

UNITED NATIONS DEVELOPMENT PROGRAMME

Adaptation Fund Climate Innovation Accelerator

Impact Report

2020-2025



**Accelerating climate
adaptation through
local innovation**



Funded by:



This report was developed and produced by UNDP-AFCIA

Lead author: Eleanor Saunders

Editor: Irati Durban Aguinagalde

Design: Deepesh Sangtani

Cover photo: Phil Kabuje / UNDP Tanzania

Technical reviewers and contributors:

Mónica Borrero, UNDP-AFCIA Global Programme Manager

Azhar Amir, UNDP-AFCIA Monitoring and Evaluation Coordinator

Chongguang (Charles) Yu, UNDP SDG Finance Policy Advisor, Regional Bureau for Asia and the Pacific

Clint Bartlett, UNDP-AFCIA Partnerships and Innovative Finance Specialist

Ekin Celikyay, UNDP-AFCIA Community Engagement and Knowledge Sharing Expert

Harris Farooqui, UNDP-AFCIA Investment and Business Development Consultant

Kate Jean Smith, UNDP Climate Change Adaptation Communications Specialist

Mariam Zafar, UNDP-AFCIA Project Analyst

Yusuke Taishi, UNDP Climate Change Adaptation Principal Technical Advisor a.i.

Acknowledgments:

We extend our sincere appreciation to all UNDP-AFCIA grantees whose dedication, innovation and tireless work have been at the heart of the UNDP-AFCIA programme. Their efforts in advancing locally led adaptation solutions and building climate resilience have made a tangible difference in the lives of vulnerable communities and have generated valuable lessons for future climate action.

We are equally grateful to the [Adaptation Fund](#) and the [European Union](#) for their generous support and steadfast commitment. We also thank our partners—the [Global Resilience Partnership \(GRP\)](#), the [Climate and Development Knowledge Network \(CDKN\)](#) and the [International Centre for Climate Change and Development \(ICCCAD\)](#)—for their collaboration, expertise and essential role in supporting the delivery of this programme.

About UNDP:

UNDP is the leading United Nations organization fighting to end the injustice of poverty, inequality and climate change. Working with our broad network of expert and partners in 170 countries, we help nations to build integrated, lasting solutions for people and planet. Learn more at [undp.org](#) or follow @UNDP.

About the Climate Promise:

UNDP's Climate Promise is the UN system's largest portfolio of support on climate action, working with more than 140 countries and territories and directly benefiting 37 million people. This portfolio implements over US\$2.45 billion in grant financing and draws on UNDP's expertise in adaptation, mitigation, carbon markets, climate and forests, climate risk and security, and climate strategies and policy.

Visit our website at [climatepromise.undp.org](#) and follow us at [@UNDPplanet](#).

About this publication:

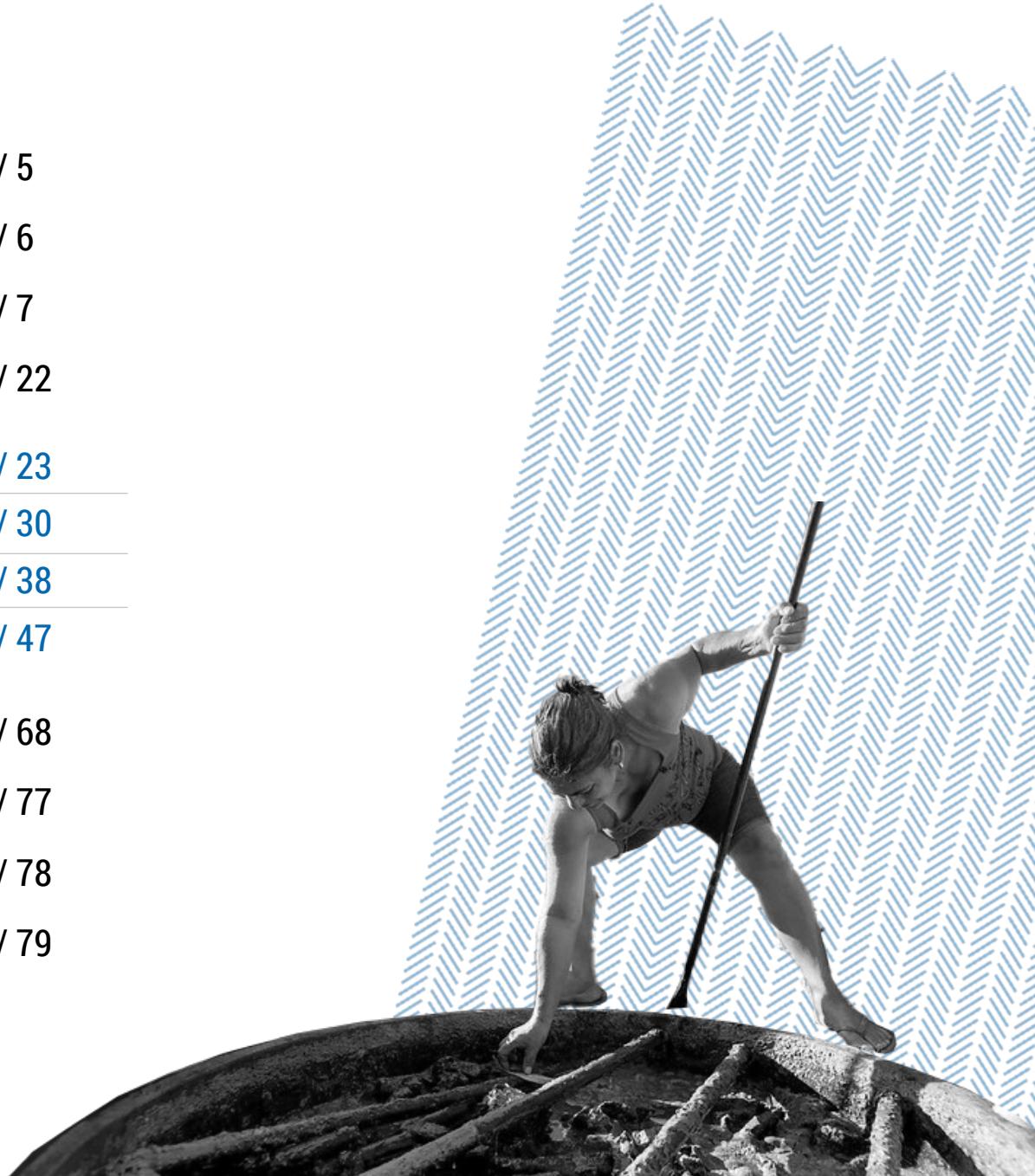
This report was developed under UNDP's Climate Promise Flagship Initiative [Adaptation Innovation Marketplace \(AIM\)](#), designed to advance scaled-up adaptation efforts at the local level, with a specific focus on civil society, non-governmental organizations and innovative women entrepreneurs and young people. Delivered in collaboration with a wide variety of partners, the [Adaptation Fund Climate Innovation Accelerator](#) has granted 44 micro and small awards to locally led organizations in 33 countries worldwide, accelerating their innovative solutions to enhance resilience in the most vulnerable communities.

UN disclaimer:

The views expressed in this publication are those of the author(s) and do not necessarily represent those of United Nations, including the United Nations Development Programme (UNDP), donor agencies or UN Member States.

Table of Contents

Acronyms and abbreviations	/ 5
Foreword	/ 6
Introduction	/ 7
Impact showcase	/ 22
Impact: Innovation for adaptation	/ 23
Impact: Climate and environmental resilience	/ 30
Impact: Socio-economic resilience	/ 38
Impact: Scalability and investability	/ 47
Lessons learned for best practice	/ 68
Partnerships and collaborations	/ 77
Future outlook	/ 78
Annex	/ 79



Acronyms and abbreviations

AF

Adaptation Fund

AFCIA

Adaptation Fund Climate Innovation Accelerator

AIM

Adaptation Innovation Marketplace

AVPA

African Venture Philanthropy Alliance

AVPN

Asia Venture Philanthropy Network

BMO

Business member organization

CDKN

Climate and Development Knowledge Network

Climate KIC

Climate Knowledge Innovation Community

COP

Conference of Parties

CSO

Civil society organization

EU

European Union

FAO

Food and Agriculture Organization

GCA

Global Center on Adaptation

GNAM

Global Network for Advanced Management

GRP

Global Resilience Partnership

ICCCAD

International Centre for Climate Change and Development

IPCC

Intergovernmental Panel on Climate Change

LDC

Least Developed Country

LLA

Locally Led Adaptation

LUCCC

Least Developed Countries Universities Consortium on Climate Change

M&E

Monitoring and Evaluation

MBA

Master of Business Administration

MSc

Master of Science

MSME

Micro, Small, Medium sized Enterprise

NGO

Non-Governmental Organization

SDG

Sustainable Development Goal

UNCCD

United Nations Convention to Combat Desertification

UNCDF

United Nations Capital Development Fund

UNDP

United Nations Development Programme

UNEP-CTCN

United Nations Environment Programme - Climate Technology Centre and Network

UNESCO

United Nations Educational, Scientific and Cultural Organization

UNFCCC

United Nations Framework Convention on Climate Change

UNIDO

United Nations Industrial Development Organization

VSLA

Village Savings and Loan Associations

WFP

World Food Programme

FOREWORD



The global responsibility to tackle climate change is paramount. Communities everywhere—especially the most vulnerable—are experiencing profound disruptions to their lives, livelihoods and environments.

The urgency to act has never been greater. In this decisive moment, locally led adaptation has proven to be one of the most effective powerful ways to ensure that those most affected are not only included in solutions, but are shaping and driving them.

UNDP's commitment to locally led action is longstanding and steadfast. By strengthening capacities, forging systemic connections and helping bridge the finance gap, UNDP is ensuring adaptation begins where it matters most: at the community level.

The UNDP-AFCIA programme was born out of this conviction. Its core premise is simple yet transformative: empowering local actors, elevating community knowledge and supporting innovative, homegrown approaches are essential to creating sustainable, climate-resilient futures.

Over the course of this programme, we have witnessed how organizations have not only delivered impactful solutions but also sparked transformative change in their communities, often despite limited resources and complex challenges.

Yusuke Taishi

UNDP Climate Change Adaptation Principal Technical Advisor a.i.

Their impact is tangible: Communities have become owners of their livelihoods with 59 percent of the UNDP-AFCIA-supported organizations reaching revenue generation stage within five years, all directly applying the principles of locally led adaptation and achieving gender equality, with women making up 54 percent of all beneficiaries.

This Impact Report is a testament to their ingenuity, perseverance and leadership. It also reflects the collective strength of the partnerships that have made this possible, most notably the invaluable support of the Adaptation Fund, the European Union and our key partners. Together, we are shaping a more inclusive and responsive adaptation ecosystem.

As we look ahead, the lessons captured here serve as both an inspiration and a call to action. To truly meet the scale of the climate crisis, we must continue to listen to, invest in and champion local solutions. I invite you to explore this report and join us in advancing locally led adaptation that leaves no one behind.

Together, we can create systemic change and lasting impact for future generations to not only survive but thrive.

INTRODUCTION

In 2019, the Adaptation Fund (AF) launched the Adaptation Fund Climate Innovation Accelerator (AFCIA) to foster innovation in adaptation in developing countries. The United Nations Environment Programme (UNEP) and the United Nations Development Programme (UNDP), were selected as the first implementing entities of two US\$5 million AFCIA programmes respectively, in 2020. In 2021, the European Union (EU) made a €10 million financial contribution to the AF, channelled through the UNDP-AFCIA programme.

The UNDP-AFCIA programme operates within the framework of the Adaptation Innovation Marketplace (AIM). This strategic, multi-partner platform led by UNDP is designed to advance scale-up adaptation efforts at the local level, with a focus on civil society, governments, non-governmental organizations, Indigenous and community groups, entrepreneurs, young innovators and women-led enterprises. The marketplace aggregates resources and technical support to facilitate local access to climate change adaptation finance.

AFCIA aims to foster locally led innovative adaptation solutions in developing countries. UNDP-AFCIA supports not-for-profit entities, including non-governmental organizations (NGOs), civil society organizations (CSOs), business member organizations (BMOs) and other associations, cooperatives or community-based organizations registered in a developing country to test and accelerate locally led impact. Meanwhile, UNEP delivers the AFCIA programme through the technological mechanisms of the United Nations Framework Convention on Climate Change (UNFCCC), the Climate Technology Centre and Network (CTCN), and supports governments to generate national impact. In 2024, AFCIA was joined by two further partners implementing similar innovation for adaptation acceleration programmes: the United Nations Industrial Development Organization (UNIDO) and the World Food Programme (WFP). In combination, AFCIA reaches across a broad range of actors to enable change and ensure resilience against climate change across the Global South.

The AFCIA impact report has two volumes, covering the first phase of the programme implemented by UNDP and UNEP-CTCN in the 2020-2025 period:

UNEP CTCN-AFCIA

UNDP-AFCIA

This volume focuses on the impact of UNDP-AFCIA.

The report is a quantitative and qualitative exploration of the programme's impact described through data gathered during regular reporting, narrative reporting and direct quotes from local adaptation leaders. By examining the successes, challenges and lessons learned, the report provides a comprehensive overview of how UNDP-AFCIA has contributed to advancing climate adaptation solutions and strengthening resilience in developing countries. This analysis will also lay the foundation for the next phases of UNDP-AFCIA, to inform and support others on their own climate adaptation journey and enable continued progress toward scaling up transformative climate technologies globally.

UNDP-AFCIA is supported by financial contributions from the Adaptation Fund and the European Union.

About UNDP-AFCIA

The UNDP-AFCIA programme stands as a groundbreaking innovation accelerator programme, igniting and scaling innovative solutions for community resilience in developing countries. It has generated evidence of practical solutions that can be scaled up to change the lives of vulnerable people and the lands on which they rely.

There are two clear objectives that drive UNDP-AFCIA:



Promoting and accelerating new innovations:

Development of innovative adaptation practices, tools and technologies is encouraged and accelerated.



Generating evidence:

Evidence of effective and efficient adaptation practices, products and technologies is generated as a basis for implementing entities and other funds to enable scaling up.

These objectives are delivered on the ground by a variety of NGOs and CSOs through:

Testing new solutions and technologies.

Catalysing social innovations to address climate risks.

Generating evidence for effective and efficient solutions, documenting and disseminating lessons learned, leading to the adoption or replication of successful innovations.

Scaling and replicating long-term sustainable impactful solutions.

When these objectives are effectively implemented, they create a strong foundation for scalable and sustainable climate adaptation. The result is a dynamic cycle of learning, adaptation and replication that accelerates impact, builds resilience and drives meaningful change at scale.

UNDP plays a pivotal role in international development as a knowledge broker, capacity builder, innovator and facilitator. It connects agents of change from developing countries with the knowledge, resources and networks that support them to achieve transformational development. UNDP-AFCIA also contributes directly to five (out of six) [UNDP Signature Solutions](#)—poverty and inequality, governance, resilience, environment and gender equality—through the establishment of three main enabling conditions: development finance, strategic innovation and digitalization. The activities cut across the [eleven Adaptation Fund sectors](#).

In addition, the objectives of UNDP-AFCIA align with the [Paris Agreement](#) and the [Sustainable Development Goals](#).



11 SUSTAINABLE CITIES AND COMMUNITIES
Make cities and human settlements inclusive, safe, resilient and sustainable



13 CLIMATE ACTION
Take urgent action to combat climate change and its impacts



Photo: Moyo District Farmers Association

Access to UNDP-AFCIA

Grants from \$60,000 up to \$250,000 are competitively awarded to initiatives that strengthen local climate action and accelerate progress toward the Paris Agreement and the Sustainable Development Goals.

UNDP-AFCIA is open to NGOs, CSOs, BMOs, cooperatives and community-based organizations registered in developing countries. Local innovation for climate adaptation and resilience is fostered by providing flexible funding directly to these local actors. Each local partner can use the funding and support to respond to climate impacts in its own way: grounded in local ecosystems, cultures and Indigenous knowledge. UNDP-AFCIA also supports adaptation practitioners in sustaining and scaling their solutions through connections with national, regional and global funders.

In its first funding round, UNDP-AFCIA disbursed \$4,459,728, followed by a second round of \$3,831,718, aimed at long-term sustainability, scaling and replication. In total, \$8.3 million were directed to local initiatives, alongside an additional \$6 million in technical assistance provided through the programme.

Value added of UNDP-AFCIA

Communities in vulnerable areas are often least served in terms of vital adaptation development support. Many of these communities strive to adapt by themselves, but their initiatives fall into the “missing middle” whereby they generate ideas, but lack finance to implement, test or scale them. The “missing middle” initiatives are too large or costly for microfinance support, yet too small or risky for commercial banks or funds.

UNDP-AFCIA bridges this gap, putting finance into the hands of community led organizations. In addition, financial and business capacity-building, professional networking, and expert support is provided to ensure longevity and sustainability. These communities use the support to build capacity, run pilots, and generate evidence of success. Once data is gathered, it becomes much easier to present a body of evidence to national or private financers for further investment, growth and scaling.

