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Climate Justice Guidelines



THE
LUTHERAN
WORLD
FEDERATION

World Service

actalliance

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“As those who live in the resurrection hope for renewal and restoration for all God’s Creation, we believe we cannot stand by and ignore the impacts of Climate Change. Creation groans under the weight of human action and inaction (Rom 8:22). (...) We believe that taking global action now can make a difference.” (LWF Council vote, 2015)

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Abbreviations

CO ₂	Carbon dioxide
COP	Conference of the Parties (UNFCCC)
CSO	Civil society organisation
GCF	Green Climate Fund
GDP	Gross domestic product
GHG	Greenhouse gas
IKI	International Climate Initiative (German Federal Ministry for the Environment)
IPCC	International Panel on Climate Change
L2G	Local to Global approach of LWF
LDCs	Least Developed Countries
LEED	Leadership in Energy and Environmental Design (certificate)
LTS	Long-term low greenhouse gas emission development strategies
NAP	National Adaptation Plan
NDC	Nationally Determined Contribution
NGO	Non-governmental organisation
PA	Paris Agreement
PSF	Pond Sand Filtration
SFDRR	Sendai Framework for Disaster Risk Reduction
SDGs	Sustainable Development Goals
SME	Small and medium enterprises
SNVC	Shea Nut Value Chain
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
WASH	Water, Sanitation and Hygiene

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Climate change adaptation is an adjustment in natural or human systems in response to current or expected climate stimuli or their effects; adaptation moderates harm or exploits beneficial opportunities.

Climate disaster risk management is a systematic process of implementing policies, strategies and measures to reduce the impacts of natural hazards and related environmental and technological disasters. This includes, among other things, disaster risk reduction, preparedness, response, recovery and rehabilitation.

Climate justice is a term used for framing climate change as an ethical and political issue. It links climate policies to human rights and sustainable development, safeguarding the rights of the most vulnerable people and sharing the burdens and benefits of climate change and climate policies equally and fairly. Climate justice can also cover aspects of intergenerational and environmental justice, access to sustainable energy for all and a just transition for those whose jobs or livelihoods are endangered by ambitious climate policies.

Climate proofing is an approach to identify, address and minimise project-related climate risks.

Climate resilience is defined as the capacity of a socio-ecological system (1) to absorb stresses and maintain function in the face of external stresses imposed upon climate change, and (2) adapt, re-organise and evolve into more desirable configurations that improve the sustainability of the system, leaving it better prepared for future climate change impacts.

Climate risk assessment is a methodology to determine the nature and extent of risk by both analysing hazards and their potential likelihood and intensity and estimating impacts through the evaluation of conditions of vulnerability and the identification of exposed people, property, infrastructure, services, livelihoods and their environment.

Disaster risk refers to the potential disaster losses of sudden or slow-onset events in lives, health, livelihoods, assets and services which could be incurred by a particular community or a society over some specified future time period. Disaster risk is a function of hazard, exposure, vulnerability and capacity.

Disaster risk reduction: The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.

Gender sensitivity and gender responsiveness: A gender-sensitive programme considers gendered norms, roles and inequalities and has an awareness of these issues. However, in gender-sensitive programmes, appropriate solutions or actions might not be taken. This is the case for gender-responsive programmes that not only acknowledge inequalities but also actively work to address and change them.

The **Green Climate Fund (GCF)** is the world's largest climate fund supporting developing countries to reduce their greenhouse gas emissions and enhance their ability to adapt to climate change. The GCF was set up by the United Nations Framework Convention on Climate Change (UNFCCC) in 2010 and serves the achievement of the Paris Agreement's objectives.

Hazard: A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

The **Long-term Strategy (LTS)**, or Low Carbon Development Pathways 2050, provides a long-term national vision for low (and ultimately zero) carbon sustainable development and the roadmap to achieve it by around mid-21st century. The LTS shows in a predictable way how a country aims to implement the Paris Agreement in the long run.

The **National Adaptation Plan (NAP)** process was established under the UNFCCC helping countries conduct medium- and long-term climate adaptation planning. It is a flexible programme that builds on each country's existing adaptation programmes and actions, and helps to align adaptation with other national policies.

Nationally Determined Contributions (NDCs) are the pledges of climate action (adaptation and mitigation) of State Parties to the UNFCCC under the Paris Agreement.

Vulnerability: The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard and, hence, disaster. There are many aspects of vulnerability, arising from physical, social, economic and environmental factors.

The Lutheran World Federation (LWF), World Service Global Strategy (2019-2024) 'For Hope and a Future' provides the framework for its programmes and emergency operations worldwide. As part of this, LWF World Service strategy emphasises addressing climate change, supporting people and communities affected by extreme weather events and other climate-related disasters through our humanitarian and development work, and through engagement in relevant policy debates at national, regional and international levels.

LWF World Service (WS) is committed to all country programmes contributing to activities to minimise the immediate and long-term effects of climate change on the communities we work with.

In the LWF World Service strategy, climate justice is mainstreamed at many levels. LWF World Service has developed these guidelines on mainstreaming climate justice in LWF country programmes to provide practical advice and tools to support the development of approaches and strategies for projects that seek to increase resilience by linking climate change adaptation, mitigation, humanitarian assistance and sustainable livelihoods.

The structure and the sequence of issues addressed in these guidelines were defined in agreement with key staff at global level, including the regional programme coordinators, and complemented with a wider series of interviews, 15 in total, that collected inputs and contributions from staff at global and country levels.

These guidelines are designed in a way that readers can pick what they need, depending on the situation that the WS country programme faces in relation to climate change and its own knowledge regarding the topic. For quick reference, each topic includes a box with a key message relevant to LWF World Service country programmes.

In the first four chapters, the overall background on climate issues is summarised briefly, giving readers essential information to better understand climate change causes, impact chains and consequences, and the urgency and legitimacy of the call for climate justice. This first part is also a scene-setter on why the climate crisis matters for LWF programming.

The following chapter on climate proofing of a project is the core part, introducing key tools to assess, understand and minimise climate risks at project level. Readers can find guidance on which projects are recommended for climate-proofing and, depending on the type and the level of climate sensitivity of a project, an indication of which further tools – for instance climate risk and vulnerability assessments, or climate adaptation planning – should be applied.

What follows are many good practices, mainly from country programmes, on how to address climate change impacts at project level, be it through mitigation or adaptation action, across very different sectors such as agriculture, water, energy, mobility and many others.

The guidelines also include a chapter on gender-responsive climate action, including a checklist for gender-responsive climate project design. They end with recommendations on how to apply for climate finance.

RISKS AND IMPACTS OF THE CLIMATE CRISIS

Unabated climate crisis or resilient recovery? LWF World Service and the people we work with are feeling the impacts of climate change every day. Addressing those impacts is the choice we have to make. To say it in the words of the Intergovernmental Panel on Climate Change (IPCC), as the most authoritative scientific voice on climate change:¹

“The future will look different no matter what – just how different is our choice. Because the decisions we make today determine the world we get tomorrow. There are many possible worlds.”

Our and humanity’s current pathway can be described as late, uncoordinated action. If continued, it will lead us, within decades, to a worst-case scenario with: more frequent and more extreme storms, especially in the Pacific, Indian Ocean and the Caribbean; mid-latitude and tropical extreme rainfalls and flooding, particularly in Asia; severe drought and crop failure, especially in the Mediterranean, Africa, the Americas and Europe; deforestation in the Amazon and Congo basin, followed by unprecedented drought; glacier and ice shield retreat in the high mountains Greenland and West Antarctic, leading to rapid sea level rise and coastal flooding, especially in Asia and small island states. These impacts have a huge potential to undo the development successes of our work.

They and other impacts of global warming come on top of the losses and damages we have increasingly experienced in previous years, representing the effects of 1°C of global warming that we have already reached. Since 1980, losses caused by climate extremes have quadrupled. Most at risk are vulnerable, predominantly rural, populations whose livelihoods depend on intact ecosystems, as in agriculture, forestry and fisheries sectors. How threatening the risk is can be seen in many of our programmes but also in the warning of the insurer Swiss Re Group that 50% of global GDP is in peril, as climate change puts 20% of the world’s countries at the risk of ecosystem collapse.



Figure 1: Worlds apart: The story of possible warmer worlds. IPCC. <https://www.ipcc.ch/static/infographic/worlds-apart/>

A better world is still possible, if we take strong and effective climate action now. The IPCC Special Report on Global Warming of 1.5°C (2018)² analysed the change needed to avoid a climate catastrophe: halve global carbon dioxide (CO₂) emissions by 2030; immediately switch investments from fossil to renewable energies, achieving 100% renewable energy supply within 15-20 years; turn soils, agrarian land and forests from greenhouse gas (GHG) emission sources to sinks; and, finally, achieve carbon neutrality, i.e. global net zero emissions by 2050.

In fact, 2020 tied with 2016 as warmest year on record. It was a year of climate breakdown caused by a series of extreme climate events. The ten most expensive of them cost US\$140.9 billion.³ In Australia, bushfires killed billions of animals, displaced 65,000 people and destroyed assets worth US\$5bn. In Africa, locust swarms devastated fields of hundreds of thousands of farmers, leading to losses of US\$8.5bn. In Asia, cyclone Amphan killed 128 people, temporarily displaced 4.9 million, provoked losses of US\$13 billion. Floods in Asia caused damages of US\$52bn. The hurricane season (US, Caribbean, Central America) cost US\$41bn and took more than 400 lives. LWF country programmes took up humanitarian action to address these disastrous events. Our country programmes in Djibouti, Ethiopia, Kenya and Somalia, for example, provided humanitarian aid to tens of thousands of people uprooted by floods and suffering hunger due to crop failure caused by locust swarms. Our field workers learned that communities do not receive information about climate threats early enough, and they lack the capacity to enhance their resilience and minimise risks. This guidance note can help to address this gap.



KEY MESSAGE

The future we get is defined by climate action in the 2020s. Only through limiting global warming to 1.5°C global temperature rise can we prevent massive burdens falling on current and future generations. It is also incumbent on us as LWF World Service to take ambitious and structured climate actions in all aspects of our work.

Recommended resources:

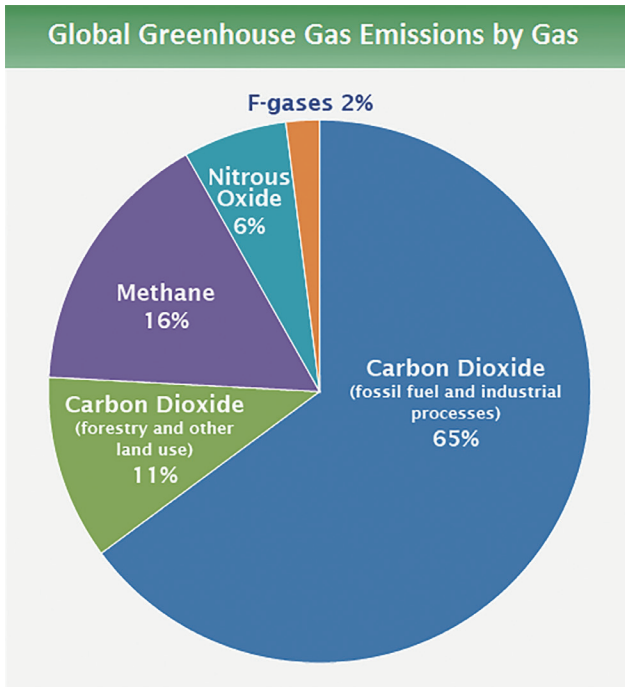
IPCC, 2018. Global Warming of 1.5°C. Special report. <https://www.ipcc.ch/sr15/>

¹ <https://www.ipcc.ch/static/infographic/worlds-apart/>

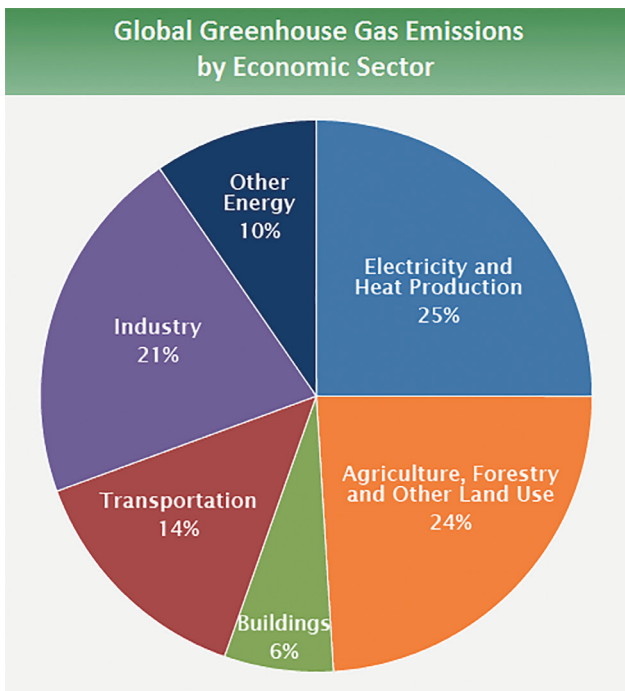
² <https://www.ipcc.ch/sr15/>

³ Source: Christian Aid. 2020. Counting the cost 2020

CAUSES OF THE BROKEN CLIMATE SYSTEM



Humankind has broken the climate system. By burning fossil fuels and making changes to land use that damage vegetation and soils, we have destabilised the atmosphere's concentration of greenhouse gases, especially of carbon dioxide (CO₂). These gases effectively trap the sun's warmth in the lower atmosphere, where they allow shortwave solar radiation to enter the atmosphere but block the long-wave radiation reflected from earth. Since the beginning of the industrial revolution, the concentration of carbon dioxide in the atmosphere has risen by almost 50%, first slowly and then increasingly faster since the 1990s, from 280 parts per million (ppm) in 1880 to 418 ppm in May 2021. In 2019, annual manmade GHG emissions totalled 43 billion tons. Given that humankind has become the main driver of change on planet earth, scientists have proclaimed a new age: the anthropocene.



