



ADAPTATION FUND

Lessons learned from Adaptation Interventions in Least Developed Countries: Experiences from the Adaptation Fund

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Mangrove afforestation creates fishing opportunity for rural poor in Teknaf, Bangladesh.
(Photo by Abdul Mannan)

Table of Contents

LIST OF ACRONYMS	i
DISCLAIMER.....	ii
EXECUTIVE SUMMARY	1
INTRODUCTION.....	4
OBJECTIVE.....	7
METHODOLOGY	9
1.OVERVIEW OF ADAPTATION IN LDCA AND IN THE AF PORTFOLIO.....	11
2. EXPERIENCES FROM THE ADAPTATION FUND PORTFOLIO	13
2.1 CAMBODIA: ENHANCING CLIMATE RESILIENCE OF RURAL COMMUNITIES LIVING IN PROTECTED AREAS OF CAMBODIA.....	14
2.2 NEPAL: ADAPTING TO CLIMATE INDUCED THREATS TO FOOD PRODUCTION AND FOOD SECURITY IN THE KARNALI REGION OF NEPAL	17
2.3 RWANDA: REDUCING VULNERABILITY TO CLIMATE CHANGE IN NORTH WEST RWANDA THROUGH COMMUNITY BASED ADAPTATION	21
2.4 SOLOMON ISLANDS: ENHANCING RESILIENCE OF COMMUNITIES TO THE ADVERSE EFFECTS OF CLIMATE CHANGE IN AGRICULTURE AND FOOD SECURITY	25
2.5 TANZANIA: ENHANCING CLIMATE CHANGE ADAPTATION FOR AGRO-PASTORAL COMMUNITIES IN KONGWA DISTRICT AND STRATEGIC WATER HARVESTING TECHNOLOGIES FOR ENHANCING RESILIENCE TO CLIMATE CHANGE IN RURAL COMMUNITIES IN SEMI-ARID AREAS	28
3. LESSONS LEARNED AND CHALLENGES	33
4. CONCLUSIONS	37
5. REFERENCES	38

List of Acronyms

ARG	Automatic Rain Gauge
AWS	Automatic Weather Station
CPA	Community Protected Area
EBA	Ecosystem-Based Adaptation
EDA	Enhanced Direct Access
FONERWA	Rwanda Green Fund
HCC	Honiara City Council
LAPA	Local Adaptation Plans of Action
LDC	Least Developed Country
MAL	Ministry of Agriculture and Livestock of the Solomon Islands
MECDM	Ministry of Environment, Climate Change, Disaster Management and Meteorology of the Solomon Islands
MINIRENA	Rwanda Ministry of Natural Resources
NEMC	Tanzanian National Environment Management Council
NGO	Non-Governmental Organisation
NIE	National Implementing Entity
NIWA	National Institute of Water and Atmospheric Research of New Zealand
NRDLUP	National Rural Development and Land Use Policy
MTS	Adaptation Fund Medium-Term Strategy
PSC	Project Steering Committee
RNRA	Rwanda Natural Resources Authority
RWRA	Rwanda Water and Forestry Authority
SIM	Solomon Islands Meteorological Services
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
WFP	United Nations World Food Programme

Disclaimer

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Executive Summary

- › Least Developed Countries (LDCs) are disproportionately affected by the worsening impacts of climate change, due to a complex interplay of global economic forces, structural imbalances in trade relations, persistent indebtedness, and physical exposure to multiple climate impacts.
- › Adaptation finance for LDCs has grown in recent years yet remains insufficient. Despite international commitments, adaptation needs far exceed available funding, creating significant challenges for effective climate resilience building.
- › The present study offers an overview of adaptation interventions in LDCs funded by the Adaptation Fund since 2009. As of August 2024, the Adaptation Fund's project portfolio in LDCs includes over US\$ 380 million approved for 41 single country and 12 regional projects, focusing on adaptation in relation to rural development, food security, agriculture, and disaster risk reduction.
- › The study's overarching objective is to deepen the understanding of adaptation strategies and resilience to climate change in LDCs. It is undertaken to support the strategic pillar of "Learning and Sharing" in the Adaptation Fund's Medium-Term Strategy (2023-2027) which focuses on cultivating knowledge and evidence on successful and innovative adaptation actions and financing. The findings presented will be of interest to the Fund's implementing entities, as well as government officials in LDCs, the private sector, civil society and youth organisations, and adaptation practitioners and researchers generally.
- › The study was conducted through document analysis of monitoring and evaluation reports, annual project performance reports, mid-term evaluations, final evaluations and a range of academic and policy literature. This work was supplemented by semi-structured interviews with project implementing and executing entities, where focus areas examined project rationale and formulation, adaptation strategies deployed, and lessons learned from implementation.
- › The findings of the report highlight a range of challenges for effective adaptation in LDCs, including the limited financial resources available to meet growing adaptation needs, and the complexities when seeking to implement adaptation interventions in contexts of political and institutional weakness or instability. Though there are exceptions, LDCs are in many cases more susceptible to political and institutional instability due to weak governance structures, lower levels of economic development, and limited capacity to manage external shocks, which can disrupt policy con-



Tanzania Country Exchange and Project Visits, May 2024
(Photo by Adaptation Fund)

tinuity and hinder long-term development planning. These factors underscore the importance of incorporating flexibility in project design, including in implementing and executing arrangements, and strengthening local capacities to ensure the sustainability of adaptation projects. Doing so minimises disruptions to project timelines where there are shifting external dynamics to consider and improves longer term outcomes and impact.

- › Further, the complexities of land tenure and ownership can pose particular challenges to project implementation in LDCs where economic development is often historically tied to agricultural commodity markets or primary resources. Fragile land ownership and property rights that are inconsistently enforced mean that local land ownership patterns must be well understood for project success.
- › The study also highlights several enabling conditions for successful adaptation in LDCs. The case studies suggest

that adaptation efforts have been most successful when gender-sensitive approaches were adopted to promote inclusion, where local capacities and leadership were built, and when climate risk assessment and management were integrated into national strategies and development plans. Moreover, when diverse stakeholders including research organisations were included in project execution, knowledge sharing on adaptation solutions was enhanced, supporting the implementation of effective adaptation at scale.

- › Looking ahead, the adaptation community would benefit from continuing to examine how adaptation interventions in LDCs can effectively overcome the challenges encountered in those contexts. As the impacts of climate change continue to worsen in the coming years, there is an urgent need to upscale finance for adaptation, and to learn from approaches piloted in practice, to ensure that climate finance genuinely supports vulnerable communities to adapt.