The long-awaited necessity of UNDP-AFCIA is best described in the words of local champion, advocate Sheela Patel.

“We at SPARC have worked for four decades seeking legitimacy for developing evidence-based data about unserved issues and communities who are otherwise invisible. We strived to build a body of knowledge and produce solutions, test them, and facilitate their scaling through building capacity, access to resources and evidence of impact of the community as well as to the environment. We believe that UNDP-AFCIA provides a long-awaited platform for this, and its involvement is very exciting and refreshing, as well as very sensitive to the issues that we grapple with.”

Sheela Patel

Founding director of the Society for the Promotion of Area Resource Centers (SPARC) in India and Locally Led Adaptation (LLA) advocate.

Small grants are revolutionary in the right hands, and the impact created on the ground by UNDP-AFCIA is showcased in their local achievements.

Directly empowering local actors

Provided flexible, accessible funding that supports context-specific solutions.



Devolving decision-making



Providing patient and predictable funding that can be accessed more easily



Ensuring transparency and accountability

Accelerating innovation

Provided a structured approach that not only funds adaptation practices but also helps refine and scale them.



Providing patient and predictable funding that can be accessed more easily



Investing in local capabilities to leave an institutional legacy

Bridging local and global systems

Connected grassroots initiatives to international funders and knowledge platforms.



Investing in local capabilities to leave an institutional legacy



Collaborative action and investment

Building an evidence base

Supported replication and policy integration of successful adaptation models.



Building a robust understanding of climate risk and uncertainty

Enhancing long-term sustainability

Invested in both financial and technical support for scaling proven innovations.



Investing in local capabilities to leave an institutional legacy

Championing equity and inclusion

Focused on Indigenous knowledge, community ownership and the unique needs of vulnerable populations.



Devolving decision-making



Addressing structural inequalities



Flexible programming and learning

Strengthening capacity and transferring knowledge

Partnered with business schools, knowledge and investments brokers and like-minded accelerators.



Investing in local capabilities to leave an institutional legacy



Flexible programming and learning



Collaborative action and investment

Bridging the finance gap

Offering grants to the “missing middle”, when they are too large for microfinance institutions, yet too small or risky for commercial banks, development finance institutions and traditional investors.



Devolving decision-making



Providing patient and predictable funding that can be accessed more easily

UNDP-AFCIA timeline

5 years of implementation | key dates

2019 December

At COP25 the Adaptation Fund launches a pilot small grants programme, called the Adaptation Fund Climate Innovation Accelerator (AFCIA)

2022 May

Launch of the AFCIA business school initiative, in partnership with the Global Resilience Partnership (GRP), to support grantees in business planning, development and scaling

2024 February and September

Award of scaling grants: 15 innovative solutions with scaling potential from cohort 1 receive a scaling round of funding of \$60,000-110,000 for 12 more months of implementation

2021 January

UNDP-AFCIA launches the first call for proposals (342 applications received, 22 solutions selected for an 18-month grant, forming cohort 1)

2022 September

UNDP-AFCIA launches the second call for proposals (455 applications received, 22 solutions selected for an 18-month grant, conforming cohort 2)

2024 November

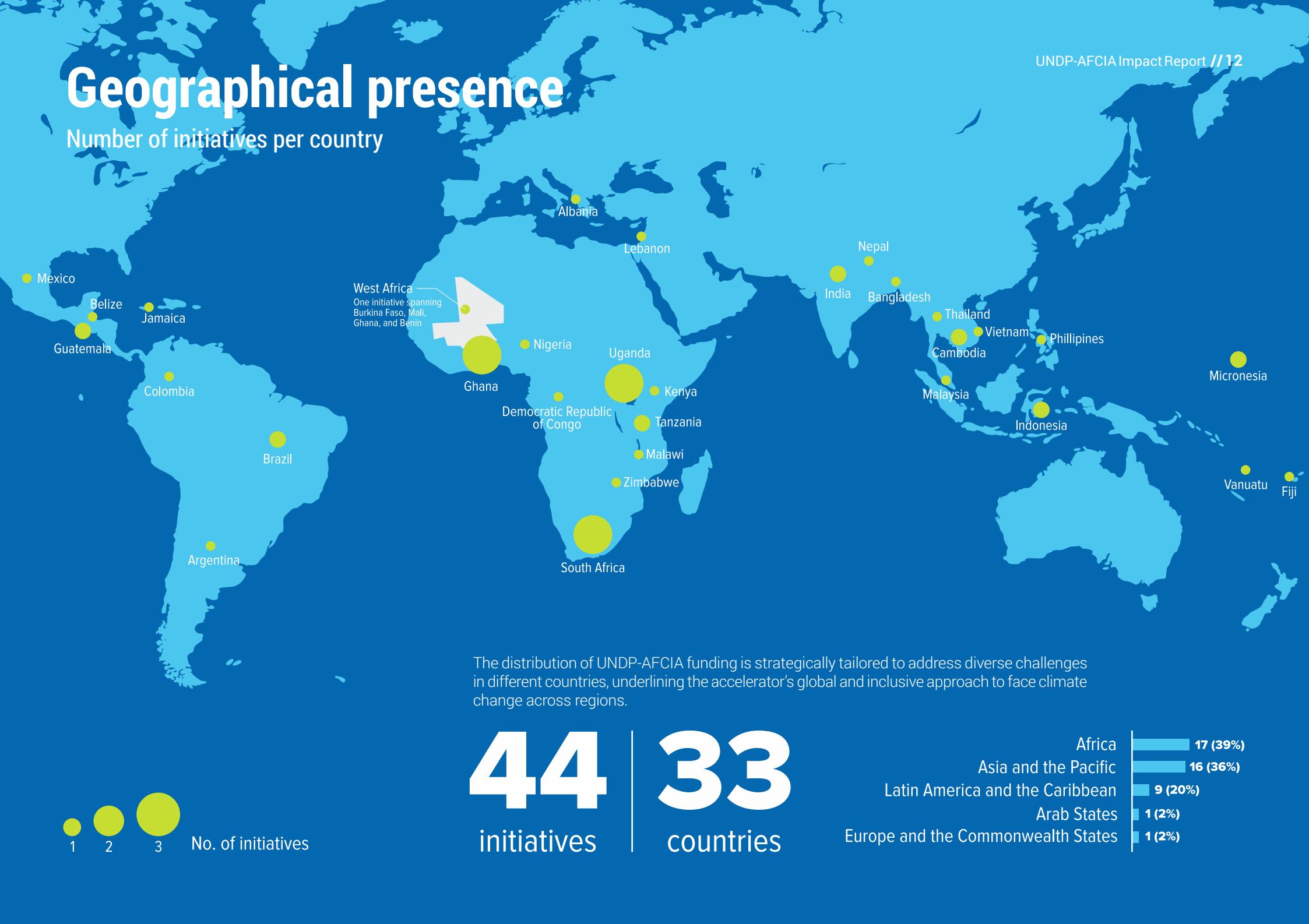
Global Center on Adaptation GCA Stories of Resilience article published featuring UNDP-AFCIA's contributions to LLA

2025 February

Award of scaling grants: 19 innovative solutions with scaling potential from cohort 2, and 2 from cohort 1 (totalling 21), received a scaling round of funding of US\$60,000-110,000 for 12 more months of implementation

Geographical presence

Number of initiatives per country



UNDP-AFCIA portfolio

Country	Lead organization	Initiative	Summary
Africa			
Democratic Republic of the Congo	Pilier aux Femmes Vulnérables Actives	 Edible caterpillar trees	Farming caterpillars for reforestation, livelihoods and food security
Ghana	BasicNeeds-Ghana	 Vegetable farming	Climate resilient organic vegetable farming and small ruminants rearing for vulnerable people
Ghana	LINK Ghana	 Aquaponics	Community aquaponic systems and capacity-building for sustainable farming
Ghana	Open Ghana	 Dry season gardens	Dry season agriculture development for livelihoods and resilience
Kenya	World Neighbors	 Dairy goat meal	Local goat meal to scale community farming and increase livelihoods
Malawi	Action for Environmental Sustainability	 Farmer field school	Capacity-building with smallholder farmers for livelihoods and resilience
Nigeria	Sustainable Environment and Fisheries Foundation	 Greenhouse agriculture	Small scale farming expansion for community land conservation

South Africa	ABALOBI	 Small-scale fisheries	Forecasting, finance and market apps for small-scale fishers to be ecologically sustainable
South Africa	INMED South Africa NPC	 Aquaponics	Plug-and-play aquaponics system for schools
South Africa	RULIV NPC	 Food gardens	Community gardening and bee keeping for local food security
Tanzania, United Republic of	Centre for Community Initiatives	 Early warning system	Forecasting for informal settlements to plan against climate events
Tanzania, United Republic of	Savannas Forever Tanzania	 Rangeland restoration	Native plant seed bank and planting to accelerate the restoration of biomass and biodiversity
Uganda	Banana Industrial Research and Development Centre	 Banana crop insurance	Picture-based insurance to address climate change related events
Uganda	SAMPLE Uganda Aquaculture Association	 Aquaponics	Introduction of aquaponics technology through an innovative lease-to-own model
Uganda	Moyo District Farmers Association	 Agriculture toolkit	Refugee driven farming toolkit for sustainable practices
West Africa	Association La Voûte Nubienne	 Nubian vaults	Reintroducing an ancient house construction adapted to the local climate
Zimbabwe	Muonde Trust	 Rainwater harvesting	Locally developed water harvesting and agro-ecological innovations for drought protection

Arab States

Lebanon

Diaries of the Ocean



Sand dune systems

Sand dune restoration for habitat creation and shore protection

Asia and the Pacific

Bangladesh

Footsteps Bangladesh



Water purification

Portable water filter for use in flood areas to support resilience and livelihoods

Cambodia

HEKS/EPER Cambodia



Cover cropping

Cover cropping as a regenerative agricultural practice

Cambodia

Livestock Development for Community Livelihood



Cricket farming

Local cricket farms to support livelihoods and food security

Fiji

Smart Farms Fiji Foundation



Hydroponics

Hydroponic kits for climate-resilient food systems in informal settlements

India

Society for the Promotion of Area Resource Centers



Nature-based water system

Nature conservation to address water and sanitation challenges

India

The South Asian Forum for Environment



Aquaculture

Regenerative aquaculture on rafts for adaptive livelihoods

Indonesia

Yayasan Besi Pae



Forest restoration

Irrigation systems to increase forest protection, livelihoods and nutrition

Indonesia

Yayasan Komunitas Penjaga Pulau



Coastal regeneration

Spatial planning, silvofishery and community-led monitoring and early warning system

Malaysia	Yayasan Kajian dan Pembangunan Masyarakat		Agroforestry	Developing a green economy through agroforestry practices and land conservation
Micronesia, Federated States of	Island Food Community of Pohnpei		Resistant local foods	Local food initiative to increase food security and economic opportunities
Micronesia, Federated States of	Sokehs Menin Ketengensed		Seaweed farming	Seaweed farming through sustainable aquaculture for community fund generation
Nepal	Rural Development Initiative		Rangeland development	Locally led and Indigenous adaptation solutions to drought.
Philippines	Bukidnon Umayamnon Tribe Kapu-unan To Mga Datu Association (BUKDAAN)		Bamboo plantation	Cacao and bamboo planting for climate adaptation
Thailand	Foundation for Community - Soul		Mulberry silk cultivation	Climate smart farmer model for silk production and cultural preservation
Vanuatu	Santo Sunset Environment Network		Environment network	Grassroots Indigenous and community climate adaptation
Viet Nam	Hiệp hội Cao đẳng Cộng đồng Việt Nam		Water storage	Water storage systems and irrigation systems by reusing plastic waste

Europe and Central Asia

Albania	Qendra Burimore e Mjedisit ne Shqiper		Sustainable agriculture	Soil-based carbon sequestration and irrigation to protect farmlands
---------	---------------------------------------	--	--------------------------------	---

Latin America and the Caribbean

Argentina	Fundación Proiectum Macrillanti		Agroecosystems	Land systematization and soil preservation techniques for adaptive land management
Belize	Belize Livestock Producers Association		Silvopastoral systems	Silvopastoral capacity-building to support sustainable cattle farming
Brazil	Centro de Desenvolvimento Agroecológico Sabiá		Water treatment and agroforests	An integrated technology combining greywater reuse and agroforestry to combat droughts
Brazil	Centro Ecológico		Açaí agroforestry	Regenerative agriculture for livelihoods and forest protection
Colombia	Cleantech Hub		Cleantech hub	Clean tech startup acceleration and entrepreneurial growth
Guatemala	Asociación Natün		Land conservation	Indigenous conservation and sustainable management of watershed areas
Guatemala	MAR Fund		Reef insurance	Post-disaster insurance for reef protection and rehabilitation
Jamaica	I-SEEED Youths Limited		Sustainable agriculture	Solar-powered greenhouse technology to support youth and women who are victims of gender-based violence
Mexico	Espacio de Encuentro de las Culturas Originarias		Water capture	Fog trapping to increase resistance to frost and drought

Funding per region



Total grant funding delivered
across **44 initiatives**

\$8,383,246

\$120,000
Arab
States

\$159,497
Europe and
Central Asia

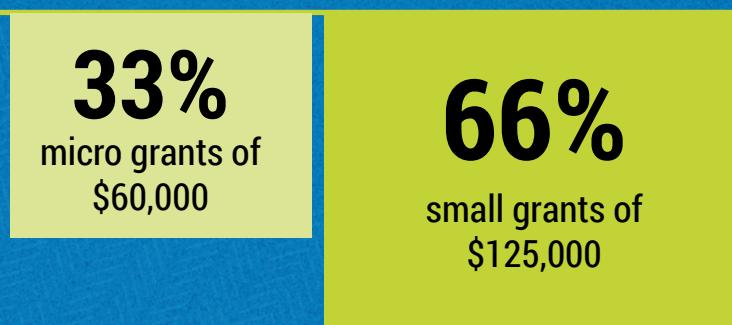
\$1,833,000
Latin America and the
Caribbean

\$3,636,725
Africa

\$2,634,024
Asia and
the Pacific

Grant types

First round of funding



Second round of funding



UNDP-AFCIA technical assistance, capacity-building, partnerships and knowledge sharing (described throughout this report) are also key inputs that support grants and enable change that far surpasses financial offerings exclusively.

Direct technical support

All 44 initiatives accessed training to enhance their capabilities including financial reporting, leadership skills, communications, safeguards and risk management to aid successful implementation, with an outlook for embedding and scaling each initiative.

For example, a crowdfunding academy organized for UNDP-AFCIA's supported grantees resulted in:

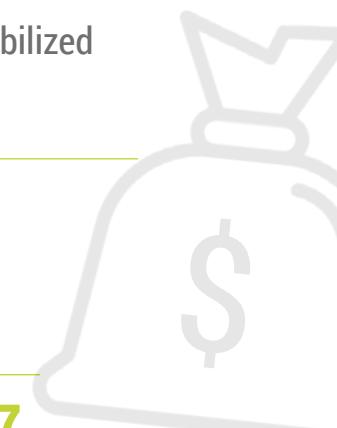
Association La Voûte Nubienne (West Africa) successfully mobilized **\$8,411 through 46 donations**

I-SEEED Youths Limited (Jamaica) strengthened their existing crowdfunding campaign and

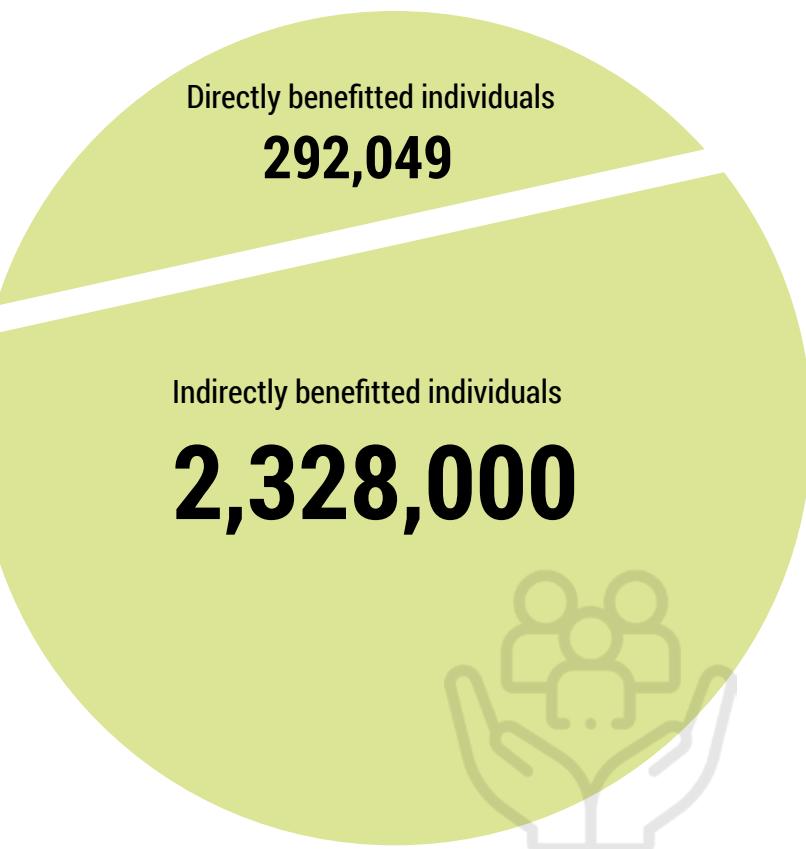
mobilized \$178,910 in total

Asociación Natün (Guatemala) **mobilized \$20,987** with the campaign currently ongoing

UNDP partnerships with [Latimpacto](#), the [Asia Venture Philanthropy Network \(AVPN\)](#) and the [African Venture Philanthropy Alliance \(AVPA\)](#) supported climate finance, knowledge and capacity-building and enable individual initiatives to thrive. For example, access was provided for all UNDP-AFCIA initiatives to join AVPN's Deal Share Platform with access to 600 members engaged in philanthropy, social investment, family offices and corporate foundations.



