - DanChurchAid

All About Anticipatory Action: Lessons from Mahakali Basin for Upscaling - DanChurchAid

#### **Case of Loss and Damage:**

## A Pathway to Address Loss an Damage and Build Resilience in Turkana, Kenya

Kenya has experienced an increase in drought frequency from once in every ten years in the 1960s and 1970s to once in every two to three years in the 1990s. Since 2000, drought has become increasingly unpredictable. Turkana County is among the most vulnerable arid and semi-arid land regions in Kenya. Here higher temperatures and an increase in evapotranspiration are expected to cause more frequent climatic extremes, which impacts negatively on livelihoods and increases vulnerability.

The effects of climate change combined with local vulnerabilities like poverty and lack of access to basic services have increased competition and conflicts over limited resources. This has pushed the uptake of environmentally unfriendly practices like excessive fuelwood collection and over-grazing, and it has also, in combination with other factors, contributed to pushing vulnerable people from rural communities to migrate to urban areas. Displacement to urban areas can lead to stress, and to cope with this, some people adopt negative coping mechanisms such as alcoholism. Women can also be increasingly exposed to sexual and gender-based violence when they have to go to urban areas to sell charcoal and firewood. These are considered non-economic losses and damages.



#### **Project Highlights:**

**Location:** Turkana, Kenya

**Type of Project:** Response to economic and non-economic losses and damages, Adaptation

Climate Hazard: Variable rainfall, increased drought frequency

Local partner: SAPCONE

#### **Key Results:**

- 6 demonstration farms were set up to support farmers to learn about climate resilient agriculture
- 4 apiculture groups were supplied with equipment and training
- Support for fisherfolk included provision of boats, motorbikes fitted with cooler boxes and solar-powered stationary chest freezers to ensure the fish delivered to the market is fresh, and other equipment.

#### Donor:

• Ministry of Foreign Affairs of Denmark, DANIDA

You can read more about this project and other loss and damage case studies from around the world in IIED and ICCCAD's compilation: Loss and damage case studies from the frontline: a resource to support practice and policy

This case study has also been featured in a compilation made by the Humanitarian Practice Network focused on Climate change adaptations in humanitarian programming: <u>Community resilience</u>, <u>livelihoods diversification</u> and recovery, and mitigating climate change shocks in Turkana County | Humanitarian Practice Network

To support people who are experiencing both economic and non-economic loss and damage DanChurchAid together with a local partner, supported the adoption of climate resilient agriculture as well as the uptake of sustainable alternative livelihoods like apiculture, fisheries and poultry production among local communities. These are pursued through sustainable market-driven interventions, that include the provision of essential agricultural inputs through input of vouchers, training on crop husbandry and poultry production, and capacity building on business. Additionally, communities and women fish traders have been equipped with essential skills to manage their businesses, and support was provided for the formation of community-led savings and loan platforms to strengthen economic resilience.

Climate change will lead to additional negative impacts in the area. Therefore, it is necessary to provide support to help communities to minimise and address both economic and non-economic losses and damages. This support can also include, for example, providing psychosocial support to help with non-economic losses related to culture and tradition and resettlement.

#### **Case of Loss and Damage:**

## Achieving a Better Understanding of Climate and Conflict-related Losses and Damages in Mali

Mali is very much affected by conflict and economic crises. Climate change is putting additional pressure on already vulnerable communities across Mali, particularly those who rely on natural resource-based livelihoods, such as 74% of Malians whose livelihoods are based on pastoralist and agrarian systems highly sensitive to droughts and rainfall variability. Greater impacts of climate change and environmental degradation are likely to contribute to fueling inter-communal violence, compounded by existing inequalities. At the same time, conflict-related and structural challenges increase Mali's vulnerability to climate stress. These compound challenges are increasing the vulnerability for already marginalized and at-risk groups — women, and people with disabilities. However, there are insufficient resources to address these issues holistically.

Through the project 'Promoting locally driven responses to address climate-induced losses and damages in the Centre of Mali', DCA and local partners are taking an integrated approach informed by participatory, action-oriented research. DanChurchAid in collaboration with a local partner and the International Institute for Environment and Development (IIED) conducted research to examine the compounded impacts of climate change, conflict, and socioeconomic vulnerabilities on households in Mopti, Mali, quantifying both economic (e.g., crop and livestock loss, employment disruption) and non-economic loss and damage (e.g., mental health deterioration, cultural erosion, social fragmentation).

