

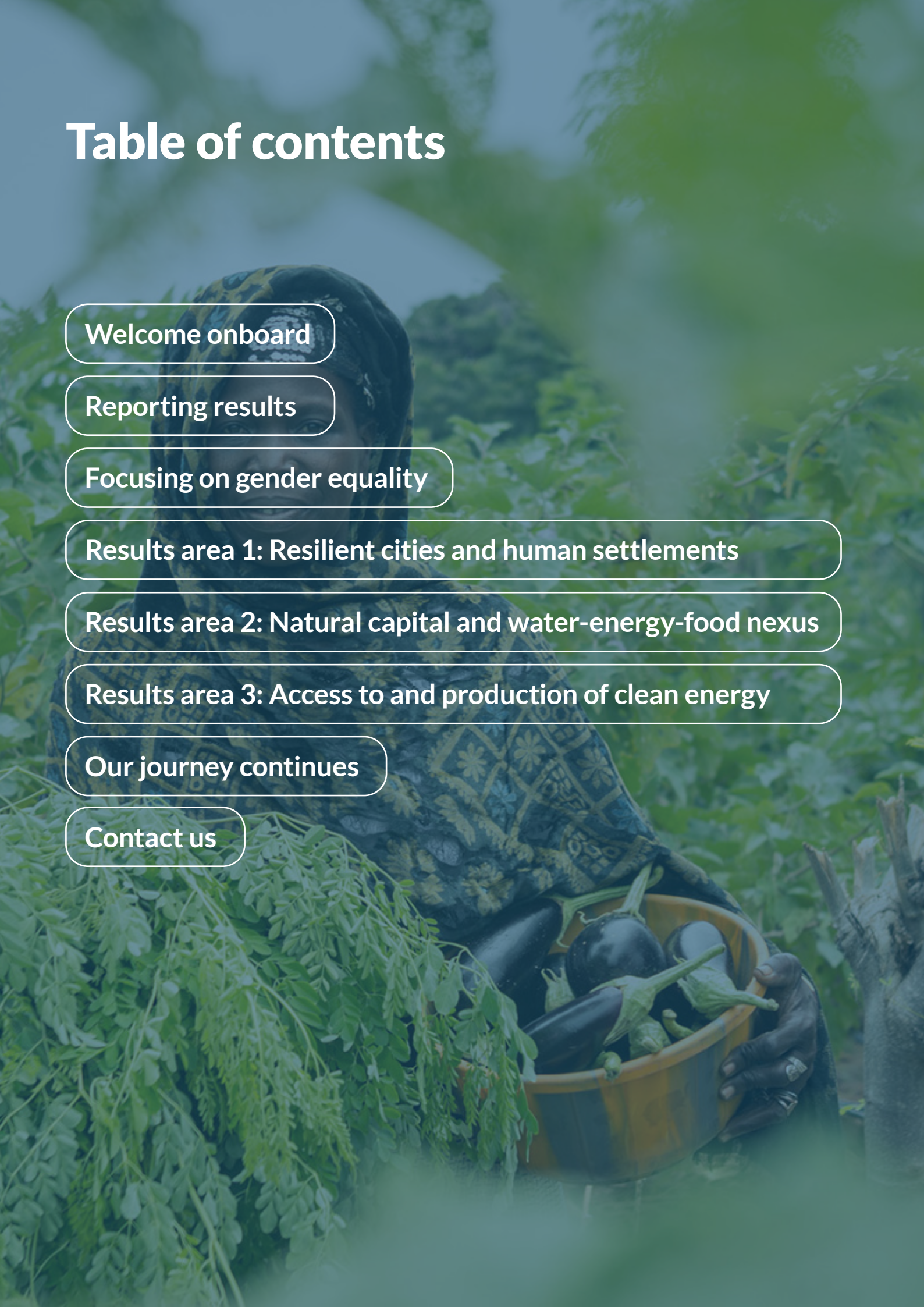


Nordic Development Fund

Nordic action for climate

NDF RESULTS REPORT 2022

Table of contents

A woman wearing a patterned headscarf and a matching patterned garment is holding a wooden bowl filled with various vegetables, including eggplants and leafy greens. In the foreground, there is a large, dense bunch of green leafy vegetables, possibly moringa. The background is a soft-focus green, suggesting an outdoor setting with trees or foliage. The entire image has a semi-transparent green overlay.

[Welcome onboard](#)

[Reporting results](#)

[Focusing on gender equality](#)

[Results area 1: Resilient cities and human settlements](#)

[Results area 2: Natural capital and water-energy-food nexus](#)

[Results area 3: Access to and production of clean energy](#)

[Our journey continues](#)

[Contact us](#)

Welcome onboard



In this section

Foreword

NDF in brief

Our guiding targets

Strategic pathways

Photo: GOAL Global

Foreword

During 2022 we faced multiple old and new crises that have negative impacts for the global climate and development goals. These interlinked crises have increased uncertainty and multiplied the already massive challenges that exist in climate change, poverty reduction and the global economy.

