



ADAPTATION & RESILIENCE DIALOGUES

Scaling locally led adaptation in the Global South:
Lessons from the Adaptation Fund Climate Innovation Accelerator



TUESDAY
FEBRUARY 3



09:30–11:00
Brussels (GMT+1)



15:00–16:30
Brussels (GMT+1)

ADAPTATION FUND CLIMATE INNOVATION ACCELERATOR

AFCIA fosters innovation in climate change adaptation in developing countries, using innovative adaptation practices, tools and technologies.

It generates evidence of impact to trigger opportunities for scaling up.

69 projects | Up to US\$ 250,000 per grant

Total budget: \$5M + \$11M (EU)



Grantees: non-governmental organizations (NGOs), civil society organizations (CSOs), business member associations (BMOs), and community based organizations registered in a developing country.



Total budget: \$5M + \$1.8 (CTCN)

Project Entities: Governments, non-governmental organizations, community groups, entrepreneurs, academic/research institution in developing countries especially SIDS and LDCs with a Nationally Designated Entity (NDE) in place.

A photograph of a woman in a red shirt and blue headscarf working in a lush green field, partially obscured by plants.

Agenda

Welcome & opening remarks

UNDP-AFCIA programme overview

UNEP-CTCN-AFCIA programme overview

Stories from the ground: UNDP-AFCIA

UNDP-AFCIA MBA Fellowship

Stories from the ground: UNEP-CTCN-AFCIA

Q&A / discussion



Opening remarks



Saliha Dobardzic

Adaptation Fund
Programming and Innovation
Unit Lead and Senior Climate
Change Specialist



Angel Gutierrez

European Commission
Head of Economic and
Social Development



Yusuke Taishi

UNDP Climate Change
Adaptation Principal
Technical Advisor a.i.



Ariesta Ningrum

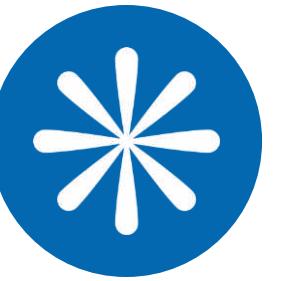
UN CTCN Director





ADAPTATION FUND





Opening remarks



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Angel Gutierrez

European Commission
Head of Economic and
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Radhika Dave

UNDP Climate Change
Adaptation Senior Technical
Advisor



Ariesta Ningrum

UN CTCN Director



- AFCIA Impact Report Launch

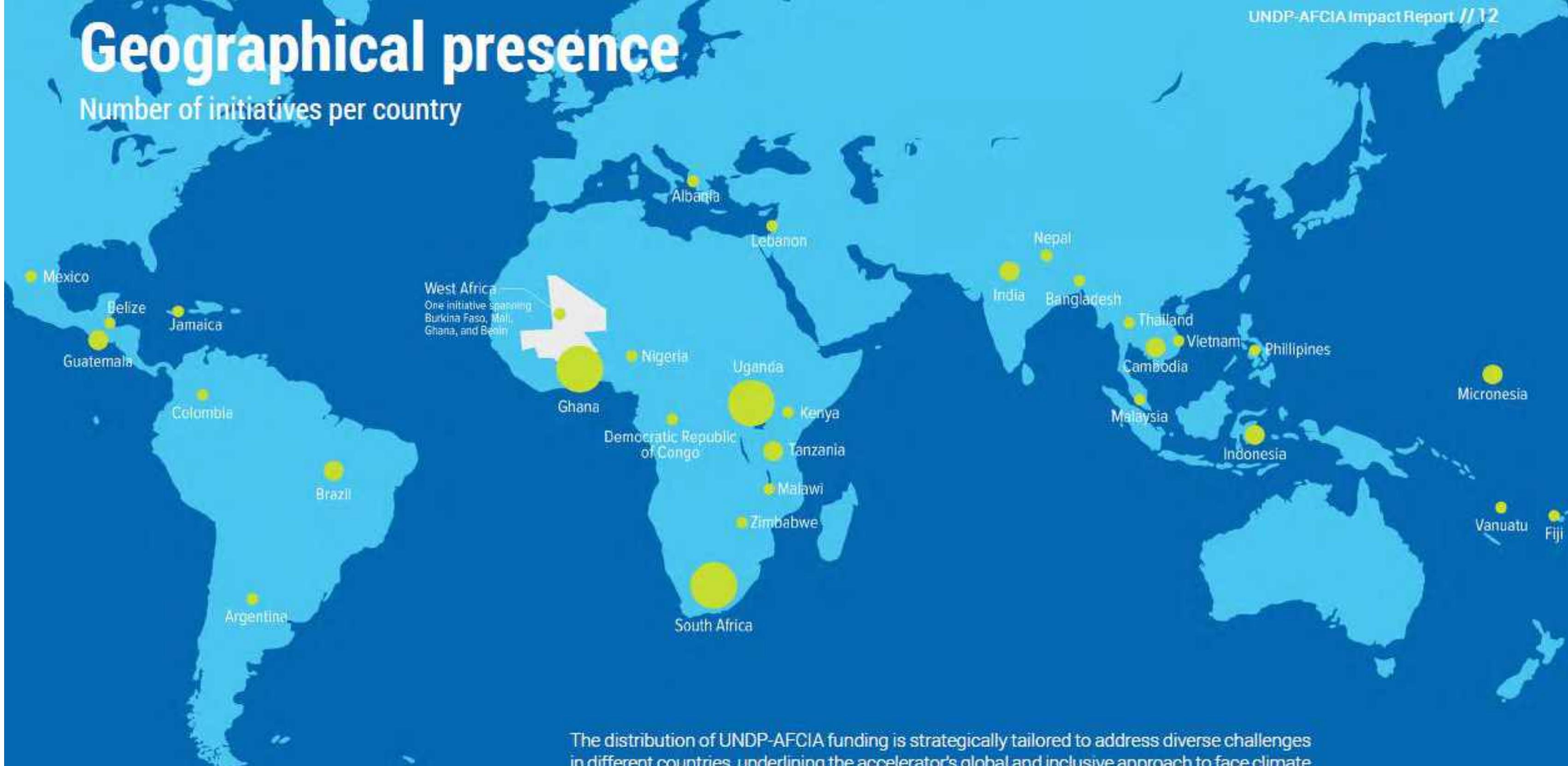
UNDP-AFCIA Impact Report

Key findings, impact and lessons learned of a 5-year journey.



Geographical presence

Number of initiatives per country



The distribution of UNDP-AFCIA funding is strategically tailored to address diverse challenges in different countries, underlining the accelerator's global and inclusive approach to face climate change across regions.