Results from this research provides evidence-based recommendations to integrate in our approaches to respond to economic and non-economic losses and damages and to build resilience in Mali's fragile and conflict-affected context. Moreover, it enhances our understanding of the interconnections between climate change and conflict.

#### **Project Highlights:**

**Location:** Mopti, Mali

**Tupe of Project:** Response to economic and non-economic losses and damages

**Climate hazard:** Rainfall variability, drought, flooding

Local partner: TASSAGHT

#### **Key results:**

- 9 Local committees for the management and monitoring of Climate Loss and Damage mechanisms have been set up and action plans have been developed
- Climate and conflict-related losses and damage have been assessed providing insights for actions to address loss and damage as well as adaptation efforts

#### Donor:

• Ministry of Foreign Affairs of Denmark, DANIDA

Link to report: Addressing climate and conflict-related loss and damage in fragile states: a focus on Mali | IIED Publications Library

## MITIGATION

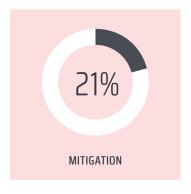
#### **IPCC DEFINTION**

Actions that prevent the planet from warming to more extreme temperatures. It can include actions to reduce or prevent human emissions of greenhouse gases (GHG), or/and those that enhance the capture and storage of GHG emissions in, for example, forests and soil.

The level of GHG emissions in the atmosphere defines how much the global surface temperature will rise. The higher the temperature increases, the larger the climate change-related risks and we may see long-lasting or irreversible impacts, such as the loss of ecosystems. The Intergovernmental Panel on Climate Change (IPCC) has established several scenarios that explore the possible future emissions pathways and the associated impacts, and it is clear cutting emissions urgently is necessary to significantly reduce the impacts of climate change.

Thus, in DanChurchAid we also integrate climate mitigation efforts into our projects and our own operations. We introduce renewable energy and energy efficient solutions such as solar-powered irrigation systems and clean cookstoves. We also reduce food loss and waste along agri-food value chains and support projects that capture carbon from the atmosphere, for example by integrating trees and shrubs into farming systems, which is also known as agroforestry.

In many of our projects, climate mitigation objectives are integrated with other development or adaptation efforts. For example, when we support the installation of solar-powered efficient irrigation systems, farmers can adapt to changes in rainfall patterns while reducing the consumption of diesel or other fossil fuels, that would be used in generators to pump water to the fields. Climate mitigation often also supports economic savings, for example by reducing energy consumption or the use of costly chemical fertilisers.



#### PERCENTAGE OF CLIMATE RELATED PROJECTS PER ACTIVE CATEGORY

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#### **Cases of Climate Mitigation:**

#### Addressing Food Loss and Waste Through Cooling Solutions in Kenya

In Turkana Kenya, temperatures are going up to 40 degrees. This is a big problem for fish traders, as the fish they catch go bad within a few hours, affecting their income.

DanChurchAid has, together with local partners, supported fish trading groups, with stationary chest freezers. This allows the fish traders to reduce spoilage of fresh fish and increase their income. The freezers are driven by solar power, showcasing the cost-effectiveness of solar power vis a vis the usual fossil fuel powered generators. At the same time, the cooling solution reduces food loss, avoiding emissions from fish that have gone to waste. Food loss and waste account for 8-10% of annual global greenhouse gas emissions — nearly five times the total emissions from the aviation sector. Fish waste, if left to rot or if disposed of in landfill, generates methane gas, thus avoiding food loss and waste in fish value chains help mitigate climate change.

The solar-powered freezers were initially distributed as grants; but some of the trading groups quickly realized the cost-benefit of the systems. They now acquire additional systems to expand their businesses and increase their income. They have been connected to a local microfinance institution, which, in partnership with DanChurchAid, can provide loans to support the expansion of their businesses. Furthermore, these groups receive training in business skills, book-keeping and taking care of the maintenance of the systems which strengthen the resilience of their business.

This example shows how we can integrate climate mitigation elements in our development projects while promoting economic resilience of communities.