UNDP-AFCIA impact data



Total number of people reached (direct and indirect)

2,620,049

12 New innovative
solutions tested

36 Existing or new solutions
accelerated

29,207 hectares

Land restored
or protected

1,309 Green jobs
created

21,732 Households with
improved livelihoods

6 Initiatives exploring
the voluntary carbon
credit market

47,132 Individuals with
improved productivity or
professional skills

\$4,171,424

Additional funding unlocked by
UNDP-AFCIA grantees

Financial sustainability and system's change

At baseline, only 9 partner organizations (20 percent) reported any revenue¹. Following UNDP-AFCIA support, 26 grantees (59 percent) now generate over \$10,000 in revenue, reflecting a 39 percentage-point shift towards financial self-reliance. Importantly, among organizations that were already revenue-positive at baseline, all of them increased their revenues, signalling that UNDP-AFCIA's catalytic technical assistance and capital unlocked tangible improvements in organizational viability and pathways to scale.

UNDP-AFCIA support translated into concrete business outcomes across the portfolio². Most notably, a share of organizations now earn predictable own-source income, while others have stood up entirely new markets or de-risked innovations that secured replication and follow-on capital. The following shows the most relevant aggregated data:



Revenue-generating

14 grantees (32 percent) are now generating more than \$100,000 in revenue: UNDP-AFCIA support enabled direct earned income for the grantee and/or beneficiaries, shifting models from grant-only to partial or fully earned-income operations.



Market-creators / Ecosystem builders

6 grantees (14 percent): These initiatives created new markets or value chains where none existed, with AFCIA acting as first-mover catalytic capital that created a pathway to crowded in partners and unlocked system-level change.



Proof-of-concept / Early innovation pilots

4 grantees (9 percent): High-risk pilots tested unproven ideas; successful models can be replicated, attract follow-on funding and build a pipeline to future revenue and investability.

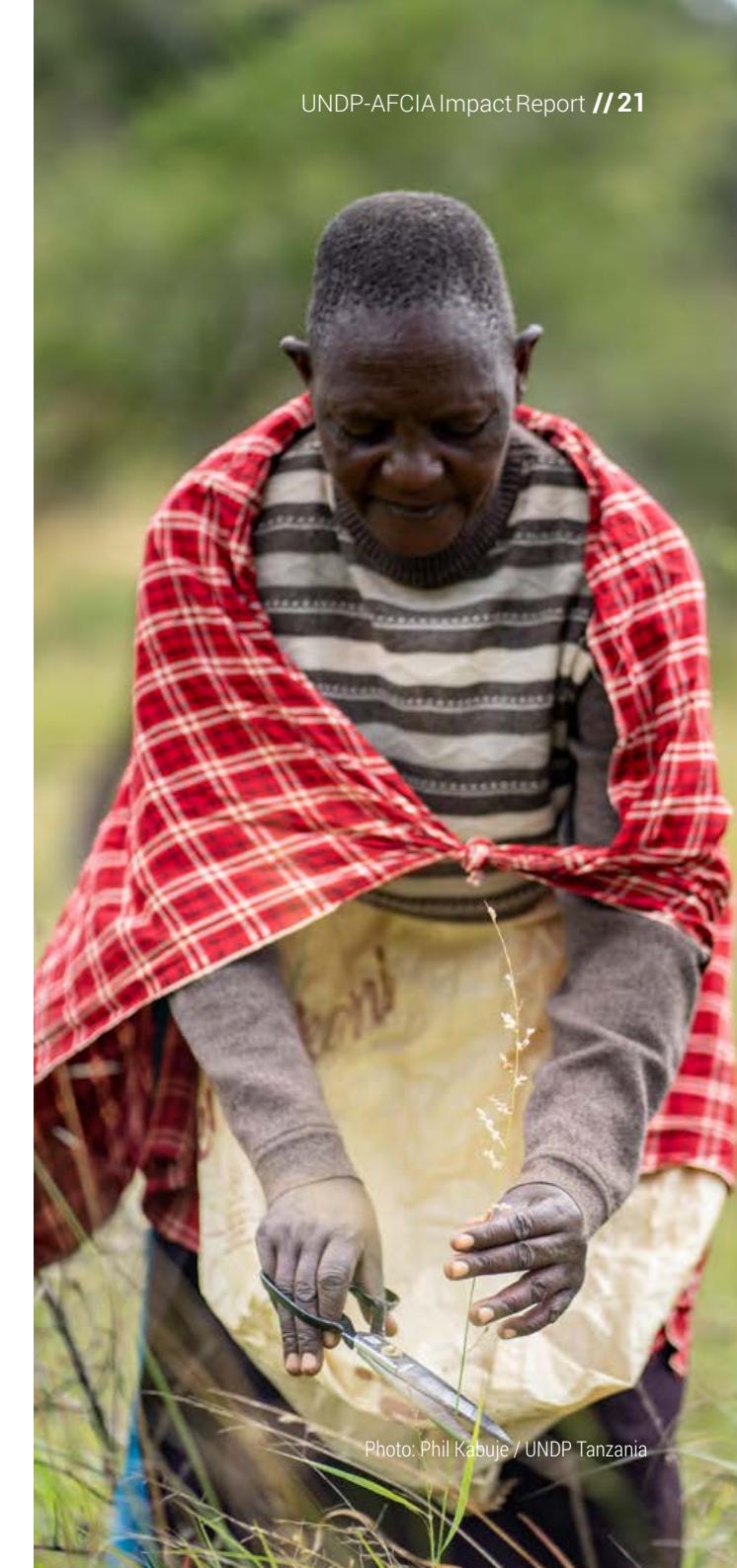


Photo: Phil Kabuje / UNDP Tanzania

¹ Revenue = Direct earned income generated by the grantee and/or by its beneficiaries, measured as gross income converted to USD at most recent FX Rates. Included: sales of goods/services, user fees, commissions, contract/service income, platform transaction fees, etc. Excluded: grants/donations, in-kind contributions, prize money/awards, equity or debt proceeds, pass-through funds, and purely notional valuations. Figures are self-reported and validated against available financial records; projects with incomplete data are excluded from denominators.

² Portfolio classification above is mutually exclusive; initiatives are mapped to a single pathway reflecting their dominant result.

IMPACT SHOWCASE

This report hones in on four key impact areas:

Innovation for adaptation

Climate and environmental resilience

Socio-economic resilience

Scaling and investment

Each impact area is discussed through reported data, snapshot stories and quotes from community members. Blending quantitative and qualitative data provides a deeper insight into the local and national actions being undertaken by the UNDP-AFCIA community.

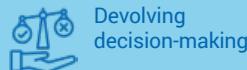
The snapshots represent a portion of the 44 UNDP-AFCIA initiatives. Whilst all initiatives showcase exciting results, only those that are clear examples for each topic have been provided here. The full catalogue of initiatives can be viewed [here](#).



Photo: Fabio Erdos / Acervo Centro Sabiá

Impact

Scalability and replicability



Devolving decision-making



Providing patient and predictable funding that can be accessed more easily



Investing in local capabilities to leave an institutional legacy



Collaborative action and investment

More than half (59 percent) of the UNDP-AFCIA initiatives have successfully evolved to incorporate a financial reliance mechanism to unlock longevity and sustainability: 59 percent have already become revenue generating, shifting from grant dependence to partial or fully earned income streams.

A further 14 percent created entirely new markets or value chains where none previously existed and 9 percent have proved feasibility for an innovative product, service or model. These initiatives prove that UNDP-AFCIA enables the experimentation required to successfully lay the foundation for future growth and new markets.

UNDP-AFCIA acknowledges that scaling climate adaptation requires financial support and bridges the gap with direct access to multilateral funding, yet these local initiatives remained disconnected from private sector funding. While many of the initiatives have found success already, many remain excluded from larger private finance opportunities required for continued acceleration. To overcome this final hurdle, UNDP-AFCIA is leading the way with a new technical assistance mechanism that links local actors, donors, financial institutions, the private sector and academia to bridge the finance gap of organizations falling under the “missing middle” category.

“What strengths does UNDP-AFCIA offer in terms of locally led adaptation? First it responds with the investment needed to build legitimacy for solutions that are urgently needed. Second, it responds to a wide range of adaptation needs and builds access to each other, so we learn from different methods and strategies. Third, it brings investors and others to work with us; it legitimatizes and scales grassroots action.”

Sheela Patel

Founding director of the Society for the Promotion of Area Resource Centers (SPARC) in India and LLA advocate.

Photo: Savannas Forever Tanzania

Developing systemic change

In 2022, UNDP-AFCIA, in partnership with the Global Resilience Partnership, launched a joint MBA school initiative. This initiative connected UNDP-AFCIA local partners with business students from top institutions such as Yale (USA), Oxford (UK), University of Cape Town (South Africa), the Asian Institute of Management (Philippines), EGADE Business School (Mexico), FGV Escola de Administração de Empresas de São Paulo (Brazil), ESMT Berlin (Germany), IE Business School (Spain) and other schools within the Global Network for Advanced Management (GNAM). The students contribute by refining business models, formulating scaling strategies, identifying new market opportunities and enhancing impact reporting and communications. These are crucial elements that help strengthen the financial sustainability of grassroots initiatives and attract further investment. Through this partnership, during 2023-2025, 70 students were assigned to various initiatives, directly supporting their scaling efforts.

To evolve from a fellowship into an innovative technical assistance mechanism, UNDP-AFCIA tapped into the strengths of academia as a space for collaboration. Universities hosted “safe spaces” for discussions where multilateral agencies, financial actors and academics came together to tackle the challenge of financing small-scale initiatives. These discussions were turned into real-world problem statements, which MBA students addressed through new elective courses. While full solutions may take several cohorts to develop, early ideas are shared with working groups to explore practical implementation.

Example of a problem statement:

How could blended finance be better used to fund locally led adaption and how might big funders contribute to this outcome?

One of the first outcomes of this technical assistance mechanism is a growing collaboration between development agencies and potential funding partners to explore how to move beyond traditional grant funding toward concessional loans and other instruments that can better leverage private finance. This process involves bringing together funders from across the risk-return spectrum in open, having uncommon conversations and working collectively to address the “missing middle” financing gap. Through this dialogue, a theoretical pathway has been developed to improve local actors’ access to blended finance and attract private capital. This ongoing collaboration has the potential to significantly scale climate adaptation efforts and showcase how blended finance models can help close funding gaps in the Global South.

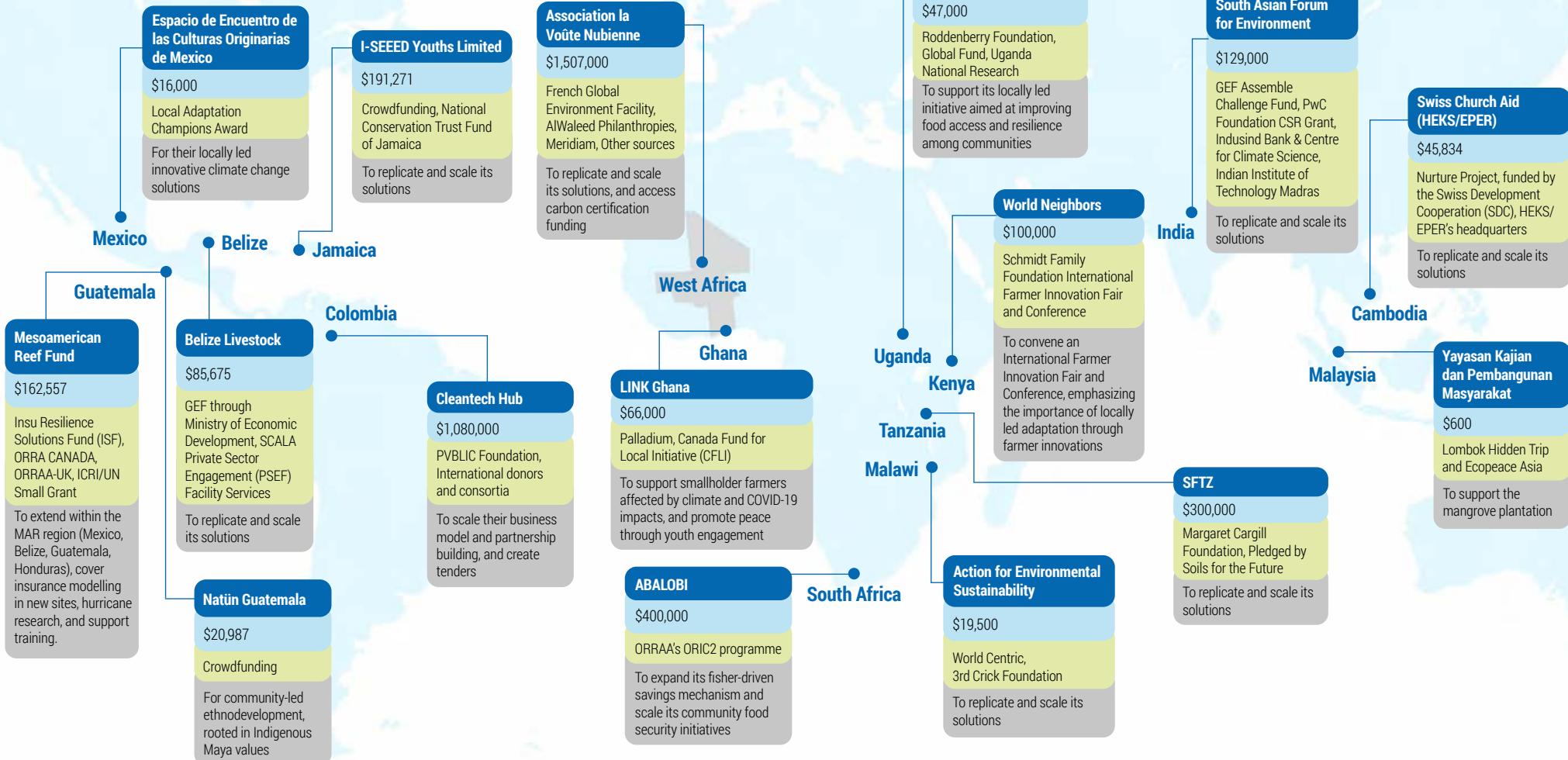
Lessons learnt

- Collaborations involving academia provide forums to identify the challenges to be addressed.
- MBA electives and fellowships reduce the transactional costs of problem solving for these challenges and provide a clear mechanism for progressing the ideas of the working group.
- On the ground fellowships upskill the local initiatives with the creativity and language to explore alternative revenue generation models, making them more financially ready.
- Partnerships allow for the development of funding pathways that build leverage from grant models toward private finance opportunities.
- Organizations get practical support and students get hands-on experience and are sensitized to continue working in impact-development.

Impact

UNDP-AFCIA has laid the foundation for a working model to enable initiatives to unlock future finance, including national, international and/or private finance opportunities through strengthened business models. Whilst nascent, these developing experiences and lessons learned contribute practical ideas to collaboratively address the finance gap for climate adaptation at the local level.

Impact



- Initiative
- Total funds raised (US\$)
- Funding source
- Scaling opportunity

Types and amounts of next stage funding accessed by UNDP-AFCIA initiatives:

Many UNDP-AFCIA initiatives have reported additional funding obtained from other sources or donors. Others may have also secured funding after their final reporting date, so the below list is not exhaustive.

\$3.83 million

33 scaling grants awarded by UNDP-AFCIA

\$4,171,424

Amount of future funding raised by initiatives to scale up their solutions

Goat meal in Kenya

Application of the MBA school initiative

In Kenya, smallholder livestock farmers face climate-related challenges that threaten feed availability and livestock productivity, limiting income and food security. The LOFODA-G-Meal initiative addresses these challenges by producing goat feed locally and supporting farmers in adopting climate-resilient livestock practices.