AFCIA Grantee 'Savannas Forever' in Arusha, Tanzania
(Photo by UNDP)

Introduction

The United Nations (2024) designates 45 economies as the least developed countries (LDCs).¹ These countries, home to more than 1 billion people, are disproportionately affected by the worsening impacts of climate change, due to a complex interplay of global economic forces, structural imbalances in trade relations, persistent indebtedness, and physical exposure to hotspots of climate impacts. Despite contributing minimally to global greenhouse gas emissions—emitting less than 4% of total world emissions in 2019—societies across LDCs are experiencing high vulnerability to climate change and threats to their development prospects (United Nations Trade and Development, 2022). Action across the international community has recognized the climate vulnerability of LDCs, including through dedicated funding channels, expert groups, and negotiation blocs. Despite this recognition, the adaptation needs of communities and economies in LDCs remain urgent and mostly unaddressed.

The latest scientific assessments demonstrate that LDCs are already experiencing the acute and chronic impacts of climatic change (World Meteorological Organization, 2021). Country-level data on changes in monthly surface temperatures confirm monthly temperatures in the median LDC in 2021 are 1.3°C higher than during the reference period of 1951–1980. The increase in surface temperatures compared to the

reference period has exceeded 1.5°C in as many as 18 LDCs (Intergovernmental Panel on Climate Change, 2021). This rise in surface temperatures is altering climate systems, causing an increase in the frequency and intensity of weather and climate extremes such as heatwaves, heavy precipitation, droughts and tropical cyclones. Across the African continent, where over 30 of the 46 LDCs are located, and South and Southeast Asia, where half of the 16 Asian LDCs are located, climatic changes are having significant impacts on the availability of water resources, on human health, human settlements, and major economic sectors including agriculture, fisheries and tourism. In this context, the global community faces renewed calls to address the urgent needs of LDCs.

Since the late 2000s, a range of interventions have been promoted with the aim of improving LDC preparedness for the effects of climate change. These comprise efforts to ‘mainstream’ climate adaptation and efforts to pilot concrete adaptation projects and programmes to deliver tangible adaptation benefits directly to vulnerable communities. Mainstreaming refers to efforts to hardwire adaptation into national development plans and capacity building, so that climate risk is considered centrally in all development planning and implementation, not as a separate issue. Efforts to mainstream adapta-

1. In the formal UN definition, LDCs are low-income countries confronting severe structural impediments to sustainable development. They are highly vulnerable to economic and environmental shocks and have low levels of human assets. The list of LDCs is reviewed every three years by the Committee for Development Policy, a subsidiary body of the United Nations Economic and Social Council.

tion into national development plans in LDCs have had most success when the highest levels of government have supported the integration of adaptation into development priorities and a country's own initiatives, particularly those involving budget allocation.

Access to timely and adequate financial resources is a crucial enabling condition for effective climate change adaptation. Following the Copenhagen Accord in 2009 and the Paris Agreement in 2015, developed nations progressively increased their climate funding to developing countries, reaching a target of US\$ 100 billion annually by 2022 (Organisation for Economic Co-operation and Development, 2024). In 2024, during the 29th UN Climate Change Conference (COP29) in Baku, Azerbaijan, nations agreed on a New Collective Quantified Goal (NCQG) for climate finance, aiming to mobilise at least US\$ 300 billion annually by 2035. This new goal underscores the need for balanced financial allocation between adaptation and mitigation and noted the particularly vulnerable nature of nations with significant capacity constraints, including LDCs (United Nations Framework Convention on Climate, 2024).

Despite commitments to pursue equity between efforts to adapt to and mitigate climate change, adaptation has, however, received much less international support than mitigation. Adaptation costs in LDCs are expected to rise rapidly in the coming years, given the inability of governments to effectively stem the growth in global emissions causing climate change. As planetary warming continues to approach the lower

limit of the Paris Agreement of 1.5C, the international climate finance system is expected to face continuing pressures to deliver the adaptation finance needs facing LDCs.

The landscape of adaptation finance for LDCs has diversified significantly over the last two decades, with a growing range of funding options to address the unique challenges faced by LDCs, including climate funds that assist LDC governments in areas such as project proposal development, institutional readiness, technical assistance, and the implementation of concrete adaptation actions through projects and programmes (United Nations Framework Convention on Climate Change LDC Expert Group, 2023).

Despite the increase in funding options, the financial resources currently available are insufficient to meet the escalating needs of developing nations facing the effects of climate change, particularly LDCs. According to the United Nations Environment Programme (2022) Adaptation Gap Report, international finance for developing nations remains markedly below what is necessary, with current funds being only a fraction of the estimated \$340 billion needed annually by 2030. This shortfall is evident in the stark financial constraints faced by LDCs, which require significant investment to build resilience and adapt to climate change, at a time when many of these countries are already heavily indebted and have limited fiscal space to borrow. There is an urgent need to increase financial support for LDCs, as well as to improve understanding of how those countries can effectively support their climate vulnerable populations to adapt.



Mangrove afforestation creates fishing opportunity for rural poor in Teknaf, Bangladesh
(Photo by Abdul Mannan)

Objective

This study provides an examination of the challenges and realities associated with climate adaptation in LDCs, drawing on experiences and insights from the Adaptation Fund's extensive project and programme portfolio. Its aim is to deepen the understanding of adaptation strategies and resilience against climate change in LDCs. The study aligns with one of the key strategic pillars of the Adaptation Fund's

Medium-Term Strategy (2023-2027), namely "Learning and Sharing", which focuses on cultivating knowledge and evidence on successful and innovative adaptation actions and financing. The findings presented will be of interest to the Fund's implementing entities, as well as government officials in LDCs, the private sector, civil society and youth organisations, and adaptation practitioners and researchers generally.



River bank farming to provide additional income for locals in Nepal.
(Photo by NCCSP)

Methodology

The study methods include document analysis and semi-structured interviews. Analysis covered a review of the academic and grey literature on adaptation in LDCs; a review of Fund policies and guidelines related to adaptation in LDCs, including the Strategic Results Framework, the Environmental and Social Policy, the Medium-Term Strategy (MTS 2023-2027); and a review of the project and programme portfolio in LDCs. The portfolio review was used to understand the general characteristics of projects and programmes in LDCs and informed the case study selection. The case studies were chosen based on three criteria: (1) the projects were at least at the midpoint of their implementation, (2) the projects spanned a diversity of sectors and

(3) geographies, and (4) the project was able to demonstrate significant results. The selected case studies include interventions led by National Implementing Entities through the Direct Access modality, as well as those implemented by Multilateral Implementing Entities.

For each case study, the authors reviewed all available documents, including Project Performance Reports, Mid-Term Reviews, Terminal Evaluations, completion summaries, monitoring mission reports, websites and related media. Finally, semi-structured interviews were conducted with project stakeholders to understand specific approaches, their effectiveness, and lessons learned from implementation.