#### **Project Highlights:**

**Location:** Turkana, Kenya

Type of project: Climate mitigation, addressing food loss and waste

Local partner: SAPCONE

#### **Key Results:**

- Support for fisherfolk included provision of boats, motorbikes fitted with cooler boxes and solar-powered stationary chest freezers to ensure the fish delivered to the market is fresh.
- Collaboration with local microfinance institution to provide loans

#### **Donor:**

• Ministry of Foreign Affairs of Denmark, DANIDA



Also in Kenya, we are implementing a project titled "Loss to value – L2V" aiming at reducing food loss and waste through cold chain solutions in Nakuru and Nyandarua counties where many small holder farmers depend on their farm produce to sustain their livelihoods. These farmers encounter myriad challenges such as poor pre and post harvesting handling, limited production skills, high input costs and exploitative markets. Therefore, DCA and local and international partners are implementing scalable cold storage solutions with a focus on developing and testing a business model that makes these solutions affordable and accessible to farmers in selected value chains including french beans, snow peas, sugar snaps, chilies, and vegetables. Assessments show that up to 40% of produce is lost post-harvest, especially during peak harvest months. The spoiled food contributes directly to CO2 emissions due to poor waste management practices. Therefore, reducing food loss together with other changes in production will reduce the GHG emissions resulting from agricultural activities.

These examples, show us the interconnectedness between different aspects of climate change and the importance of developing holistic solutions that can address both adaptation, mitigation and other economic and social resilience elements.

#### **Project Highlights:**

Location: Nakuru and Nyandarua, Kenya

Type of project: Climate mitigation, addressing food loss and waste

Strategic partnership with Fresh Produce Exporters Association of Kenya (FPEAK), FSD Kenya and Danfoss

**Key Results** (during first 6 months of introducing cooling):

- 40% reduction of post-harvest loss
- 24% increase in production
- 32% increase in income
- 269 smallholder farmers reached across 2 cooperatives

#### Donor:

• Ministry of Foreign Affairs of Denmark, DANIDA, through Danida Green Business Partnerships (DGBP)

Link to story in website: Loss to Value Creation: A Path to Higher Incomes for Smallholder Farmers - DanChurchAid

#### **Cases of Climate Mitigation:**

## Restoring Land and Empowering Refugees and Host Communities in Uganda Through Green Livelihoods

Uganda hosts the largest refugee community in Africa. The continuous influx of refugees has overstretched natural resources due to their heavy reliance for cooking, building materials, and agriculture. This has led to environmental degradation, reduced groundwater recharge, and reduced food and nutrition security. Furthermore, when trees are cut down to be used for cooking, building materials or for agriculture, carbon dioxide is released into our atmosphere and less is being absorbed, contributing to climate change.

Since 2019, DanChurchAid and local partners, have been supporting refugee and host communities in the West Nile region and Kampala to restore the environment, access clean energy and engage in green livelihoods such as shea nut butter production, agroforestry and beekeeping. DanChurchAid and partners work with local communities and stakeholders to map and restore degraded lands, promoting natural regeneration and reforestation. We promote a collaborative approach to ensure that landowners and community members benefit from restoration efforts, fostering local ownership and sustainability. As a result, we have managed to grow 4.8 million trees in these settlements through approaches such as woodlot establishment, household tree growing done through individual initiatives, cash for work and agroforestry. This effort supports timber production, carbon sequestration, biodiversity restoration, soil conservation, and biomass provision for cooking.



#### **Project Highlights:**

**Location:** West Nile and Kampala, Uganda

**Type of project:** Climate mitigation and adaptation, land restoration, agroforestry

**Environmental issue addressed:** Deforestation and unsustainable use of natural resources

**Local partners:** Raising Gabdho Foundation (RGF), Partners in Development, the Center for Holistic Transformation (PICOT), West Nile Community Action for Rural Development (WN-CARD), I CAN SOUTH SUDAN, and

Youth Social Advocacy Team (YSAT)

**Private Sector partner:** Kijani Forestry limited

#### **Key Results:**

- Improved energy-saving stoves to 55,000 households in the West Nile region and 150 households in Kampala
- Over 4.8 million tree seedlings/3818ha have been planted since 2019

#### Donors:

- UNHCR
- Ministry of Foreign Affairs of Denmark, DANIDA

#### Links to stories in website:

Mahad Fights Heat with Trees in Uganda's Imvepi Refugee Settlement - DanChurchAid A Beacon of Hope for Land Restoration and Climate Resilience - DanChurchAid Empowering Refugees with Sustainable Energy & Green Livelihoods - DanChurchAid Seeds of Change: Restoring Nature and Livelihoods in Uganda - DanChurchAid Fuelwood Economy Study Report

DanChurchAid has also incorporated agroecology, resilience design, and farmer managed natural regeneration approaches to restore native vegetation, enhance biodiversity and improve soil health in the settlement areas, while contributing to improved food security and nutrition. Marginalized communities are also supported through this project to engage in agroforestry, mixed crop and animal farming and other practices that promote economic diversification and build their environmental and economic resilience.