44 initiatives | **33** countries



Funding per region



Total grant funding delivered
across **44 initiatives**



Impact



Urban adapt



Innovative
adaptation
financing



Focus on
communities



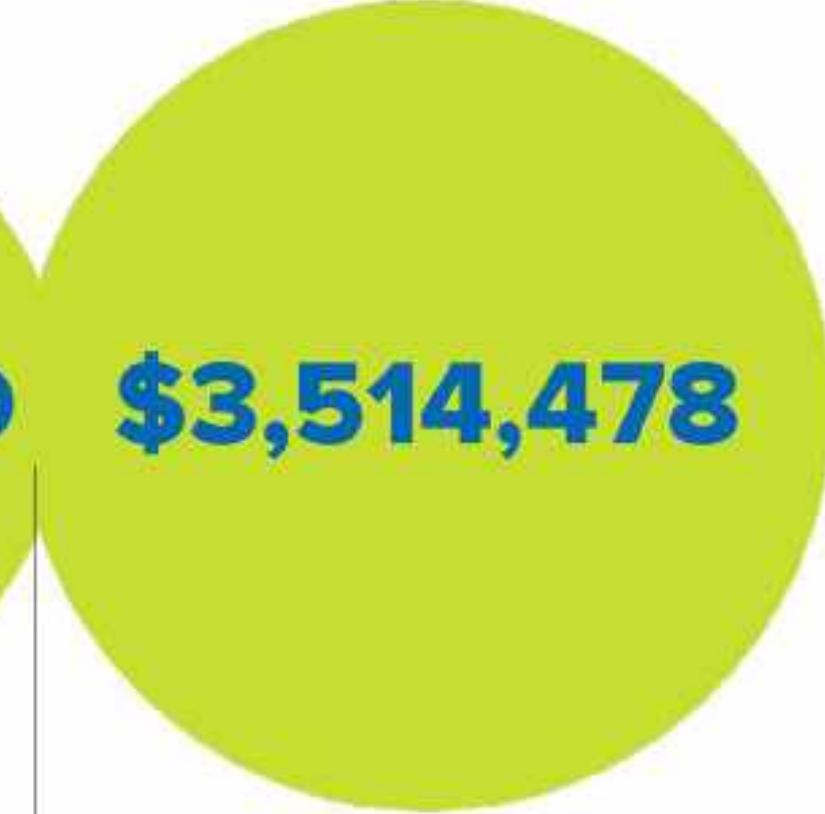
Disaster-risk
reduction



Nature-based
solutions



Food security



\$1,886,800
Initial round
\$1,627,678
Scaling round

Total investment

\$8,383,246

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

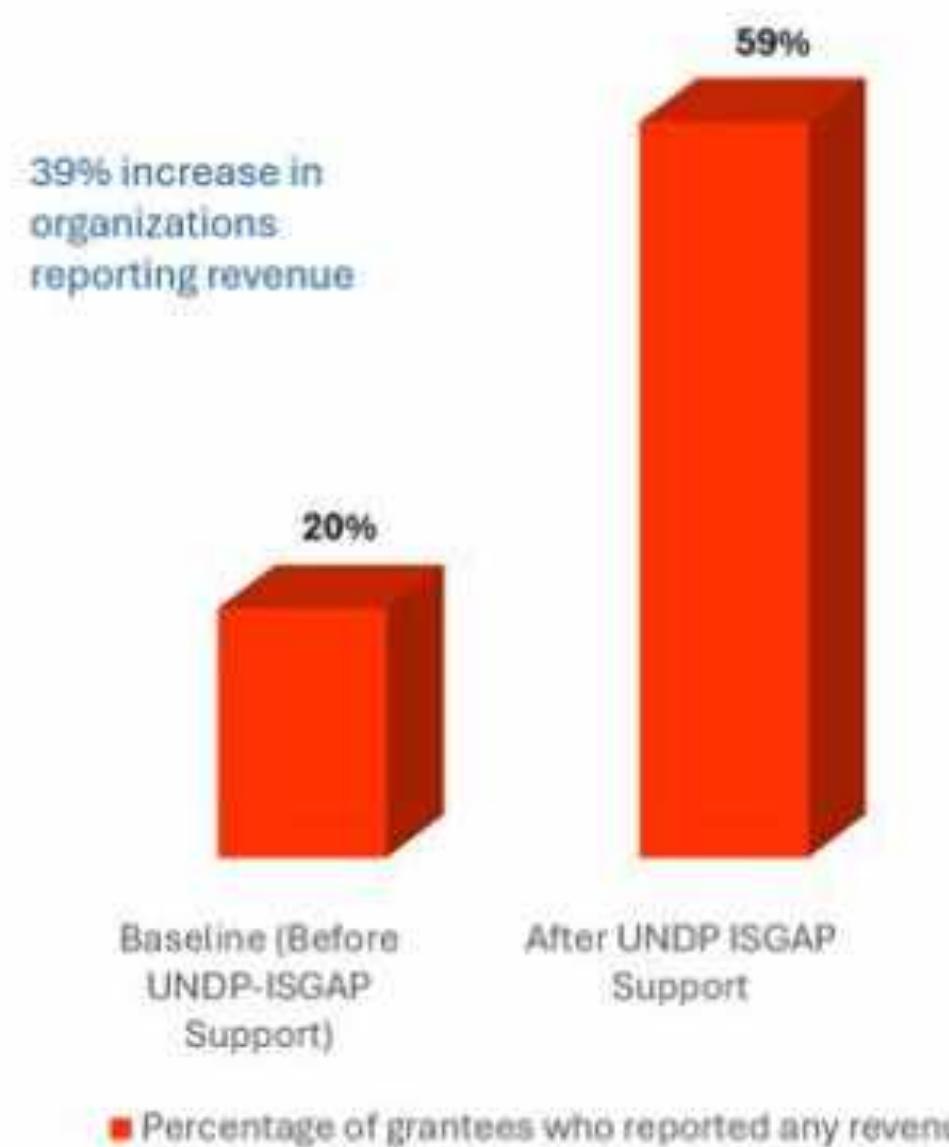
47,132 Individuals with improved productivity or professional skills