The idea began as a basic feed, with locally sourced herbs and grasses. LOFODA was able to transform this early concept into a fully developed, fortified product, enriched with essential minerals and vitamins. The resulting feed is highly nutritious, low-cost, and produced through a climate-friendly process, positioning it to disrupt the traditional livestock feed market. LOFODA has progressed through critical validation steps, having successfully passed Stage 1 approval with the Kenya Bureau of Standards and is now awaiting Stage 2 confirmation, a key milestone toward commercial rollout and market adoption.

Alongside this development pathway the MBA school initiative linked four students from Oxford, UCLA and Yale who collaborated with the community to conduct market analysis, develop a business plan and assess risks. Farmers are supported to diversify their incomes through value-added product sales, loan access and partnerships with potential investors, strengthening both livelihoods and local resilience.

Some key benefits include expanding mechanisms and strategies, understanding the market dynamics and embracing market alternatives, and offering strategies to manage competition from already existing and well-established feed companies. LOFODA now has the potential to significantly reduce feed costs for smallholder farmers, improve animal health, and promote sustainable livestock production.

Impact



1,510

households with improved food security
(906 women-led households).



75%

increase in feed product sales.



\$12,000

expected revenue by the end of 2025, with a potential to reach \$300,000+ by 2030.



245 (41 youth)

people trained in the goat value chain.



Certifications are underway for products to be commercialized and sold at scale.



Climate adapted housing in the Sahel (West Africa)

Market growth and new funding mechanisms

In the Sahel region, communities face extreme heat, unpredictable rainfall and other climate stresses that threaten housing durability and safety. Traditional building methods are often unsustainable and carbon-intensive, limiting long-term resilience.

Association la Voûte Nubienne (AVN) is addressing this by expanding the use of the ancient Nubian Vault technique, a low-carbon, climate-resilient mud brick

construction method. AVN completed a carbon credit feasibility study and business plan, securing multi-source funding and targeting financial sustainability by 2028. Recognized as a finalist in the 2024 Global Center on Adaptation (GCA) Local Adaptation Champions Award, AVN is beginning to replicate the model in Côte d'Ivoire, offering affordable, resilient housing solutions across the region.



Impact

2,391

Nubian Vaults built, housing nearly 12,000 people.

47,820

tonnes of CO₂ emissions avoided.

1,051

masons trained in Nubian Vault construction.

48.5

construction incentive coupons (funding support to communities to start construction) funded through AVN's first informal carbon credit sales.

\$8,096

mobilized through crowdfunding campaigns.

Photo: C Lamontagne Cosmos

Water management in Brazil

Scaling through simplicity

In the semi-arid region of Pernambuco, communities face water scarcity and soil degradation, which limit agricultural productivity and threaten food security. Traditional irrigation methods are often inefficient and costly, putting additional pressure on families and local ecosystems.

Centro Sabiá is addressing these challenges by developing a simple, low-cost greywater reuse system integrated with agroforestry. Built with local materials and family labour, the system is affordable, scalable and promotes local ownership. Its non-patented design reduces financial barriers and supports

long-term sustainability, enabling communities to adapt effectively to water and land constraints.

The initiative has gained recognition nationally and internationally, being showcased at New York Climate Week and UNCCD COP16 in Riyadh. In 2024, Centro Sabiá received the Pact Against Hunger Award from UNESCO, FAO, WFP and UNEP for its impact on food security. Further scaling is underway through a consortium with Centro Ecológico, securing a key role in a €30 million German Ministry of Environment-funded project to combat deforestation across Brazil's biomes.



Impact



31,336 people
(17,235 women)

benefiting from better water management and adapted agri-food systems.



130

families using greywater recycling systems, treating 1.5 million litres annually to use it in agroforestry systems.



30

agroforestry systems established.



\$350

saved by families on water per month, earning US\$300 per month from sales of produce.

Floating farms in India

Economic resilience and scaling

In the Sundarbans, eastern India, frequent flooding and saline intrusion threaten food security and livelihoods, making traditional farming unreliable.

The [South Asian Forum for Environment \(SAFE\)](#) established 500+ floating farms combining hydroponics and aquaculture, generating \$238,000 annually. The expected revenue by the end of 2025 is \$391,000 which is projected to reach \$3,500,000 annually from 5,000 float farms. Twenty percent of

returns are reinvested into a loan and seed fund, empowering communities through financial inclusion and capacity-building.

SAFE has scaled the technology to Bangladesh and Cambodia, with replication requests from initiatives in Sri Lanka, Vanuatu and the Philippines, showing strong potential for wider adoption in flood-prone regions.



Impact



5,700

households supported.



4,450

farmers and fishers trained.



50+

hectares of coastal farmland restored.



12

farmer schools and 8 organic hubs launched.



1,250+

women gained financial inclusion.

Impact

Innovation for adaptation



Devolving decision-making



Flexible programming and learning



Investing in local capabilities to leave an institutional legacy



Collaborative action and investment

Innovation means creating change that includes stakeholder engagement, iterative deployment of ideas and embracing change, learning and new information. It plays a key role in advancing the goals of the Paris Agreement, which calls for accelerated action to address climate change through new technologies, practices and approaches. Article 10 highlights innovation as essential to enabling long-term, effective responses while promoting sustainable development and inclusive growth.

UNDP-AFCIA contributes to the Adaptation Fund and European Union's innovation for adaptation agenda by supporting initiatives that demonstrate strong potential to enable the most vulnerable communities to adapt to climate change impacts.

The Adaptation Fund describes innovation as:

"The creating, testing, deployment or diffusion of new, adapted or improved adaptation solutions, developed contextually and with the inclusion of the communities most vulnerable to climate change, to enable those communities to become more resilient to climate change. Innovation solutions may include approaches, technologies and mechanisms. Innovation projects and programmes differ from concrete adaptation projects and programmes in the nature of their stakeholder engagement, including with unconventional actors, and in the emphasis on iterative deployment where change, learning, and new information is embraced and can take innovation projects and programmes in different directions."

Accessing innovation

The value of innovation lies not only in new ideas, but in local ownership, adaptability and the ability to evolve with changing realities. UNDP-AFCIA recognizes that innovation flourishes in dynamic environments where solutions are shaped by those most affected: communities with the lived experience, insight and motivation to lead meaningful change. These innovations become powerful levers for transformation when they are supported to grow, adapt and inspire replication elsewhere.

Through the 44 initiatives, UNDP-AFCIA supports both the rollout and scaling of successful innovations, encouraging pilot activities that test new adaptation practices, tools and technologies.

To guide the investment in innovation, UNDP-AFCIA applies three key criteria to identify promising initiatives:



Novelty and promise

The solution, practice or business model presents a unique and promising approach compared with current norms.



Viability and impact

The solution is feasible and shows strong potential to deliver tangible benefits for climate adaptation.



Community-driven innovation

The solution supports the creation, testing, deployment or diffusion of new, adapted or improved adaptation approaches that are locally grounded and inclusive of vulnerable communities, offering a pathway to a more resilient future.

“UNDP-AFCIA has supported us with the opportunity to make sure that our imaginations could put things into reality. Our plug-and-play aquaponics system is a new technology that had not been tested before, but now we can design and test if it is effective and productive before we roll it out to the broader market. It will benefit hundreds of schools in South Africa.”

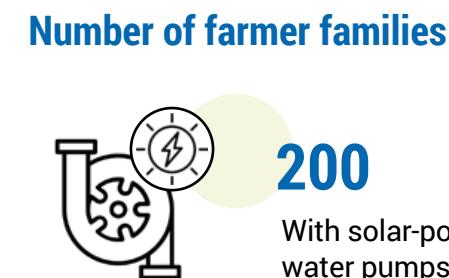
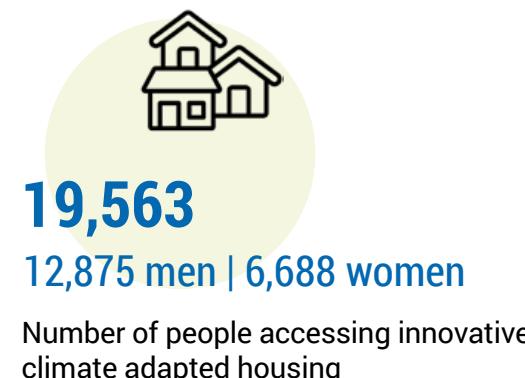
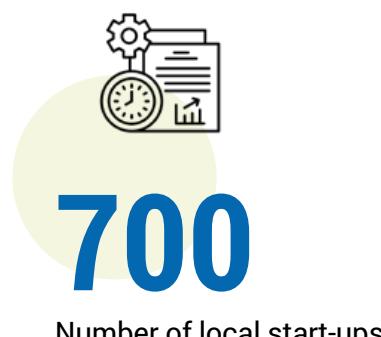
—
Unathi Sihlahla
INMED South Africa director

Impact

Type of innovative solutions funded

Replicating solutions	15	New technology	4	Social innovation	3
Scale-ups	14	Pilots	8		

Innovation for adaptation highlights from across the 44 initiatives



Seed banks in Tanzania

Indigenous innovation

In Tanzania's Arusha and Manyara regions, degraded rangelands threaten Maasai livelihoods, reduce biodiversity and increase vulnerability to drought and floods. Invasive plants and loss of native species further erode the land's ability to sustain communities and wildlife.

Savannas Forever Tanzania is addressing this by creating the first seed banks of native grasses and

legumes traditionally used by the Maasai. Guided by the knowledge of eight Maasai elder focus groups, together with the Tanzanian Wildlife Research Institute, the team identified 30 priority native plant species, collected seeds from rangelands and trained locals to restore degraded areas. This indigenous-led approach draws on traditional knowledge to regenerate ecosystems while enabling communities to participate in the growing "restoration economy."



Impact

15

acres reseeded with native plants.

84

villagers trained (**women and youth**) in land preparation and native seed planting.

45

participants ("seed champions") planted native grass and legume seeds on their land.

45

site visits conducted for plant growth measurement and data analysis.



Increased biomass and biodiversity thanks to re-seeded rangelands, building resilience to drought and floods for Maasai communities.



Biodiversity and ecosystem functions restored thanks to the production of native plant materials (watersheds stabilized, soil moisture increased and invasive species controlled).

Small-scale fisheries in South Africa

Technology innovation

In South Africa, small-scale fishers face declining catches, unpredictable weather and limited access to fair markets and financial services—challenges that threaten both livelihoods and marine sustainability. ABALOBI is addressing these issues through three integrated technologies that enable sustainable, safe and economically viable fishing to keep local economies thriving:

- A traceability marketplace that records the origin of catches, promotes underfished species, and guides fishers to higher-value markets using their traditional tools and skills.
- A community-based weather service providing real-time updates on changing conditions to improve safety at sea.

- A WhatsApp support bot, “Lobi”, offering fishers access to savings, business cash advances and financial service applications.

Alongside these tools, ABALOBI works with fishers, NGOs and governments to collect data, build skills and connect fishing cooperatives to fair markets and financial services, creating systemic change for coastal livelihoods. A finalist for the 2023 Earthshot Prize and shortlisted for the prestigious 2025 Zayed Sustainability Prize, ABALOBI has successfully piloted its solution in 12 countries in Africa, South America, Europe, Micronesia and the Western Indian Ocean region and now aims to scale globally with a target of financial self-sufficiency in the next year.



Impact



80,000

people gained access to sustainable fish via community-supported fisheries sales.



35%

increased product demand through better market access, cold chain and logistics.



2,000

fishers registered with the digital marketplace, with 445 active users.



2,200

fishers saw their household food security improved.



Ecosystems recovered from the effects of overfishing in the past.

Insurance models in Uganda

Enabling environments

In southwestern Uganda, smallholder farmers are increasingly vulnerable to erratic rainfall and other climate variations that can devastate crops and livelihoods. Limited access to risk protection leaves many without the means to recover, making it harder to invest in their land and adapt to a changing climate.

The [Banana Industrial Research and Development Centre \(BIRDC\)](#), operating in Bumbaire village, Bushenyi district, is piloting a crop insurance system that combines weather-based indexing with picture-based insurance. Weather-based indexing sets agreed rainfall thresholds for a specific area, triggering automatic payouts when conditions deviate beyond the limit. Picture-based insurance enables quick,

remote documentation of crop damage to speed up compensation. Together, these tools provide farmers with reliable protection against climate shocks, allowing them to remain productive stewards of their land.

To encourage adoption of these innovations, BIRDC has created an enabling environment by training a network of 30 champion farmers. These champions visit local farms to build trust, monitor crops using smartphones and distribute seeds alongside guidance on the insurance products. This hands-on approach ensures that farmers understand and benefit from the technology, strengthening both livelihoods and climate resilience.



Impact



534 (219 women)

farmers trained on enhancing agricultural productivity and sustainability.



30

champion farmers trained to share picture-based monitoring skills and knowledge to an additional 2,500 farmers.



1,200

hectares area of land covered through adaptation of picture-based insurance.



22 (5,000 farmers)

cooperatives registered in a database to scale farmer engagement.



Radio news broadcasted to share knowledge with distant farms.

Drones in Indonesia

Collaboration for innovation

"I now understand that sea level rise can be predicted, and this helps us to think about our future housing."

Rusmin Nuryadin
Fisherman and local Kabete Bajo group leader, Indonesia

In Labuhan Bajo village, Sumbawa district, Indonesia, rising sea levels, coastal erosion and increasingly severe storms threaten homes, livelihood, and ecosystems. With 60 percent of Indonesia's population living along the coasts of its 17,000 islands—and relying heavily on fisheries, agriculture or tourism—these risks pose a serious challenge to long-term resilience.

Penjaga Pulau ("Guardians of the Island Community") is helping the village prepare for these challenges by combining scientific expertise with

community action. In partnership with universities and research students, the organization has developed an interactive dashboard that displays past and projected sea level changes. A weather station and drone provide accurate, real-time data, enabling a 48-hour forecast of key weather parameters to guide planning, including climate-adapted agriculture. Alongside this, the community is restoring mangroves and developing silvofisheries, strengthening coastal defences, supporting sustainable livelihoods and boosting ecotourism potential.



Impact

16



people trained (half of them women) in planning technology and drone operations to monitor land-use and deforestation and providing an early warning system for coastal erosion.

5



village-level policies and programmes developed considering coastal erosion prediction.

25,000



seedlings planted in the designated five hectares of mangrove areas.

100



households (70 women headed households) trained on post-harvest management practices to ensure the quality and marketability of milkfish and other coastal products.

5,000



milkfish from 25 hectares harvested, increasing food security and providing stable incomes for communities (90 percent fish survival rate in the new silvofishery farms).



Site plan for ecotourism development designed, signed by the village head.



Portable water filters in Bangladesh

Business model innovation

"The filter provides access to clean drinking water during floods and can be used to purify water for bottling and selling as safe drinking water. This not only ensures clean water but also creates an income opportunity. This filter is really helpful for us."

Adhuri Begum
Water entrepreneur and disaster respondent in Kurigram, Bangladesh.

In the flood-prone northern district of Kurigram, Bangladesh, access to safe drinking water becomes critically scarce during high-water events, threatening health and livelihoods. Communities, especially in rural areas, often rely on unsafe sources when infrastructure is damaged or submerged.

Footsteps Bangladesh is tackling this challenge with a portable water filtration device that can be carried like a backpack, providing clean water in flood-affected areas. The initiative's business model is equally innovative, empowering rural women as entrepreneurs.

The compact, low-cost design makes the filters easy to transport and affordable, enabling women to deliver clean water where it is needed most. Many have already sold between 1,468 and 3,431 litres of filtered water, earning modest but meaningful incomes.

This approach not only addresses an urgent public health need but also strengthens local economies and supports women's economic empowerment. In recognition of its impact, Footsteps Bangladesh received the Muhammad Ali Humanitarian Award in the Core Principle Dedication category in 2024.



Impact

100



women trained to pursue water entrepreneurship, with 80 successfully becoming water entrepreneurs and receiving a monthly income of \$27-38 through the sales of clean water.

100



portable filters produced, benefitting 1,100 households.

2,500



participants trained through awareness sessions on disaster preparedness and safe drinking water practices.

400



litres of filtered water provided per day during the Kurigram flooding in July 2024, where Dreamwater entrepreneurs were the first responders to the crisis.

67



devices sold to date, creating gross revenue around \$12,000 annually.

Impact

Climate and environmental resilience



Devolving decision-making



Building a robust understanding of climate risk and uncertainty



Investing in local capabilities to leave an institutional legacy



Ensuring transparency and accountability

UNDP-AFCIA-supported initiatives place climate and environmental resilience at their core, selecting locally led innovations that reduce environmental degradation, protect natural resources and promote sustainable production and consumption.

To best safeguard societal wellbeing, economic activity and the environment, people, communities and governments need to be equipped to deal with the risks posed by the impacts of climate change. UNDP-AFCIA categorizes supported initiatives according to the following risk areas:

- Drought/rainfall variability
- Heatwaves/temperature rise
- Glacial lake outburst floods (GLOF)
- Floods/flash floods
- Climate related health
- Landslides
- Sea level rise
- Storm surges
- Coastal erosion
- Strong winds

Supporting adaptation means responding directly to these risks and realities, and helping communities chart their own path toward long-term resilience and equity.