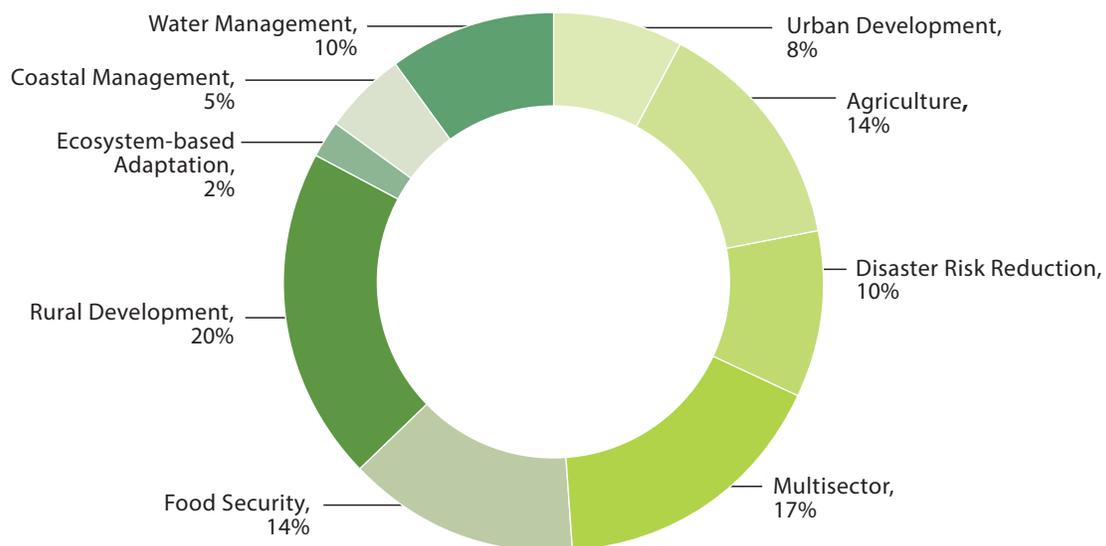
AF country exchange mission in Tanzania
(Photo by Adaption Fund)

1. Overview of Adaptation in LDCs and in the AF Portfolio

Since 2010, the Adaptation Fund has committed over US\$ 1.25 billion for climate change adaptation projects and programmes, including 183 concrete, localized projects in the most vulnerable communities of developing countries around the world. Over the past decade, the Adaptation Fund Board has established several options to support adaptation in LDCs, including through regional and single country projects and programmes, its Direct Access and Enhanced Direct Access funding modalities, its innovation grants, its Climate Innovation Accelerator, Project Formulation Grants, Learning Grants, Readiness Grants, Project Scale-up Grants and Technical Assistance Grants for Environmental, Social, and Gender Policy.

As of January 2025, the Adaptation Fund had approved more than US\$ 290 million approved for 43 single projects and programmes in LDCs. Most of these are still under implementation while eleven were completed. These projects and programmes spanned a range of sectors, with emphasis on adaptation relating to rural development, food security, and agriculture and disaster risk reduction. Water management, urban development, and interventions spanning multiple sectors also featured as significant areas of focus. In each instance, the projects and programmes had a focus on delivering concrete adaptation benefits to communities particularly vulnerable to climate change.

Figure 1. Adaptation Fund investments in LDCs by sector (US\$ 290 million as of January 2025)



Source: Adaptation Fund



Adaptation Fund Climate Innovation Accelerator (AFCIA) project grantee in Arusha, Tanzania
(Photo by Adaptation Fund)

2. Experiences from the Adaptation Fund portfolio

Due to its maturity and global coverage, the Adaptation Fund portfolio offers the potential to develop an understanding of adaptation challenges and successes in LDCs. This section explores five case studies from the portfolio, selected as some of the first approved and most mature interventions in LDCs across regions. These include projects and programmes in Cambodia, Nepal, Rwanda, Solomon Islands and Tanzania.

Each of the following cases reviews the climate-related challenges facing vulnerable communities, the strategy and approach taken to promote adaptation, and what can be learned from the challenges and successes. The selected case studies range across rural, coastal, and urban areas, with a focus on overcoming adaptation challenges relating to food security, water management and resource-dependent livelihoods.



The AF project 'Enhancing Climate Resilience of Rural Communities Living in Protected Areas of Cambodia' is implemented by UNDP and executed by Cambodia's Ministry of Environment. (Photo by Adaptation Fund)

2.1 Cambodia: Enhancing Climate Resilience of Rural Communities Living in Protected Areas of Cambodia

Project amount: US\$ 4,954,273

Implementing Entity: United Nations Development Programme (UNEP)

Implementation period: 2013-2021

Background

Cambodia has been grappling with persistent social and economic challenges over recent decades, including poverty, malnutrition, and underdeveloped infrastructure. These challenges are now compounded by the country's vulnerability to climate change, particularly in its agricultural sector. Rural Cambodians are experiencing a fall in agricultural productivity due to dramatic fluctuations in precipitation that are harming farmers and their families by causing more intense droughts

and floods. As well as threatening crop yields, the severe weather is damaging roads and other critical infrastructure that farmers use to transport their goods to urban markets. In response, many rural communities are becoming more reliant on forest ecosystems for food and income, which is exacerbating soil erosion and reducing the ability to grow crops.

In 2012, the Adaptation Fund approved a US\$ 4.9 million project implemented by

the United Nations Environment Programme (UNEP) and executed by Cambodia's Ministry of Environment. The project aimed to increase food supply and reduce soil erosion in three Community Protected Areas (CPA): Beung Per Wildlife Sanctuary, Phnom Prech Wildlife Sanctuary and Phnom Kulen National Park. Project activities included the restoration of a variety of plant species in degraded forests; planting of multi-use tree species at rice paddy boundaries and other cultivated areas to enhance crop productivity; testing of several drought-tolerant hybrid rice cultivars to assess their potential yield and suitability for cultivation; and the intensification and diversification of production in at some 2,000 family agricultural areas in communities close to forest sites, including small home gardens ranging in size from 0.2 hectares to 1 hectares.

Strategies to promote adaptation

The strategies adopted to achieve the project objective—to increase food supply and reduce soil erosion in three Community Protected Areas (CPA)—centred on Ecosystem-Based Adaptation (EBA), an emerging approach at the time of project development. EBA focuses on using biodiversity and ecosystem services to help communities adapt to the adverse effects of climate change, and combines conservation, sustainable resource management, and restoration of ecosystems to promote natural solutions that increase resilience and reduce vulnerability to climate impacts.