\$4,171,424

Additional funding unlocked by UNDP-AFCIA grantees

Scaling significant impact

Growth in Revenue-Generating Capacity of UNDP-AFCIA Grantees



Business Outcomes across UNDP-AFCIA Grantees

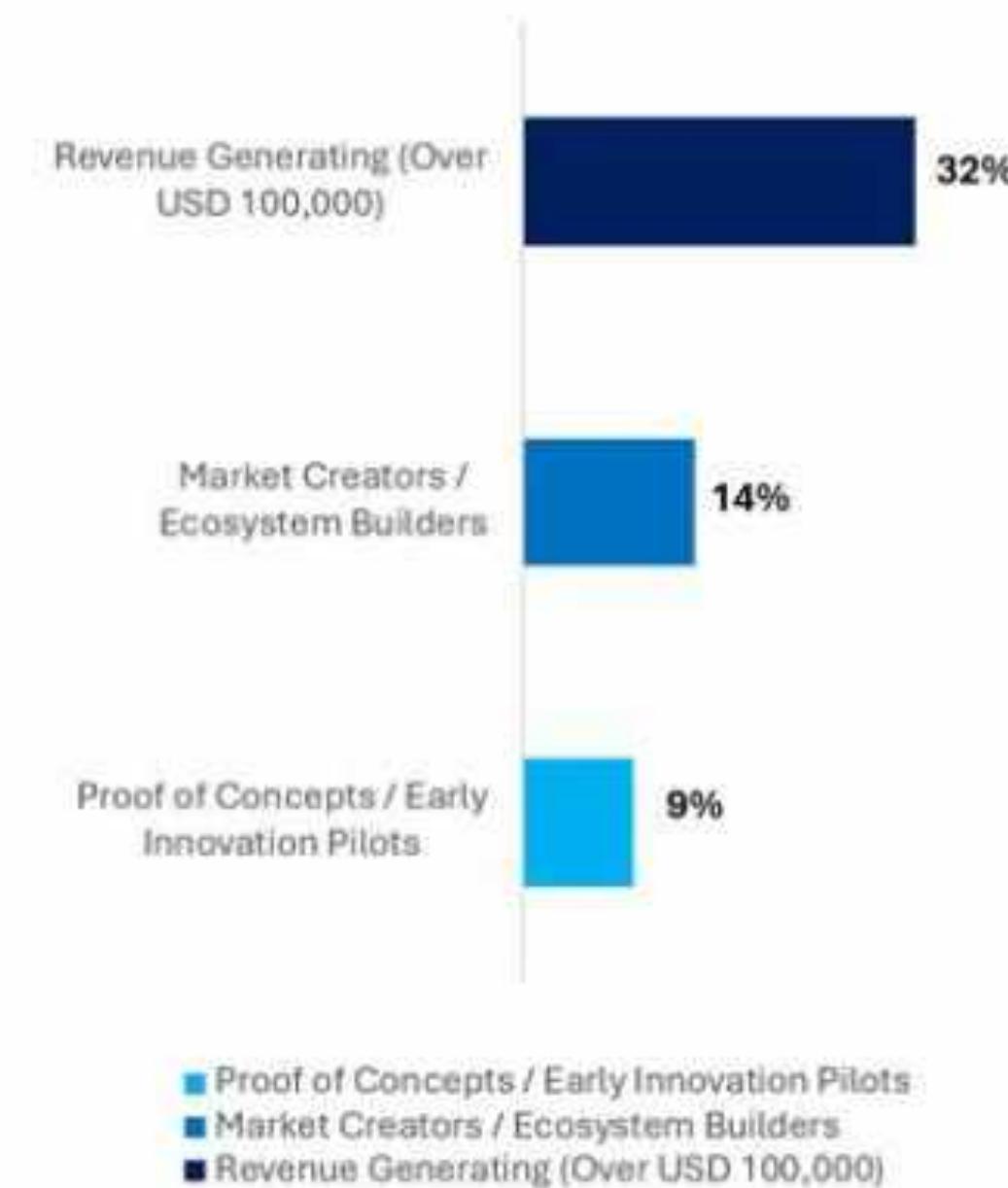


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Lessons for adaptation and resilience



Lessons on innovation



Lessons on locally led adaptation



Lessons on gender equality and mainstreaming



Lessons on replicability and scalability



Lessons on knowledge generation and exchange



Photo: Action for Environment and Sustainability (AES)

Photo: HEKS/EPER Cambodia

Photo: Phil Kabuie / UNDP Tanzania

Photo: Foundation for Community-Soul (FCS)

Photo: Open Ghana

Photo: Smart Farms Fiji Foundation

Lessons learned

Local ownership & flexibility

Empowering local actors through direct funding mechanisms enhances effectiveness:

Providing direct funding to local organizations and stakeholders enables them to design and implement context-specific climate solutions.



Lessons learned

Capacity building

Failure must be recognized as an integral part of the innovation process:

Innovation involves an iterative process that often includes setbacks and "failures." These challenges provide valuable learning opportunities.



Lessons learned

Financial sustainability

Diversified revenue streams and unlocking private investment are key to the financial sustainability of adaptation initiatives:

Ensuring the financial sustainability of climate adaptation projects requires the exploration of alternative revenue streams.

Market access and ecosystem service monetization are key to financial sustainability:
Strategies to strengthen market linkages, secure certifications, and develop buyer relationships were central to the success of projects.



Lessons learned

Scalability

Adaptive management approaches are crucial for ensuring the flexibility and scalability of climate adaptation efforts:

Climate change is dynamic, and adaptation strategies must remain flexible to respond to evolving local needs and environmental challenges.

Phased funding models are essential for scaling and sustaining innovation:

Allows for a gradual scale-up of initiatives, providing the necessary financial and technical support at different stages of development.



- AFCIA Impact Report Launch

UNEP-CTCN-AFCIA Impact Report

Key findings, impact and lessons learned of a 5-year journey.

23
countries

25
projects



Geographical presence

Number of initiatives per country



UNEP CTCN-AFCIA supports countries in Africa, Asia-Pacific, Eastern Europe, and Latin America and Caribbean under the United Nations Framework Convention on Climate Change (UNFCCC), with priority given to Least Developed Countries (LDCs) and Small Island Developing States (SIDS).

No. of initiatives



25 initiatives | **23** countries

52%
of the initiatives are implemented
in Least Developed Countries
(LDCs) and Small Island
Developing States (SIDS)



Funding per region



\$2.45 million

Africa

\$1.5 million

Asia and the Pacific

\$1.1 million

Latin America and
the Caribbean

\$1.5 million

Globally used for
knowledge production
and sharing activities

\$254,350

Europe and
Central Asia

Portfolio by Sector

Early Warning Sys. (9)

| | | |
|---|-----------------------|---------|
| EWS for Flood | Mali | Sudan |
| EWS for Forest Fire | Georgia | |
| Drought Modelling and Forecasting Systems | Saint Kitts and Nevis | Ecuador |
| Agrometeorological Platform | Nepal | Nigeria |
| Multi-hazard Platform | Malaysia | |
| Transboundary Water Management | Vietnam | |

Water Management (6)

| | |
|------------------------------|----------|
| Aquifer mapping | Zambia |
| Flood mitigation barrier | Burundi |
| Flood sensor technologies | Malawi |
| Rainwater harvesting system | Pakistan |
| Water drainage system | Maldives |
| Roadmap for aquifer recharge | Suriname |

Food Security (10)

| | | |
|--------------------------------|------------|------------|
| SPIS | Liberia | Mozambique |
| Drones for soil mapping | Sudan | |
| Enabling environment and SPIS | Ghana | Guatemala |
| Climate-smart farming | Mozambique | |
| Blockchain for crop insurance | Thailand | |
| Climate-smart free trade zones | Bahamas | |
| Pastureland management | Mongolia | |
| Biodiversity hot spots | Honduras | |

UNEP CTCN-AFCIA beneficiaries

Over the 2 million people reached by UNEP CTCN-AFCIA

Gender breakdown

Men

58%

42%

Women

Age profile

Youth

20%

80%

Adults

212,264

Direct
beneficiaries

11,615 (37% women)

Number of staff targeted for capacity
building to respond to, and mitigate
impacts of, climate-related events

2,262,496

Direct and Indirect
beneficiaries



15

new adaptation
solutions tested



11,615

staff across 2,243
organizations with
improved professional
skills and increased
capacity for adaptation



56

local technical tools,
guidelines and training
modules produced to
support technology use



\$17 million

unlocked for scaling
successful adaptation
initiatives



10

enabling
environments
for adaptation
technologies and
innovation adoption
and diffusion
strengthened



947

municipalities are
benefitting from a
new, an improved or a
strengthened early
warning system,
agrometeorological or
multi-hazard platforms.



15

adaptation-related
climate plans,
strategies, and laws
supported



3,000,716 ha

natural assets or
ecosystems protected/
rehabilitated

**UNEP CTN-AFCIA
impact data**

Scaling significant impact

To date, 10 of the 25 initiatives (40%) have already secured additional support and finance for scale-up, either from governments, private sectors, or through new grants:

Burundi, Georgia, Malawi, Ghana, Pakistan, Sudan EWS, Zambia, Maldives, Mongolia, Saint Kitts and Nevis