“Climate resilience is the capacity of a community or environment to anticipate and manage climate impacts, minimize their damage, and recover and transform as needed after the initial shock.”

UNDP, The Climate Dictionary, 2023

Photo: Luca Zanetti / Acervo Centro Sabiá

These types of adaptations must be sensitive to the local climate and environment. Solutions in Argentina may be very different from the ones in Cambodia

“Since rains are now more intense and concentrated in less time, I have had problems with seeds and soil being washed away by the water. The adapted farm plot with water channels has shown a considerable decrease in erosion and loss of the vital topsoil layer.”

Hector Fischer

Landowner and producer in the Gómez Creek basin, Argentina

“Before I planted the cover crop [as an innovative solution], my rice grains were dry and red. But after using this method, I noticed a big difference. Now, my field is green and the rice grains look clearer and more transparent. My rice yield increased from 32 bags (1,600kgs) to 48 bags (2,400kgs), and I’m very happy about it.”

Om Savun

Rice farmer from Kdol village, Preah Vihear province, Cambodia

For example, in drought-prone areas, communities increasingly face prolonged dry seasons and more intense water scarcity. In response to worsening drought there are a wide variety of ways to adapt, such as:

Adopting water storage devices or dry-season planting. In extremely arid areas, fog nets can be used to harvest moisture from the morning air.

Exploring alternative water sources and/or adopting water-efficient practices.

Replanting vegetation and using mulch or greenhouses to retain soil moisture and protect crops. Water gullies can direct away flash floods and help irrigation.

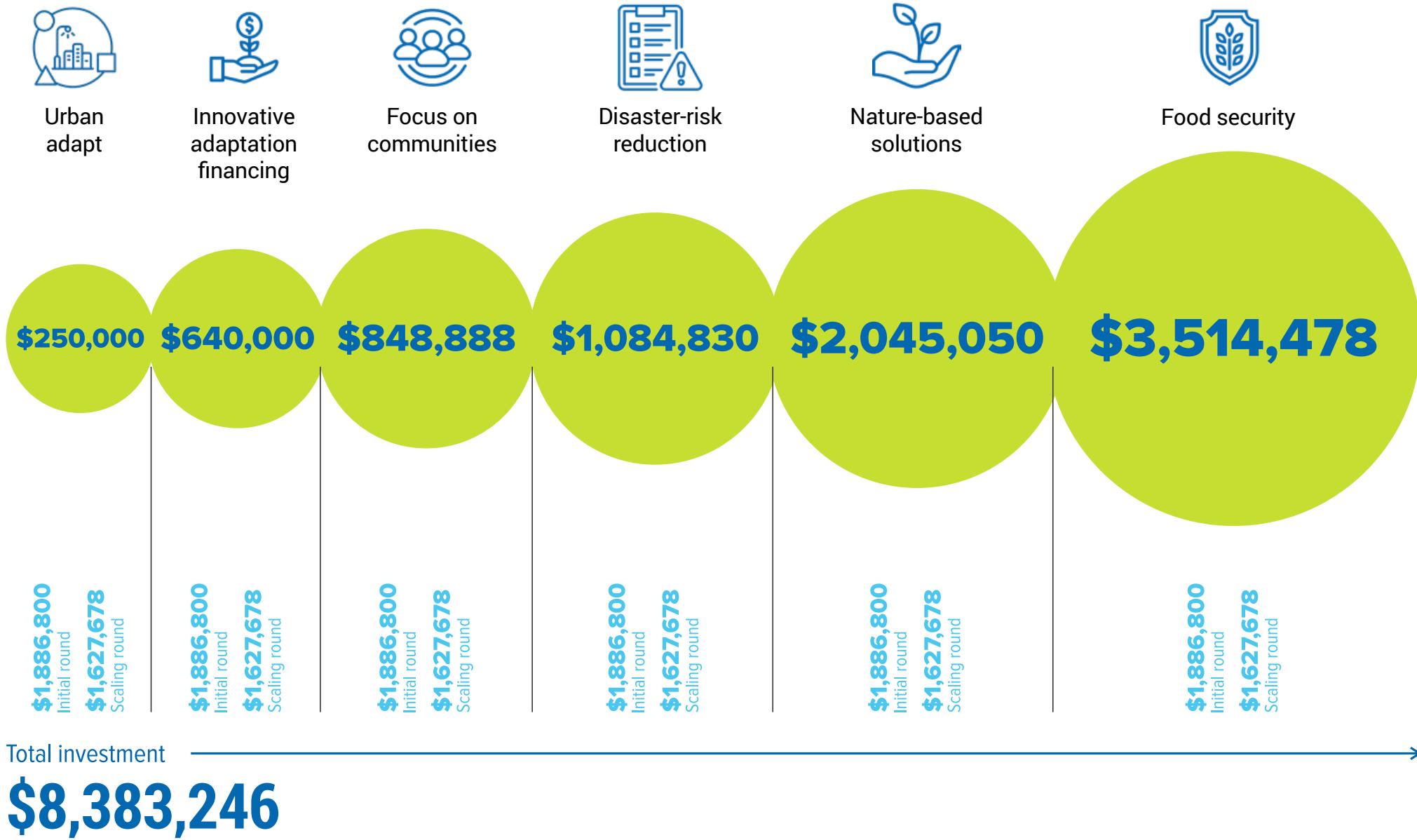
Adapting homes with insulated roofing to reduce heat and protect families from extreme weather.

In each location, communities must work out what is most suited to their needs. With the support of UNDP-AFCIA, they are able to trial and accelerate different innovations to find out the best adaptation practices, tools and business models for themselves. By supporting this kind of grounded, context-specific adaptation approaches, UNDP-AFCIA supports communities to thrive, not just survive, as they navigate the complex challenges of climate change.



Image: Eleanor Saunders and Roberta Ragona

Impact



Highlights of climate and environmental resilience from across the **44 initiatives**

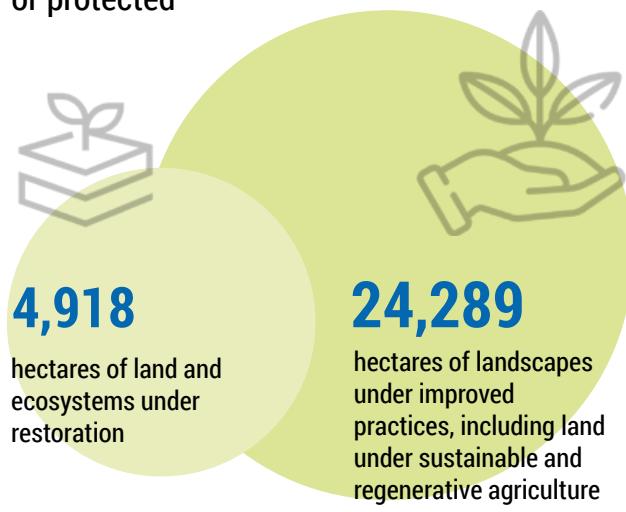
29,207

hectares of land restored or protected



4,918

hectares of land and ecosystems under restoration



881,100

trees planted



23

companies trained in measuring their carbon footprint



4180

hectares of coral reefs covered by insurance through innovative adaptation finance tools



116

water conservation features including waru warus (water channel systems), swales, ponds and tanks



11,500

farmers and fishers trained on float-farming and integrated aquaculture



36

climate risks identified and geo-referenced in climate and biodiversity surveys



5,600

households engaged in natural revegetation programme to restore degraded rangelands and cropping areas through tree plantation

Number of initiatives addressing climate risks

(initiatives may address more than one climate risk)

32

Drought/rainfall variability

23

Heatwaves/temperature rise

21

Floods/flash floods

19

Climate related health

17

Landslides

15

Sea level rise

15

Storm surges

14

Coastal erosion

2

Strong winds

Community forests in the Democratic Republic of the Congo

Building biodiversity

The Democratic Republic of the Congo is home to the Congo Basin, which holds about 10 percent of the world's biodiversity. However, the country faces significant threats to its rich ecosystems due to deforestation, losing roughly 500,000 hectares of forest annually.

In Mwenga, South Kivu, the local organization PIFEVA is tackling both deforestation and food insecurity by promoting the cultivation of edible caterpillar trees in community forests. These trees provide a sustainable habitat for caterpillars, an important local food source, while also contributing to forest restoration. PIFEVA has also established an Indigenous cooperative to scale up the practice, supporting biodiversity and creating new sources of income for the community.



Impact



940

hectares of forest restored.



392,000

kilograms of tree seedlings distributed.



330

Indigenous youth and 330 women engaged in sustainable forest management.



22

Indigenous Forest Monitoring Committees established, involving 66 nursery workers and 660 Indigenous community members.



44

caterpillar tree nurseries set up, producing and selling 22 tonnes of caterpillars.



88

local forest monitoring committees trained for the fight against deforestation, ceasing ember production activities in targeted forests.

Bamboo plantations in the Philippines

Climate resilience

In the Philippines, unsustainable farming and illegal logging have contributed to the loss of 6.2 percent of tree cover between 2001 and 2021. This deforestation has led to soil erosion, flooding, pollution and biodiversity loss, threatening the livelihoods and ancestral lands of Indigenous communities.

The Bukidnon Umayamnon Tribe (BUKDA) is restoring degraded areas by cultivating bamboo and cacao plantations on their ancestral lands. Guided by their

Ancestral Domain Sustainable Development and Protection Plan, the initiative addresses climate change, biodiversity loss and land degradation while creating sustainable livelihoods. Twenty hectares of giant bamboo and cacao forest have been established in Malaybalay City and Cabanglasan, Bukidnon province. The project also trains community members in cultivation and harvesting, ensuring long-term benefits for both the environment and the tribe's economic resilience.



Impact



20

hectares of giant bamboo and cacao forest maintained and protected.



1,820

individuals from Indigenous and cultural communities engaged.



11

families of Indigenous Tribal Leaders temporarily employed.



1,800

kg of organic fertilizer provided for cacao plantation management and protection.



Nature-based solutions promoted for erosion control, watershed rehabilitation and climate resilience.



Communities engaged in governance and climate adaptation efforts.



Riparian ecosystem resilience enhanced through bamboo's carbon sequestration capacity.

Photo: Bukidnon Umayamnon Tribe (BUKDA)

Forests for food and resilience in Brazil

Agroforestry

In the Atlantic Forest of southern Brazil, the endangered juçara palm is under threat from unsustainable harvesting. Traditionally, the tree is cut down to obtain its palm heart, a practice that destroys the plant. This not only reduces biodiversity but also undermines the livelihoods of smallholders and traditional communities who depend on the forest.

Centro Ecológico is helping to reverse this trend by promoting the sustainable cultivation of juçara

through agroforestry. Instead of cutting the tree, farmers harvest its nutritious açaí-like fruit, preserving the plant while creating a valuable food source. The initiative trains Indigenous and traditional communities in combining açaí production with forest management, strengthening food security, improving nutrition and protecting biodiversity. By aligning livelihoods with conservation, the project ensures that the juçara palm remains a living asset for future generations.



Impact

40



tons of açaí berries processed, from which 7 tonnes were commercialized to the institutional market.

2,500



seedlings of native species planted.

60



hectares of area brought under certified agroforestry systems.

364



households participating in açaí production.

8,500



children provided with school meals including açaí.

Photo: Centro Ecológico

Sand dune management in Lebanon

Coastal restoration

In South Lebanon, stronger ocean storms and rising seas are threatening coastal communities and ecosystems. A predicted sea level rise of 30 to 60 centimetres within 30 years is putting agricultural plains, tourism and livelihoods at risk. In Al Kharayeb, a village of 11,000 people, concrete sea walls currently serve as the main defence against storms—but they are costly, environmentally damaging and increasingly vulnerable to erosion and higher waves.

Diaries of the Ocean is replacing these hard defences with sustainable, nature-based solutions. In partnership with the local community, the organisation has reinforced and restored natural sand dunes by building wooden fences to shield nearby farmland, planting protective grasses and slowing the loss of sandy beaches. This soft engineering approach protects agriculture, supports tourism and strengthens the resilience of coastal ecosystems and livelihoods in the face of climate change.



Impact



3,000

beach seedlings collected and nurtured for future transplantation.



1.2

hectares area of sand dune ecosystems restored with the deployment of 600 metres wooden fences to trap the sand and recreate the natural defence system.



100

people (54 women) trained on climate change adaptation measures, with a particular focus on marine environment conservation and sand dune native plant species protection.



1 scientific study conducted on flora assessment, seed collection, germination, beach profiling and economic valuation of sand dunes.



1 beach safety watchtower constructed and two lifeguards hired.

Building a shared prosperity green economy in Malaysia

Reforestation

In Malaysia, the Indigenous Orang Asli communities play a vital role in protecting forests and carbon sinks, yet many live below the poverty line. Dependent on forest resources and subsistence farming, they face mounting threats from illegal logging, encroachment on ancestral lands and shifting rainfall patterns that disrupt their livelihoods.

Yayasan Kajian dan Pembangunan Masyarakat is strengthening climate resilience in Pekan district, Pahang state, by rehabilitating watershed areas

through sustainable farming. The initiative is establishing a community-led agroforestry and organic agriculture enterprise in which Orang Asli become farm owners and active partners in the supply chain, sharing profits from the produce. Drawing on Indigenous knowledge, the approach regenerates soils, reduces flood and drought risks, restores degraded land and creates diversified livelihoods, aligning environmental stewardship with economic empowerment.

Impact



30

families in five villages supported for adaptive agroforestry.



2.2

hectares of degraded land area rehabilitated through adaptive agroforestry.



34

households received direct incentives to protect watersheds through improved farming on degraded land and enhanced cooperation.



1

hectare of community farm established.



5

regenerative farming training sessions held.



34

weekly agroforestry coaching visits to two villages organized.



5.4%

growth in average household incomes through syntropic farming and regenerative agriculture.



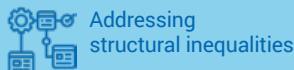
Photo: Yayasan Kajian dan Pembangunan Masyarakat

Impact

Socio-economic resilience



Devolving decision-making



Addressing structural inequalities



Investing in local capabilities to leave an institutional legacy



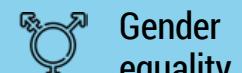
Flexible programming and learning

UNDP-AFCIA goes beyond funding. In addition to grant support, the initiative offers technical assistance, investment brokering, peer learning and global advocacy. All initiatives are designed to enable their communities to flourish, emphasizing inclusion and equity, and contributing to at least one of the following outcomes:

Enhancement of social or economic conditions for women, Indigenous Peoples, people with disabilities, young people, elders and other historically underserved groups.

Reduction of poverty, improved food security, better living conditions, strengthened community governance or enhanced public health and safety.

Integration of gender equality and women empowerment as a core objective.



Gender equality



Inclusivity



Local governance



Capacity-building



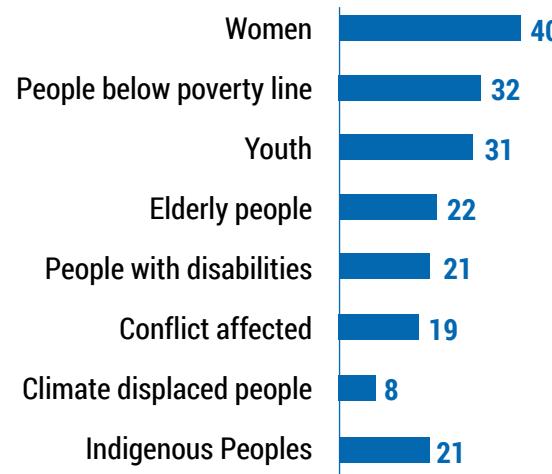
Indigenous adaptation



Impact

Highlights of socio-economic resilience from across the 44 initiatives

Number of initiatives with a focus on key groups of vulnerable population

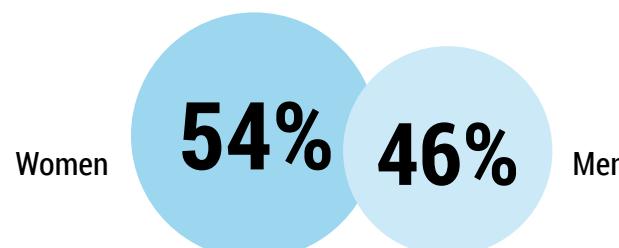


2,620,049 Total number of people reached (direct and indirect)

292,049 Directly benefitted individuals

2,328,000 Indirectly benefitted individuals

Gender breakdown



21,732

Households with improved livelihoods (increased cashflow/income/ additional income generated)



47,132

Individuals with improved productivity or professional skills



7,754

Indigenous community households directly benefitted from improved food security and nutrition

Socio-economic benefits for women

1,400

women farmers empowered through training in nature-based climate change adaptation practices, equipped with sustainable farming techniques.

2,800

women engaged to restore degraded rangelands and cropping areas.

11,416

women trained in sustainable enterprise, climate change adaptation planning and various land management techniques.

5,524

women experienced with improved livelihood (increased cashflow, increased income or additional income generated through various activities).