The project sought to achieve adaptation benefits through establishing healthier

forests, reducing soil erosion, increasing carbon sequestration and improving water quality and flow in watercourses, as well as more productive forest-based livelihoods, increased household income, and reduced climate vulnerability. This theory of change underpinned the specific project activities and components, namely: (1) protocols for agriculture interventions; (2) concrete eco-agriculture adaptation interventions; and (3) institutional capacity, awareness-raising and upscaling of eco-agriculture interventions. Beyond the five CPAs which formed the target area, the project also sought to generate technical knowledge and demonstrate effectiveness of the eco-agriculture approach, and scaling up through capacity development, awareness raising mainstreaming eco-agriculture in national climate change policy and planning.

Results/Achievements

The project achieved a number of concrete outcomes, including:

- The planting of 947,690 indigenous trees, equivalent to around 2,370ha of forest planting, and the provision of 518,542 fruit trees for planting agro-forestry plots and in home-gardens.
- The diversification of home gardens through training and distribution of equipment and planting materials to 1,193 households. Most of these households have continued home gardening, increasing the quantity and variety of

food available as well as generating cash income for households.

- A programme of water supply installations including spring capture systems, wells, ponds and household rainwater harvesting, resulting in improved water supply for 80 percent of households across two of the target CPAs.
- The establishment of community savings and loans groups, which are well established among communities in the CPAs.

Findings

- **The project underestimated the contested nature of land rights.** Early on following project approval, the baseline study found that previously cleared forest land within the CPAs (identified mainly through remote sensing) could not be claimed for restoration as it was largely in private agricultural use. A revised strategy for tree planting was therefore adopted on agro-forestry plots and in home-gardens. Moreover, certain targeted intervention areas were adjacent to Economic Land Concessions, a controversial form of land management and allocation used by the Cambodian government until 2013 that had led to land degradation through the

conversion of former forest land for agricultural uses. This meant that the project had to navigate community members' fears of having their land removed amidst wider pressures to grow agro-industry crops such as rubber tree and cassava plantations. These experiences point to the need to invest in understanding the history of land rights and ownership, including community perceptions around land tenure and development. Such questions are particularly pressing in EBA, which may require large areas of land, which in turn is subject to the wider market dynamics of agro-industry and resource pressures.

- **The project achieved good stakeholder consultation at project formulation and throughout implementation, including successful partnerships with various NGOs and academic institutions.** These included partnerships with the Royal University of Phnom Penh and the Royal University of Agriculture. However, it fell short in fostering more cooperation between the Ministries represented on the Project Steering Committee (PSC), which would have been advantageous in efforts to mainstream adaptation into national climate change and sectoral policies and strategies.



Dam construction to make water available for irrigation canal in Bardiya District in the mid-western region of Nepal
(Photo by NCCSP)

2.2 Nepal: Adapting to Climate Induced Threats to Food Production and Food Security in the Karnali Region of Nepal

Project amount: US\$ 9,527,160

Implementing Entity: United Nations World Food Programme

Implementation period: 2018-2022

Background

Nepal has faced economic and social development challenges in recent decades. The country's physical geography, with mountainous terrains and underdeveloped infrastructure, has posed difficulties in access to education, healthcare, and economic opportunities for many of its rural inhabitants. Political and governance issues have also constrained economic and social progress. Further, the devastating earthquake that struck Nepal in 2015 significantly hampered the country's development, causing

widespread destruction of infrastructure, homes, and cultural heritage sites, and profoundly affecting economic growth and the well-being of its population.

Nepal's economy is heavily reliant on agriculture, which employs a large portion of the population. Communities experience high poverty, inequality, and gender disparities, with many communities lacking basic services and facing marginalization. Climate change poses additional

challenges to Nepal's development. The country is particularly susceptible to environmental threats, including glacial lake outburst floods, landslides, and erratic monsoon patterns, which disrupt agriculture and livelihoods. These climate-related events have far-reaching implications for food security, water availability, and health, further exacerbating the country's socio-economic vulnerabilities.

In 2018, the Adaptation Fund Board approved a US\$ 9.527 million project implemented by the United Nations World Food Programme and executed by the Ministry of Environment, Science and Technology and Ministry of Federal Affairs. The project aimed to increase the adaptive capacity of food-insecure poor households by improved management of livelihood assets and natural resources in several districts in the Karnali region of Nepal. Project activities include strengthening local capacity to identify climate risks and design adaptive strategies; improving food security and diversifying livelihoods; and increasing the resilience of natural systems that support livelihoods.

Strategies to promote adaptation

The project adopted a locally-driven approach consistent with Nepal's Local Adaptation Plans of Action (LAPA), within the nation's federal governance framework that assigns local governments responsibility to prioritise climate action. Incentivizing community engagement, the project leveraged an established

World Food Programme (WFP) mechanism to reward good management of livelihood assets and natural resources with food or cash compensation. In Karnali Province's Kalikot, Jumla, and Mugu districts, local service delivery organizations – particularly those providing agricultural, irrigation, livestock, and forestry extension services – were selected as executing entities. The project's design placed a strong emphasis on alleviating the workload of rural women, enhancing their living and health conditions, and ultimately seeking to improve the adaptive capacity of households to climate change.

Results/Achievements

The project achieved a number of concrete outcomes, including:

- The creation of 118 community assets, including micro-hydro schemes, slope stabilization, and community nurseries, and multi-use water irrigation channels, benefitting over 2,200 households. These irrigation networks increased water availability for farming across 960 hectares, enabling farmers to grow seasonal and off-season crops throughout the year, including the dry period, which has boosted household agricultural output and food security.
- The creation of more than 300,000 employment days and cash-based transfers totalling US\$ 1,723,313 to 7,421 households experiencing poverty and acute food insecurity (of which 36% were led by women) in exchange for their

involvement in WFP-led food/cash assistance for assets programs.

- Seven Local Adaptation Plan of Action (LAPA) were prepared and implemented by seven local governments, with guidelines developed on the design and construction of climate-resilient local infrastructure.
- Climate change awareness was enhanced by establishing 113 technical committees for knowledge transfer, and by communicating through community messaging on climate change to 38,608 individuals (45% women). Additionally, 490 staff members (42% women), including 76 from WFP and local governments, had their capacities built to address and lessen the effects of climate events.

Findings

- **Unforeseen political and governance changes required adaptive management during implementation.** The project was approved before Nepal's constitutional reform and the creation of provincial authorities. The original project design did not anticipate the inclusion of provincial authorities in implementation, with responsibilities assigned to the federal and local governments. Nonetheless, proactive approaches were adopted to involve the new provincial authorities in planning, monitoring, evaluation, and the operation of a provincial climate change management information system. A

Provincial Project Coordination Unit was also set up to facilitate coordination and information exchange at the provincial level, to bring together and mainstream disparate sources of climate information in useful forms for decision-making. The Adaptation Fund Board enables changes related to adaptive management practices on a case-by-case basis, recognizing that flexibility is sometimes needed, so long as they align with the Fund's policies and guidelines.