DanChurchAid has also supported 55,000 households with energy efficient cook stoves to support the transition to clean energy. However, evidence shows that there is continued high demand for fuelwood and an existing economy for fuelwood with host communities as the key business players. Therefore, in collaboration with local and private sector partners, a project on sustainable fuelwood production is being piloted.

## ENVIRONMENT & BIODIVERSITY

When talking about a green future, we talk about addressing climate change, environmental degradation and biodiversity loss. These crises mutually reinforce each other; and we do our best to identify solutions that consider synergies.

The environment can be understood as everything that surrounds us. It includes all our ecosystems with diverse animal species, plants and fungi, the nutrients in the soil, the weather systems, geology and much more. Environmental degradation has a major impact on our livelihoods. When we consume natural resources in an unsustainable way, or pollute the water, air or soil, we affect the ecosystems that we depend on. Ecosystems provide us with food, medicine, energy, clean air and water, and protect communities from natural disasters. Bees and other pollinators are a great example of how we benefit from healthy ecosystems. A variety of vegetables, nuts and fruits, like almonds, apples and raspberries would not yield as much without pollinators. But as we affect their habitats, for example with chemicals from pesticides, we also affect their health and ability to reproduce. If we continue impacting ecosystems this will result in, for example, a smaller variety of fruits and vegetables for humans harming our food systems. More than half of the global gross domestic product



#### PERCENTAGE OF CLIMATE RELATED PROJECTS PER ACTIVE CATEGORY

The analysis is based on 471 projects included in the 2024 annual report, funded by own funds and donors. please note that a project may address one or more dimensions, therefore the percentages reflect overlap.

(GDP) relies on nature, and therefore the loss of biodiversity and ecosystems integrity has a huge impact on our economic situation, especially in the Global South due to their extreme vulnerability.

In addition to this, ecosystems also have a great effect on our mental well-being and cultural practices and traditions. We need to act now to move away from deforestation, over-fishing, and unsustainable agriculture, and instead focus on protecting and restoring our environment while promoting a sustainable use of natural resources.

This is why DanChurchAid acts to protect and restore the environment in addition to having a specific focus on addressing climate change. We do this by, for example, promoting the uptake of agroecological practices, reforestation and afforestation, or by supporting sustainable waste management and circular economy.



#### **Case of Environment:**

#### Building Healthy and Sustainable Livelihoods Through Agroecology

In Cambodia, there is a need to build up the resilience of communities to ensure healthy and sustainable livelihoods. One of the ways we support this is through agroecology.

It works with nature to balance the relationships between plants, soil, people, animals and the environment. It is a holistic term that goes all the way from practices to increase soil health, crop and environment protection, local market linkage to governmental initiatives that promote organic food production and sustainable food consumption.

DanChurchAid and partners established an Agroecology Living Lab in Cambodia, to enhance agroecology capacity and promote a participatory, collaborative approach to knowledge-sharing and co-creation among key stakeholders within the food system. To advance a more cooperative and user-centered way of learning and sharing knowledge within agroecology, DanChurchAid and partners developed tools such as the ECOKasekor app through which farmers can, for example, share videos with their own experiences on organic fertilizer production agroforestry, and other practices.

**Agroecology** is a holistic and integrated approach that simultaneously applies ecological and social concepts and principles to the design and management of sustainable agriculture and food systems.

Through this initiative, DCA developed new ways to engage farmers, local partners, district and provincial agricultural authorities, universities, and the private sector, building bridges between scientific and non-technical research and interventions towards agroecological transition and establishing connections to relevant policy dialogue platforms.