Gender equality

Gender equality is a fundamental human right and a powerful catalyst for sustainable development. It lies at the heart of the 2030 Agenda and the commitment to “leave no one behind”. Promoting gender equality is not just a development objective, it is essential for building a just, inclusive and resilient future.

UNDP-AFCIA works with partners to eliminate gender inequalities by ensuring that all development efforts reflect the experiences, needs and contributions of women and girls. By removing systemic barriers and strengthening women's leadership in decision-making, communities are better equipped to reduce poverty, respond to climate change and build lasting resilience.

Within this framework, initiatives are selected for their ability to demonstrate strong gender advocacy and capacity. Gender considerations are embedded throughout the programme, considering the following key approaches:

Gender-balanced participation:

UNDP-AFCIA has reached over 2.6 million people so far, with women making up 54 percent of those reached, thanks to a strong focus on gender equality and inclusion.

Support for women-led initiatives:

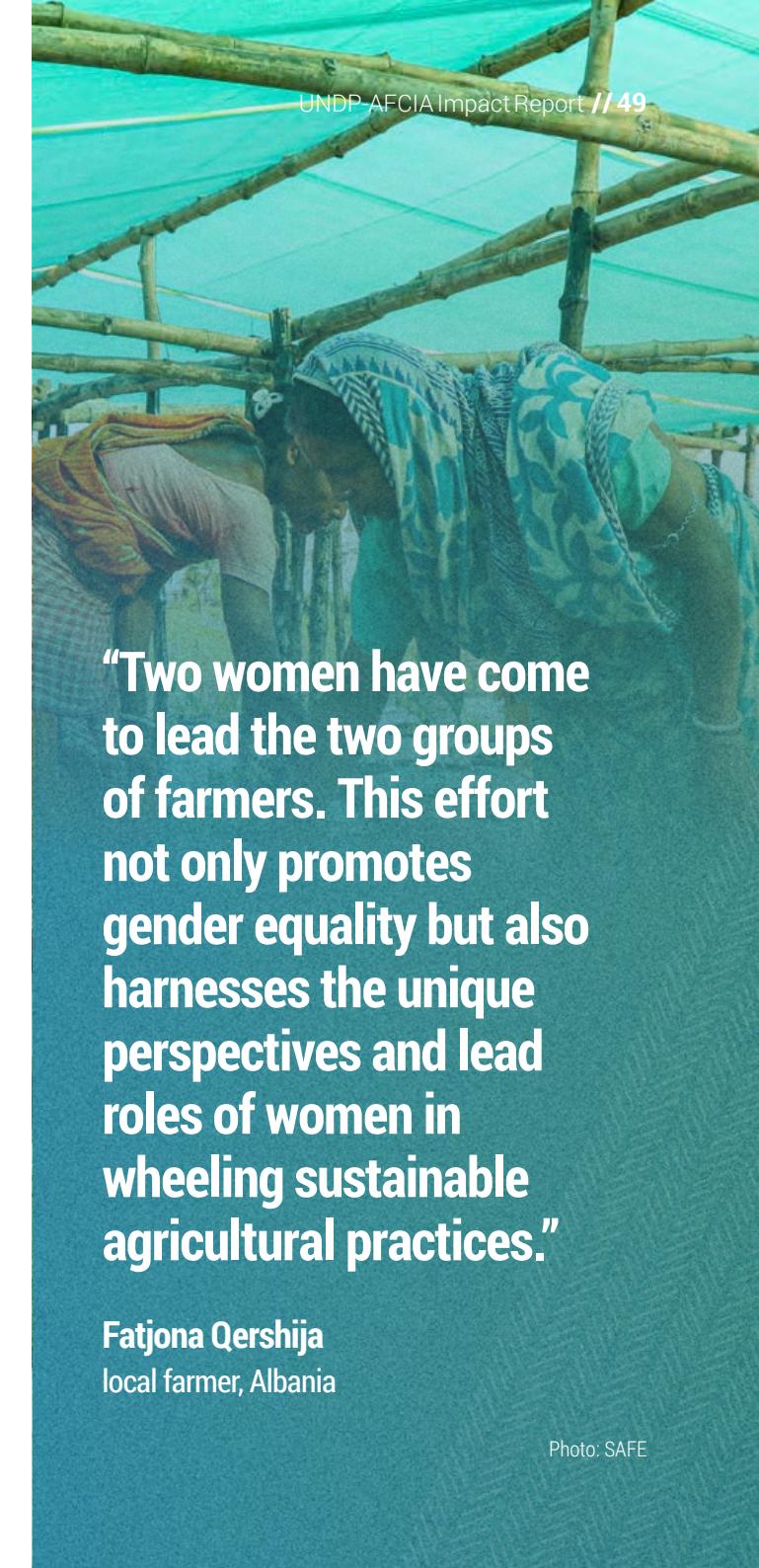
Many initiatives that are supported are led by women or explicitly designed to elevate women's roles in decision-making, climate leadership and economic opportunity.

Structural change at the local level:

Through locally driven innovation, UNDP-AFCIA supports the transformation of traditional gender norms, supporting women to take active roles in climate resilience and community development.

By embedding gender equality across its activities, UNDP-AFCIA ensures that climate adaptation not only protects communities, but also promotes justice, inclusion and long-term social change.

The following examples highlight how women's leadership and innovation are driving meaningful, measurable change. In these communities, women are rebuilding local food systems, restoring degraded land, generating income and passing on climate-smart practices to future generations.



“Two women have come to lead the two groups of farmers. This effort not only promotes gender equality but also harnesses the unique perspectives and lead roles of women in wheeling sustainable agricultural practices.”

Fatjona Qershija
local farmer, Albania

Women-led dry season gardening in Ghana

In the Upper East Region of northern Ghana, where rainfall is unpredictable and growing seasons are shortening, Open Ghana is transforming dry-season agriculture with women, youth and people with disabilities. Through climate-resilient gardening centres and financial inclusion strategies, the initiative empowers community members with sustainable incomes and improved food security.

Community-led dry-season gardens produce vegetables like ayoyo (a green leafy vegetable), bean leaves and spinach. Women make up over 80 percent of direct participants, receiving hands-on training in water-efficient farming practices, climate change awareness and sustainable land use. The initiative also supports Village Savings and Loan Associations (VSLAs) to help participants invest in their gardens and households.



Impact

14



100



320



6



14



8,525



Photo: Open Ghana

Women-led agroforestry enterprises in Micronesia

On the atoll islands of Chuuk, rising seas and changing weather threaten traditional ways of life. In response, the Chuuk Women's Council and the Island Food Community of Pohnpei are reviving ancestral agroforestry practices and turning them into modern micro-enterprises. The "Let's Go Local!" initiative promotes indigenous crops like breadfruit, banana and taro while training women in food preservation and business skills.

Workshops led by women's groups focus on everything, from nutrition and food sovereignty to branding and packaging. The result is a resurgence of local food systems, increased income for families and a cultural reconnection to traditional ecological knowledge.

Impact

**5,151**

individuals educated on local food systems.

**267**

women trained in food processing and equipment use.

**10**

workshops on food commercialization delivered to women's groups.



Photo: Island Food Community of Pohnpei

Inclusivity

Many initiatives are designed to reach those who are often most vulnerable to the impacts of climate change including people with disabilities, survivors of violence, youth at risk, refugees and marginalized ethnic groups.

These locally driven solutions are not only addressing environmental threats, but also transforming lives by fostering dignity, inclusion and long-term opportunity. The following initiatives demonstrate how adaptation can be a tool for building more equitable, resilient and cohesive communities.



“What attracted me to the initiative was its potential to unite and strengthen my community through a shared activity.”

Nikri A/L Mohamad

Indigenous community member of the Air Hitam area, Malaysia

Photo: Penjaga Pulau

Alternative livelihoods for vulnerable groups in Jamaica

In Portmore, Jamaica, solar-powered greenhouses are cultivating more than just crops—they're growing opportunity, safety and resilience. This initiative targets women survivors of gender-based violence and at-risk youth, offering training in climate-smart agriculture and entrepreneurship.

Participants also engage in gender sensitivity workshops that support healing and social cohesion. By linking climate adaptation with skills development and economic empowerment, I-SEEED Youths Limited is helping to break cycles of violence and unemployment while preparing communities to thrive in the face of climate stress.



Impact



600 (402 women)

individuals received support in farming as a business.



45

individuals increased their incomes through agricultural and business training.



10

hectares of degraded land rehabilitated to enhance productivity.



7

hectares of land applied agricultural and water management practices, including drip irrigation systems.



70,000

seedlings raised and sold locally.



\$178,910

mobilized through crowdfunding campaigns.

Fostering social inclusion in Ghana

In northern Ghana, people with psychosocial disabilities, epilepsy, widows and caregivers often face deep social exclusion. [BasicNeeds-Ghana](#) uses climate-smart gardening and animal husbandry as both a livelihood and a form of occupational therapy, creating safe, inclusive spaces for marginalized individuals to build confidence, skills and social standing.

By improving food security and income through sustainable farming, the initiative is also strengthening household resilience and community cohesion while normalizing inclusive approaches to climate adaptation.



Impact



12

climate smart organic vegetable gardens (7.3 hectares) established with community collaboration.



10

Village Savings and Loans Associations (VSLAs) established and **533 people (336 women)** trained on financial management and savings.



202

individuals (127 women) self-employed in farming.



200+

community leaders and members consulted to ensure local buy-in.



362

individuals supported in wellbeing, nutrition and social integration through training on animal rearing.



372

individuals connected to vegetable traders for reliable markets, resulting in an additional \$50 revenue generation per individual annually.

Refugee integration in Uganda

In the West Nile sub-region of Uganda, where refugees and host communities share limited resources, nature-based solutions are fostering both ecological restoration and social harmony. Through Farmer Managed Natural Regeneration, farmers are trained to revive trees from stumps and root systems, restoring degraded land while improving food and timber supply.

The Moyo District Farmers Association combines sustainable agriculture with inclusive adaptation planning, enabling peaceful coexistence, shared ownership of resources and resilient livelihoods across diverse communities.



Impact



2,200

farmers (1,320 women) practising nature-based adaptation.



142

individuals trained in beekeeping, apiculture and coffee farming.



102

hectares under conservation.



1,500

individuals (900 women) trained in making energy-saving cookstoves and efficient cooking methods.



893

farmers and 2 NGOs using the app to support climate action.



1 climate adaptation app created to share knowledge and skills.



2 community led conservation plans developed.

Enhanced governance and support structures

Effective climate adaptation relies not only on strong ideas and local leadership but also on the governance systems that sustain and scale them. UNDP-AFCIA prioritizes locally led adaptation by ensuring communities and local institutions have the authority and resources to define, design, implement and evaluate climate solutions.

This creates a durable foundation for climate resilience, with institutional legacies that reflect the values, priorities and knowledge systems of the people they serve.

The following initiatives highlight how governance innovations are playing a critical role in the success across UNDP-AFCIA. Each highlights a different model of how inclusive, locally driven governance systems can support long-term adaptation, resource protection and climate resilience.



"After listening to the heartfelt sharing from my fellow villagers, there was support and encouragement from the leader. Continuous encouragement from community leaders is helping me a lot."

Remah A/P Akub

local farmer and community member, Pekan District, Malaysia

Photo: IFAD Francesco Cabras

Community-driven leadership in Vanuatu

The Santo Sunset Environment Network (SSEN) is an Indigenous network of community environmental champions who came together to support and provide awareness on protecting their forests and oceans. The initiative places the community members as the leaders, in charge of all activities, from local food production to building houses.

By integrating these practices with climate risk projections, SSEN has developed a science-based, culturally relevant adaptation and development

programme that builds climate resilience for remote communities on Espiritu Santo island, Vanuatu.

To ensure deep rooted support and longevity, a Major Chiefs Summit was facilitated and hosted in Tasmate Village of Western Santo in 2023. The summit combined Chiefs from both Area Councils, representatives from the 42 villages, government technical experts and private sector representatives. Eighty people attended the summit, ensuring the community leadership and governance from the chiefs.

Impact



89

Indigenous climate rangers trained (22 women).



42

villages engaged, with 5 villages implementing women-led nature-based solutions.



3

Community Disaster Climate Change Committees established.



5,000

community members engaged in knowledge and skills sharing.



Community Conservation Areas developed in Molpo and Wunon.



Photo: Santo Sunset Environment Network (SSEN)

Collaboration agreements forged in Argentina

Soil erosion caused by torrential rains in the Arroyo Gómez creek basin, Argentina, is threatening agricultural productivity, infrastructure stability and the livelihoods of small farmers. [Fundación Proiectum Macrillanti \(FPM\)](#) identified that land systematization and soil preservation techniques were vital for a sustainable future.

The foundation's long-term vision is supported by building strong partnerships with government

agencies and institutions engaged in agriculture and environmental protection. On July 7, 2024, it formalized an inter-institutional collaboration through 12 strategic partnerships with local governments, universities and international agencies working in the Arroyo Gómez basin. This agreement aims to promote community-led land management and soil conservation practices, safeguarding both local livelihoods and the surrounding natural environment.

Impact

**12**

local governments, universities and international agencies working collaboratively.

**100**

family-run smallholder producers trained in soil conservation techniques.

**6,560**

hectares in Arroyo Gómez basin undergoing data-driven land systematization.

**195 (121 women)**

community members sensitized on gender mainstreaming in rural communities and agricultural activities.

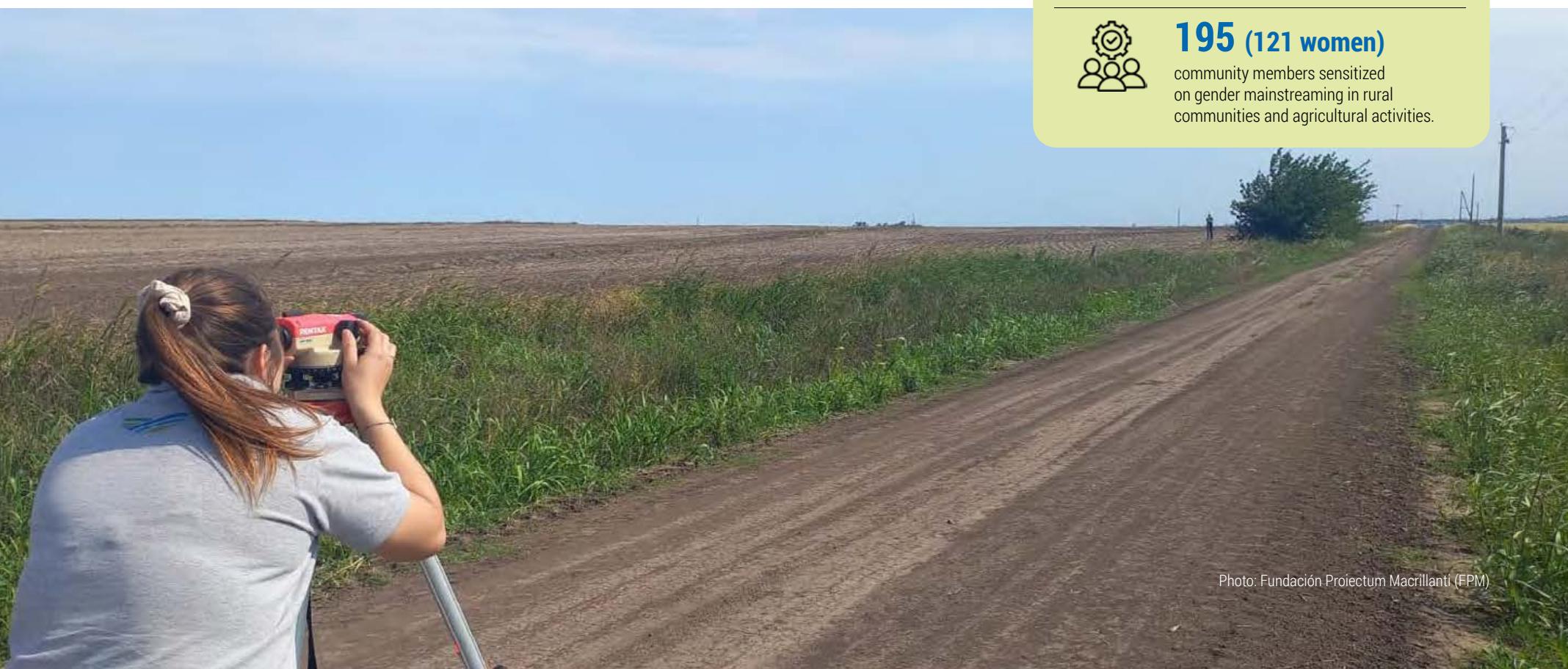


Photo: Fundación Proiectum Macrillanti (FPM)

Committees and governance for reef management in the Mesoamerican Reef

The Mesoamerican Reef Insurance Programme protects coral reefs at risk from extreme climate events across Belize, Guatemala, Honduras and Mexico. UNDP-AFCIA specifically supported activities along the Honduran coast, where Caribbean communities are highly vulnerable to climate hazards. The reef serves as a critical natural barrier, safeguarding livelihoods and local ecosystems.