- **The project supported women's empowerment by prioritizing their access to finance, social protection, and autonomy.** Women, as the primary recipients of cash through Food for Assets activities, were empowered to establish bank accounts, often for the first time, thereby improving their security and financial independence. In a shift from direct cash disbursements, the project's impact led the Government to begin issuing social security allowances via local financial institutions, marking an advancement in social inclusion. This was achieved in part through a strong gender impact assessment and inclusion of clear targets in terms of the inclusion of women and marginalized groups.

- **The financial management system provided flexibility as well as coherence with wider government action on climate change.** The project operated under the "on budget, off-treasury" modality, whereby the budget was included in the government's annual plan but funds were not channelled

through the government treasury. This approach provided smooth project planning and implementation without cash flow challenges, enabling performance-based budget management and

timely implementation according to the approved project document. Reflecting the project budget in government treasury systems promoted coherence with broader climate related action.



The AF project in Kabyaza Green Village in Northwest Rwanda supported the resettlement process and procure materials for house construction for 200 families. (Photo by Adaptation Fund)

2.3 Rwanda: Reducing Vulnerability to Climate Change in North West Rwanda through Community Based Adaptation

Project amount: US\$ 9,969,619

Implementing Entity: Rwandan Ministry of Environment

Implementation period: 2014-2018

Background

Rwanda is grappling with the effects of climate change on its fragile socio-economic fabric. The country's predominantly rural population is reliant on and sustained by rain-fed agriculture, which is subject to changing precipitation patterns and extreme weather. In a context where land holdings are highly fragmented, intensive cultivation on hilly and mountainous landscapes has led to severe environmental degradation. The Northern and Western

uplands are markedly vulnerable to erosion worsened by climate-induced heavy rainfall, compromising the agricultural productivity that most Rwandans depend on, and threatening life and livelihoods.

Significant unplanned settlements in environmentally vulnerable areas have increased pressure on the land, disrupting local ecosystems. Climate change is intensifying these pressures, as recent

shifts in rainfall variability have dramatically impacted the mountainous North West of Rwanda. The area is now prone to severe floods and landslides, disrupting communities and agriculture. This ecological disturbance, coupled with Rwanda's socio-economic development hurdles, underscores the urgency for integrated climate-resilient strategies and agricultural practices to ensure the sustainability of its development trajectory and the safety and wellbeing of its people.

In 2013, the Adaptation Fund approved a US\$ 9.969 million project implemented by the Rwandan Ministry of Environment and executed by the Rwanda Natural Resources Authority (RNRA) and later Rwanda Water and Forestry Authority (RWFA). The project aimed to increase the adaptive capacity of natural systems and rural communities in North-Western Rwanda to the impacts of climate change. Project activities included managing risks from floods, landslides, and erosion through integrated natural resource management, alternative livelihood programs, and capacity building of local institutions. The project was implemented over four years and was completed in 2019.

Strategies to promote adaptation

The Rwandan Ministry of Environment and execution partners aimed to achieve the project objectives through an integrated natural resource management and alternative livelihoods approach. The project focused on one of the most climate sensitive and vulnerable parts of

the country where recurring floods, landslides and erosion were a frequent feature of life. The implementation approach for the project emphasized gender considerations on decision making and adaptation planning, with women representing 67% of leadership positions on the project's implementation arrangements.

Results/Achievements

- Over 1,350 hectares of terraces were built to stabilize land, and to further this effort, 130 hectares of riverbanks were reinforced through bamboo planting.
- 200 households identified as highly vulnerable to climate change were resettled to rural development hubs. These hubs were furnished with essential social amenities, such as schools and a health centre. The project provided building materials for the construction of new homes, while the labour for the construction was contributed by the households themselves.
- 16 farmer field schools were set up, engaging 480 participants. Training at these schools encompassed a range of practices, from kitchen garden creation and organic fertilizer production to seed cultivation, post-harvest processing, and the cultivation of climate-resilient crops.
- 30 media products were developed in one of the two target districts for the construction of rural development hubs. These media products contributed to raising community awareness of climate

issues though these efforts were not conducted evenly throughout all project areas and sustained afterwards. The project educated community facilitators and key partners in target areas on key topics including value chain management, post-harvest handling, implementing climate change adaptation plans, and the management of land use and forests.

Findings

- **Extensive community engagement was unable to guarantee community enthusiasm for culturally transformative activities.** The relocation of 200 households facing high climate vulnerability led to considerable anxiety among target households who considered the proposal a significant disruption to established community life. While many had earlier experienced destroyed homes and lost farmland to climate-induced flooding, and the new rural development hubs promised climate-resilient homes in a safe zone and provided with rainwater tanks and biogas, some initially resisted relocating due to fears of losing their cultural heritage and existing social bonds. To address the resistance in relocation and to manage the risks facing the community, the project team facilitated interactions between target households and those who had already moved, to share relocation experiences. The outcomes have been varied; the relocated households are now less exposed to climate-related floods and landslides, but it will take time to develop their new communities, and to build the

social networks and livelihoods that they benefited from previously.

- **Governance reforms in Rwanda led to unintended project delays.** The Rwandan government's institutional reforms during project implementation led to the reorganization of the Ministry of Natural Resources (MINIRENA), resulting in its split and subsequent loss of accreditation with the Fund. Consequently, the Ministry of Environment adopted the relevant functions and responsibilities pertaining to the Adaptation Fund and was accredited as the new National Implementing Entity in March 2019. The primary Executing Entity transitioned from the Rwanda Natural Resources Authority (RNRA) to the Rwanda Water and Forestry Authority (RWFA). This restructuring caused a one-year delay (from June 2017 to August 2018) in releasing the final funding tranche. Despite the delay, the project did not incur budget overruns, and most activities had already been completed prior to the institutional change.

- **The Direct Access modality built country capacity to drive further adaptation at scale.** Building on this project, Rwanda is now advancing locally-led adaptation using the Enhanced Direct Access (EDA) mechanism. This effort emphasizes local adaptation in water, agriculture, and land management, with funds managed through the Rwanda Green Fund (FONERWA). That Fund had provided technical support for the design of the project reviewed in

this case study, in North West Rwanda. Its focus on building local organizational capacity for climate finance is proving to be a key strategy to scaling up adaptation country wide. This approach

devolves decisions and funding to the local level to empower local actors to pursue adaptation based on local priorities and insights.