Burning fossil fuels to generate electricity, heat and air conditioning is the main source of GHG emissions, followed by CO₂, nitrous oxide and methane emissions originating from agriculture, deforestation and other land-use changes. Industries, transportation, construction and the waste sector are the other economic sectors that cause global warming. What are the most emission-intensive sectors vary from country to country. In developing countries, agriculture and land-use changes tend to cause most of the national emissions, while the energy sector tends to be the most emission-intensive in emerging economies and developed nations. The common goal for all is to achieve GHG neutrality by 2050 – and even 5-10 years earlier in rich nations. Decarbonisation pathways will be as different as current emission profiles. While the transition of the energy sector to renewables is already relatively advanced, the transition of industries (green hydrogen), transport (e-mobility) and agriculture is more challenging. Achieving carbon neutrality requires huge investments, a system change to a circular economy, and international collaboration.

Figure 2-3: <https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data>

CAUSES OF THE BROKEN CLIMATE SYSTEM

Ten GHG emitters contribute two-thirds of global emissions: China (26%), United States (13%), EU-27 (8%), India (7%) and Russia (5%) are the top five, followed by Japan, Brazil, India, Iran and Canada. In terms of historic cumulative emissions (1751-2017), the top five are United States, EU-27, China, Russia and Japan. Qatar has the highest per capita emissions (49 tons per year), ten times the global average (5t). The United States (16t) exceeds the average by three times and China by 1.5 times (7t), while Switzerland (4t) and India (2t) are below average.⁶

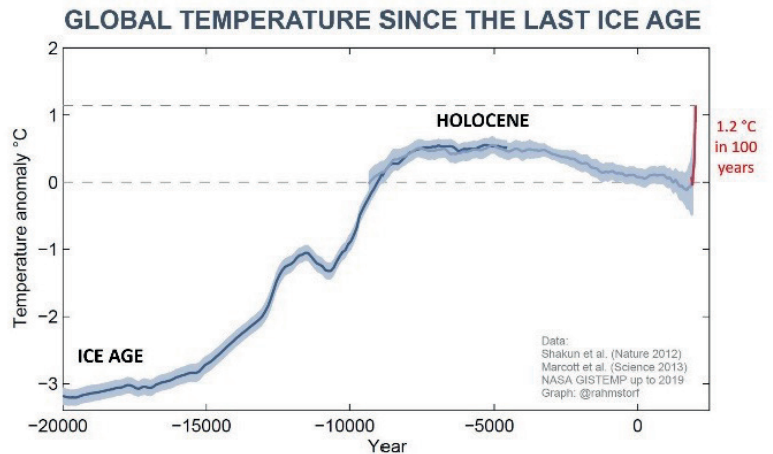


Figure 4: Global temperature rise



EXAMPLE

To bring temperature rise to a halt is a prerequisite to avoiding a climate catastrophe, followed by an ecological and economic breakdown. Apart from state actors, cities, companies and other subnational actors, including LWF programmes, are required to set up ambitious climate targets. As a first step, a LWF country programme could calculate its current GHG emissions. A carbon footprint calculator can be found at: www.carbonfootprint.com/calculator.aspx



KEY MESSAGE

To achieve carbon neutrality, decarbonisation has to happen across all economic sectors and countries. LWF World Service can contribute to it by greening its infrastructure, as committed in the Global Strategy 2019-2024. As a first step towards net zero emissions, it is proposed to measure the carbon footprint of country programmes and to agree on three easily implementable measures to reduce it.

Recommended resources:

Climate Action Tracker, with detailed country analysis: <https://climateactiontracker.org>

⁴ <https://www.wri.org/insights/interactive-chart-shows-changes-worlds-top-10-emitters>

⁵ <https://ourworldindata.org/contributed-most-global-co2>

⁶ <https://ourworldindata.org/per-capita-co2>

A CALL FOR CLIMATE JUSTICE

Drought or flood, melting glaciers or surging seas: The fact that climate change leads to deprivation, conflict and lost development opportunities for current and especially future generations, and that those communities suffer the most who are the least responsible, has become perhaps the most challenging justice concern of our times.

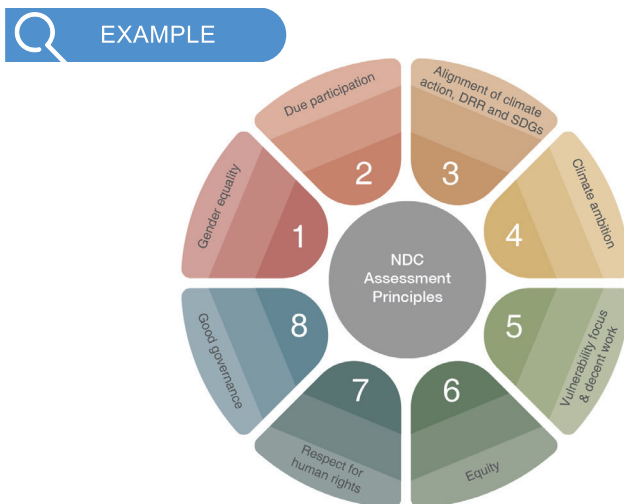
“We recognize that the impact of climate change is often felt first and most acutely by those who suffer from extreme poverty. We are committed to ensuring that our programs minimize the immediate and long-term risks of climate change to those communities we serve.” LWF World Service Global Strategy 2019-2024

The lens of climate justice sharpens the focus on the social and ethical dimensions of climate change. As a global world communion of faith on the side of the poor and those who have no voice, LWF is in a privileged position to apply the moral compass in the climate discourse. The compass is based on the belief in God, the Creator, in the creation as a gift that is good, and in human beings being sustaining stewards of God’s creation, including the sustenance of life in future generations, as pointed out in LWF’s Strategic Directions for Climate Justice 2019-2024.⁷ Thus, in addition to care for creation, the LWF climate justice concept enshrines further dimensions:

“Climate change is a matter of social and economic justice (...) Climate change is a matter of gender justice (...) Climate change is a matter of inter-generational justice. It moreover raises an issue of justice for other vulnerable people, like children, disabled people and indigenous people (...) affecting the (...) enjoyment of human rights.

Based on these values, and spiritually rooted in hope and trust, LWF commits to six guiding climate justice principles:⁸

- Using ‘climate justice’ as an umbrella, while remaining rooted in a richer and broader theology
- Promoting climate justice as a positive narrative of climate action with sustainable development co-benefits
- Exploring climate justice as a bridge-builder for intergenerational collaboration and youth leadership
- Applying climate justice in a gender-responsive way
- Linking climate justice to the Local-to-Global-back to Local (L2G2L) approach
- Implementing climate justice through multi-stakeholder partnerships and collaborations.



The ability to ‘walk the talk’, i.e. to apply the moral compass of climate justice at the level of policies and programmes, is what finally counts. Eight criteria can be applied to assess the level of climate justice entailed in climate policies, or to align the programmatic priorities of LWF World Service – livelihoods, quality services, and protection and social cohesion – with climate justice: (1) gender equality, (2) stakeholder participation, (3) alignment of climate action with the Sustainable Development Goals (SDGs) and disaster risk reduction, (4) level of climate ambition, (5) the focus on the needs of vulnerable populations and decent work, (6) equity, (7) respect for human rights, and (8) good governance.

Figure 5: Climate justice assessment principles for policies and programmes. Author: Thomas Hirsch

KEY MESSAGE

The climate crisis is human induced. LWF WS country programmes are encouraged to align actions with the goals of the Paris (Climate) Agreement and to undertake efforts to advocate for climate justice, especially in terms of engaging governments in low-carbon development and urging them to keep global warming below 1.5°C. Apart from that, according to the LWF Global Strategy 2019-2024, country programmes are committed to minimising the immediate and long-term risks of climate change to those communities we serve, and to decarbonising and ‘greening’ our infrastructure.

⁷ <https://lutheranworld.sharepoint.com/:b:/r/sites/ICF/PrivateDocuments/LWF%20Climate/LWF%20Strategic%20Directions%20for%20Climate%20Justice.pdf?csf=1&web=1&e=U8BLs3>

⁸ Ibid

THE PARADIGM SHIFT – ADDRESSING THE CLIMATE CRISIS AT POLICY LEVEL

The Paris Agreement (PA) is perhaps the most important multilateral climate agreement ever made, adopted at the 21st Conference of the Parties (COP21) of the United Nations Framework Convention on Climate Change (UNFCCC). It provides, together with the Sustainable Development Goals (SDGs) and the Sendai Framework for Disaster Risk Reduction (SFDRR), both also agreed in 2015, the necessary multilateral policy frameworks for a paradigm shift towards transformative sustainable development pathways. Together they provide a long-term vision and action priorities for the 2020s.



Patricia Espinoza dancing with Archbishop Thabo Makgoba (ACT Alliance)

The PA has been ratified by almost all countries, committing them to:

- holding the rise in global temperature to well below 2°C, and if possible, to 1.5°C
- improving the ability to adapt to climate change and to foster climate resilience
- making financial flows consistent with a pathway towards low GHG emissions and resilience. To turn common commitments into verifiable national action, Parties to the PA are obliged to periodically submit national pledges, the so-called Nationally Determined Contributions (NDCs), to the UNFCCC, and to raise the level of ambition every five to ten years, beginning in 2020. Apart from the NDCs, countries are called to present mid-century, long-term low GHG emission development strategies (LTS), providing the roadmap to achieve net zero emissions, and finally, to develop National Adaptation Plans (NAPs), showing how they plan to become climate resilient. On top of that, developed countries pledged to support the developing world with US\$100bn in climate finance per year by 2020.

LWF advocated for the climate agreement adopted in Paris in 2015. Since then, the technical details of the PA have been further negotiated, and countries have finalised their NDCs. Now is the time to advocate for an ambitious implementation of the NDCs, and to finalise NAPs and LTS. Again, LWF will play a role, using the L2G2L approach for evidence-based advocacy.

The aim of aligning NDC implementation with the climate justice criteria (see Figure 5) can guide the advocacy work of LWF and partners on the NDCs.

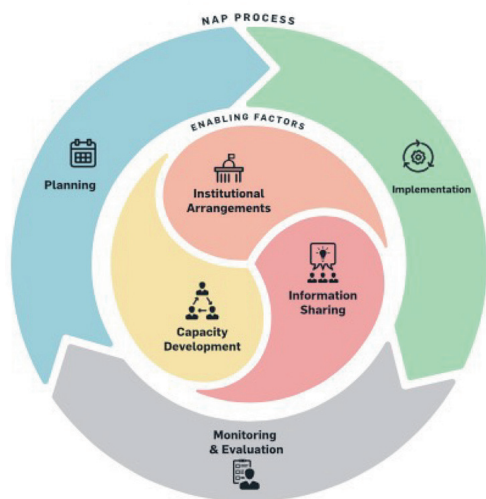


Figure 6 The NAP cycle from planning to implementation and monitoring. Developed by the LDC Expert Group. UNFCCC

National Adaptation Plans (NAPs) are still in the making for most countries, and it is vital that they address the needs of the most vulnerable communities we work with. LWF could facilitate stakeholder dialogues, discussing the lessons arising from our project experience with vulnerable communities for national adaptation planning, again applying the L2G2L approach. Linking national level to local level adaptation planning, and ensuring gender responsiveness, could be our advocacy priorities..