**Lessons on
Innovation**



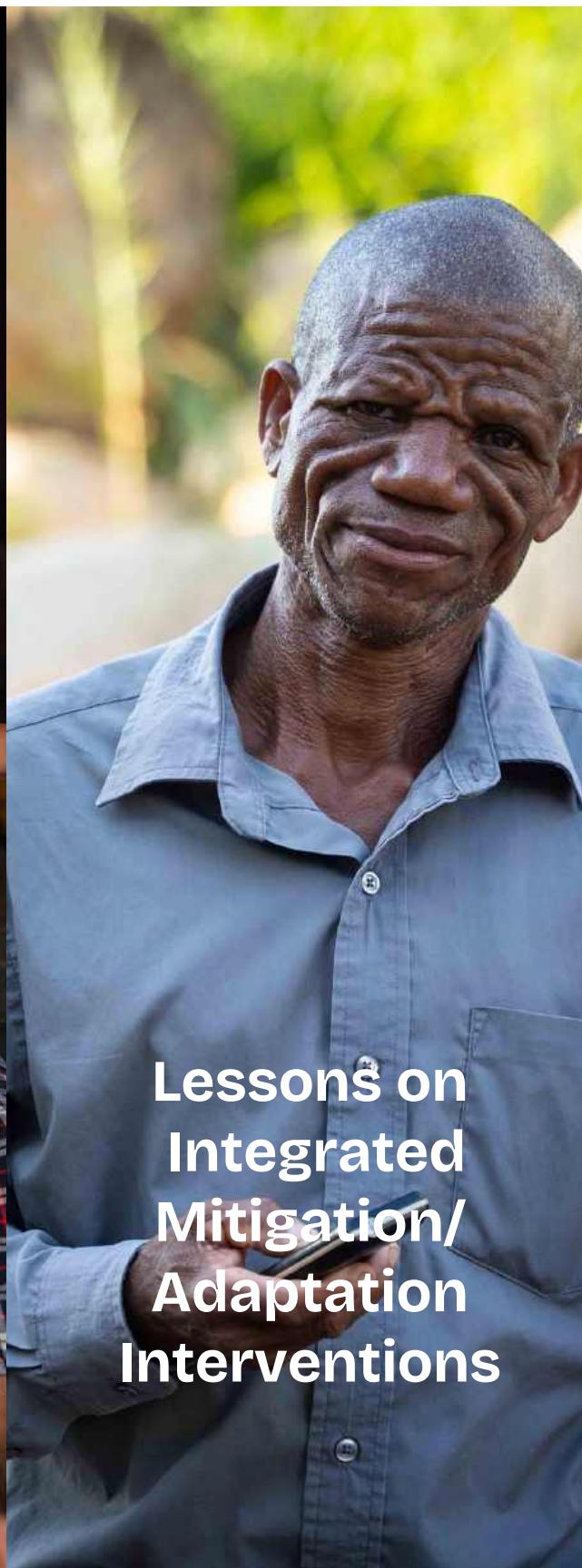
**Lessons on
Locally Led
Climate
Adaptation**



**Lessons on
Adaptation and
Monitoring**



**Lessons on
Replicability**



**Lessons on
Integrated
Mitigation/
Adaptation
Interventions**



**Lessons on
Knowledge
Generation and
Exchange**

Lessons learned

Adaptation and Monitoring

Essential to measure and document impact

To build up evidence for the future roll-out of technologies, it is essential to measure and document on-the-ground impacts. Although challenging and resource-intensive, this approach is still acknowledged as the direction for best practice.



Lessons learned

Replicability

Successful only with government ownership and coordination

Government ownership is critical for the success and replication of technologies.

Once technology proves effective, its roll-out and scale-up require coordination across different entities, levels and sectors.



Lessons learned

Integrated Mitigation / Adaptation Interventions

Climate smart solutions build resilience

Initiatives like ecosystems restoration or renewable energy (e.g., solar-powered irrigation) can build resilience to future climate impacts and support livelihoods while limiting/reducing emissions.



Lessons learned

Knowledge Generation and Exchange

Technology transfer depends on capacity building. Users must develop skills to continue project.

Technology transfer depends on capacity building and knowledge exchange. End users must have opportunities to learn about the technology and develop skills needed to interact with it in the future.



Resources

Adaptation Fund Climate Innovation Accelerator Programme (AFCIA) Dashboard

Adaptation Fund – UNEP

This dashboard has been developed to present high-level information and results of the AFCIA programme. It enables interaction based on signature solutions, sectors, interventions, and SDGs.

Type of intervention

- Enabling environment
- Technical Acceleration

Sector

- Adaptation Finance
- Climate Data
- Disaster Risk Reduction
- Food Security / Agriculture
- Nature-based Solutions
- Urban Adaptation
- Water Management

Type of Solutions

- Agrometeorological Platform
- Aquifer Mapping
- Blockchain
- Climate-Smart Agriculture Technique
- Cross-Cutting
- Drones Soil Mapping
- Early Warning Systems (EWS)

AFCIA Programme Global Coverage

● Enabling environment ● Technical Acceleration

Mongolia

UNDP
UN Environment
UN Economic Commission for Europe
UNFCCC
CTCN

Technical Assistance: Enhancing climate resilience and economic sustainability of livestock farming

Location: Bayanzaran Sum, Mongolia

Solution: Sustainable pastoralism management and introduction of community-scale meat processing systems

UNEP CTCN grant: USD 304,500



Mongolian herder in Bayanzaran Sum, CTCN COUNTRY

Climate change and overgrazing have severely degraded pastures, threatening the livelihoods of pastoral communities in Mongolia. This study assessed the potential to enhance climate resilience and economic sustainability by improving pastoralism management, developing community-scale meat-processing systems, and building the capacity of herding communities. By strengthening the resilience of herders' farming, sustainable livelihoods for vulnerable herding families are ensured while mitigating the impact of climate change.

 **Objectives**

- The project focuses on enhancing climate resilience and economic sustainability of livestock farming.
- Activities include assessing improved pastoralism management practices, climate change vulnerability, and community-scale meat-processing business models.

 **Adaptation Impact**

- Enhanced Livestock Management and Pasture Resilience:** The deployment of improved livestock management practices and pasture resilience measures helps mitigate the negative effects of climate change and support sustainable livestock farming.
- Improved Economic Sustainability:** The study of the development of community-scale meat-processing systems by economic resilience by creating value-added products and new sources of revenue for herders.

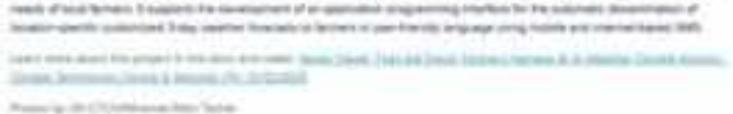
 **Social Impact**



This Programme, financed by the European Union and implemented by the UN-CTD, supports 145 projects to develop and test innovative adaptation products and technologies in non-treaty S countries. UN-CTD has granted 20 micro and small awards due to UN-CTD's efforts to involve the most vulnerable countries in assessing their innovative solutions to enhance resilience in the most vulnerable communities.



ABCD



UN CTCN and UNDP projects around the world, financed by the Adapt... Copy link

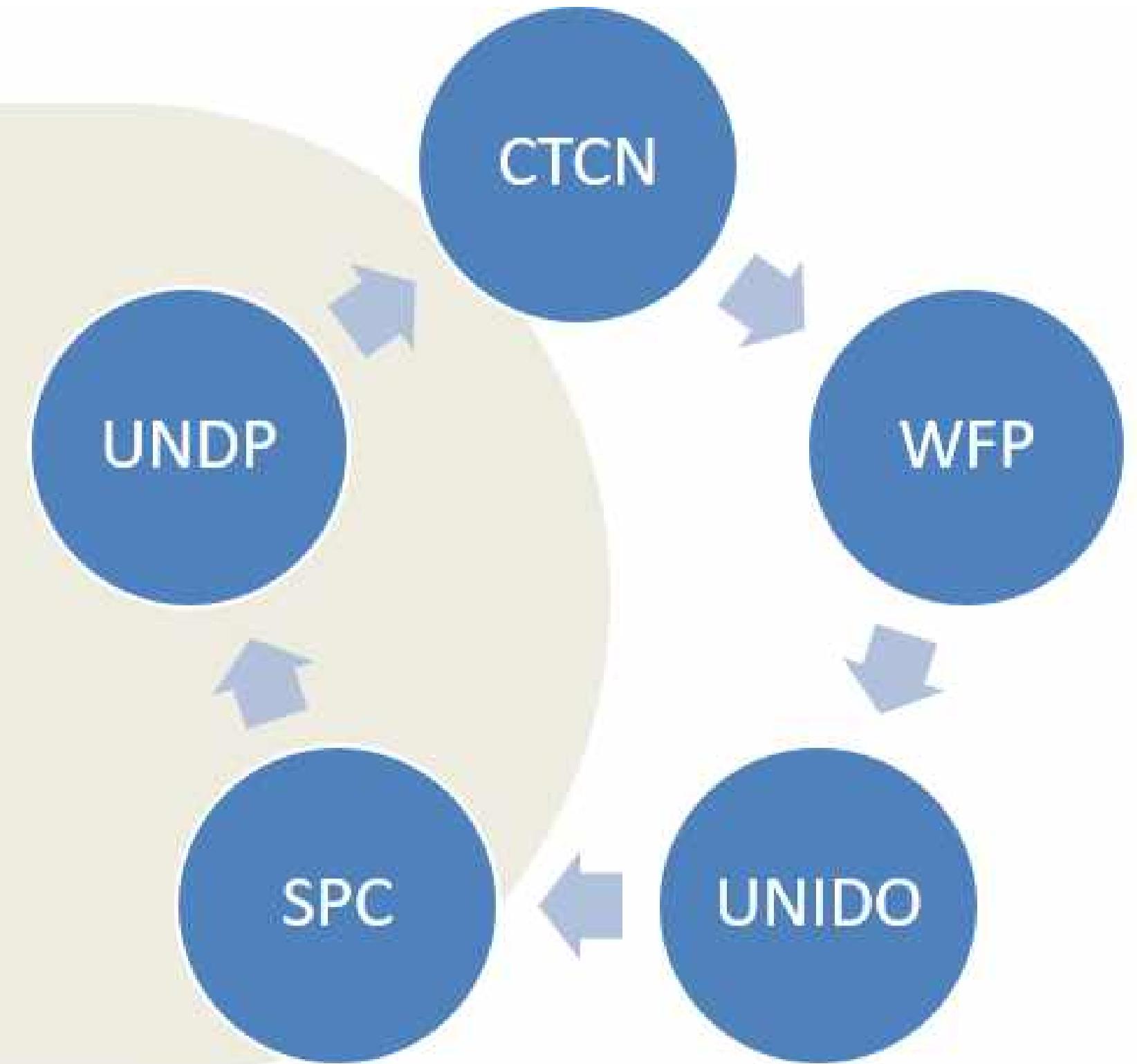
Climate change - Climate change refers to long-term shifts in temperatures and...