A key milestone was the establishment of three Reef Response Coordinating Committees. These committees provide a consultative framework for managing post-storm reef activities. Government authorities and reef site representatives maintain sovereign responsibility over the marine environment, ensuring that the Mesoamerican Reef is effectively managed and preserved for the benefit of local communities.

Impact

**4,180**

hectares of coral covered by forecast-based financing instruments (insurance).

**365,000+**

people received immediate post-hurricane coastal protection in Honduras.

**39**

responders trained and certified for hurricane reef damage in Honduras.

**3**

Reef Response Coordinating Committees established in Honduras.



Secured insurance coverage of additional reef sites covering the entirety of the Mesoamerican Reef off the coast of Honduras.



Photo: Honduras Brigades Training / Martin Leglize

Capacity-building

Capacity-building is essential for lasting climate adaptation, enabling local actors to implement, lead and sustain solutions. UNDP-AFCIA shows that access to knowledge, skills, and tools through technical assistance, peer learning, or international exchange, helps communities respond to climate risks in ways that are locally relevant and culturally grounded.

By fostering local ownership, innovation and inclusive leadership across gender, age and social groups, capacity-building becomes an ongoing process of learning and adaptation, ensuring climate resilience can be scaled and sustained for generations.

The following initiatives showcase how investing in skills, knowledge and leadership at the local level can unlock innovation, improve livelihoods and enable communities to thrive in the face of climate change.



"I realised, you can have the best technology in the region, but if you don't cultivate the mindsets of people to be farmers, who is going to operate the technology?"

Rinesh Sharma
Founder,
Smart Farms Fiji Foundation

Knowledge development in Thailand

In Phayaram, Kakoh and Nadee villages, in Thailand, the Foundation for Community-Soul (FCS) is revitalizing traditional silk production (sericulture) by integrating climate-smart practices and modern business skills. This initiative focuses on building community knowledge to support both people and the land.

Community leaders travelled to Japan to study global best practices in sericulture, returning with insights that are now shared through local workshops. The workshops also cover climate change awareness, social entrepreneurship, digital marketing and grant writing. Through knowledge transfer, they enable the community to become more adaptive, self-reliant and economically secure.



Impact



950

community members trained in farming innovation and smart agriculture.



1,200

Indigenous women upskilled in climate adaptation and digital media.



60

individuals trained in digital marketing.



20%

more income generated and promotion improved for local mulberry silk farmers.



30,000

acres dedicated to adaptive silk farming practices.



First woman elected as head of Phayaram village attributed to awareness raised through the initiative.

Photo: Foundation for Community-Soul (FCS)

Training and development in Malawi

In Blantyre, Malawi, Action for Environmental Sustainability (AfES), is equipping smallholder farmers with hands-on knowledge to tackle flash floods, landslides and other climate hazards through an innovative farm school model. The initiative demonstrates how education and sustainable farming techniques can transform communities and increase resilience.

At a dedicated farm school, farmers receive training in organic agriculture, soil conservation, goat herding, composting and indigenous crop practices. Graduates of the farm school are not only improving their own livelihoods but also actively training others, creating a ripple effect of shared knowledge and climate-smart action across the region.

Impact



10

hectares climate-resilient farm established with greenhouses, irrigation, piggyery and goat housing.



225

smallholder farmers (169 women) trained in climate smart farming.



6,150

Indigenous community members gained access to improved nutrition.



19,000

indigenous seedlings, including 10 indigenous crop varieties planted.



7%

monthly income increase for 150 participating farmers (38 men; 112 women).



150

additional farmers trained through peer outreach.



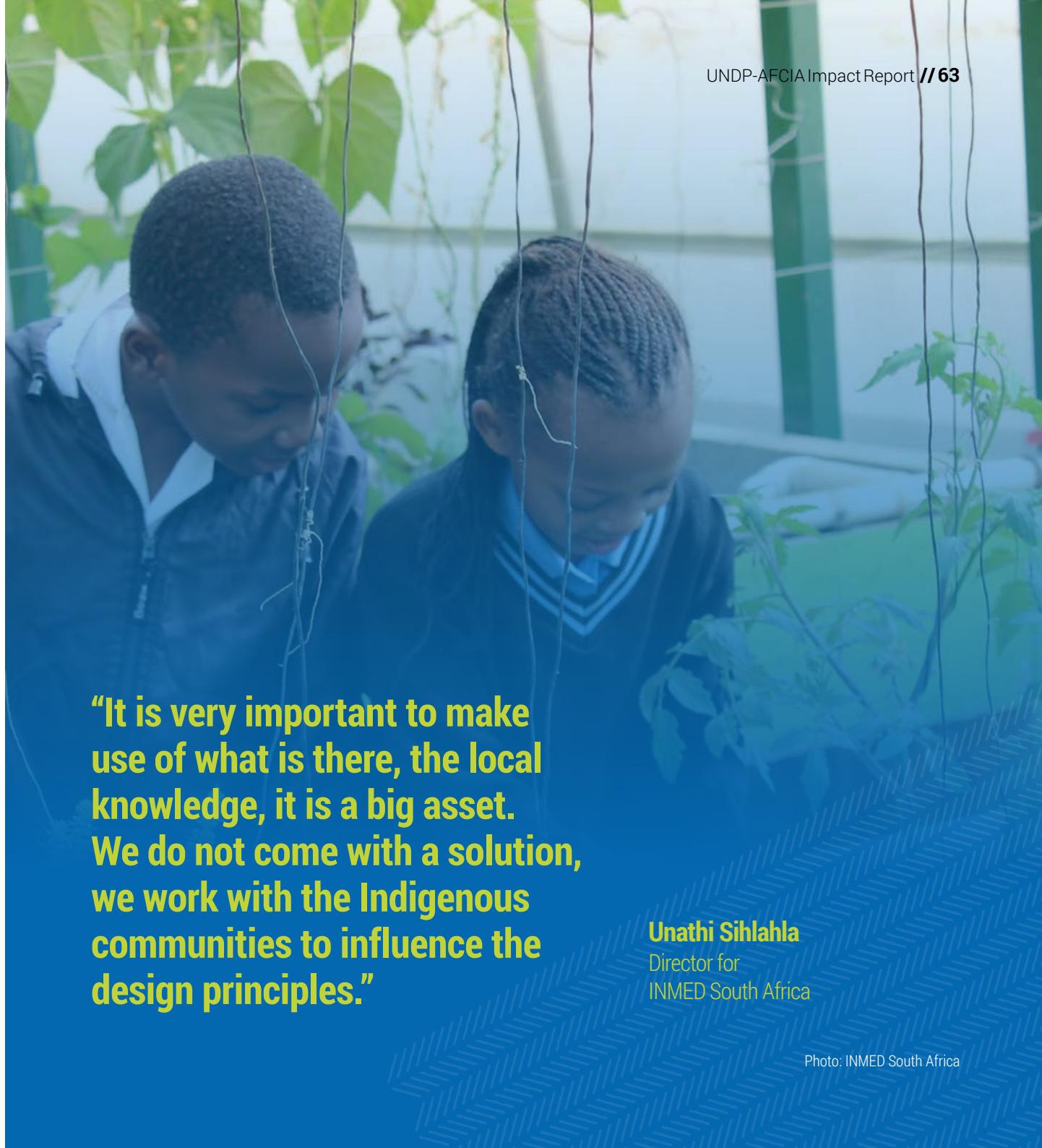
Photo: Action for Environmental Sustainability (AfES)

Indigenous knowledge

Rooted in centuries of lived experience and close observation of local ecosystems, Indigenous knowledge offers time-tested practices for managing land, water and biodiversity in ways that are adaptive, resilient and deeply connected to a place.

Across UNDP-AFCIA initiatives, the integration of Indigenous knowledge not only enhances adaptation efforts but also builds capacity by recognizing and strengthening the leadership of Indigenous communities as knowledge holders and innovators.

The revival and scaling of Indigenous practices show how communities are preserving their heritage and actively building capacity for a climate-resilient future.



“It is very important to make use of what is there, the local knowledge, it is a big asset. We do not come with a solution, we work with the Indigenous communities to influence the design principles.”

Unathi Sihlahla
Director for
INMED South Africa

Ancient techniques of water harvesting revived in Zimbabwe

Muonde Trust works with farmers in Zvishavane, Midlands province, Zimbabwe, to refine and scale traditional water harvesting techniques. These indigenous practices, including sand abstraction, swales, land contouring and strategic planting, are revitalized through hands-on training and knowledge-

sharing. Deeply rooted in culture and community, the initiative supports both environmental restoration and community resilience. Farmers are trained in technical methods and equipped to teach others, ensuring knowledge is culturally rooted.



Impact



80 (50 women)

farmers trained in traditional water harvesting techniques.



5

lead farmers trained in advanced water harvesting and dry-stone walling.



10

additional farmers trained via the "train the trainer" model.



900

trees planted for forest regeneration, covering an area of 4.5 hectares.



60 swales and 40 ponds

(water harvesting structures) built to combat soil erosion, restore catchments and aid farming.

Government stakeholders and rural councils strongly engaged.

Indigenous fog capture methods scaled in Mexico

In the highlands of Oaxaca, Mexico, Espacio de Encuentro de las Culturas Originarias (EECO) revives ancestral methods to address climate change vulnerability. Using indigenous fog catchers, fine mesh nets that capture water from fog, and an ancient waru waru system of raised beds surrounded by water channels, Indigenous communities are re-establishing techniques that ensure food and water security. These innovations are community-led,

with a strong emphasis on women's leadership and biodiversity preservation.

EECO received the prestigious "Local Adaptation Champions Award" at COP28, earning a prize of \$16,000 for their locally led innovation, bringing Indigenous Peoples to the forefront of climate change solutions.



Impact



85%

crop survival during severe frosts and 93 percent during droughts with *waru waru*.



30

waru waru systems built, half of which are managed by women farmers to help their flower and vegetable crops withstand frost and drought.



15

drip irrigation systems and 15 fog catchers operated by women to adapt to climate change and drought.



75

women supported to lead in agri-tech awareness.



20%

increase in family income from improved vegetable production.



15

different fauna species observed benefiting from enhanced water access.



"I never imagined that my small fallow land could be so effectively utilized, generating at least US\$4 per square metre within just forty days."

Pang Ouk

Farmer from Kampot province, Cambodia

Photo: HEKS/EPER Cambodia

"The production of this fish will transform our lives and the lives of children. We will sell and make profit to support our families, especially our children's education."

Gifty Achoga

Catfish Entrepreneur,
Upper East Region, Ghana

"It has contributed to the nutrition of my family and provided additional family income with the surplus from the garden. The members of my family have come closer together and have understood the importance of agriculture through a family garden."

Sandra Virginia

Local farm gardener, Santa María, El Tablón, Guatemala

"We chose to be beekeepers. The training that we received in beekeeping opened our eyes about the importance of looking after bees as part of nature, not just for honey."

Mhlambiso Lamla

Member of the new beekeepers' association,
Eastern Cape province, South Africa

"We are engaging in innovative value add products, such as wild honey, ginger beer and virgin coconut oil productions for home consumption as well as for selling to earn money in outside markets. Also, both women and men are engaged in craft making (weaving and carving) utilizing local resources."

Chief Titus Rojo

Tasmate village, Vanuatu



"Thanks to this initiative we have not only established avenues for market sales in towns but also secured sustenance for our families and communities."

Hélio Wherá

Indigenous community leader,
Guyra Nhendu, Brazil

Lessons learned for best practice



UNDP-AFCIA initiatives have demonstrated strong results, as showcased throughout this report, enabling access to further funding for roll-out and scaling.

However, embedding technologies, demonstrating impact and building trust takes time. This is critical in driving innovation and an important consideration that supports all other lessons learned.

“It’s both a good and a bad thing that wicked problems don’t get solved quickly, so time bound initiatives have to deal with this. I suggest that partners who have been innovative and impactful have longer term relationships to widen and deepen the scope of work to grow in country and region.”

Sheela Patel

Founding director of the Society for the Promotion of Area Resource Centres (SPARC) and LLA advocate.

Lessons for adaptation and resilience



Photo: Action for Environmental Sustainability (AfES)

Effective communication and advocacy, particularly when culturally tailored, are crucial in fostering awareness and securing long-term resilience. Direct funding mechanisms, such as flexible grant agreements, empower local actors to create context-specific solutions, ensuring initiatives are more relevant and impactful. Adaptive management also allows for continuous learning and responsiveness to local needs, ensuring that adaptation efforts can evolve and scale over time. These strategies collectively enhance resilience by embedding local ownership and ensuring sustainable, locally led solutions.

Communication and advocacy

Key insight

Culturally sensitive communication strategies are essential to fostering adaptation success.

Action

Future initiatives should focus on developing robust, context-specific communication and advocacy plans.

Impact

Agency to local communities to lead advocacy efforts will driving ownership and long-term sustainability.

Direct funding

Key insight

Direct funding through local mechanisms enables local organizations to tailor climate solutions effectively.

Action

Support and expand funding channels that enable local NGOs, CSOs and cooperatives to drive locally relevant initiatives.

Impact

Locally driven funding models strengthen local ownership, enhancing the effectiveness of climate adaptation efforts.

Adaptive management

Key insight

Adaptive management ensures that adaptation efforts remain relevant and scalable.

Action

Actively engage with organizations and communities to refine and adjust strategies based on feedback and local realities.

Impact

Embracing adaptability allows initiatives to grow at their own pace, responding dynamically to evolving local needs.

Lessons on innovation



Photo: HEKS/EPER Cambodia

Innovation in climate adaptation must be grounded in practical, sustainable solutions that prioritize long-term impact. The integration of local labour, Indigenous knowledge and appropriate technologies not only strengthens community capacity but also ensures initiatives are cost-effective and culturally relevant. Phased funding also plays a critical role in scaling innovative approaches by providing ongoing support and technical assistance. Innovation requires flexibility to 'fail' and adapt initiatives during their development. These lessons highlight the importance of both strategic financial support and designing solutions that seamlessly fit into existing systems and daily practices.

Phased funding for impact and sustainability

Key insight

Multi-stage funding is essential for scaling innovation and fostering long-term impact.

Action

Implement phased funding models to provide sustained financial backing, along with technical assistance and connections to strategic partners.

Impact

A phased approach allows local actors to test and refine solutions, build resilience and scale effectively, ensuring sustainability over time.

Practicality over novelty

Key insight

Innovations must prioritize practicality and integration into existing systems to ensure long-term success.

Action

Support the design of innovations that are both practical and adaptable, fitting seamlessly into local contexts and daily routines. Innovations must be built with or come from the local context.

Impact

Focusing on functionality, such as efficient land use or low-maintenance systems, enhances adoption and scalability, ensuring the sustainability of solutions.

Testing and learning from failure

Key insight

Innovation takes time and testing to find the best solution for the local situation. 'Failure', or the ability to try something and then adapt as needed, must be accepted to give the flexibility to innovate.

Action

Funding agencies must 'take the risk' and continue to foster events and trainings where initiatives can work with and learn from one another, sharing how to overcome 'failure'. The use of phased funding and locally derived indicators are vital tools to support this innovative environment.

Impact

Learning from one's own 'failures', as well as that of others, fosters an environment for innovation and allows local actors to refine solutions, build resilience and scale effectively, ensuring sustainability over time.

Lessons on locally led adaptation



Photo: Phil Kabuje / UNDP Tanzania

LLA thrives when there is a focus on community ownership and flexibility in response to local needs. Empowering communities to set priorities, through approaches like community-defined indicators and participatory planning, ensures that interventions are both relevant and effective. Additionally, UNDP-AFCIA's approach strengthens LLA by addressing urgent needs, fostering cross-learning and creating strong and deep relationships with partners, all while building the legitimacy and sustainability of grassroots action.

Local ownership and flexibility

Key insight

Empowering communities to set their own priorities ensures alignment with both local needs and donor requirements.

Action

Use community-defined indicators to balance local ownership with accountability and ensure participatory processes for better alignment with community goals.

Impact

This approach creates more relevant, effective and impactful solutions by actively involving local stakeholders in the decision-making process.

Strengths in locally led adaptation

Key insight

UNDP-AFCIA offers critical support to local actors, focusing on urgent investment needs, cross-learning and building legitimacy for grassroots action.

Action

Continue to foster relationships with innovative and impactful partners to expand the scope of work, deepen in-country impact and promote long-term engagement.

Impact

This approach helps build stronger, more sustainable, locally led adaptation solutions, driving both local and regional growth.

Lessons on gender equality and mainstreaming



Photo: Foundation for Community-Soul (FCS)

Advancing gender equality and youth empowerment are foundational to the success of climate adaptation initiatives. Engaging women and youth strengthens adaptation outcomes and fosters economic and social resilience. Programmes targeting women's leadership, including those focused on capacity-building, income generation and leadership roles, have proven transformative. Moreover, the integration of gender-sensitive approaches in knowledge sharing and activity implementation enhances the sustainability and inclusivity of adaptation efforts, ensuring that gender considerations are embedded throughout.