Not only does this project improve soil health and promotes diversified cropping systems but it also promotes organic food production and market linkages to strengthen economic resilience and promotes entrepreneurship and leadership for smallholder farmers and rural youth, which increases engagement in the communities. Women entrepreneurship was also promoted through capacity building, and access to capital and market.

Agroecology is an approach that is being integrated in DanChurchAid programmes in 15 countries and which we also advocate for through collaboration with international networks such as the Agroecology Coalition.

#### **Project Highlights:**

Location: Cambodia

**Type of project:** Environmental protection and restoration, agroecology

#### Donor:

• Ministry of Foreign Affairs of Denmark, DANIDA

Link to EcoKasekor app: ECOKasekor

#### **Project Highlights:**

**Location:** Hurungwe, Zimbabwe

**Type of project:** Sustainable natural resource management, biodiversity protection

#### Donor:

- Swedish International Development Cooperation, SIDA
- UN Global Environment Fund
- Ministry of Foreign Affairs of Denmark, DANIDA

#### Link to story in website:

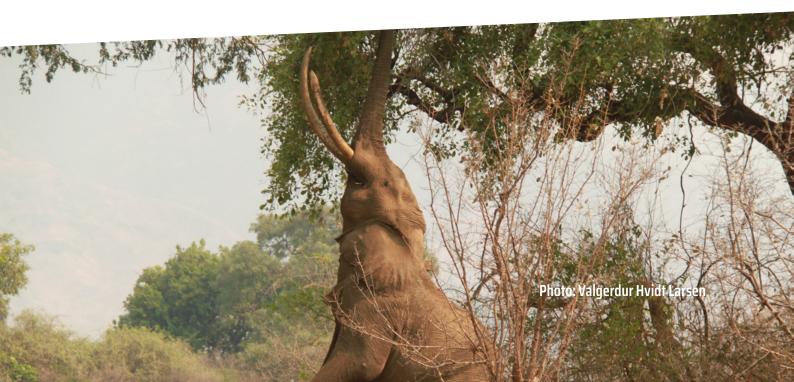
Supporting Zimbabwe's Biodiversity and Climate Change Ambitions - DanChurchAid

#### **Case of Biodiversity:**

#### Protecting Biodiversity and Livelihoods in Zimbabwe

The biodiversity hotspot Zambezi Valley, cuts across Mozambique, Zambia and Zimbabwe and is home to important wildlife populations as well as rural communities. But the area faces climate change hazards, ecosystem degradation and biodiversity loss, due to unsustainable use of water and land, food production and deforestation. Meanwhile the communities also face socio-economic challenges.

In the Hurungwe district in Zimbabwe, DanChurchAid's Utariri Project works with local communities to protect wildlife and habitats, while ensuring sustainable and climate resilient livelihoods. This is done by providing alternative water sources to communities for decreasing conflicts over water between humans and wildlife. In addition, communities are trained in sustainable natural resource management, agroecological food production methods and enterprise and value chain development. These provide alternatives to clearing forest land for agricultural purposes, poaching and unsustainable harvesting on non-timber forest products. The project also strengthens the dialogue between communities and wildlife management agencies for improved management of conflicts between humans and wildlife. Lastly, the project monitors and protects forest areas, including protected areas.





## CLIMATE CHANGE ADVOCACY

#### **DEFINTION**

Any action that speaks in favor of, recommends, argues for a cause, supports, or defends, or pleads on behalf of others, in relation to political structures, polices and decisions.

Formal and informal authorities have the opportunity and the responsibility to play a significant role in enabling and supporting sustainable development and climate action. DanChurchAid therefore also pursues advocacy with ambitious efforts to influence policy makers and other duty bearers to make decisions that address climate change and environmental harm. Our efforts focus on advocating for more finance to support the communities that we work with to scale up climate action. This is done through political dialogue, strategic communication, stakeholder management, and public campaigns that are informed by research and lessons learned from our own projects.

DanChurchAid engages partners all over the world in its climate advocacy to build connections between advocacy at local, national and global levels.

#### **Case of National Advocacy:**

#### Climate Change Advocacy in Nepal

Nepal is being severely affected by an increasing number of floods and landslides.