Watch on YouTube

AFCIA I is closed, but AFCIA II will be even bigger!

All these programmes are sourcing 200+ projects

AFCIA is implemented by all these agencies for \$30 million and will continue to grow



UNDP: CSO and NGOs (grants)

WFP: Specific regions (grants)

UNIDO: Private sectors (grants)

SPC : Pacific only (grants)

CTCN: Technical Assistance open to all sectors, all countries (not grants)



Stories behind the data

- AFCIA Impact Report Launch

Stories behind the data



South Asian Forum for Environment, India

Dr. Dipayan Dey



Rural coastal farmlands are inundated with saline water due to sea level rise and storm surge, ruining crops and exacerbating food insecurity for farmers living below poverty line



AFLOAT-HEAL

Adaptive Float-farming for Horticultural Entrepreneurship & Livelihood



- 650 HEAL Hubs, 150 Ha in vulnerable floodplains.



- 5700 farmers, 20 FPOs under financial inclusion



- Advanced capacities built in 2500-3000 marginal smallholder farmers for climate resilient farming



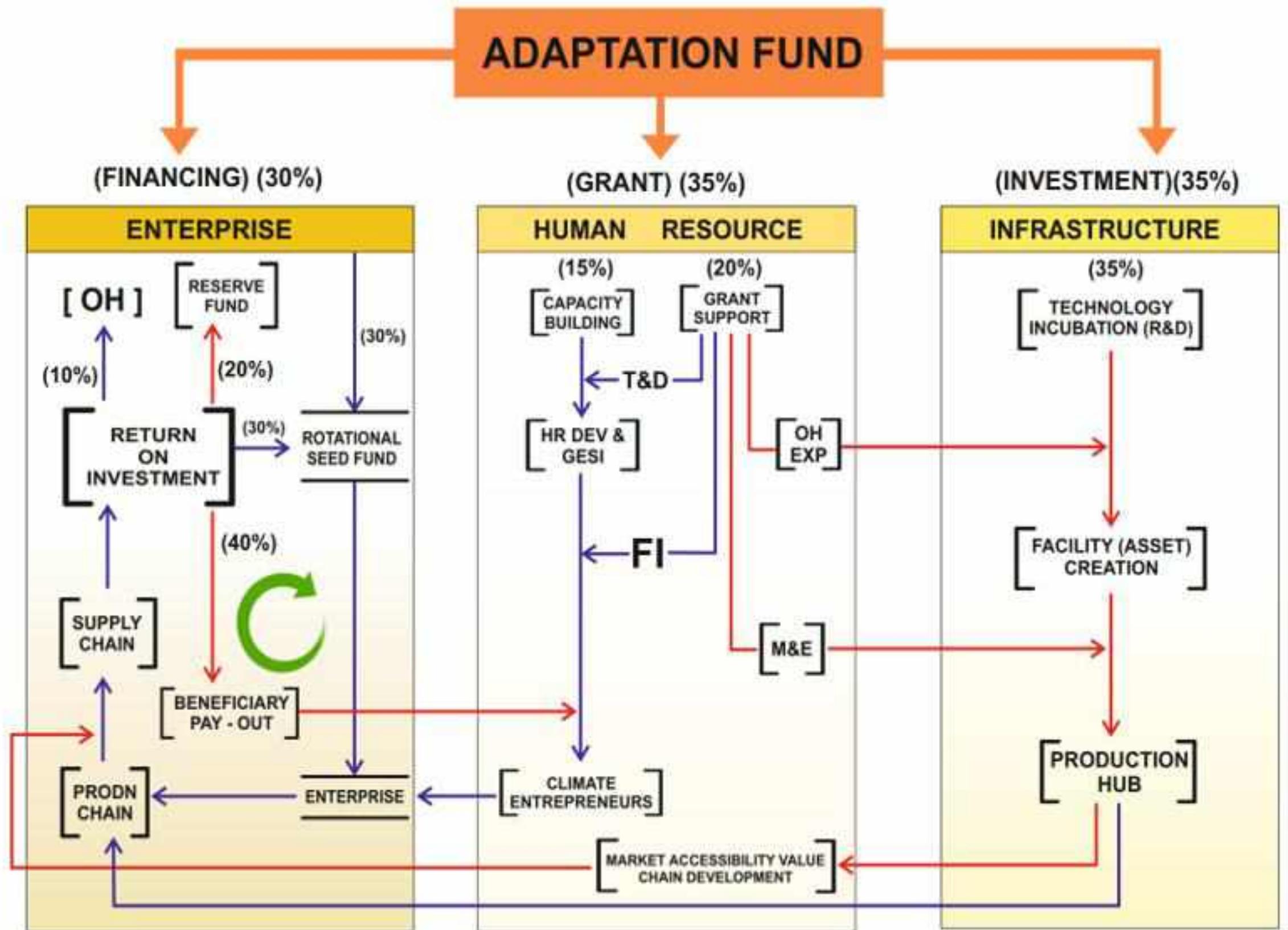
- \$325,000 investment deployed so far over 4 years