Adaptation Fund Project Monitoring Mission in the Volta Basin.
(photo by the Adaptation Fund)

2.4 Solomon Islands: Enhancing resilience of communities to the adverse effects of climate change in agriculture and food security

Project amount: US\$ 5,610,000

Implementing Entity: United Nations Development Programme

Implementation period: 2011-2016

Background

Economies and livelihoods in the Solomon Islands, comprising hundreds of islands in the South Pacific, have traditionally relied on agriculture, fishing, and forestry. These sectors are vital for the livelihoods of rural communities and the economy at large, but are now threatened by more intense and frequent cyclones, sea-level rise, and changing oceanic conditions, which disrupt traditional fishing practices and threaten coastal communities with erosion and saltwater intrusion into fresh

water resources. These environmental stresses are compounded by existing socio-economic issues, including limited healthcare infrastructure, education, and economic diversification, which constrain the country's adaptive capacity and resilience to climate-induced shocks.

In 2017, the Adaptation Fund Board approved a US\$ 5.533 million project implemented by the United Nations Development Programme (UNDP) and executed

by the Ministry of Environment, Climate Change, Disaster Management and Meteorology (MECDM) and the Ministry of Agriculture and Livestock (MAL). The project aimed to strengthen the ability of communities to make informed decisions on food production and management systems taking into account the changing climate. It also aimed to adjust national and sub-national policies related to agriculture to take climate change into consideration, and promote adaptation at the community and regional levels.

Strategies to promote adaptation

The project was designed to overcome barriers in capacity, policy and information that prevented government agencies and communities from transitioning smallholder farming systems to adapt to climate change. It sought to address capacity barriers through attention to technical skills and human resources, and policy barriers through systematically including climate risks and opportunities in agricultural policy. It sought to address the absence of meteorological, agricultural and ecological information for decision-making on climate at national and local levels. The approach included piloting concrete measures in selected regions as well as broader institutional capacity building.

Results/Achievements

- 18 isolated wards integrated climate risks into land use plans, which led smallholder farmers to apply enhanced agricultural practices in search of higher

crop yields. These included the partial adoption of climate-resilient farming and aquaculture techniques, as well as the establishment of genetic reserves for agricultural crops and emergency food banks.

- Meteorological information capacities were improved for the Solomon Islands Meteorological Services (SIM) from a baseline of just five manual weather stations to an additional 6 automatic weather stations (AWS) and 8 Automatic Rain Gauges (ARG). This component was coupled with training from the National Institute of Water and Atmospheric research (NIWA) of New Zealand. These improvements have allowed SIMS to generate and disseminate, through its webpage, real time data as well as more accurate daily and monthly forecasts. Lack of internet connectivity, and government budget constraints, however, prevent improvements across the islands at the scale envisioned by the project.

- A range of policy measures were supported, including the development of the National Rural Development and Land Use Policy (NRDLUP) 2015-2019, and the mainstreaming of climate change risks into the Agriculture and Livestock Sector Policy 2009-2014. More broadly, the project developed guidelines and training modules for the integration of gender considerations into agricultural policy.

Findings

- **Mid-term review provided an opportunity to address implemen-**

tation issues related to project management and technical expertise. In the early phase of the project, national agencies involved in project's execution had faced significant challenges due to a lack of human resources and coordination skills, which prevented a greater sense of ownership at the country level and given rise to the perception of an international-driven project. The 2014 mid-term review raised several concerns on delivery and proposed opportunities to address these challenges through shifts in project implementation and execution. Changes implemented included the appointment of a new management team and the engagement of technical and senior officials of the Ministry of Environment, Climate Change, Disaster Management and Meteorology in implementing specific activities. Taking action on the recommendations of the mid-term review proved crucial in the latter phases of the project in delivering on project outcomes, as noted in the terminal evaluation.

- **The project was burdened by significant transaction costs to deliver its outputs due to geographical dispersion.** Travel to remote communities across five provinces in the project area proved expensive, difficult, and somewhat dangerous in this project due to the lack of a basic road network and regular transportation services, resulting in limited access and services for project beneficiaries. Additionally, the project's diverse range of activities, from national planning to provincial coordination,

establishing weather stations, organizing university courses, providing agricultural extension services, and conducting research on crop varieties, required extensive negotiations with various government and non-government organizations and numerous procurement and recruitment procedures. A more focused project design commensurate with the adaptation challenges across a particular geographical unit could have had a higher likelihood of fully achieving its intended objectives.

- **Subsequent projects in the same country are building on earlier interventions and applying lessons learned.** Approved in 2017, a US\$ 4.395 million project, implemented by UN-Habitat and executed by a number of entities including Honiara City Council (HCC), aims to address climate-related vulnerabilities and enhance local ownership in adaptation efforts. Building on the lesson learned on geographical reach and accessibility, that project has a narrower spatial focus than the earlier project, on vulnerability hotspots in the city, where it supports the establishment of community evacuation centers, while at the city level, the focus is on enhancing the skills of urban planners and related professionals to foster urban resilience in broader planning processes. When project lessons are well documented and knowledge transfer is effective, lessons from early projects can inform and improve the delivery of later interventions.



AF-funded project expanded and improved the water and irrigation management for a rice farm in Dakawa Village in Tanzania (Photo by Adaptation Fund)

2.5 Tanzania: Enhancing Climate Change Adaptation for Agro-Pastoral Communities in Kongwa District and Strategic Water Harvesting Technologies for Enhancing Resilience to Climate Change in Rural Communities in Semi-Arid Areas

Project amount: US\$ 1,200,000 and US\$ 1,000,000

Implementing Entity: National Environment Management Council

Implementation period: 2021-2025

Background

Tanzania, located in East Africa, has an economy historically rooted in agriculture, which remains a key sector alongside mining and tourism. The country's vast and diverse geography, including arable lands, mineral resources, and tourist attractions like Mount Kilimanjaro and Serengeti National Park, has shaped its economic activities. Despite economic growth in recent years, Tanzania continues to face

challenges with poverty and inequality, particularly in rural areas where access to basic services and infrastructure is limited. Efforts to diversify the economy and improve social welfare are ongoing, but disparities in income distribution and development opportunities persist.

Tanzania is increasingly facing climatic stresses that significantly impact its

people, economy, and environment. Unpredictable and extreme weather patterns, including prolonged droughts and erratic rainfall, have affected agricultural productivity, leading to food insecurity and threatening the livelihoods of millions who depend on farming. The country is also experiencing a rise in temperatures and more frequent flooding, causing damage to infrastructure, displacing communities, and straining water resources. Additionally, deforestation and land degradation, driven by the need for agricultural expansion and fuelwood, are exacerbating soil erosion and loss of biodiversity, further diminishing the resilience of ecosystems. These environmental challenges are compounded by the socio-economic development challenges such as limited access to adaptive technologies, inadequate infrastructure, and high levels of poverty, making it difficult for communities to adapt to the changing climate.