Long-term strategies should reflect the vision and the roadmap of how a country intends to become carbon neutral, without compromising its sustainable development aspirations. Most countries do not have them yet. The transformation that is needed to contain climate change is a century's challenge, requiring a moral compass, trust and hope. LWF can contribute to create change, driven by a whole-of-society support.

KEY MESSAGE

To achieve carbon neutrality, decarbonisation needs to be achieved in all economic sectors and countries. By greening and decarbonising our infrastructure and our programmes step-by-step, we contribute our fair share to achieve the carbon neutrality goal of the Paris Agreement. By enhancing climate resilience of the communities we work with, we contribute to reducing their climate vulnerability. Through the L2G approach we link our projects with our climate advocacy work, aiming at mainstreaming lessons learned from our policies and contributing to more enabling policy frameworks for the communities we work with.

Recommended resources:

ACT Alliance, 2018. Towards the ambitious implementation of the Paris Agreement. https://actalliance.org/wp-content/uploads/2018/03/ACT-Alliance_Toolkit-for-National-Level-Advocacy-2018.pdf

WHY THE CLIMATE CRISIS MATTERS FOR LWF PROGRAMMING



EXAMPLE

In Ethiopia, 19.2 million people needed humanitarian assistance in 2020 because of an abnormal desert locust plague, which was helped if not caused by climate change. At the same time, floods displaced approximately 1.6 million people – an increase of 600% in just four years. “Many of these people needed to be evacuated. Now they are internally displaced and have become dependent on humanitarian aid. This is a tremendous additional stressor for our LWF teams, who are the frontline humanitarian workers. Imagine that a lot of that happened during the lockdown. We could not shut down our operations. We found ways to ensure that the humanitarian imperative prevailed – but it was tough and continues to be so”, says Sophie Gebreyes, LWF Country Representative in Ethiopia. Science-based climate projections in fact suggest that rainfall variability will further increase in Ethiopia, leading to both more flooding and more droughts. The increasing risk of crop failure will severely affect livelihoods in a country where agriculture accounts for 85% of employment and is 99% dependent on rainfall. Heat stress is predicted to increase, too. By 2060, average temperature will rise by another 1.8°C. By then, temperatures will exceed 30°C in 20-40% of all days.

The example shows that the climate crisis matters for LWF programmes – and that it will matter even more in future. Humanitarian programmes have to deal with accelerated climate-induced migration and an increase of both intensity and frequency of climate disasters. Internal and interstate conflicts over scarce resources, particularly water, will also increase. And many development programmes outcomes will be in great peril due to adverse climate impacts.

Taking climate action and aligning all of LWF work areas – livelihoods, quality services, and protection and social cohesion – with the Paris Agreement’s goals is not only a climate justice imperative. It is a matter of mitigating risks to programmes, and thus of ensuring development effectiveness, as we will further discuss on the following pages.

To align all LWF country programmes with the Paris Agreement is necessary for three reasons: (1) to protect projects from climate risks, (2) to enable LWF beneficiaries to become more climate resilient, and (3) to avoid projects themselves fuelling climate change with avoidable GHG emissions.

As a first step, it is important to understand a programme’s possible climate risk exposure. Apart from collecting information from locals and experts, desk research should be carried out to elaborate climate risk profile of projects (see p 15). With only a few mouse clicks, excellent information can be gathered by using selected open-access tools specifically designed for practitioners.



The perhaps single most helpful tool is the **World Bank’s Climate Change Knowledge Portal**, which provides a lot of climate information, trends and data for developing countries. It also includes projections of future climates and forecasts of future impacts and vulnerabilities. The information is provided in a form that can be easily understood.



The **World Meteorological Organization** covers a broad range of information about weather, climate, water and environment, while the Potsdam Institute for Climate Impact Research is specialised in climate projections, modelling of scenarios, and the development of solutions, for example monsoon forecasts that can be used by farmers.



WHY THE CLIMATE CRISIS MATTERS FOR LWF PROGRAMMING

Surging Seas

Sea level rise analysis by CLIMATE CENTRAL

Surging Seas specialises in offering very detailed forecasts showing sea level rise for each of the world's coastlines in Google maps.



The **IPCC** website offers many climate change assessments and special reports on topics such as 1.5°C of global warming, climate change and land, or risks of extreme climate events. The recommended resources should be consulted regularly in the context of programme planning.



KEY MESSAGE

Adverse climate change impacts unfold dynamically on many LWF WS country programmes, undermining development effectiveness and humanitarian aid. As a matter of appropriate risk management, we recommend that understanding and addressing the climate susceptibility of LWF programmes becomes a standard routine, aimed at mitigating climate risks already in the programme design phase. Easily accessible climate information services can be used for this purpose.

Recommended resources:

World Bank Climate Change Knowledge Portal: <https://climateknowledgeportal.worldbank.org/>

Climate Central Surging Seas: <https://sealevel.climatecentral.org>

IPCC and its reports: <https://www.ipcc.ch>

World Meteorological Information: <https://public.wmo.int/en>

Potsdam Institute for Climate Impact Research (PIK): <https://www.pik-potsdam.de/en>

Climate proofing is an approach to identify and minimise project-related climate risks, as required by the Istanbul Principles for aid effectiveness. The principles apply to civil society organisations (CSOs) and their fulfilment is required by public donors.



QUESTION AND ANSWER

What criteria are to be fulfilled to call a programme or project 'climate-proofed'?

- 1. Do no harm:** LWF must not undermine the climate resilience of people and ecosystems, especially not the resilience of poor and climate-vulnerable people, and must be in line with all efforts to limit global warming to 1.5°C.
- 2. Programme/project resilience:** The programme/project and its infrastructure should be protected effectively during its entire lifespan against value loss caused by climate change impacts.
- 3. Enhanced systemic climate resilience:** The programme/project should be designed and implemented in a way that contributes to the protection of human systems and ecosystems against climate change impacts.

Climate proofing is a first step – and not yet the full solution – to ensure that projects are climate friendly and resilient. It should always be implemented with a particular focus on the rights of poor and climate-vulnerable people as those being most in need. Seven **pro-poor criteria** should guide this process: creation of value for the poor, transformation to sustainable development pathways, support of enabling policy frameworks, accessibility, affordability, participation and transparency.



Climate proofing is a necessary first step towards compliance with Istanbul Principle 4 for CSO development effectiveness: Promote environmental sustainability

As a follow-up to the High-Level Forum on Aid Effectiveness in Accra, Ghana (2008), the eight Istanbul Principles for CSO Development Effectiveness were developed by the Open Forum for CSO Development Effectiveness. They form a common framework of minimum standards, adopted in 2011. Principle 4 on the promotion of environmental sustainability calls on CSOs:

“...to develop and implement priorities and approaches that promote environmental sustainability for present and future generations, including urgent responses to climate crises, with special attention to the socio-economic, cultural and indigenous conditions for ecological integrity and justice.”

Source: www.csopartnership.org/resource/istanbul-principles-for-cso-development-effectiveness/



Climate proofing is required to act according to the climate justice principle and the commitment to sustainability and a low carbon footprint, both anchored in the LWF WS Global Strategy

“We recognize that the impact of climate change is often felt first and most acutely by those who suffer from extreme poverty. We are committed to ensuring that our programs minimize the immediate and long-term risks of climate change to those communities we serve.” (Climate Justice Principle)

“We strive to implement, step by step, the resolution that was adopted during the 2017 LWF Assembly to respond to the climate crisis. Accordingly, we aim to strengthen our efforts to achieve climate justice and to work toward carbon neutrality, including through enhanced energy efficiency and the replacement of fossil fuels by renewable energies in our operations, through saving water, and by raising awareness for environmental care and protection, wherever possible.” (Commitment to Sustainability and a Low Carbon Footprint)

Source: <https://www.lutheranworld.org/content/resource-lwf-world-service-global-strategy-2019-2024>



KEY MESSAGE

Understanding, addressing and minimising climate risks is at the centre of climate proofing. Climate proofing is becoming a prerequisite for ensuring the effectiveness of LWF humanitarian and development work, and for compliance with the external and internal principles LWF is committed to as laid down in the Istanbul Principles for CSO Development Effectiveness and the LWF World Service Global Strategy 2019-2024. Progressively introducing climate proofing at all levels of programming, i.e. across all programmatic areas (livelihoods, quality services, social protection and cohesion), for running newly planned projects and for overall portfolio development, will help us to better manage climate risks and to identify resilience opportunities, thereby aligning our work with the goals of the Paris Agreement.

So far, there are no widely agreed standard procedures how to climate-proof a project. However, there are a lot of good practices. The following checklist aims at assisting LWF development and humanitarian practitioners to incorporate climate change concerns and the goals of the Paris Agreement into projects or programmes in the design phase, and to monitor the results of climate change adaptation and mitigation throughout the project cycle.



CHECKLIST

CLIMATE-PROOF A PROJECT

The purpose of climate proofing is to ensure that project results will neither be hampered by climate change nor will projects undermine climate resilience of people or that they will contribute to global warming.

1. Which projects to climate proof? Climate proofing is relevant for: (i) projects that are sensitive to climate effects (e.g. agriculture, fisheries, forestry, natural resource management or food security projects), or projects with vulnerable communities in coastal, mountainous, dry or wetland regions; (ii) projects that have a climate adaptation or disaster risk reduction focus; (iii) biodiversity projects; (iv) projects that are GHG intense.
2. Projects that fall under 1(i) to (iii) should undertake the steps below; 1(iv) projects should set GHG emission reduction targets (see pp. 28-32). Their achievement should be regularly monitored.
3. Climate-sensitive projects 1(i) and (iii) should undergo a rapid climate risk screening by project managers. The screening should elaborate a climate risk profile of the project to better understand the degree of its climate risk exposure (for resources see p. 12/13). Projects that show a high climate risk exposure (see list of criteria p. 20f. in the Guidelines recommended below) should be subject to the following steps.
4. Projects with potentially high climate risk exposure, as well as all projects of category 1(ii), need to be assessed as to whether they might lead to maladaptation, i.e. the planned interventions overlook climate change impacts and thus do not reduce climate vulnerability, but rather may inadvertently increase vulnerability. If maladaptation cannot be excluded, the next steps are to be taken.
5. In-depth risk screening of high risk and of all explicit climate adaptation/climate risk reduction projects:
 - a. Assess the climate policy context (e.g. the National Adaptation Plan; for more information see p. 16)
 - b. Assess the climate hazard risk (for more information see p. 17)
 - c. Assess the climate vulnerability (for more information see p.18/19)
 - d. Develop an adaptation plan and take disaster risk reduction steps (see p.20/21)
 - e. Take sector-specific steps for climate proofing (for more information see pp. 22-27, 33-36).
6. To take steps towards carbon neutrality, follow the guidance provided on pages 28-32.
7. Document the climate-proofing process, including conclusions and recommendations, in a climate-proofing report. This can be made available to donors, particularly if a project applies for climate finance (see p. 37).
8. Depending on the climate-proofing results, categorise the project according to the DAC Rio Markers (see p. 29).
9. Regularly monitor the project to check that it is on track with the set climate resilience and GHG mitigation. If not, take corrective action.



KEY MESSAGE

It is recommended that all climate-sensitive LWF projects are climate proofed. The checklist provides a first roadmap for how to manoeuvre through the different steps of climate proofing. It also helps to categorise projects according to their level of climate sensitivity, and therefore, provide a basis for deciding what level of intensity of climate proofing is required. On the following pages of these guidelines, the relevant topics for climate proofing are explored further. As a next step, LWF WS may develop its own climate-proofing manual. An example of how this might look is recommended below for further reading.