Some positive developments came, however, with an increased focus on adaptation in the context of COP27. The year ended with the UN's landmark biodiversity agreement which will put 30% of the planet and 30% of degraded ecosystems under protection by the end of the current decade. This agreement also included proposals for increasing biodiversity finance, something which NDF follows closely.

These challenges, and the urgency to tackle them, make NDF more well-placed than ever to build a better future.

Climate finance has reached record high levels but is still falling short of needs. The availability of financing – especially concessional financing – is scarce, and particularly the adaptation finance gap widens every year. More volume in adaptation finance is needed, and it has to be targeted predictably, patiently and flexibly to those needing it most – particularly lower income countries and especially the Small Island Developing States, and through structures that can multiply its impact.

To reach positive development results and impact, we need to continue to improve the quality of project designs and adapt monitoring and evaluation

2022 key portfolio figures

NUMBER OF PROJECTS



48

TOTAL FINANCING OF ACTIVE PORTFOLIO



EUR 359 m

systems, to better know what works, what does not work and why. This will enable us to address the root causes and build our work on quality data and evidence for targeted climate action. Effective monitoring, evaluation and learning is also a critical agenda for NDF.

The public sector currently faces big financing needs to address some of the most critical and costly impacts of climate change. It has for a long time been unrealistic to assume that the public sector could absorb the financing needs related to climate and development. Catalytic blended finance models are important for attracting private sector and institutional investors. While such models have been developed and presented as promising solutions, the processes require further development, facilitation and support from financiers like NDF.

The results for this report have been collected by applying our **Results Management Framework (RMF)**. In this report we detail our contribution to building resilient, sustainable and equitable societies in the least developed countries and countries in fragile situations.

Challenges remain and now is a critical time to bring all stakeholders to the table. NDF is well-equipped with a focused mandate and offering to meet the greater resources that the climate and development agenda needs urgently to cope with the mounting challenges.

I would like to sincerely thank our partners, Board of Directors and the dedicated NDF staff for making this happen. Together we have positively contributed to the lives of the most vulnerable people around the world. This gives reason for optimism, which we can now show in concrete results.

CO-FINANCING RATIO *



1:10

*based on the indicative total project cost at Board approval

Now is a critical time to bring all stakeholders to the table. NDF is well equipped with a focused mandate and offering to meet the greater resources that the climate and development agenda needs.



Karin Isaksson

Managing Director
Nordic Development Fund





Photo: Ignitia

NDF in brief

NDF is the joint Nordic international finance institution (IFI) focusing on the nexus between climate change and development in least developed countries. NDF was established in 1988 by the Nordic countries Denmark, Finland, Iceland, Norway and Sweden. Since 2009, NDF has focused our activities on climate change and development. NDF is financed by the Nordic countries and received our latest capital increase of EUR 350 million in 2020. We have a staff of 28 and our offices are in Helsinki.

The demand for climate change financing is constantly increasing, and NDF's approach is to respond quickly, flexibly and appropriately using our concessional financing instruments. Depending on the project type, we may contribute with grants, loans and equity. These instruments can be used stand-alone or blended, as relevant.

As a convener, we bring together public and private sectors and encourage the participation of institutional investors. As a concessionary financier, NDF advances Nordic leadership on climate solutions, supports early-stage design and structures, and provides catalytic financing for launch and scale with focus on least developed countries, particularly in Sub Saharan Africa, fragile countries and Small Island Developing States.

NDF is well-placed to provide solutions and added value to tackle the global challenges. Our model is based on working with strategic partners in places which need us the most, such as Sub Saharan Africa and elsewhere in the Global South, and focusing on the most vulnerable, such as women and girls. We support early stages of projects, building a firm foundation with our partners to mobilise other financing, including private capital for increased impact.



Established in **1988** by the **Nordic countries** Denmark, Finland, Iceland, Norway and Sweden.



NDF is financed by the Nordic countries and received our latest capital increase of **EUR 350 million in 2020**.



We have a staff of **28** and our offices are in Helsinki.

NDF's project database

Our guiding targets

Our actions are guided by the Strategy 2025, which defines our approach in addressing climate change and development challenges together with our co-financing partners. This strategy outlines our guiding targets and introduces three strategic pathways for carrying out our work: Advancing Nordic leadership, Early-stage design and structure and Catalytic financing for launch and scale. Our progress towards achieving the three guiding targets in 2022 is presented below.