DanChurchAid together with local partners, have been working in Nepal to disseminate knowledge about Disaster Risk Reduction (DDR), enhance local leadership in climate resilience, and call for increased funding for climate adaptation. This has been done by creating DRR learning centers and local green funds. To enhance government accountability, 87 civil society organisations, with more than 5,000 members, have been empowered to participate in local level planning and to advocate for the allocation of resources in local budgets for the implementation of climate resilient agriculture and DRR practices. As a result of this project, four municipalities have prepared local disaster and climate resilience plans, created learning centers, and allocated at least 5% of the municipal budget for climate and DRR action in local green funds.

Moreover, DanChurchAid Nepal connects national and international advocacy, for example by presenting relevant learnings from locally led adaptation and loss and damage responses at global forums like the UN climate summits, COP 27 in Egypt, and COP 28 in Azerbaijan, together with government representatives from Nepal and other international stakeholders.



#### Donor:

• Ministry of Foreign Affairs of Denmark, DANIDA



#### **Case of Global Advocacy:**

#### Advocacy in International Networks

The climate crisis is a global emergency, and advocacy efforts are therefore important also at an international level. DanChurchAid in collaboration with international networks, including the ACT Alliance, has followed the UN climate talks, and related international processes since 2007.

In 2024, DanChurchAid pursued an advocacy strategy to push for scaled up finance for adaptation and loss and damage, through both informal dialogues with strategic global stakeholders, and public events, enabling ambitious countries to reach out with messages to influence the global debates. DanChurchAid, together with other international organisations including E3G, UN Foundation, German Watch and SouthSouthNorth, hosted an event in relation to the UN General Assembly in 2024. Ministers and other high-level speakers from a number of countries, used this platform to push for their positions, and to make announcements about new initiatives towards increased finance for adaptation.

#### Case of Advocacy:

#### Sofie Junge Pedersen, a DCA Climate Advocate

Danish football player, Sofie Junge Pedersen is a DCA climate advocate and has been since 2022. As a football player she is using her position to get football fans and the football industry globally to take greater climate responsibility.

"Football players fly around the world to matches and tournaments. We cannot avoid emitting greenhouse gases if green aviation fuels are not available. But we can take responsibility for our air travel. However, taking responsibility for our flights is only one step on the way. We must reduce our overall CO2 emissions and take the lead and inspire the world's 3.5 billion football fans to take care of the climate", says Sofie Junge Pedersen

In 2024 Sofie Junge Pedersen was awarded as the Footballer of the year by the British newspaper The Guardian. She won the award for her climate advocacy and for being behind an open letter to Fifa regarding Saudi Arabia's human rights issues. In her time as a DCA climate advocate she also headed a group of over 40 football players, that took climate responsibility for their flights to the Women's World Cup in Australia and New Zealand in 2023.





## **ENGAGEMENT**

Public engagement has historically been a force of change.

Our work on climate and sustainability action creates global connectedness and fosters joint engagement. It links people, consumers, faith-based actors, civil society partners and the private sector in Denmark and the countries we operate in.

Consumption dictates the market, therefore engaging people to reduce overconsumption, for example by buying second-hand clothes or furniture, or minimizing food waste has a great impact on the environment and sends a signal to policymakers, companies and other actors about consumers' interest in more sustainable lifestyles.

Also politically, engagement is crucial. When people engage in a debate or issue, politicians and decision makers are more likely to listen. It is therefore an important aim for DanChurchAid to support engagement of people in our agendas and projects on climate change. Not only is it important to engage people to change behavior towards more sustainable consumption patterns but it is also important to engage people into political debates to show policymakers that their constituents care for and demand enhanced support for climate action both in the Global North and the Global South.

Besides communicating about our projects through reports or social media, we also manage over 100 secondhand stores, offering Danes an opportunity to reduce their carbon footprint related to consumption by buying secondhand items, instead of new products. We have a high level of engagement and support in Denmark, with more than 20.000 volunteers and supporters, including our Parish collection volunteers.

#### **Case of Engagement in Denmark:**

#### Alleviating Food Waste Through Surplus Food Supermarkets

More than a third of all food produced in the world ends up as trash. At the same time nearly 800 million people all over the world go hungry every day. According to the U.N. Environment Programme, industrialized countries in North America, Europe and Asia collectively waste 222 million tons of food each year. Meanwhile, countries in sub-Saharan Africa produce 230 million tons of food each year.