Recommended resources:

Welthungerhilfe. 2011. Climate Proofing. https://www.dkkv.org/fileadmin/user_upload/Veroeffentlichungen/Publikationen/DKKV_Climate_proofing_of_programmes_and_projects_of_Welthungerhilfe.pdf

Climate change, sustainable development and humanitarian action are closely linked – and so are climate, humanitarian and development policies. Achieving the SDGs without meeting the goals of the Paris Agreement (PA) is unlikely, and vice versa. Therefore, it is important to always assess the local, national and even international climate policy contexts of a project and to find out how the project coincides with, contributes to implementation, or departs from (national) climate policies, strategies, targets, programmes or plans. The benefits of such an approach for LWF country programmes are obvious. Identified connections can be used to avoid conflicts, strengthen cooperation, mobilise synergies, shape the project's profile, apply a local to global advocacy approach, and eventually mobilise additional funding. Thus, the landscape of climate policies and actors should be explored, answering the following questions: What are the main national climate policies, strategies, programmes, plans and the relevant institutions and processes? How are they implemented, including in the project area? What opportunities are there in terms of political participation in policy and programme design or implementation? How can the project's target groups benefit? If there is limited time to analyse the policy context of a programme, country programmes should first look at the NDC. The second priority should be the National Adaptation Plan, and third the Long-Term Strategy. Given States obligations under the PA, three policy instruments are decisive for national implementation. They should be at the centre of LWF's assessment of the climate policy context (see also p. 11).

QUESTION AND ANSWER

How to assess the Nationally Determined Contribution (NDC)?

The NDC is the national contribution towards achieving the goals of the PA. States are obliged to elaborate, communicate and implement their NDC, and to progressively ratchet up the targets every five to ten years. NDCs must include emission reduction targets and provide clarity and transparency, including of GHG accounting. Climate adaptation and capacity building should also be covered. Developed countries should report on climate finance provided. LWF should assess how ambitiously these aspects are captured in the NDC, should apply the climate justice criteria (see p.9) to the NDC, should analyse how far the project could contribute to the NDC implementation, and if it could benefit from the NDC.

QUESTION AND ANSWER

How to assess the National Adaptation Plan (NAP)?

All governments are called to formulate and implement an NAP as a means of identifying medium- and long-term adaptation needs. The NAP process should be guided by UNFCCC principles. It should be transparent, country driven, gender responsive and participatory. It should also be science and ecosystem based, building on indigenous and community knowledge. Further guidance is provided by a special manual (<https://environmentalmigration.iom.int/national-adaptation-plans-technical-guidelines-national-adaptation-plan-process>). LWF should advocate for a rights-based, inclusive and participatory NAP design and implementation to for the benefit of vulnerable communities, well connected to local adaptation action.

QUESTION AND ANSWER

How to assess the Long-Term Low GHG Emission Strategy (LTS)?

An LTS, also called a Low Carbon Development Pathway, is complementary to an NDC, by providing a long-term vision and roadmap for achieving GHG neutrality. Thus, the LTS provides planning security and predictability of how a country intends to become carbon neutral. Despite its high importance, so far only a few countries have submitted their LTS. LWF can advocate for a national LTS and engage in the process with a narrative of hope and a vision of a better world, as provided by faith, and fitting well with LWF's own pledge for GHG neutrality. Further information can be found at: www.2050pathways.org

KEY MESSAGE

Assessing the climate policy context of a project or programme is a vital step to understanding the broader political picture of a project, how it can contribute to the national implementation of the Paris Agreement, and how it can, in turn, benefit from climate policies, strategies, programmes, plans and budgets. The assessment also helps to identify entry points for a local-to-global approach.

Recommended resources:

Climate Action Tracker – CAT: <https://climateactiontracker.org>

CLIMATE HAZARD AND RISK ASSESSMENT FOR A PROJECT

A climate risk assessment is a means of assessing the susceptibility of a project to climate change-related risks and their potential impacts, including through future trends. The hazard assessment analyses the type, frequency and magnitude of climate extremes. The resulting project risk is not only defined by the hazard, as the climate stressor, but also by the level of existing vulnerability (e.g. exposure, fragility and resilience, see p. 18) to the hazard. Climate risk assessments can be conducted for localities, projects, countries or programmes. They are an important part of risk management in the planning process, aiming at reducing risks, and thus, avoiding disasters or severe losses. They should be applied if a project has been classified as highly climate sensitive in the course of climate proofing, in case of climate adaptation projects, or for programmes in climate-vulnerable countries.

CHECKLIST

CLIMATE RISK ASSESSMENT

1. Conduct a climate risk assessment for all projects/programmes that are classified as highly climate sensitive.
2. Select an assessment tool that fulfils the following key criteria: user friendly; based on climate data; covers current and future climate risk trends; makes impact chains visible; uses standardised indicators with flexibility; scores risks, based on the standard risk formula.
*'Hazard (frequency + magnitude/2) * Vulnerability (exposure + fragility + resilience/3) = Risk*
3. Select the climate risks to be covered, e.g. storm, storm surge, flooding, landslides, drought, heatwaves, sea level rise, salinity, decreasing precipitation, etc.
4. Define the time period to be assessed (e.g. 1991-2020 compared to the last climate normal period, i.e. 1961-1990 and projections for 2020-2039 and 2040-2059).
5. Define the geographical scope of the assessment.
6. Select reliable sources for climate data (e.g. <https://climateknowledgeportal.worldbank.org>).
7. Elaborate impact chains for each climate risk (e.g. storm).
8. Include results from vulnerability analysis (see next page).
9. Calculate the risk score. Weigh/calibrate impact factors, if required.
10. Elaborate a risk map, showing the assessment results (use an overlay method with one map per risk type).
11. Analyse the assessment results, formulate conclusions and make to inform adaptation planning.

EXAMPLE

CRAT – Climate Risk Assessment Tool

CRAT was developed for Diakonia Emergency Aid (Germany) by Climate & Development Advice in cooperation with CCDB (Bangladesh). The assessment was successfully tested for a number of districts in Bangladesh, for two localities and for the country as a whole. It was designed in a way that it can be applied by non-governmental organisations (NGOs) with some back-stopping. An updated version of the tool should be available in 2022. It could be applied by LWF country programmes or for single projects.

For further information: t.hirsch@climate-development-advice.de



Risk assessment, LWF Nepal

KEY MESSAGE

Climate risk assessments provide the information necessary to identify and address possible climate risks to LWF projects and programmes. It is recommended that they become a standard routine for all projects that have been classified as 'at climate risk' in the climate-proofing process. For explicit climate adaptation projects, risk assessments are also required. There are risk assessment tools available that can be applied by LWF with little support.

Recommended resources:

Contact t.hirsch@climate-development-advice.de to receive the CRAT information package.

General information on climate risk assessment: <https://climateanalytics.org/what-we-do/climate-impacts-and-risk-assessment/>

Latest Climate Risk Index: <https://www.germanwatch.org/en/17307>

The vulnerability of human or natural systems to climate hazards is always specific to particular contexts, and therefore varies. A typhoon may devastate an island of the Philippines, costing many lives, while a typhoon of the same magnitude might lead to much less destruction and no deaths in Japan because of very different vulnerabilities and coping capacities in the two countries. While the physical susceptibility to extreme events can hardly be influenced by risk management in the short term, vulnerability or resilience can be changed. The results of a vulnerability analysis are, therefore, of great importance for the development of an adaptation plan (see p. 20). Indicators for vulnerability may vary from project to project (depending on the ecological zone, livelihoods, etc) but the building blocks remain the same across projects:

- Risk exposure: physical and economic exposure (e.g. dependence on agriculture), population density, etc
- Fragility: age, gender, health and nutrition status, housing, water and sanitation, electricity supply, etc
- Resilience/coping capacity: infrastructure, disaster management committee, contingency plans, savings, etc.

QUESTION AND ANSWER

How to assess vulnerability based on statistical data

Many countries provide vulnerability data for the criteria mentioned above in disaster-related statistics, population or housing censuses, including at subnational and even local levels. The vulnerability assessments for Bangladesh with the CRAT tool (see p. 18) used 27 indicators to measure risk exposure, fragility and resilience at districts and village levels. All data was taken from public statistics. Where such statistics are not available, and where a survey (see below) is also not possible for whatever reason, aggregated data provided by international institutions could be used, for example from the United Nations Office for Disaster Risk Reduction (UNDRR), the United Nations Development Programme (UNDP), the World Bank or EU INFORM Risk Index (see below).

QUESTION AND ANSWER

How to assess vulnerability at household level

The household assessment approach serves to identify the most vulnerable people in a community. It is needed for projects that specifically target those families in order to reduce their disaster risk. The assessment is carried through individual interviews with men and women of all households that are assumed to belong to the highest risk group. In cases where the social, economic and cultural conditions in a community are rather homogeneous, households can be clustered for group interviews. However, in order to verify the information obtained, cross-checking based on random sampling is recommended. A vulnerability analysis based on the survey of a representative group of interviewees is also possible where statistical data are not available.

Vulnerability assessments based on household-level interviews are more costly and time consuming, and they require well trained interviewers. However, one advantage of the approach is that follow-up surveys can be used to measure the success of adaptation measures. CCDB (Bangladesh) has vast experience with this approach in climate adaptation projects.

EXAMPLE

EU INFORM Risk Index: vulnerability assessment

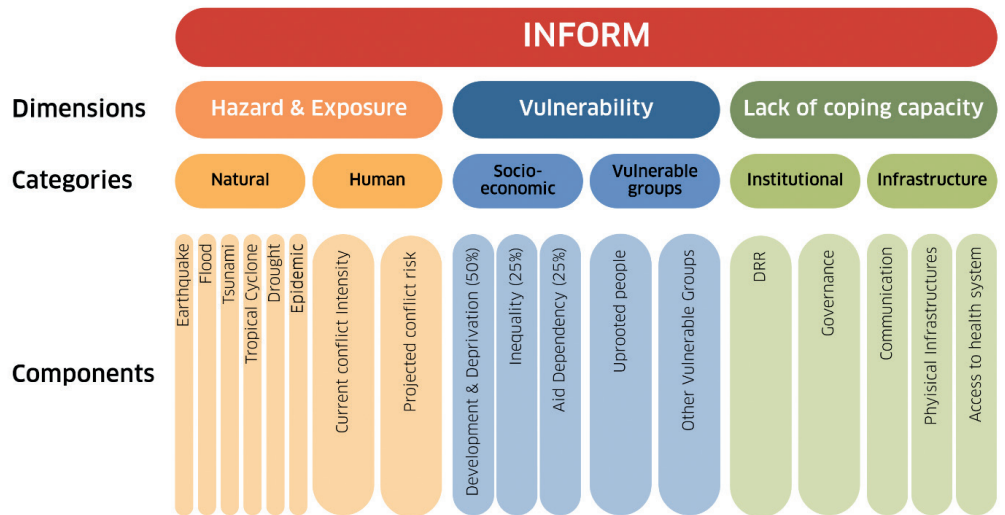


Figure 7: Vulnerability indicators of the EU INFORM Risk Index

The index was developed by the European Commission Risk Management Knowledge Centre as a global, open-source assessment tool for humanitarian crises and disasters. The vulnerability section of the assessment measures socio-economic vulnerability, aid dependency and vulnerable groups, complemented by an assessment of coping capacity (e.g. infrastructure, governance, disaster risk reduction). Scoring results are available for most developing countries (<https://drmkc.jrc.ec.europa.eu/inform-index/INFORM-Risk>) and could be used by LWF.

KEY MESSAGE

Assessing vulnerability in a gender-responsive way is a prerequisite to conducting a full climate risk assessment and to planning for adaptation and disaster risk reduction. Vulnerability comprises risk exposure, fragility and resilience/coping capacity. Indicators may vary, depending on the specific circumstances. Vulnerability is more complex than poverty. The data for the vulnerability assessment can either be collected in a survey or taken from statistics.

Recommended resources:

ACT Alliance, without year. An Ounce of Prevention. ACT Alliance's understanding of disaster risk reduction. https://www.unisdr.org/files/globalplatform/5924e1d8c9e106_ACT_Alliance_DRR_Report_-_An_ounce_of_prevention_WEB.PDF

DEVELOPING AN ADAPTATION PLAN

Climate change adaptation aims to reduce climate vulnerability and enhance the resilience of a community, project, programme or country. The adaptation plan should be developed along the lines of the steps set out below.

In a first step, short- and long-term adaptation goals are defined, for instance ensuring sufficient water supply for agriculture during the dry season.

In a second step, a strategy is developed setting out to achieve the goals, for instance water storage combined with drip-water irrigation.

In a third step, opportunities, co-benefits and challenges regarding the strategy are assessed and solved.

In a fourth step, an action plan, including responsibilities, partnerships, stakeholders and milestones is set up. The following questions should be discussed and answered:

- Which other stakeholders (e.g. technical experts, traditional leaders, local government) do we need?
- How can we ensure active participation, involvement and ownership of all beneficiaries?
- What can we keep risks under control and how do we ensure sustainability of adaptation results?