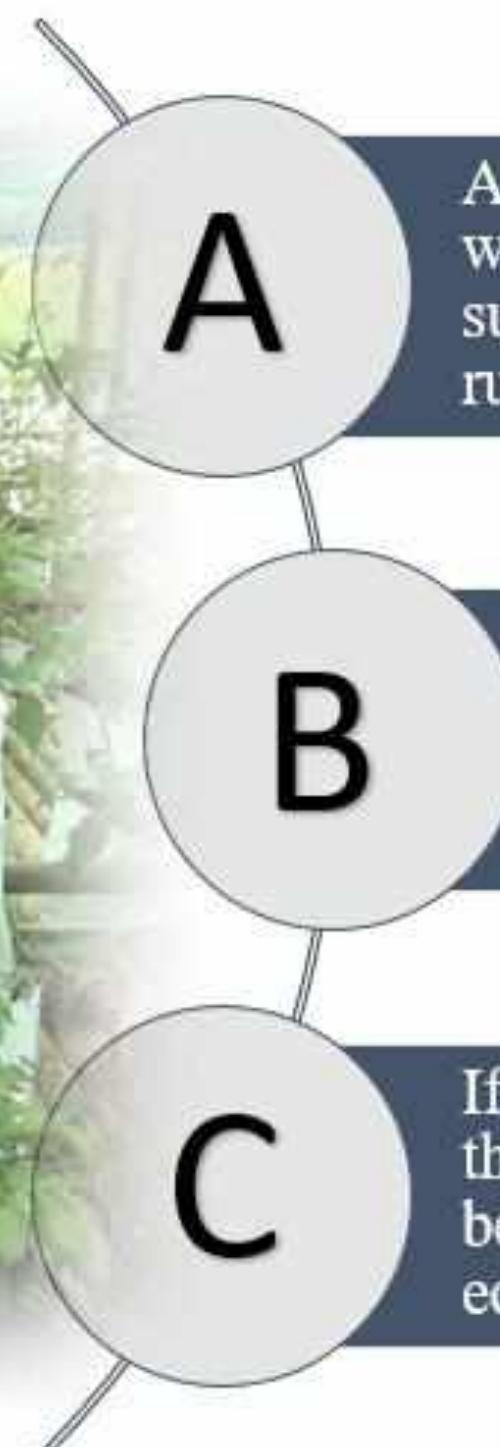
- Potential to expand nationally and internationally

| Indicator of Sustainability | | |
|--|------------|------------|
| Particular | Year 1 | Year 2 |
| Turnover | 790,680.00 | 885,561.60 |
| less : variable cost | 128,000.00 | 143,360.00 |
| Contribution | 662,680.00 | 742,201.60 |
| Less : Fixed Cost (Capital cost distributed with 36 months) | 164,500.00 | 164,500.00 |
| Profit | 498,180.00 | 577,701.60 |
| Profit Volume Ratio : contribution x100/sales | 84% | 84% |
| Break Even Point :Fixed cost/PV ratio | 196,274.01 | 196,274.01 |
| Margined of Safety : Profit/PV ratio | 594,405.99 | 689,287.59 |

Innovative Blended Finance



Adaptive Learning for Scale-up



A 2X times scaling up (300 float-farms to 600) of the current project with grant-support would need an amount of USD 65-70K and then to sustain the supply cold chain we would need another USD 25-30K (If runs on grid) / USD 40-45K (If solar powered).

If we go for blended finance with 70% grant, we need to scale it for 5X time to leverage the economy of scale to repay the loans. The investments will be 2.5 times more than the above.

If we go for more than 30% loan then (1) either we need to redesign the present structure and reduce the number / pay-out of the beneficiaries or (2) we need to scale up and replicate in other geo-ecologies to spread the risk.

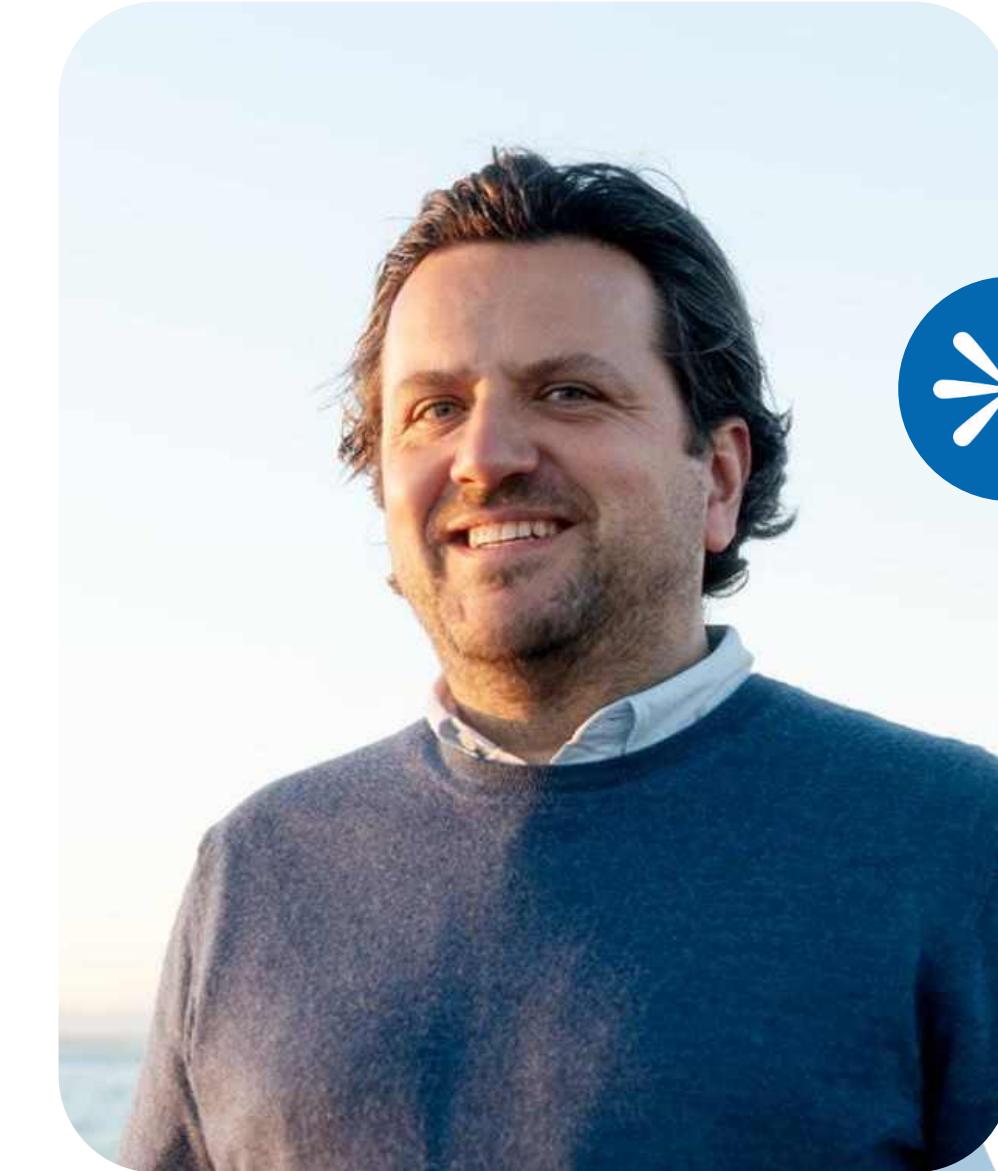
- AFCIA Impact Report Launch

Stories behind the data

ABALOBI, South Africa



Dr. Serge Raemaekers





ABALOBI



Harnessing community-led data and traceability tech
to rebuild small-scale fisheries and unlock equitable markets

www.abalobi.org/impact

greg.duggan@abalobi.org



Challenge

Small-scale fisheries =

40%

of global catch

Support 492 million
livelihoods

Cornerstone of global
food, nutritional & financial security

Mostly excluded from markets and
management conversations

Solution

Enabling technologies

We co-design data collection ICTs to digitise
and legitimise their livelihoods

Capacity building

We address the capacity challenges in
small-scale fisheries and catalyse financial, digital
and cultural inclusion

Market access

With digital tools, and relevant training in place, we
invest, and establish transparent cold chains,
payment gateways, and direct market access



Social

75%

avg food security status of market participant fishers after 1 year

109.130K

mouths fed through food security sales programme

41%

women beneficiaries in the market programme

38

supported fisher collectives

Ecological

93%

ecological sustainability of market catch composition within 3 years

C-FIP

world-first TBL community-level Fisheries Improvement Programme

Stable catch

Rates for key species sold on the ABALOBI Marketplace

496 tonnes

Fully traceable, legal seafood sold

Economic

US\$2.0m

Revenue channelled directly into small-scale fishing communities

77%

Economic value retention of market sales at local community level

9579

Small-scale fisher beneficiaries across all our programmes

10%

Fishers using ABALOBI financial services



- Moving slowly to move fast - take time to understand context and adapt offering accordingly
- Co-design - involve people early and consistently
- Embedded staff - ground-up approach

Stories behind the data

I-SEED Youths, Jamaica



Tracey-Ann Harriage



Project context

- Volatile communities facing climate shocks, GBV & youth violence.
- Women & youth disproportionately affected and economically excluded.
- Urgent need for safe, dignified, income-generating pathways.