In 2020 and 2021, the Adaptation Fund Board approved four projects to be implemented by the Tanzanian National Environment Management Council (NEMC) through the Direct Access modality. These projects aimed to strengthen the ability of communities to adapt to climatic changes across key geographies and economic sectors, in agricultural, coastal, and rural communities. Two of these four projects were advanced in their implementation having entered their second year. The first of these is a US\$ 1.2 million intervention focused on enhancing adaptation for agro-pastoral communities in the Kongwa District. The second of these is a US\$ 1.28

million intervention aimed at enhancing resilience through water harvesting technologies in semi-arid rural areas. Two other projects approved around this time—a US\$ 1.4 million project in Bunda and a US\$ 1 million project in Zanzibar—are also expected to generate important impacts in the coming years. In addition to these projects, in 2011, the Adaptation Fund (2021) funded a US\$ 5.008 million project implemented by the United Nations Environment Programme that focused on coastal adaptation.

Strategies to promote adaptation

The project in the Kongwa District aimed to pilot practical, cost effective, community rooted solutions to improve the livelihoods of poor people, as well as to restore and rehabilitate ecological systems to better support agriculture and livestock production. This would involve a transformation of exploitative agro-pastoral practices towards diversified, sustainable livelihoods. It also included measures to strengthen the capacities of institutions to manage locally experienced climate risks and impacts. The water harvesting project has some similar aims, including to contribute to improved crops, aquaculture and livestock productivity in semi-arid rural areas, as well as help in combating crop and livestock pests and diseases. That project took a participatory approach towards livelihoods measures drawing on the improved water availability, including an afforestation programme for locally adapted fruit and forest trees,

and knowledge management for sustainable land use and farming techniques.

Results/Achievements

- Improved water governance with 100 people trained on sustainable water management and water rights; 6 Community-based Water Supply Organizations established; 4 small dams constructed and 2 drip irrigation schemes established;
- 80 community members trained on nursery techniques, tree planting, management and sustainable utilization of fruit and forest tree species;
- 60 farmers trained on contour banding for soil and water conservation and 100 farmer households supplied with improved sorghum seeds and sunflower seeds;
- 2 nurseries established with multi-purpose fruits and forest trees; 12ha of catchment planted with forest through participatory afforestation programme. 30,000 cashew nut trees and 20,000 fruit trees planted;
- 200 beehives procured and distributed to beekeeping groups whose members include women and old people, to promote climate resilient livelihoods.

Findings

- **Proposing several projects enabled the National Implementing Entity to enhance project development**

capacities while piloting adaptation measures across the country's varied ecosystems. After becoming accredited, NEMC decided to develop and propose several projects of approximately US\$ 1 million, rather than one larger project. NEMC believed that by implementing several projects with different executing entities, across the country's varied ecosystems, they could maximise their chances of project successes and generate lessons to determine the best implementation arrangements for the future. This strategy is proving true for NEMC as the entity's staff capacities have been significantly strengthened through the experience of delivering relatively small projects. Delivery risks are playing out differently across the projects, with some projects advancing well, while others experiencing some delays. In combining the Direct Access modality with a project implementation approach of several relatively small projects, NEMC is building country capacities and generating lessons for the delivery of future projects.

- **Including national research organisations in project execution has aided the development of locally appropriate adaptation knowledge.** The Tanzania projects involved national research partners including the Sokoine University of Agriculture, which has enabled research through the collection of primary data during project execution, and promoted an improved understandings of adaptation solutions. Dedicated research is examining what

makes communities in the project areas resilient to climate change impacts in the medium to long term, promoting knowledge management more broadly. It is also important that a comprehensive knowledge management strategy captures the value of having research organisations involved in project execution.

■ **Implementation arrangements have posed challenges for timely disbursement of funds and execution of seasonal project activities.** Many project activities in Tanzania must be executed in particular times of the year to accommodate seasonal changes. Excavation for small dams to promote water harvesting, for instance, must

take place in the dry season. Fruit and forest trees, too, must be planted at a particular time of year for optimal root establishment and survival. Timely disbursement of funds for such activities recognising seasonal needs is therefore crucial. If delays in fund transfer mean that the optimal season is missed, it can be up to a whole calendar year before those project activities can be properly executed. NEMC has faced some challenges in this area and has made deliberate efforts to promote implementation arrangements that minimise the risk of delays in fund disbursement, and is aware this will continue to be an important area of focus in its project oversight.



Adaptation Fund Climate Innovation Accelerator (AFCIA) project in Arusha, Tanzania
(Photo by Adaptation Fund)

3. Lessons Learned and Challenges

The cases reviewed above demonstrate some important features relating to how adaptation projects and programmes have operated in practice in interventions supported by the Adaptation Fund in LDCs. The cases reveal the range of ways that climate change poses new challenges to societies already facing deficits in social and

economic development, as well as some of the enabling conditions that hold promise for opportunities for success in pursuing adaptation projects in vulnerable communities. While every development context is unique, some of the following lessons may apply broadly across adaptation efforts in LDCs.

Project proponents can benefit from flexibility in project design to anticipate possible political and institutional instability.

Political and institutional changes in the cases reviewed had significant implications for project delivery. As seen in the case of Nepal, the transition to a federal system after the project’s commencement necessitated adaptive management to include new provincial authorities in the project’s execution. Though there are exceptions, LDCs are often more susceptible to political and institutional instability due to their weaker governance structures, lower levels of

economic development, and limited capacity to manage external shocks, which can disrupt policy continuity and hinder long-term development planning. These factors underscore the importance of incorporating flexibility in project design that can accommodate such shifts and ensure continued alignment with governance structures, minimizing disruptions to project timelines and objectives.

Project activities that are disruptive to communities must take into account that social bonds and cultural identity take time to rebuild.

At times, project proponents may determine that disruptive project activities (such as community relocation) outweigh the risks of alternatives (such as incremental improvements to infrastructure in a flood-prone location). This was the case in the project reviewed in

Rwanda, where 200 households were relocated. Extensive community engagement was unable to promote enthusiasm among community members who were slated for relocation to new, safer, homes in a new location. In other contexts, other adaptation measures including

large scale infrastructure development, change of livelihoods, and new governance arrangements, could have similar effects in disrupting social bonds and cultural identity. Project developers can minimize disruption to community life by

undertaking meaningful consultation, by identifying and managing social impacts of project activities through recognized processes, and by providing support to communities during and after the implementation of disruptive project activities.