EXAMPLE

NAP Support Programme & Global Centre on Adaptation



**NAP
Global
Network**

The NAP Global Network is a discussion and knowledge-sharing platform for individuals and institutions working to enhance adaptation planning. LWF can become a member. Further information at: www.napglobalnetwork.org



**GLOBAL
CENTER ON
ADAPTATION**

The Global Centre on Adaptation is another resource for adaptation planning and action, considering itself as a solutions broker. Further information at: www.gca.org



CCDB

The CCDB Climate Centre in Bangladesh is a hub for local adaptation planning. CCDB constantly develops new adaptation technologies for the rural poor. It has successfully piloted an approach developed by the Community Climate Resilience Centre to bring people together in action. You can join CCDB's Climate Knowledge Hub, access information on adaptation technologies and exchange experiences of adaptation in an online forum. Further information at: <https://ccdbbd.org/ccp/> or email to nazmul@ccdbbd.org



QUESTION AND ANSWER

What are the locally led adaptation principles?

The principles are intended to guide adaptation planning and implementation at community level. They have been developed by an international community of practice on adaptation (further information at: <https://www.wri.org/initiatives/locally-led-adaptation/principles-locally-led-adaptation>). The principles are:

1. Decision making at the lowest possible level
2. Addressing structural inequalities faced by women, youth and other marginalised groups
3. Providing predictable funding that can be accessed more easily
4. Investing in local capabilities to leave an institutional legacy
5. Building a robust understanding of climate risk and uncertainty
6. Flexible programming and learning
7. Ensuring transparency and accountability
8. Collaborative action and investment.

Recommended resources:

Trocaire, 2016. Manual for the preparation of a community-based adaptation plan with a focus on water resources management. <https://www.trocaire.org/sites/default/files/resources/policy/manual-preparation-community-based-adaptation-plan.pdf>

ESSENTIAL STEPS OF CLIMATE DISASTER RISK REDUCTION

A widening range of disastrous climate change-related extreme events like storms, floods or droughts, as well as slow-onset events like sea level rise and glacier melting, are increasingly causing humanitarian catastrophes and substantial socioeconomic and financial risks that undermine sustainable development and provoke loss and damage.

The Sendai Framework for Disaster Risk Reduction (SFDRR) is an international treaty that guides policies and actions to reduce disaster risks for the years 2015 to 2030, covering all areas shown in the graph below. It has set the targets to: halve disaster mortality; reduce the number of people affected; reduce the direct disaster economic loss and damage to infrastructure; enhance international cooperation and the number of countries with disaster risk reduction strategies; and improve availability of and access to early warning, risk assessments and risk information.

Disaster risk reduction is a cross-cutting issue bridging development and humanitarian work. While there is no universally applicable approach, as solutions need to be context specific, some general rules should be followed:

- Assess risks in advance and enable different members of the community to mitigate them; this could help to prevent many of the severe impacts of climate disasters.
- Invest in prevention: each US dollar invested in risk prevention saves US\$8 for emergency aid and recovery.
- Apply a human rights-based approach: identify and prioritise support for people with the greatest risk.

EXAMPLE LWF disaster risk reduction programme in Mauretania

In Brakna, Mauritania, LWF guided 15 communities with almost 13,000 inhabitants to develop and implement local disaster prevention and preparedness plans, to set up and regularly train disaster risk reduction committees in all 15 communities, to establish early warning systems, to manage cereal banks, to develop contingency plans, to protect the environment and to take protective measures against drought.

As a result, the communities could substantially reduce food insecurity and enhance resilience against drought – the most frequent and severe climate risk to the region. The existence of well-established disaster risk reduction committees turned out to be a huge advantage when the COVID-19 pandemic reached Brakna. The committees immediately took action, warned and informed the communities about the new disease, and advised people about hygiene, physical distancing, testing and quarantining. As a result, a major outbreak might have been prevented.



Figure 8: The climate risk management chain Source: Munich Climate Insurance Initiative

QUESTION AND ANSWER How to manage climate risks?

Climate disaster risk management involves strategies aimed at identifying, preventing and reducing climate risks, as well as ensuring a more resilient recovery. The risk management chain is composed of different elements that can be applied to projects:

Risk assessments identify climate risks in advance

Risk prevention reduces disaster risks

(e.g. livelihood diversification, building codes, coastal protection, land-use planning)

Risk preparedness minimises damage (e.g. early warning, evacuation, contingency planning)

Risk financing mobilises resources to respond to a disaster and compensate for losses and damage

(e.g. calamity funds, climate risk insurance, emergency loans, contingency credits).

KEY MESSAGE Now is the time to strengthen the focus on climate risk management in order to reduce the protection gap that many climate-vulnerable communities due to intolerable risks that go far beyond their coping capacity. Enhanced engagement at programme or project level might include climate risks assessments, risk prevention measures, risk preparedness and risk financing. Making these approaches work for communities largely depends on comprehensive design, due participation and inclusiveness, and a pro-poor approach.

Recommended resources:

ACT Alliance, 2010. Background and components of disaster risk reduction. <https://www.preventionweb.net/publications/view/24122>

THE BROKEN FOOD CHAIN: ESSENTIAL STEPS OF CLIMATE ACTION IN AGRICULTURE

Agriculture is the basis of human civilisation and the main source of livelihood for the majority of people around the globe. Agriculture provides food, fodder and fuel – and is highly dependent on the climate system. While healthy soils and vegetation serve as carbon sinks, stabilising the atmospheric concentration of CO₂, unsustainable agricultural practices have turned agriculture into the single largest contributor to land degradation, water shortage and biodiversity. It has become the key driver of chemical pollution with pesticides and overload of soils and water with nitrogenous fertilizers, as well as the second largest source of GHG emissions. The food chain has broken, putting lives and livelihoods, ecosystems and the climate system at great risk. Climate action is not the only but one essential element to repair the food chain and make it resilient to climate threats, to rehabilitate land, to protect biodiversity, and to turn agriculture from a carbon polluter to a carbon sink. Climate-friendly and resilient food systems are also key matters of climate justice for current and future generations, given that unabated climate change undermines food security and sovereignty, today and even more so in the future when the world population is predicted to grow from the current 7.7 to 10 billion people. Business-as-usual agriculture would very likely increase rather than reduce hunger and the pressure of agriculture on the climate system. It is time to take climate action in agriculture.



EXAMPLE

Climate-friendly and resilient agriculture introduced by LWF in Nakoyo village, Turkana West, Kenya

The introduction of solar water pumps, running a drip-water irrigation system for net houses, has changed the lives of smallholders for the better. In the past, they were exposed to rainfall irregularities, making agriculture highly risky. Today, smallholders practise irrigated agriculture with a sustainable cropping system. High-value vegetable crops such as tomatoes and spinach are sold by women farmers in a nearby market. In addition, the introduction of agroforestry with indigenous multi-purpose species has led to diversified income sources, improved soil health, sequestered carbon and, thus, better water storage capacity in the soil. Source: LWF Kenya



Intense vegetable cultivation in solar drip-water irrigated net houses, Kenya



EXAMPLE

Somali refugees train Ethiopian farmers on irrigation practices to enhance drought resilience

Drip-water irrigation, drought-tolerant seeds and climate-resilient practices are at the core of an LWF livelihood project in Awbarre refugee camp, Ethiopia, near the border with Sudan. Refugee and host community farmers work hand in hand. Seeds and traditional knowledge about irrigation practices are shared by the Somalis, while they receive, in turn, land for cultivation from the Ethiopians. Both sides benefit from the cooperation and peaceful co-existence is strengthened. Source: <https://www.lutheranworld.org/news/seeds-and-peace-ethiopia>



EXAMPLE

Climate field schools: Farmers and scientists co-develop climate-smart practices

Action-oriented research jointly undertaken by farmers and scientists can boost technology innovation and enhance knowledge dissemination at times when adverse climate change impacts go beyond local coping strategies.

Climate field schools foster locally led adaptation in agriculture, and is being promoted by LWF and partners from the mountains in Nepal to the coastlines in Indonesia, the drylands in Africa, and the Central American forests. In Toraja, Sulawesi (Indonesia), MPM, the capacity-building wing of the Church of Toraja, based on the field school approach, turned villages into 'climate model villages' awarded by the government of Indonesia for their climate smartness and resilience in the face of external shocks. The cooperation between the local farmers, the Agricultural Department of the University of Makassar, and the Centre for Rural Development, Humboldt University Berlin, facilitated by MPM together with Bread for the World, was successful.

A short video tells the story: https://www.youtube.com/watch?v=g6J_ZZ1_-Lk&t=10s

Recommended resources:

IPCC, 2019. Special Report on Climate Change and Land. www.ipcc.ch/srccl/

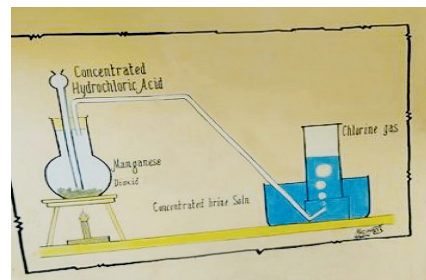
THE BROKEN WATER CYCLE: ESSENTIAL STEPS OF CLIMATE ACTION IN WASH

Thinking about climate change unavoidably means thinking about water, as climate change effects are primarily seen in changes in the water cycle. Droughts, floods, melting glaciers, sea level rise and storms are consequences that negatively impact people all over the world in their daily lives.

Particularly in drought-prone regions, for example in sub-Saharan Africa, a lack of rainfall or falling water levels can cause boreholes and springs to run dry, leaving communities without drinking water. If water is scarce, sanitation and hygiene also become incredibly difficult. „Access to water is still a problem in many places where we work,“ said Clovis Mwambutsa, LWF Regional Programme Coordinator and focal point for Water, Sanitation and Hygiene (WASH). „You cannot practise proper hygiene without water.“ And without proper sanitation, diseases spread more easily, endangering the health and lives of many communities (every day, over 700 children under the age of 5 die of diarrheal diseases due to a lack of sanitation). Water scarcity particularly affects women and girls, as they are often the ones who collect it. With fewer wells, the time needed to collect water increases, which is why girls tend to spend less time in school when water is scarce. Additionally, remote water sources and lack of private sanitation facilities increase the risk of gender-based violence against women and girls.

WASH projects try to offer solutions to the problems of water scarcity and lack of hygiene facilities. In 2020, 11 country LWF World Service programmes worked on providing water and sanitation in refugee camps. In the Minawao refugee camp, for example, the LWF World Service provides water supply to refugee communities. In other regions, for example in Ethiopia, it trains and supports local farmers to adapt their irrigation practices with the use of drip-systems to save water.

Before implementing a WASH programme, it is important to identify and assess the current water and sanitation-related needs of the population, including women, children, the disabled and vulnerable groups (for a good practice example, see link below for the LWF Somalia WASH assessment) and the possibilities of water provision (through groundwater, surface water or rainwater), water testing and treatment, and waste



Hand washing before distribution in Burundi and an illustration of water sanitation scheme of toll in Somalia. LWF

THE BROKEN WATER CYCLE: ESSENTIAL STEPS OF CLIMATE ACTION IN WASH

The Christian Commission for Development in Bangladesh (CCDB), a national NGO, makes use of technology to support water provision in Bangladesh. For example, it employs simple rainwater harvesting systems to collect and purify rainwater. These systems require no energy and only little maintenance (costs: €300-400 for a 1,000-litre storage system). In order to clean pond water from sand, saline and germs and make it drinkable, a filter unit called a pond sand filtration (PSF) can be used. PSF is installed on natural ponds and cleans the water with its three filtration chambers. It is easy to install and relatively simple to operate (costs: €1,000-1,200 for a standard structure with around 11,000-litre filter tank). Raised tube wells are used in flood-prone areas to protect the groundwater from being polluted during floods (costs: €500-900). Further information at: CCDB, mohibullah@ccdbbd.org



KEY MESSAGE

Ensuring that WASH programmes are climate resilient is increasingly important, considering that the fulfilment of the human right to water and sanitation is severely threatened by climate change impacts and will increasingly continue to do so.