Solutions

- Climate-smart food security
- Capacity building
- Livelihoods that build peace



Innovation: Climate-smart agriculture for behavioral change

- Climate-smart agriculture as violence prevention & healing
- Safe spaces for women & youth exiting GBV and volatile environments
- Blended model: behavioral change + skills + income
- Trauma-informed, community-owned & scalable



Impact

- 30–45% reduction in community violence & Gender-Based Violence
- 60–75% youth disengagement from crime and antisocial behavior
- 4000+ livelihoods created for women & youth
- 40–60% improvement in household food security
- Globally recognized as a scalable climate peace model

Lessons learned

- Community ownership sustains peace
- Structure changes behavior
- Food security is violence prevention



Stories behind the data

World Neighbors, Kenya



Vincent Mariadho





LOFODA-G-Meal

Locally Formulated Dairy Goat Meal

Regenerative Feed for Climate-Resilient Dairy Goat Farming in Kenya



Context

34M+



in Kenya, yet may face feed shortages

60%

Annual deficit (about 33M tonnes of dry matter)

34M goats in Kenya, yet many smallholder farmers face feed shortages

29%

rural children malnourished



Innovation

A community-driven answer to food insecurity, malnutrition and climate vulnerability

through
formulation of nutritious goat feed from locally available fodder materials





Women and youth put into production clusters earning income and livelihoods



USD 22,970

Cumulative revenue generated by 2025;
projected USD300K revenue by 2030



~80%

increase in milk yield reported by early adopters



15 LIs identified

Community's innovative capacity strengthened

Impact



Reduced pressure on vegetation
(Cut and carry feeding model eradicated)



2,113

Practicing dairy goat farming as an
alternative source of livelihoods



138

Women and youth employed as skilled or
unskilled labourers

Lessons learned

Co-creation of knowledge: Communities are at the center of knowledge co-creation, coming up with site appropriate solutions to their own constraints and challenges.

Locally-led adaptation: An effective adaptation can be achieved even with low grants if communities are part of the adaptation initiatives.

Sustainability: There is an urgent need to mainstream/institutionalize community-centered adaptation approaches with donor, development actors and extension spaces.



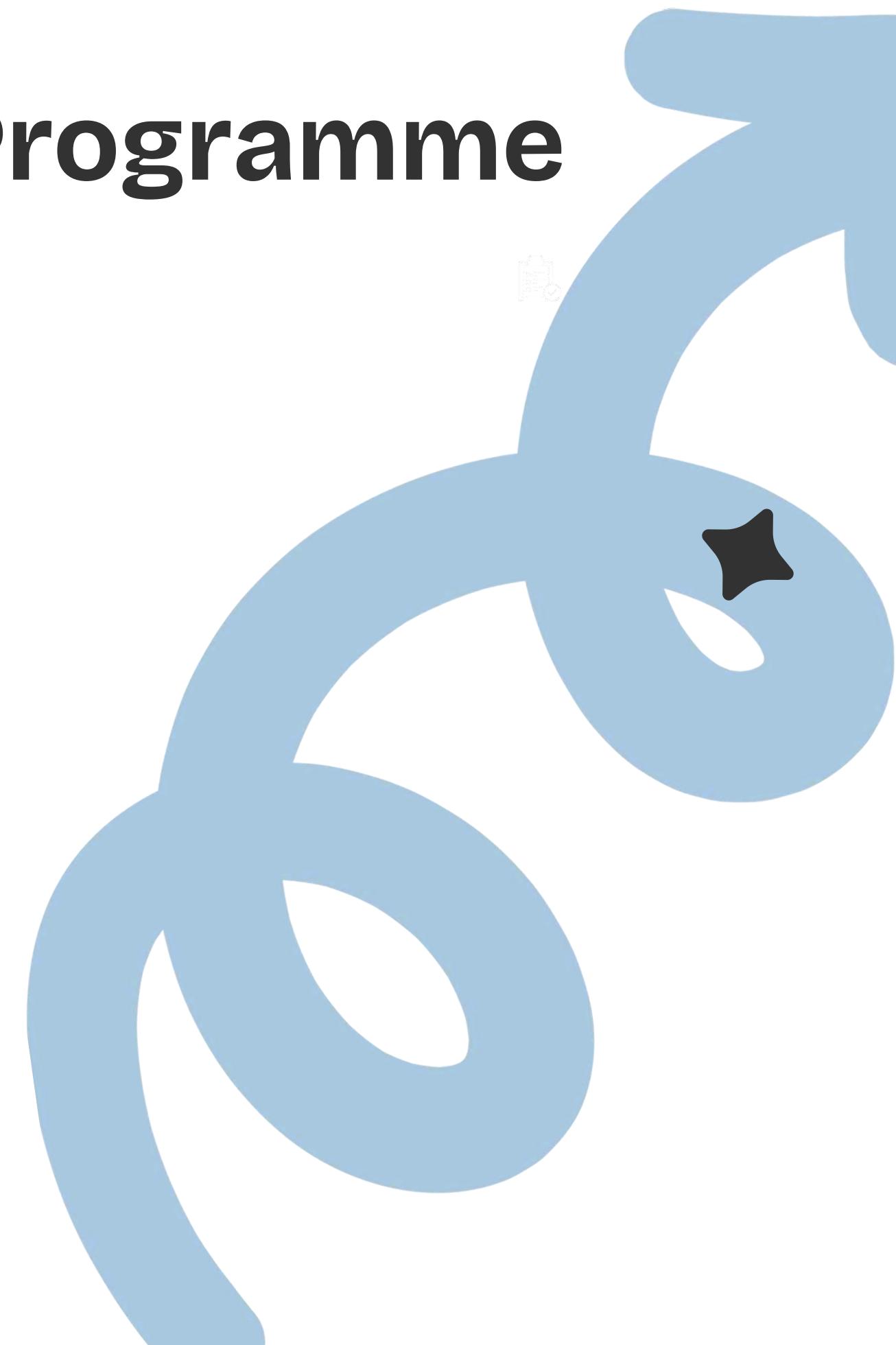
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UNDP-AFCIA MBA Fellowship Programme

**Saïd Business School,
University of Oxford**



**Abrar
Chaudhury**



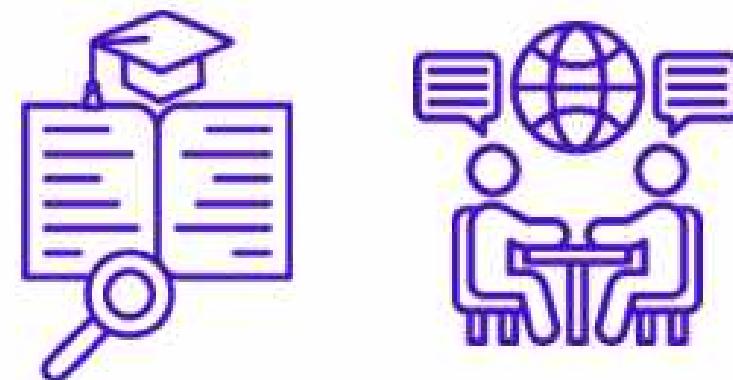
Number of MBA intern deliverables

150



Pages of academic research produced

957



Focus areas

- Adaptation finance mechanisms
- Livelihoods and resilience
- Locally led adaptation
- Impact measurement
- Project case studies
- Project sustainability
- Funding strategies