Project proponents should recognize land tenure and ownership patterns and integrate these understandings into project design:

Land tenure and ownership issues can be critical in LDCs, impacting project outcomes. The case of Cambodia is instructive, where the project had to adapt its approach due to the complex history of land rights and the effects of Economic Land Concessions. In LDCs, economic development is often tied to agricultural commodity markets, or primary resources, resulting in fragile land ownership and precarious property

rights that are not consistently enforced or respected. At project development stage, project proponents need to therefore understand land tenure dynamics and consult with local communities to navigate these challenges successfully. Integrating land tenure and ownership considerations into project design is crucial to give projects a good chance of success.

Effective gender assessments can reveal opportunities to support women's roles in adaptation.

Gender assessments are vital to address imbalances and ensure equitable project benefits. In Nepal, prioritizing women's access to finance and decision-making led to their empowerment and financial independence, demonstrating how gender-sensitive approaches can foster

inclusion and resilience. Effective gender assessments can reveal opportunities to support and enable women's roles in delivering effective adaptation, leading to more robust and inclusive climate resilience strategies.

Strengthening local capacities is essential for the long-term sustainability of adaptation projects.

In Rwanda, the project's emphasis on improved gender relations—by ensuring women held a majority of leadership roles in project arrangements, and the

establishment of farmer field schools—highlights the importance of empowering local actors. Training local communities not only in technical skills but

also in leadership and equitable decision-making increases the prospects that adaptation measures will be maintained and effective decisions will be made over time. In Tanzania, the inclusion of national researchers in project execution

enables the development of locally appropriate adaptation knowledge that holds potential to serve the country's efforts to promote community resilience in the medium to longer term.

A focused project design in terms of geographical reach and project activities may prevent strain on resources and achieve higher impact.

The Solomon Islands project demonstrated that a design with diverse activities over a wide area can constrain effectiveness. A targeted approach, as later applied in the urban resilience project Honiara, can allow for more cohesive measures, tailored to specific vulnerabilities and capacities, potentially leading to a lasting and sustainable impact. In Tanzania, where project developers sought to manage project delivery risks,

the implementation of several smaller projects instead of one large project is proving to be effective and is building country capacities. This may not be universally true, however, and implementing entities and government authorities must balance a range of factors in project design, including the feasibility and potential logistical challenges to adequate monitoring across sites.



AFCIA Grantee 'Savannas Forever' in Arusha, Tanzania.
(Photo by UNDP)

4. Conclusions

Communities in LDCs are highly vulnerable to the impacts of climate change due to multiple factors, often including high physical exposure, limited coping capacity, and longstanding development challenges. This study was motivated by the urgency to achieve greater understanding on what makes effective adaptation interventions in contexts of longstanding development challenges. It drew on a literature review, project documentation, and interviews with implementing entities and executing entities delivering adaptation interventions funded by the Adaptation Fund in recent years.

The study's findings note that poor communities in LDCs are often particularly vulnerable to climate change due to economic development relying on natural resources, meaning that there is little in the way of alternative livelihood options in the face of climate shocks and stresses. Where there are underdeveloped government institutions, a lack of effective socio-economic development strategies are compounded by a changing climate, threatening already

fragile development prospects. Despite these multiple challenges, it is clear that if project design is undertaken effectively, and enabling conditions are established, governing authorities and implementing partners can deliver adaptation that is impactful in delivering benefits to the most vulnerable communities.

The financial resources currently available are insufficient to meet the escalating needs of developing nations, including LDCs. Those resources must scale in accordance with needs. Beyond resources alone, however, the adaptation community must continue to innovate and learn from what makes interventions effective in challenging contexts. It must continue to study and learn from experiences in LDCs as more adaptation interventions mature. Efforts to grow and improve the evidence base on adaptation will prove valuable to donors, project proponents, governments and civil society stakeholders seeking to ensure that climate finance delivers maximum benefits to vulnerable communities on the frontlines of climate impacts in the years to come.

5. References

Adaptation Fund (2021). Implementation of Concrete Adaptation Measures to Reduce Vulnerability of Livelihood and Economy of Coastal Communities In Tanzania. Retrieved from: <<https://www.adaptation-fund.org/project/implementation-of-concrete-adaptation-measures-to-reduce-vulnerability-of-livelihood-and-economy-of-coastal-communities-in-tanzania/>>

Denton, F. (2010). Financing adaptation in least developed countries in West Africa: is finance the 'real deal'?. *Climate Policy*, 10(6), 655-671.

Intergovernmental Panel on Climate Change (IPCC) (2021). Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.

Organisation for Economic Co-operation and Development (2024) Developed countries materially surpassed their USD 100 billion climate finance commitment in 2022 – OECD. Retrieved from: <<https://www.oecd.org/en/about/news/press-releases/2024/05/developed-countries-materially-surpassed-their-usd-100-billion-climate-finance-commitment-in-2022-oecd.html>>

Reid, H., Dodman, D., Janssen, R., & Huq, S. (2010). Building capacity to cope with climate change in the least developed countries. *Changing Climates, Earth Systems and Society*, 217-230.

Saito, N. (2013). Mainstreaming climate change adaptation in least developed countries in South and Southeast Asia. *Mitigation and Adaptation Strategies for Global Change*, 18, 825-849.

United Nations (2024). Department of Economic and Social Affairs – Economic Analysis. Least Developed Countries (LDCs). Retrieved from: <<https://www.un.org/development/desa/dpad/least-developed-country-category.html>>

United Nations Trade and Development (UNCTAD) (2022). Least Developed Countries Report 2022. The low-carbon transition and its daunting implications for structural transformation. Retrieved from: <<https://unctad.org/publication/least-developed-countries-report-2022>>

United Nations Trade and Development (UNCTAD) (2023). Least Developed Countries Report 2023. Crisis-resilient development finance. Retrieved from: <<https://unctad.org/publication/least-developed-countries-report-2023>>

United Nations Environment Programme (UNEP) (2022). The Adaptation Gap Report 2022: Too Little, Too Slow – Climate adaptation failure puts world at risk. Retrieved from: <<https://www.unep.org/resources/adaptation-gap-report-2022>>

United Nations Framework Convention on Climate Change (UNFCCC) (2024) New collective quantified goal on climate finance. Draft decision -/CMA.6. Retrieved from <<https://unfccc.int/documents/643641>>

United Nations Framework Convention on Climate Change (UNFCCC) LDC Expert Group (2023). Mapping of relevant sources of finance for climate change adaptation for the least developed countries. Retrieved from: <<https://unfccc.int/documents/635395>>

World Meteorological Organization (WMO) (2021). WMO Atlas of Mortality and Economic Losses from Weather, Climate and Water Extremes (1970–2019). World Meteorological Organization. Geneva. Retrieved from: <<https://library.wmo.int/records/item/57564-wmo-atlas-of-mortality-and-economic-losses-from-weather-climate-and-water-extremes-1970-2019>>



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