Recommended resources:

UNICEF: <https://www.unicef.org/wash>

Red Cross: <https://www.redcross.ch/de/file/13991/download>

UNESCO World Water Assessment Programme: <https://en.unesco.org/wwap>

UNHCR: <https://wash.unhcr.org/download/wash-in-the-comprehensive-refugee-response-framework/LWE>

WASH Assessment in schools in South Central Somalia: https://www.humanitarianresponse.info/sites/www.humanitarianresponseinfo/files/assessments/draft_report_-_wash_assessment_in_schools_kismayo_south_central_somalia_may_2017_0.pdf

Reliefweb Guidance Note on Inclusive WASH:

<https://reliefweb.int/report/indonesia/climate-change-response-inclusive-wash-guidance-note-plan-international-indonesia>

THE BROKEN HOME: ESSENTIAL STEPS OF CLIMATE ACTION IN HOUSING

Providing shelter to the homeless and fulfilling slum squatters' human right to housing are among the key concerns of LWF WS. Climate change poses an additional double challenge for housing. More frequent and more intense extreme events like storms, floods, landslides or heatwaves necessitate additional measures to fulfil a function of housing, i.e. the provision of safe shelter. Second, sustainable and low-carbon construction is required to achieve GHG neutrality. If the additional buildings and infrastructure required to provide homes for the growing global population are built 'business as usual', the 1.5°C threshold would be blown away by 2050 by the additional emissions in the construction sector alone. Thus, sustainable, climate-resilient low-carbon construction solutions are required. Sustainability in construction implies following the 'cradle-to-cradle' principle, i.e. construction materials are designed and produced in such a way that at the end of their life, they can be truly recycled (upcycled), imitating nature's cycle with everything either recycled or returned to the earth.



EXAMPLE

Climate-resilient low-cost buildings

Strong winds, floods and landslides are the main risks to buildings. Wind- and wave-breaking vegetation surrounding buildings provides good protection. But a good distance between houses and trees is also important, in case trees get uprooted. Dense vegetation also offers some protection against landslides.

An elevated concrete plinth offers further protection. Walls need to be well anchored in their foundation, with corners stabilised by diametrical structures and walls fixed by vertical bars. Doors and windows should not be too big, and should be placed some distance from each other. Roofs should be as light as possible, well anchored and fixed to columns separated from the walls. Roof slopes should not exceed 30° in order to avoid suction, which can dismantle the roof. Large roof overhangs should be avoided because they are susceptible to storm. As heat protection, shading of a house by trees and thick (adobe) walls preventing heat from penetrating into the house, are recommended.



EXAMPLE

Low-carbon, earthquake-resistant, low-cost building with stabilised earth bricks



IN Nepal, LWF is promoting 'Compressed Stabilised Earth Bricks' technology. The bricks are manufactured from sand, clay and cement mixed in a 5:4:1 ratio. By using locally available materials, the cost of construction is reduced by 25%. The interlocking ability of the compressed blocks, when reinforced with iron rods, makes structures earthquake resistant. The carbon footprint is low.

Building with earth bricks. LWF Nepal



EXAMPLE

Eco-audits and LEED certification (www.usgbc.org)

LEED (Leadership in Energy and Environmental Design) is the leading certification programme for green buildings and communities worldwide. Developed and run by the US Green Building Council, it aims to design, build, maintain and restore buildings so that they are climate-smart, eco-friendly and healthy in order to improve people's quality of life. The Climate Centre of Christian Commission for Development in Bangladesh is LEED certified. The introduction of environmental audits for buildings, for instance the LWF property on Mount of Olives including the Augusta Victoria Hospital, will enable LWF to take appropriate action to reduce the carbon footprint and improve the climate resilience of its infrastructure.



LWF Augusta Victoria Hospital, Jerusalem



KEY MESSAGE

In view of the climate crisis, resilience to disaster risk and low-carbon footprints are key requirements for the building and housing sector. Business-as-usual solutions are no longer sustainable. Low-cost solutions are possible, many of them ecosystem-specific and nature based. Sustainability in construction implies building in such a way that materials can be recycled at the end of their life.

Recommended resources:

ACT Alliance, 2010. Background and components of disaster risk reduction. <https://www.preventionweb.net/publications/view/24122>

THE BROKEN ECOSYSTEM: NATURE-BASED SOLUTIONS TO RESTORE ECOSYSTEM SERVICES

Humans benefit from the fauna and flora dynamic complexes that form ecosystems. The benefits obtained from such ecosystems are called ecosystem services, which include: providing services including food and water; regulating services such as flood control; or supporting services that maintain the environment and the equilibrium conditions for life.⁹ The damage to natural ecosystems deprive humans of the very rare natural benefits that are granted to us. Utilising sustainable community approaches such as the Human Rights Based Approach, community members participate and are involved in the development of nature-based solutions to restore such ecosystems. The LWF's projects set the foundations for community support and empowerment to restore reforestation and ecosystems.



EXAMPLE

One such project is the Shea Nut Access and Value-addition Enhancement Project in Uganda. Together with the Act Church of Sweden, the LWF supported the small and medium enterprises (SMEs) and nature-based solutions working in the Shea Nut Value Chain (SNVC) and apiculture in Northern Uganda. The shea tree has been heavily deforested in Northern Uganda due to the short-term benefits of wood charcoal. LWF worked directly with local government and the communities to tackle this problem, creating sustainable synergies for the SNVC and green SMEs, and supported the apiculture sector as a complementary ecosystem service. The main target groups have been Ugandan women and young people, who have been economically empowered in their transition to inclusive and sustainable consumption and production.



A member of Gum Pa with her fresh shea fruits.

By 2021, a total of 3.6 hectares of shea trees had been planted. The project enabled women and young people working in the green SMEs participating in the SNVC and apiculture to increase their sales of honey and shea butter by 40%. The project increased not only the annual income of local SMEs but also their numbers, with 490 women and young entrepreneurs actively engaging in the production, processing and sale of shea nut and apiary products.



EXAMPLE

The LWF also participates in reforestation projects in Cameroon. When the Minawao refugee camp in the northern desert region of Cameroon received Nigerian refugees escaping Boko Haram, the camp's scarce resources were put under severe strain. With an growing rate of deforestation and lack of economic resources, exchanging food rations for wood in order to cook became common.



Energy-efficient stoves in the Minawao camp.

At the camp, the LWF implemented a two-fold solution. The LWF worked with local communities and hosts planting and re-foresting 119 hectares in 26 green spaces. After four years, over 300,000 trees had been planted, and the average survival rate increased by 90% in the green spaces. To ensure that the reforestation would not be affected by the lack of energy sources, the LWF introduced 11,460 energy-efficient stoves and set up two ecological charcoal production centres.



EXAMPLE

The LWF supports local communities who live from mangrove ecosystem resources. Due to extreme weather and rising sea levels, the sensitive mangrove ecosystems have declined. The LWF helps local organisations in El Salvador and the Pacific Ocean preserve mangrove ecosystems with irrigation trenches and tree reforestation.



KEY MESSAGE

Sustainable ecosystem services not only mitigate emissions and reduce climate risks but represent an opportunity for economic and social empowerment of communities and local authorities. The promotion of nature-based solutions by LWF WS country programme projects with local communities is an important contribution to protect ecosystems and biodiversity, and at the same time, provide food, raw materials, bioenergy and income for local communities. Other essential ecosystem services, like watersheds, soil protection and carbon sequestration, are also maintained.

⁹ Assessment, M.E., 2001. Millennium ecosystem assessment.

BEYOND ADAPTATION: COMPENSATING LOSSES BY RISK FINANCE AND INSURANCE

Many of the poorest countries in the world suffer the highest risks of loss and damage because of climate change effects (for example, through rising numbers of extreme weather events). Climate risk financing aims to transfer these risks by offering financial compensation for affected communities in case of an extreme weather event.

Climate-risk financing instruments can be categorised according to whether they come into play before or after a disaster occurs. Contingent credit lines, catastrophe bonds or climate risk insurance require proactive planning in advance and upfront investments, but they provide financial support immediately after a disaster and can therefore serve as an important step to offer quick answers to an acute, climate-induced crisis. Tools such as donor relief or conventional credits do not require upfront payment but take longer to receive. Thus, these instruments usually are better suited for the long-term reconstruction phase.

Climate risk insurance can be particularly helpful for climate-affected communities. There are many different regional, national and international climate risk insurance schemes. What they all have in common is that they can only compensate for events that do not happen with certainty (e.g. sea level rise), but only with a certain probability (e.g. extreme weather events such as droughts or floods). While these mechanisms can be a crucial part in supporting those who experience loss in the aftermath of a disaster, they usually become more expensive for those who are most at risk. Therefore, to make them a tool of climate justice, these mechanisms should effectively target and protect the most vulnerable populations by providing them with free or affordable access to climate insurance (according to 'pro-poor principals'), while holding those who are responsible for climate-related impacts and risks accountable. It is also important that climate-financing tools are embedded within a broader resilience strategy and are designed to reflect people's needs.

EXAMPLE To provide small-scale producers of grains, fruits and vegetables with financial assistance in times of excess rain or drought, the LWF partnered with the Canadian Foodgrains Bank in 2018 to establish a micro-insurance project in El Salvador. For the 5,100 initial beneficiaries, the cost of the insurance was subsidised by 25% to 100%, depending on the level of financial need. If a catastrophic event happens and exceeds a certain threshold, policyholders receive a payout as compensation for their losses. Additionally, the insurance scheme provides a broader resilience framework by offering policyholders disaster risk reduction training to further mitigate possible damage.



Community food banks in Rangeli and Joshipur, Kailali. LWF

EXAMPLE Local compensation solutions have also been developed in Nepal. Here, the LWF World Service piloted a project in a community that is affected by annual floods. Together with the Nepal Evangelical Lutheran Church, the LWF has supported the setting up of more than ten grain banks as emergency stockpiles of foodstuffs such as paddy, husked rice or wheat. These grain banks help communities meet their immediate food needs after a disaster has occurred until external help arrives.

For more information, see: <https://www.lutheranworld.org/news/nepal-ready-respond-those-need>

KEY MESSAGE Climate risk finance mechanisms, particularly climate risk insurance, can be an important tool in compensating affected communities for losses and damage caused by severe climate events. However, these tools must be designed and implemented according to pro-poor principals, so that the most vulnerable communities are reached and supported. Furthermore, these climate risk financing tools should be embedded in a broader strategy to strengthen climate resilience.

Recommended resources:

InsuResilience Global Partnership: <https://www.insuresilience.org/>

Global Index Insurance Facility: <https://www.indexinsuranceforum.org/>

Act Alliance Manual: https://actalliance.org/wp-content/uploads/2020/10/Climate-Risk-Insurance-Manual_English.pdf

WHICH STEPS TO TAKE TO ACHIEVE CARBON NEUTRALITY OF INFRASTRUCTURE AND OPERATIONS



Calling for climate justice, sustainability and a low-carbon footprint requires us to 'green' our infrastructure development and building maintenance (LWF WS Global Strategy)

"World Service will align its work with the new LWF policy developed to implement the LWF Assembly's most recent resolutions on climate change. Investments into improved energy efficiency, the enhanced use of renewable energies, water saving and protection measures, and improved waste management are not only necessary measures to protect our environment and climate, but also have a huge potential to reduce our mid- and long-term costs, and hence will contribute to economic sustainability of our operations."

Source: www.lutheranworld.org/content/resource-lwf_world_service_global_strategy_2019-2024

In Namibia, in 2017, the LWF Assembly pledged to become carbon neutral by 2050. LWF World Service can contribute to the achievement of this pledge and to the decarbonisation commitment in the World Service Global Strategy by developing a plan of implementation, including for country programmes. The following steps could be taken:

1. At institutional level, LWF WS could produce an Environmental and Climate Policy, replacing the LWF WS Guidelines on Environment (2010) and the Climate Change Response Framework (2012).

The Environmental and Climate Policy should be aligned with the Goals of the Paris Agreement (2015), UN Conventions to Combat Desertification (1996) and Biological Diversity (1992), the Sendai Framework for Disaster Risk Reduction and the Sustainable Development Goals (both 2015).

The objectives of the LWF WS Environmental and Climate Policy could be defined measurably, so that it is reportable and verifiable. Implementation of the objectives, including milestones, might be laid down in an implementation plan.

Specific GHG mitigation targets should be set up for the energy, building, transport, waste procurement and agricultural sectors.

For each sector, a simple baseline GHG inventory could be elaborated and biennially updated, as part of the monitoring.

This could be complemented by the introduction of the EU Eco-Management and Audit Scheme EMAS III (www.emas.de) being used by some LWF member churches, for example the Evangelical-Lutheran Church in Bavaria.