MBA Intern Outputs

| | |
|-------------------------------------|----|
| Financial Models & Strategies | 32 |
| Business Plans | 31 |
| Pitch Decks & Marketing Tools | 31 |
| Market Analyses & Strategies* | 13 |
| Capacity Building Plans | 10 |
| Investor Resources & Portfolios | 9 |
| Programme Funding Strategies | 7 |
| Environment & Climate Risk Analyses | 7 |
| Stakeholder Engagement Strategies | 6 |
| Programme Narratives | 2 |
| Impact Reporting Plans | 2 |

Project-specific output AFCIA programme output

*Including carbon & biodiversity credit feasibility studies



Stories behind the data

- AFCIA Impact Report Launch

Stories behind the data: Nepal

RSMI
Uttam Singh



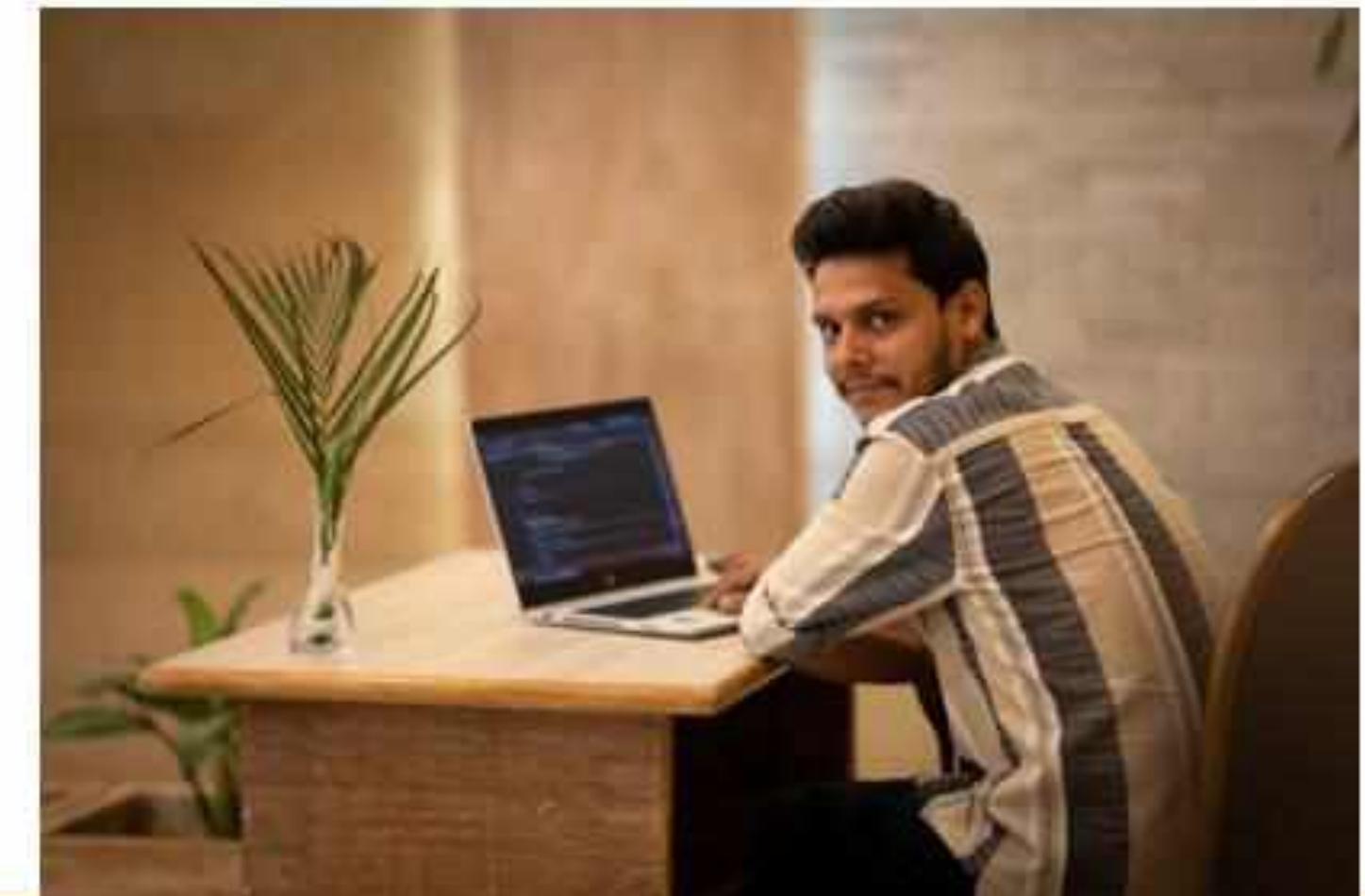
Problem: Climate-induced hazards are increasingly frequent and severe in mountainous regions as a result of changing precipitation patterns and rising temperatures.



Challenge: Weak IT infrastructure

Solution:

- Automated digital platform to deliver timely and localized digital climate, weather, and agricultural advisories.
- Improved agricultural decision-making.
- Multi-channel dissemination.
- Bias-correction mechanisms for improved temperature and precipitation forecasts.



Key Benefits: Enhanced climate resilience, agricultural productivity, and informed decision-making by farming community.

Next Steps:

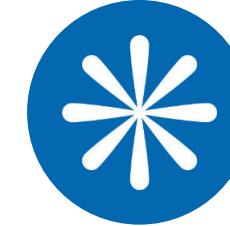
- Scaling up solution
- Improve weather forecasts
- Strengthen IT infrastructure
- More dissemination channels
- Long-term financial sustainability through integrating API operational costs into government budgets
- Strengthening inter-agency coordination





Nepal video link: <https://www.youtube.com/watch?v=NBp8ImUEUSQ>

Stories behind the data: Mozambique



Practica
Aldo Zamarroni



Mozambique: Implementation of Water-Food-Energy nexus using digital technologies for local communities

Problem: Farmers face water scarcity, irregular precipitation, poor soil management and limited access to farming technologies

Approach:

- Modular Integration of solar-powered irrigation, aquaculture, biogas, and composting.
- Tailors design to farm needs



Impact:

Sustainable Resource Management & Improved Food Security;

- Ensuring the efficient use of natural resources while increasing agricultural productivity and reducing vulnerability of smallholder farmers to climate change

 PRACTICA

Next Steps: Scale up the modular approach through targeted dissemination, capacity building for local stakeholders and implementation of demonstration plots.



- AFCIA Impact Report Launch

Stories behind the data: St Kitts and Nevis



**Director, Climate Action
Unit, Ministry of
Environment, St Kitts
and Nevis NDE**

Elrick Francis



St Kitts and Nevis: Drought Forecasting Modeling

Problem: Recent push towards an agricultural and tourism-based economy places greater demand on already stressed water resources.

Approach: Designing a data-driven drought forecasting system. Weather information is shared with farmers via simple technologies, like SMS, to help inform decision-making.

Impact: Increased resilience in the water sector, improved use of water resources, & water and food security.

Next Steps:

- Shifting towards operational drought forecasting systems, with continuity of ground-based data.
- Increased collaboration intra-Ministerially and continued capacity building.
- CTCN is providing TA to improve water supply management through a GIS-based monitoring and control system for water loss reduction, and a decision support tool for water network management (web based)





St. Kitts & Nevis video link: <https://www.youtube.com/watch?v=glxWPxUCvs0>

- AFCIA Impact Report Launch

Q&A

[UNDP-AFCIA website](#)

[UNDP-AFCIA Impact Report](#)

[UNEP-CTCN-AFCIA website](#)

[UNEP-CTCN-AFCIA Impact Report](#)

[Adaptation Fund website](#)