DanChurchAid decided to do something to alleviate this problem. In February 2016, we opened the world's first supermarket only with surplus goods called Wefood. Wefood sells goods that regular supermarkets can no longer sell due to overdue 'best before' dates, incorrect labels, or damaged packaging. The products found in Wefood are still edible and safe to consume according to the Danish food legislation but have simply lost their value to the company donating them.

All of the six Wefood shops around Denmark are run by volunteers, who want to engage in the climate debate and stop food waste. Through the Wefood shops, DanChurchAid creates a platform for people to have a voice and act to change the world. In 2023, 473 tons of food were saved, and more than 4 million kroner were collected through these efforts. Furthermore, it enhances volunteer's and customer's awareness on the need to reduce food waste.





#### **Case of Engagement in Denmark:**

#### From Consumption to Recycling

The Earth's resources are limited and are being depleted at an unsustainable rate. Fast fashion has a significant environmental impact. The fashion industry is the second-biggest consumer of water and is responsible for about 10% of global carbon emissions. The consumption of textiles is at an all-time high and every Dane buys around 40 kilos of new textiles every year on average. This level of consumption is unsustainable. Luckily, there are options to reduce our consumption, for example by reusing textiles. DCA makes this option available through our second-hand shops.

In 1972 the first DCA second-hand shop was opened in Aarhus by the priest couple Ruth and Herluf Andersen. It was not only the first DCA second-hand shop, but also the first second-hand shop in Denmark with a charity purpose.

Since then, over 100 DCA second-hand shops have opened all over Denmark. They are all run by volunteers. From Ruth and Herluf Andersen being the first two volunteers at a DCA second-hand shop, we now have over 3.000 volunteers. Every year they create a profit of over 30 million DKK, and since 1972 the DCA second-hand shops have in total made a profit of over half a billion DKK. This money supports DCA's work around the world.

## ACTIONS WITHIN THE ORGANISATION

In DanChurchAid we know that it is urgent to act, and this also means that we are committed to walking the talk, taking responsibility and being part of the change. We have recently updated our Climate and Environment policy and are committed to reducing our carbon emissions by 46,2% by 2030 compared to our 2019 baseline emissions. This means that we are on our way to implementing changes to use energy in a more efficient way, for example in our offices and our retail shops, to install solar systems in the countries where electricity depends heavily on fossil fuels, to purchase products and services that are more environmentally friendly, and to reduce our emissions related to air travel. To keep track of our commitment we are monitoring our carbon emissions following international protocols.



#### **Case of Organisational Commitment:**

#### Taking Responsibility of our Carbon Footprint

DanChurchAid works in 19 different countries, and even though we work mainly in collaboration with our local partners, we still need to travel. This means that approximately 56% of our carbon emissions, according to our 2019 baseline, are related to our air travel. While we are making efforts to reduce our air travel emissions, we still sometimes need to travel. Therefore, we take responsibility for our air travel emissions by supporting a local organisation in Uganda to implement certified community-based reforestation and agroforestry projects.

Through these projects, farmers have an economic incentive to plant and maintain trees within their own agricultural land or in community-owned forests and public land including protected areas. The farmers receive payments for planting and maintaining the trees and can sell the non-timber products that the trees generate or use them themselves. In addition to sequestering CO2, the trees benefit the surrounding environment, where their roots can prevent landslides, and the tree crowns can provide shade for agriculture, thus also supporting communities to adapt to climate change.

Beyond taking responsibility for our current air travel emissions, DanChurchAid has calculated the carbon footprint of its first 100 years of operations (1922-2022) and has invested through the same Uganda-based organisation to plant 280.000 trees to turn the past into action. Through this initiative, we also aim at inspiring others to take climate responsibility. For example, we collaborate with companies and organisations committed to take responsibility. Climate agreements have been made with companies like the Danish football club AGF, the travel agency Unitas and the real estate company JBS Ejendomme, to support DCA's work on climate adaptation and tree planting in Uganda.

#### Link:

<u>Climate responsibility for the past, the present and the future - DanChurchAid</u>

## CONCLUSION

Now you have a good overview of how we work with climate and environment in DanChurchAid. We hope you are inspired to join us in taking climate action! Find out more about our work and how you can engage on our webpage: <a href="https://www.danchurchaid.org/climate">https://www.danchurchaid.org/climate</a>



DCA is grateful for the support of our donors to our climate change work.

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