Ensure meaningful inclusion of women and youth

Key insight

The engagement of women and youth is essential for the success and sustainability of climate adaptation efforts whilst delivering significant economic and social benefits.

Action

Continue to design and implement programmes that specifically prioritize the inclusion of women and youth in leadership roles and ensure their active participation in all phases of adaptation activities.

Impact

Women and youth-led initiatives demonstrated that inclusion leads to enhanced resilience to climate change and greater economic standing within their communities.

Target interventions that address specific needs

Key insight

Targeted interventions can enable women both economically and socially.

Action

Implement programmes that provide targeted training and employment opportunities to women in climate adaptation contexts.

Impact

Results have demonstrated that economic and social inclusion strengthens women's resilience and leadership in adaptation efforts.

Focus on knowledge sharing

Key insight

Gender-sensitive knowledge sharing is essential for embedding gender equality in adaptation.

Action

Host dedicated knowledge exchange sessions that focus on gender equality to promote awareness and best practices.

Impact

Shared experiences and expert presentations on gender standards and frameworks help integrate gender considerations into climate adaptation activities, ensuring that women's roles are acknowledged and supported.

Highlight women's roles in communications

Key insight

Recognizing and showcasing women's contributions reinforces their importance in adaptation efforts.

Action

Continue to feature women-led initiatives in publications like GCA's [2024 Stories of Resilience](#) ensuring that women's roles in climate adaptation are celebrated and promoted.

Impact

Stories of women's leadership in adaptation inspire others and underline the crucial role women play in achieving resilience.

Lessons on replicability and scalability



Photo: Open Ghana

Financial sustainability, replicability and scalability should be foundational from the beginning of an initiative. Ensuring long-term impact requires support during implementation and a focus on developing sustainable business models, diversifying revenue sources and, in some cases, unlocking private investment. Future initiatives must prioritize these aspects in their design to ensure replication and scalability.

Unlocking private investment and alternative revenue streams

Key insight

Blended finance and diverse revenue streams are vital for the scalability and financial sustainability of adaptation work initiated through grants.

Action

Explore alternative financing options, such as carbon credits and revenue diversification, to reduce dependency on grants and ensure long-term financial viability.

Impact

Considering these options from the beginning will help maintain and expand resilience gains, making adaptation solutions more enduring and impactful.

Business model clarity

Key insight

Clear and transparent business models and an effective “impact storyline” are essential to attract investment.

Action

Support and capacity-building to develop robust business models and powerful pitches that demonstrate a clear risk-return profile to attract private investment and explore innovative financing options such as blended finance.

Impact

Initiatives that have successfully leveraged carbon credits or identified alternative profitable revenue streams highlight the importance of diverse funding sources to drive sustainability and scalability.

Business model development support

Key insight

Supporting business model development is essential to help attract investment and generate revenue.

Action

Continue providing technical assistance, like the MBA school initiative, to help refine business models and access investment at local, national and international levels.

Impact

The MBA school initiative has played a key role in delivering the tools and knowledge to develop sustainable, investable business models, helping to unlock new revenue streams and attract more funding.

Lessons on knowledge generation and exchange



Photo: Smart Farms Fiji Foundation

Effective partnerships, both local and international, are essential for driving meaningful, long-term impact in adaptation initiatives. A critical lesson is the importance of leveraging strong networks to generate visibility, gain access to resources and amplify efforts on both global and local stages. Successful collaboration allows for sharing knowledge, increasing influence and facilitating the scaling of impactful solutions.

Additionally, capacity-building is a cornerstone of resilience. By developing key operational, climate-related and leadership skills, initiatives foster local ownership and ensure their long-term sustainability.

Local and International Partnerships

Key insight

Strong partnerships enhance visibility and access to critical resources, supporting both local and global efforts.

Action

Future initiatives should prioritize forming and nurturing partnerships that provide both technical and financial support to local actors.

Impact

Collaborative efforts are critical to scaling sustainable change from the local level upwards.

Capacity-building

Key insight

Supporting local stakeholders through targeted capacity-building ensures sustainability and effective implementation of adaptation initiatives.

Action

Initiatives should focus on developing climate-related, operational and leadership skills within local communities to drive long-term success.

Impact

Building local capacity using local labour and contractors fosters economic growth, enhances ownership and boosts community resilience.

Indigenous knowledge

Key insight

The integration of Indigenous knowledge and technology adapts solutions to local realities and ensures cultural relevance.

Action

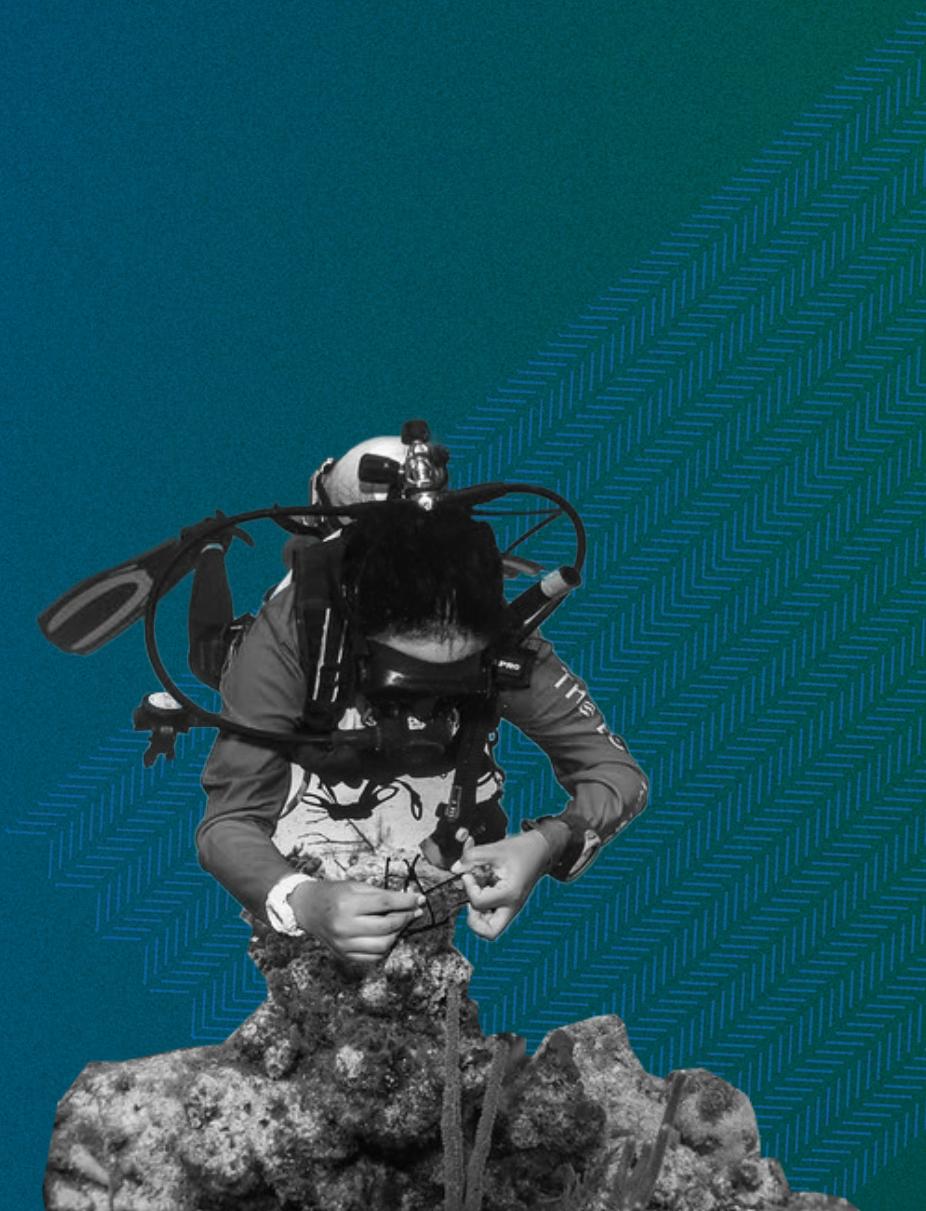
Ensure communication channels and events that enable and support Indigenous knowledge sharing and allow all voices to be heard.

Impact

Culturally and environmentally relevant initiatives with a proud local ownership.

Key lessons to strengthen climate adaptation initiatives

By sharing these lessons learned, this report aims to provide valuable insights that can help strengthen future climate adaptation initiatives. The experiences from UNDP-AFCIA's work highlight the importance of building strong enabling environments, fostering local engagement and ensuring long-term sustainability and scalability of technologies. By reflecting on these lessons, stakeholders can better navigate the challenges of implementing and scaling climate adaptation solutions, ultimately improving the resilience of vulnerable communities to climate change. These lessons also serve as a guide for future initiatives, helping to refine approaches, enhance impact and encourage more effective and inclusive adaptation strategies worldwide.



Partnerships and collaborations

UNDP-AFCIA promotes partnerships and fosters collaboration among local initiatives under the [Adaptation Innovation Marketplace \(AIM\)](#). These partnerships enable funding sources and technical assistance into the core of AFCIA, contributing to the programme's success.

AIM's work is possible via a vast network of partners. Organizations like the [International Centre for Climate Change and Development \(ICCCAD\)](#), [Climate and Development Knowledge Network \(CDKN\)](#), the [Least Developed Countries Universities Consortium on Climate Change \(LUCCC\)](#), the [Global Resilience Partnership \(GRP\)](#), the [Climate-Knowledge Innovation Community \(Climate KIC\)](#) and the [UN Capital Development Fund \(UNCDF\)](#) offer essential technical support.

AIM has also forged strategic alliances with the [Climate and Development Knowledge Network \(CDKN\)](#) and impact investment networks like the [Asia Venture Philanthropy](#)

[Network \(AVPN\)](#), the [African Venture Philanthropy Alliance \(AVPA\)](#) and [Latimpacto](#) which supported UNDP-AFCIA initiatives with capacity-building in the context of private sector finance. Complementing these partnerships is UNDP's global network of country offices, through which AIM can deploy funding to hard-to-reach communities.

The MBA school initiative, developed in partnership with the Global Resilience Partnership, connects with MBA students from leading business schools, including Yale, Oxford and other members of the [Global Network for Advanced Management \(GNAM\)](#). Under the programme, over the past two years, 70 students were assigned to more than 20 initiatives, helping them to refine business models, explore new markets and enhance impact reporting and communication.

UNDP-AFCIA holds strong partnerships with both its funders, the Adaptation Fund and the European Union. Their commitment to accelerating adaptation innovation is key to creating an enabling environment globally.

The wider AFCIA programme is a growing partnership hosted through UNDP, UNEP-CTCN, UNIDO and WFP.



Photo: Penjaga Pulau

Future outlook

AFCIA partnership expansion

At COP28 in Dubai, the Adaptation Fund announced the expansion of the AFCIA programme by welcoming two new partners: the United Nations Industrial Development Organization (UNIDO) and the World Food Programme (WFP) to join UNDP and UNEP-CTCN. Under the AFCIA partnership, UNIDO and WFP will administer programmes that will issue small grants and provide technical support globally to local actors, amounting to \$20 million. This initiative continues to respond to the alarming gap in international adaptation financing, which falls significantly short of projected needs. More information about these programmes can be found [here](#) and [here](#).

UNDP-AFCIA Phase II

A second phase of the UNDP-AFCIA programme is currently being developed, building on the achievements and lessons learned from Phase I. Phase II will focus on scaling tested, high-impact climate adaptation solutions with an enhanced emphasis on community impact, financial sustainability and systemic resilience.

In addition to continuing support for NGOs and CSOs, the programme will expand its reach to engage private sector actors, while maintaining a strong commitment to grassroots innovation. Projects with strong potential for scale or meaningful social and climate impact will be prioritized.

Technical assistance will also be strengthened, moving toward more localized and context-specific support mechanisms. This next phase will reflect UNDP-AFCIA's ongoing commitment to bridging innovation and investment in climate adaptation.

UNEP-CTCN AFCIA II

Launched in 2024, the [AFCIA II](#) programme continues the collaboration between UNEP-CTCN and the Adaptation Fund to boost innovation in climate adaptation technologies.

The programme continues to target developing countries, with special attention to Least Developed Countries (LDCs) and Small Island Developing States (SIDS) as, despite contributing only 3.3 percent of global greenhouse gas emissions, these countries suffer the most from climate change impacts and are particularly vulnerable due to their geographic, economic and structural challenges. In comparison with AFCIA Phase I, the programme will aim to broaden its remit from government organizations to include public institutions, private institutions, civil society organizations, community groups, research centres and universities. All ideas for the programme continue to be channelled through the National Designated Entities (NDEs) of each participating country.

AFCIA II will grow the success of AFCIA I with support provided for the testing of 40 innovative and transformative climate adaptation technologies and solutions in developing countries and facilitation of the scaling up of 10 promising adaptation technologies that have already been successfully tested.

Key definitions

Climate adaptation

Actions taken to adjust systems, behaviours or structures in response to climate change or climate change and variability, aiming to reduce vulnerability and take advantage of potential benefits. It often includes specific strategies, such as altering agricultural practices, building flood defences or designing more heat-resistant infrastructure.

Resilience

Closely related to adaptation, the capacity to absorb, recover from and adapt to shocks while maintaining essential functions, such as livelihood generation and food security.

Innovation for adaptation

The creating, testing, deployment or diffusion of new, adapted or improved adaptation solutions.

Locally led adaptation

Adaptation at the local level that adheres to the [eight principles of LLA](#).

Methodology

In alignment with UNDP's standards on Monitoring and Evaluation (M&E), UNDP-AFCIA collects outcome and impact data starting at the selection process and flowing into reporting and communication activities. Impact is gathered both quantitatively and qualitatively to create a comprehensive picture of action on the ground.

Selection criteria

UNDP-AFCIA received 797 applications from 92 countries in its first and second call for applications, with the highest number coming from Africa (54 percent). Following a rigorous selection process, supported by internal and external experts and a Grant Selection Committee composed of different AFCIA partners³, 44 initiatives were chosen based on four key criteria:

1. Effectiveness in adapting to climate change
2. Innovation in the business model or solution
3. Positive social and environmental impact
4. Potential to self-sustain, replicate or scale

An extensive due diligence process was carried out for the shortlist, which involved reviews from UNDP's technical, financial, safeguards and management teams. Grant agreements with the 22 selected initiatives from the first cohort were issued in April 2022 and grant agreements for the 22 selected initiatives from the second cohort were issued in August 2023. Initiatives operate and manage the grants completely independently with individualized support from UNDP-AFCIA for monitoring, reporting, investment brokering, international advocacy, peer-to-peer knowledge sharing and technical assistance.

³ GRP, UNDP-Sustainable Finance Hub, UNDP-Small Grants Programme (SGP), UNCDF, Climate KIC

Data collection

UNDP-AFCIA initiatives report their progress quarterly. A results-based reporting system, aligned with the programme's results framework, theory of change and AF and EU (donors) requirements, allows the initiatives to concentrate on the requested impact-level indicators, as well as other self-identified results. The required indicators capture relevant data on:

1. Resilience and climate change risks addressed
2. Thematic/impact areas each initiative is targeting
3. Key findings and achievements to report on their most significant results
4. Effectiveness and efficiency of the innovative solutions

Impact calculation methodology

Due to the different self-identified indicators, the data collected is not the same across all initiatives, causing heterogeneity of information and consolidation/aggregation challenges. To overcome these issues, impact data was gathered using two main methods:

1. Quantitative:

- a. Gathering and aggregating standard reported data (strengths = equally reported across all initiatives; limitations = process oriented, pre-determined reporting categories; impact data quality = medium)
- b. Gathering and aggregating key data directly from initiatives including their self-identified indicators, development of fact sheets and individual data gathering for communication

5. Gender equality and women empowerment
6. Environmental, Social and Corporate Governance (ESG) risk management measures
7. Challenges and lessons learned for adaptive management, knowledge sharing and improved future programming

Self-identified indicators are specific to each initiative and vary depending on their environmental and social contexts.

Similarly, to ensure efficient financial resource utilization, a well-structured rigorous financial monitoring and reporting system is in place.

The rich and diverse information received from the initiatives through their quarterly and annual reports is shown in an interactive [dashboard](#).

More information

Background information on UNDP-AFCIA:

<https://www.adaptation-undp.org/afcias>

UNDP-AFCIA articles and stories:

<https://www.adaptation-undp.org/afcias/news>

UNDP-AFCIA solutions catalogue and factsheets for each initiative:

<https://www.adaptation-undp.org/afcias/solutions-catalogue>

UNDP-AFCIA dashboard:

<https://www.adaptation-undp.org/afcias/dashboard>

GCA's stories of resilience featuring UNDP-AFCIA:

<https://gca.org/wp-content/uploads/2024/11/GCA-Locally-Led-Adaptations-2024-final.pdf>



United Nations Development Programme
304 E 45th Street, New York, NY 10017

.....

www.undp.org
@UNDP

climatepromise.undp.org
@UNDPplanet