Further information at: wolfgang.schuerger@elkb.de

2. For each of the three programmatic areas, decarbonisation objectives should be set and mainstreamed.
3. For each project, the so-called 'Rio Markers' on biodiversity, desertification, climate change mitigation and climate adaptation should be applied (see 'Recommended resources' below and p. 37). The Markers indicate how far climate objectives are being implemented at project level. They can also be used to track the project portfolio.
4. Covering electricity demand by renewables and stepwise introducing energy-efficient devices is doable.
5. Good practice for introducing climate criteria in procurement and travel guidelines was established by the Evangelical Lutheran Church of North Germany. Further information at: j.meyer-kahrs@nordkirche-weltweit.de

WHICH STEPS TO TAKE TO ACHIEVE CARBON NEUTRALITY OF INFRASTRUCTURE AND OPERATIONS

QUESTION AND ANSWER

How ambitious is the LWF Assembly's pledge to make LWF carbon neutral by 2050?

The pledge to achieve carbon neutrality by 2050 was ambitious when it was made. However, since then the sense of urgency has grown, given climate scientists' latest findings that potentially irreversible impacts occur already at 1.5°C of global warming. The IPCC Special Report on 1.5°C (2018) was ground breaking in this regard. This report calls for halving emissions by 2030 as compared to 2018. Courts have also begun to judge on the adequacy of GHG mitigation targets of states and companies, suggesting that carbon neutrality needs to be achieved between 2035 and 2045, depending on the country, to maintain a fair chance of avoiding runaway climate change. For instance, the German Supreme Court took a respective landmark decision.

KEY MESSAGE

LWF has set a target to become carbon neutral by 2050. This target should be reconsidered and ramped up in view of the latest climate science research, and an implementation plan with milestones should be developed. LWF WS should mainstream GHG mitigation in all operations, across all sectors.

Recommended resources:

IPCC. 2018. Special Report on 1.5°C of Global Warming. www.ipcc.ch/sr15/

OECD. 2018. OECD DAC Rio Markers for Climate Handbook. www.oecd.org/dac/environment-development/Revised%20climate%20marker%20handbook_final.pdf

ENERGY TRANSITION FROM FOSSIL FUELS TO RENEWABLES

Energy transition towards a zero-carbon energy sector is built on the pillars of power sector knowledge transformation, data-driven energy models, and policy frameworks to support energy planning.¹⁰ The LWF is committed to supporting energy transition through the promotion of sustainable and renewable energy sources using a bottom-up empowerment approach. The LWF aims to strengthen local communities, and their women and young people, to support their energy and power sector planning and development for a transition to clean energy.



Biogas tank in Ashulia. LWF Ethiopia

EXAMPLE

In Ashulia, a village 50 kilometres from Dhaka, Bangladesh, the LWF facilitated a shift from traditional burners for daily cooking to biogas chambers. Biogas is produced as a result of an anaerobic process combining animal manure, organic waste and organic material.

The natural gases released by organic materials create a stable source of energy and natural fertilizers. Biogas not only replaces firewood and reduces GHG emissions, but it is an environmentally friendly, cost-effective solution for an off-grid energy transition to supply electricity or fuel.

EXAMPLE

Installing and repairing solar panels has typically been a ‘man’s job’ in Mauritania. No longer. LWF supported a group of women in learning this technical trade and, later on, in sharing their knowledge and skills with other women. The Mauritanian ‘women solar engineers’ can now be seen on rooftops helping energy transition become a reality, while bringing much needed income to their families.

The LWF further trained 50 community members on climate change mitigation and adaptation techniques and practices. It supported 106 households with cookers and solar panel training, facilitated workshops for women engineers in solar spare parts and tools, and formed a group of 75 community members to actively engage in reforestation and climate change awareness.



TEKO WA Fair in Northern Uganda. LWF

EXAMPLE

In Uganda, 90% of energy consumed comes from biomass. The limitations to the entry of sources of renewable energy are largely financial, but there is also a lack of awareness of affordable clean energy that is constraining the country’s energy transition. Since 2014, the LWF implemented a project with the Church of Sweden with funding from the European Union to improve access to clean energy in rural and peri-urban areas in Northern Uganda. The project developed awareness-raising activities such as exhibitions and events, training local technicians, and welcoming 33 national companies providing clean energy solutions. The project increased awareness of energy cooking and solar power technology for rural communities, with an estimated 900-1,500 daily visits to the exhibitions and boosts to local clean energy companies’ sales

KEY MESSAGE

LWF’s work on training, facilitation and support of local communities has set the ground for transitioning from traditional biomass sources of energy to renewable and clean energy sources, contributing to the mitigation of climate change impacts.

¹⁰ International Renewable Energy Agency on Energy Transition. Accessible at: <https://www.irena.org/energytransition>

CLEAN COOKING AND HEATING

Worldwide, more than 2.8 billion people do not have access to clean cooking fuels. This harms the environment, with up to 3% of annual global CO₂ emissions being caused by solid fuel use. Additionally, wood charcoal production, which globally amounted to 53 million tonnes produced in 2018, contributes to forest degradation and deforestation, and destroys ecosystems. Beyond the severe environmental consequences, solid fuels like wood and charcoal are often used for cooking and their fumes cause respiratory illnesses and heart problems, leading to nearly four million premature deaths every year. This has a disproportionate impact on women and girls, who not only spend more time close to cooking fires, but who also are primarily responsible for collecting firewood. Thus, offering possibilities for clean cooking can not only help the environment, but also secure the health of the target communities.



EXAMPLE

To reduce toxic smoke and save energy while cooking, the LWF promotes the use of energy-saving cooking stoves. In Northern Uganda, so-called 'Jiko Matawi' stoves are made of fermented clay and save up to 75% of fuel used previously. These stoves not only help to reduce harmful emissions, but also offer new means of livelihood for their producers. In the LWF World Service projects in Cameroon, the clay stoves are mostly produced by women. Through their 'training of trainers' approach, the programme allows a continuous transfer of knowledge without generating additional costs. Besides energy-saving clay ovens, the LWF World Service also promotes the use of solar cookers. Because any change in cooking practices is often a profound one, the LWF World Service in Mauretania, for example, works to promote solar cookers by raising awareness in the local population on the environmentally friendly cookers.

For more information, see: <https://uganda.lutheranworld.org/content/matawi-eco-stove-cooks-and-protects-environment-106>



EXAMPLE

There are different options for make cooking and heating cleaner. On the one hand, it is possible to make the use of wood more efficient. This can be done, for example, by making charcoal production more efficient, as in the Teko Wa (Energy Facility) project Uganda, which increased production efficiency by over 30%. These new technologies are accompanied by LWF efforts to create local lobbies to ensure the profitability of more efficient charcoal products, as well as providing livelihood alternatives.

On the other hand, it is possible to fully replace wood and charcoal as a fuel source. One approach to achieve this is by producing briquettes, which are made of biowaste material. Biomass is collected, processed in tanks and compressed to create small burnable pieces. In Cameroon, women are particularly active in the production of the briquettes, so the project offers them an empowering possibility to create value and earn money from formerly worthless biowaste.



Fuel-efficient Matawi stove and Casamance technology to produce 30% more energy-efficient charcoal. LWF



KEY MESSAGE

While clean cooking can be ensured with practical solutions such as energy-saving cook stoves, more sustainable ways to produce heating and energy could also greatly benefit local communities and create new opportunities to secure livelihoods.

Recommended resources:

World Bank: <https://www.worldbank.org/en/news/feature/2019/11/04/why-clean-cooking-matters>

The Energy Progress Report: <https://trackingsdg7.esmap.org/>

Clean Cooking Alliance: <https://www.cleancookingalliance.org/home/index.html>

WHO: <https://www.who.int/news-room/fact-sheets/detail/household-air-pollution-and-health>

Quartz video waste briquettes Kenya: <https://qz.com/1049248/poop-is-becoming-a-new-fuel-source/>

Transportation contributes about 14% of global GHG emissions. E-mobility, fuelled with renewables and a strictly circular battery economy, will become a main pillar for decarbonising motorised two- and three-wheelers, as well as passenger cars, city buses, trams and trains. For heavy freight transport, vessels and planes, the future fuels will probably be synthetic petroleum-free fuels or hydrogen. Full decarbonisation of transport is challenging. The point will be to reverse the trend of continued growing emissions in transport. That is why it is all the more important for LWF to give it a start. As a first step, travel guidelines should be amended in line with climate criteria.



EXAMPLE

Climate-friendly mobility: 'Avoid, reduce, compensate'

Avoid mobility: The COVID-19 pandemic has shown that travel can be substantially reduced without negative effects on the effectiveness of operations. Many physical meetings can be replaced by online meetings. Drone flights can be used to provide an overview of progress on construction, reforestation or agricultural work. Apart from mitigated emissions, working time and costs can also be saved. Thus, always think twice: is a trip really necessary?

Reduce: Optimised travel management further reduces emissions. Car sharing, using public transportation where appropriate, switching from plane to train if possible, and selecting long-haul flight routes not only from a cost perspective but also from an emission perspective will reduce your carbon footprint significantly. An emission calculator for flights, a climate airline index and further tips for green travel can be found here: www.atmosfair.de/en

Compensate: Emissions that cannot be avoided should be compensated through voluntary offsetting with a credible institution that invests only in so-called Gold Standard emission reduction projects with sustainable development co-benefits for poor communities. The compensation mechanism of churches, www.klimakollekte.de/en, is highly recommended. If you offset your flight emissions with Klimakollekte, they invest, for instance, in fuel-efficient cook stoves provided by the Lutheran Church in Nicaragua.



EXAMPLE

E-Mobility

'Heavenly Energy' is the slogan under which church districts of the Lutheran Church in northern Germany promote the charging stations for electric vehicles installed at many churches, meeting houses and church administrative buildings. This is intended to support the long-term promotion of electric mobility in rural districts. The charging stations are of course powered by renewable energy. The Church itself purchased the first five electric cars in 2017. Leading by example, 'Heavenly Energy' has been motivating more people to drive emission-free with clean green electricity. Apart from electric cars, the Church has purchased a fleet of electric bicycles for its personnel, and gives them tickets for public transportation. In Bangladesh, where tens of thousands of motorised rickshaws have switched from gas to battery, charging stations are still scarce. This is especially true for charging stations powered by renewable energy. The Christian Commission for Development in Bangladesh (CCDB) is currently establishing the first green battery chargers at its new Climate Centre in Sreepur, north of Dhaka. Visitors, but also rickshaw drivers from the neighbourhood, can soon load their vehicles free of emissions. Apart from lower GHG emissions, air pollution will be substantially reduced by the move to e-mobility, particularly in the mega cities of the Global South, where air pollution leads to an estimated 4.5 million premature deaths each year.



QUESTION AND ANSWER

Is offsetting emissions modern indulgence trading?

Carbon offsets are disputed. However, there is a stark difference between attempts of states to replace climate action at home by carbon offsetting and voluntary carbon offsets of institutions or individuals in line with the Gold Standard. More information at: www.goldstandard.org



KEY MESSAGE

Decarbonisation of the transport sector is more challenging than for the energy sector. Nevertheless, it is important to start 'walking the talk' for mobility too, following the slogan 'avoid, reduce, compensate'. Many business trips can be replaced by digital formats. Further emission reduction is possible through optimised travel management. Unavoidable flights can be compensated through voluntary Gold Standard offsetting schemes, preferably such as those that provide development co-benefits for vulnerable communities. Furthermore, e-mobility offers interesting opportunities in both Global North and South. The renewal of vehicles should be carried out in climate-friendly ways.

GENDER-RESPONSIVE CLIMATE ACTION



EXAMPLE

The LWF in Uganda, together with Act Church of Sweden and the EU, has implemented a gender-responsive project to protect shea trees (see p. 26), an endemic tree species in Northern Uganda. Instead of using these trees as firewood, the LWF project encourages women and young people to process shea nut kernels to produce shea butter products such as lotions or candles. With these efforts, the LWF was able to create green jobs for at least 500 women and young people along the shea nut and apiary value chains in Northern Uganda. The cutting of the shea trees was also reduced by 50%, as women in particular had an incentive to preserve the trees and inform local authorities of illegal cutting. Additionally, 3.6 hectares of new shea trees were planted, with more than 65,000 seedlings awaiting planting in the first rainy season of 2021.



Women making soap, cream and lotion from shea butter. LWF

Even though climate change affects everyone, women and children are particularly vulnerable to its adverse effects. According to UN Women, women and children are 14 times more likely than men to die during natural disasters, and Amnesty International reports that 80% of people displaced by climate change are women. Women who are displaced by disaster are at increased risk of gender-based violence, forced marriage and trafficking. Additionally, as women are mostly responsible for domestic and care work, it is harder for them to leave home and they are often left as de facto heads of households when men migrate. Furthermore, their livelihoods are the most affected by environmental changes. For example, water or fuel scarcity due to climate change further increases stress and labour demands on women and girls. Therefore, climate action should be sensitive to the unequal conditions, opportunities and effects women are facing.

Women and girls must be seen as key agents of change. They play a central role in building resilience in communities and managing natural resources, such as energy and food, in households. Furthermore, they are important decision makers. Therefore, women entrepreneurs can have an enormous influence in creating innovative and sustainable community solutions to climate change. Climate action can ignite this potential through gender-responsive planning, which actively tries to overcome inequalities for women with practical solutions.



Women installing solar panels and maintaining solar rooftop systems. LWF



EXAMPLE

An LWF solar energy project in Mauritania sent six women to Barefoot College in India for six months to be trained in solar technology. There the women learned how to install and maintain solar energy systems. Upon their return, they were able to install 252 solar panels in three villages. Not only did their training increase local access to electricity and lighting (which made it possible for more students to do their homework in proper conditions), it also offered the women engineers new leadership positions in their communities.



CHECKLIST

Gender-responsive climate action planning

According to the UNFCCC, there are five priority areas that aim to foster gender-responsive climate action and coherent gender mainstreaming:

- 1. Capacity building, knowledge management and communication:** Build capacity to review and monitor climate efforts on their gendered impact and aims. The special vulnerabilities and needs of women should be considered.
- 2. Gender balance, participation and women's leadership:** Women should be actively included and consulted as stakeholders in climate action.
- 3. Coherence:** Ensure that partners and team members are sensitised, and facilitate exchange on best practices that consider gender in different aspects of the climate action work processes.
- 4. Gender-responsive implementation:** Consider gender-responsive (technological) solutions and engage women's groups in the process of developing, implementing and updating climate action.
- 5. Gendered monitoring and reporting:** Collect gender-disaggregated data and report the impact of gender-responsive climate action. Include feedback mechanisms with key stakeholders to ensure accountability and inclusion.



CHECKLIST

Gender-responsive project planning for climate action

- 1.** Consider gender as an integral part of climate justice efforts **right from the start** and consult the **LWF gender toolbox** before planning a project.
- 2. Gender analysis:** Conduct a gendered climate risk assessment to understand how women might face different climate vulnerabilities and might have different needs than men. Ensure that women as well as men are involved in the initial situation analysis at all levels (e.g. policy dialogue, community consultation).
- 3. Gender-responsive planning:** Consider and set gender-specific objectives for the project and define the changes targeted by the project. Defining appropriate qualitative and quantitative indicators that consider women's/men's needs, constraints and views are important. Include women's perspective in the planning of climate action.
- 4. Gendered implementation and monitoring:** Ensure that partners and your implementing team are sensitised to gendered approaches. Collect sex disaggregated monitoring data and ensure that both women and men take part in monitoring.

Gendered evaluation and reporting: Measure and compare results with initial gendered objectives and consider whether new gender issues have emerged. Include feedback mechanisms with key stakeholders to ensure accountability and inclusion. Analyse and report gender output and results.



KEY MESSAGE

Gender should be considered from the onset and in every step of climate action. Being sensitive to unequal opportunities and impacts for women allows programmes to actively respond to and tackle these inequalities through real empowerment of women in climate action.

Recommended resources:

UNFCCC Gender and Climate Change: https://unfccc.int/sites/default/files/resource/cp2019_L03E.pdf

UNFCCC Report on gender-responsive climate action:

https://unfccc.int/files/gender_and_climate_change/application/pdf/egmreport.pdf

Care Report on gendered impacts of climate-induced displacement:

<https://careclimatechange.org/wp-content/uploads/2020/07/CARE-Climate-Migration-Report-v0.4.pdf>

Gender in Project Management Cycle:

<https://www.shareweb.ch/site/Gender/Documents/Gendernet%20Toolbox/Toolbox/Methodic/Gender%20in%20PCM.pdf>

CLIMATE EDUCATION AND CAPACITY DEVELOPMENT

Climate education and capacity development are fundamental to improving resilience to climate change and to preparing for disaster risk reduction (DRR), especially for vulnerable communities. Natural disasters particularly affect low-income and vulnerable groups, making the inclusion of capacity-building action plans for climate change adaptation and mitigation a necessary part of humanitarian and development approaches. Climate change represents a long-term risk, particularly for children, who are physically, physiologically and epidemiologically vulnerable and suffer the most. LWF supports initiatives to build youth resilience to the climate crisis through the creation of spaces for participation and advocacy, and by promoting access to information on climate change.

Science and practitioners need to cooperate to find solutions for immediate and future climate challenges. In that regard, the LWF aligns its projects on climate capacity building and education with the UNFCCC guidelines,¹¹ stressing the role of CSOs in the surveillance of climate action tools at local and national levels. The LWF multilevel efforts on community development, climate capacity building and education are illustrated in the examples below.

EXAMPLE

LWF implemented DRR and climate change education programmes in El Salvador. Together with UNICEF, the Salvadoran Ministry of Health and Environment (MINSAL), the Christian Association for Education and Development (ALFALIT), the Anglican Church of El Salvador, and the Salvadoran Lutheran Church and University, the LWF provided several capacity-building programmes in four different areas of the country. The project generated climate change resilience for Salvadoran children and youth to help them better respond to social and natural disasters. The project also provided young people with assessment and guidance tools for climate advocacy action. As a result, 198 participants learned about community adaptation strategies and the impacts of climate change on health. Moreover, the LWF supported the building of an agroecological garden – a pedagogical tool and nourishment source for 84 children and 93 community members.



Capacity building by LWF in El Salvador

¹¹ <https://www.unicef.org/lac/media/19311/file/tools-for-climate-action.pdf>



EXAMPLE

The LWF, the Church of Sweden, and Radiohjälpen built capacity development on DRR for schools in El Tule, Colima and Aldea Las Flores' villages in El Salvador and Guatemala. The project identified and promoted action and protection for DRR at schools and communities, broadening the understanding of concepts such as climate risks, threats and dangers while learning about climate-driven emergency situations and key action procedures. The project trained 870 children and teachers on climate change resilience, risk identification, tool utilisation and action planning in disaster situations (e.g. during an earthquake).



EXAMPLE

In Nepal, the LWF supported and guided local communities to incorporate good practice on climate justice as part of its development work. The projects varied in nature but served to build individual and communal capacities, with a focus on women's empowerment. The LWF included an education programme for schools in 72 villages and 895 households on emergency preparedness and DRR, building resilience and providing disaster-coping capacities. Additionally, the LWF promoted sustainable livelihoods through capacity-building programmes on plantation work to increase food security. Other activities included the introduction of sustainable household construction, the promotion of small business development programmes, and a community grain bank. All initiatives were led and managed by women as part of disaster preparedness strategies for food and financial security. As a result, Nepalese women had a leading role in the implementation of LWF's projects and participated in the building of community-led action for climate governance and justice.



Capacity building by LWF in Nepal



KEY MESSAGE

The LWF empirical learning process on climate capacity building served to highlight the importance of mainstreaming climate capacity development in all LWF programmatic areas. The LWF's educational and capacity-building programmes are built on prior experiences supporting humanitarian and development work throughout its 18 programmes in 25 countries. Climate capacity building and education are crucial to prevent, mitigate and adapt to global climate change impacts – especially for children and the vulnerable.

QUESTION AND ANSWER

What makes climate finance different from development finance?

“Climate finance refers to local, national or transnational financing which may be drawn from public, private and alternative sources. Climate finance is critical to addressing climate change (...). Climate finance is equally important for adaptation (...) to allow (...) to adapt to the adverse effects and reduce the impacts of climate change.”

Source: United Nations Framework Convention on Climate Change (UNFCCC)

Climate finance is often part of development finance – despite the fact that developing countries call for climate finance to be provided in addition to development finance. A climate project is a project that has climate change mitigation and/or climate change adaptation as significant or principal objective(s), according to the OECD DAC Rio markers (see p. 29). Rio markers were established between 1998 and 2010 to monitor development finance flows targeting the objectives of the Rio conventions on climate change, biodiversity and desertification. Rio markers score a project according to how it contributes to achieving the goals of the Rio conventions: Principal (2), significant (1), no objective (0).

To acquire climate finance, a project should explicitly aim to achieve one or more of the following criteria:

- Mitigation of climate change by limiting GHG emissions
- Protection and/or enhancement of GHG sinks (e.g. forests, swamps, soils)
- Integration of climate change concerns in the recipient country’s development objectives
- Climate change adaptation
- Climate risk assessments
- Identifying and addressing context- and location-specific vulnerabilities.

In the concept note development phase of a climate project, the following questions should be addressed:

- What are specific climate change-related risks and challenges being addressed by the project?
- How does the project take into account local, regional or national/international climate policies/plans/programmes?
- How does the project contribute to understanding and enhancing climate resilience and adaptation capacity?
- How does the project promote GHG mitigation and/or the sustainable use of natural resources?

To be successful, it is recommended that the concept note adheres to the particular strengths of LWF WS, e.g.:

- Priority focus on most vulnerable communities (this can be embedded in a narrative, referring to the so-called Principles for Locally-Led Adaptation; <https://www.wri.org/initiatives/locally-led-adaptation/principles-locally-led-adaptation>)
- Reference to climate justice and/or a commitment to apply a human rights-based approach
- Commitment to apply a gender-responsive approach
- Reference to the Local-to-Global approach.

EXAMPLE

A growing number of LWF WS country programmes have successfully applied for climate finance provided by multiple donors: for example, in Ethiopia (inter alia, climate-resilient agriculture), Nepal (inter alia, flood resilience) and Central America (inter alia, climate risk micro insurance). For further information please contact the LWF country representatives:

Ethiopia: Sophie Gebreyes, sophia.gebreyes@lutheranworld.org

Nepal: Dr Bijaya Bajracharya, bijaya.bajracharya@lutheranworld.org

Central America: Martin Ruppenthal, martin.ruppenthal@lutheranworld.org

KEY MESSAGE

To be eligible for climate funds, project concept notes must directly and explicitly contribute to climate change mitigation and/or climate change adaptation. This contribution must be reflected in the project objectives and actions, in compliance with the so-called Rio markers for climate change mitigation and/or adaptation.

Climate finance in the form of grants and loans, totalling approximately US\$70 billion in 2020,¹² is being provided by a broad variety of donors, including inter alia, UNFCCC climate funds (Adaptation Fund, Least Developed Countries Fund, Special Climate Change Fund and Green Climate Fund), climate funds of multilateral development banks, and bilateral climate finance channels of donor countries. Public sources of climate finance are complemented by non-governmental donors, for instance specialised foundations (e.g. ClimateWorks Foundation, KR Foundation, Oak Foundation, Shakti Sustainable Energy Foundation). Some developing countries have set up their own climate funds, for instance the Bangladesh Climate Change Trust Fund or the Green Fund (South Africa). Many of these funds are also accessible to LWF. Further information can be found from climate finance navigators or other resource guides (see below).



Climate finance navigator

As part of its Climate Knowledge Portal, Christian Commission for Development in Bangladesh operates a climate finance navigator, providing information on sources of funds for climate projects: <https://climateportal.ccdb.org>



**INTERNATIONAL
CLIMATE INITIATIVE (IKI)**



Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety

Since 2008, the International Climate Initiative (IKI, Germany) has approved more than 750 climate and biodiversity projects in about 60 countries, with funding totalling more than €4.5 billion. IKI uses multiple funding instruments, including annual thematic calls (big projects), medium grants and small grants calls, and country-specific calls. International organisations, development banks and NGOs can apply, either alone or in consortiums.

LWF WS is eligible to apply for the thematic and country-specific calls. Together with a German partner, a LWF country programme could also apply under the medium grants call. Small partner organisations of LWF could be eligible for the small grants call. The grant provided ranges from €70,000 (small grants call) to €800,000 (medium grants call) to €20 million (thematic call). The selection process is always two-fold: in a first round, concept notes (approximately six pages plus annexes) are to be submitted. If selected, a full proposal must then be elaborated.

Further information: www.international-climate-initiative.com/en

Recommended resources:

ACT Alliance, 2018. A Resource Guide to Climate Finance. www.actalliance.org/act-news/new-act-resource-identifies-climate-finance-sources-relevant-to-members/

IFRC, 2013. Accessing climate finance.

www.climatecentre.org/downloads/files/IFRCGeneva/IFRCClimateFinance.pdf

¹² <https://www.oecd.org/environment/cc/Projecting%20Climate%20Change%202020%20WEB.pdf>



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