In 2022, 53% (67% in 2021) of our funding has been in the form of grants and 8% in recoverable grants. The share of equity financing has grown slightly due to some high-volume private sector projects. The share of loans has remained very small. More than 60% of the financing in our active portfolio is aimed at delivering adaptation outcomes. This is beyond the target set in our Strategy, but we also know that much more needs to be done. To assess our climate focus, we apply the OECD Rio Marker definitions. The geographic focus of our co-financed operations is Sub Saharan Africa.

CLIMATE



At least **50%** directed towards
adaptation projects

61%

COUNTRY FOCUS



At least **60%** targeted towards
Sub Saharan Africa

56%

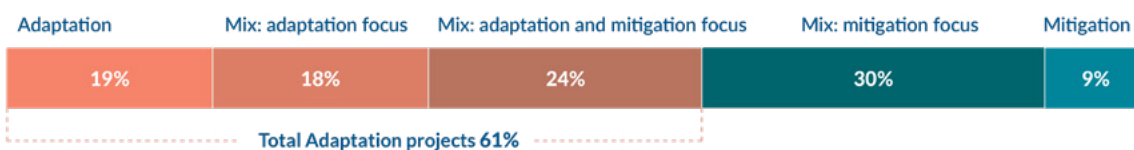
CONCESSIONALITY



At least **50%** of financing
with **grants**

53%

Climate



Country focus



Concessionalality





Photo: ADB

Strategic pathways

The Nordic countries are committed to climate and development work. This common Nordic voice supports the international community in meeting the Sustainable Development Goals and the goals of the Paris Agreement. Since 2020, NDF has put dedicated efforts in developing frameworks, policies and tools to facilitate the delivery of our portfolio and, ultimately, fulfilment of our purpose through three mutually reinforcing strategic pathways.

Advancing Nordic leadership

NDF helps advance Nordic leadership in combatting climate change and reducing poverty, in particular in Sub-Saharan Africa. We use concessionary financing terms to spur public and private sector participation in projects and actively raise awareness about the importance of action.

For example, NDF participated in the UN Climate Conference (COP27) in November 2022, joining forces with other Nordic institutions to share knowledge and spur action to mitigate and adapt to climate change. We organised events at the Nordic Pavilion and participated in discussions in many others. One of the highlights was the event on Nordic climate finance which we organised together with the other Nordic IFIs, Nefco and NIB, with the Norwegian Minister of International Development, Anne Beathe Tvinneireim, on stage with us.



62 initiatives, networks and engagements with partners.*

*This includes joint communication initiatives, strategic partners' news promoted through NDF's channels and number of partner events with NDF contribution.



100% early-stage projects in the active portfolio

Developing early-stage design and structures

The lack of available financing for the design, development and structuring of early-stage projects focusing on climate and fair and sustainable development is a constant challenge. NDF helps solve this by effective risk mitigation which unlocks larger scale financing from other partners, often from the private sector. By proper planning and piloting, projects can be validated, developed and tested to a point which attracts public and private investors.

The Africa Circular Economy Facility is an example where NDF financing can build foundations for a thriving project. The Africa Circular Economy Facility aims to build structures and processes to make circular economy solutions a mainstream green growth strategy. It plans to provide technical assistance and capacity-building support for the public and private sector in selected African countries. In addition to helping governments, it also intends to provide pilot funding for promising early-stage circular economy business models.



UMDF project brought 22 African city representatives to Copenhagen and Malmö to get ideas for urban development. Photo: UMDF/AfDB

Providing catalytic financing for launch and scale

Many least developed countries are disproportionately affected by climate change. However, international financiers may consider directing climate finance into these countries as too risky. NDF mitigates risks in the early stages of a project to improve its viability and attract new investments. By addressing perceived risks NDF encourages scale-up financing to create a larger volume of climate finance.

This can be seen in practice with the Systematic Observations Financing Facility (SOFF), a project including the World Meteorological Organization, UN Development Programme and UN Environment Programme. SOFF aims to strengthen climate adaptation and sustainable development in least developed states by collecting and analysing weather data for forecasting and early warning systems. NDF provided a EUR 10 million grant as part of a financing partnership with Denmark, Finland, Iceland, Norway and others. NDF's support and timing of the disbursement helped catalyse commitments of USD 65 million in additional financing from other partners.

“NDF has been demonstrating outstanding leadership in lifting SOFF off the ground. Both, in terms of design of the new UN Fund, but also because of the early pledge that inspired other partners to join.”

- **Markus Repnik**, Director of Systematic Observations Financing Facility

Reporting results



In this section

Developments since 2021

Overview of 2022 results

Applying systematic results management

Methodology used

Key learnings

Photo: GOAL Global

Developments since 2021

The outcome of NDF's Results Management Framework (RMF) baseline exercise was captured in our 2021 Results Report. This entailed assessing progress by project and aggregating this information at the portfolio level. Projections for both active and newly approved projects were captured to the extent possible.

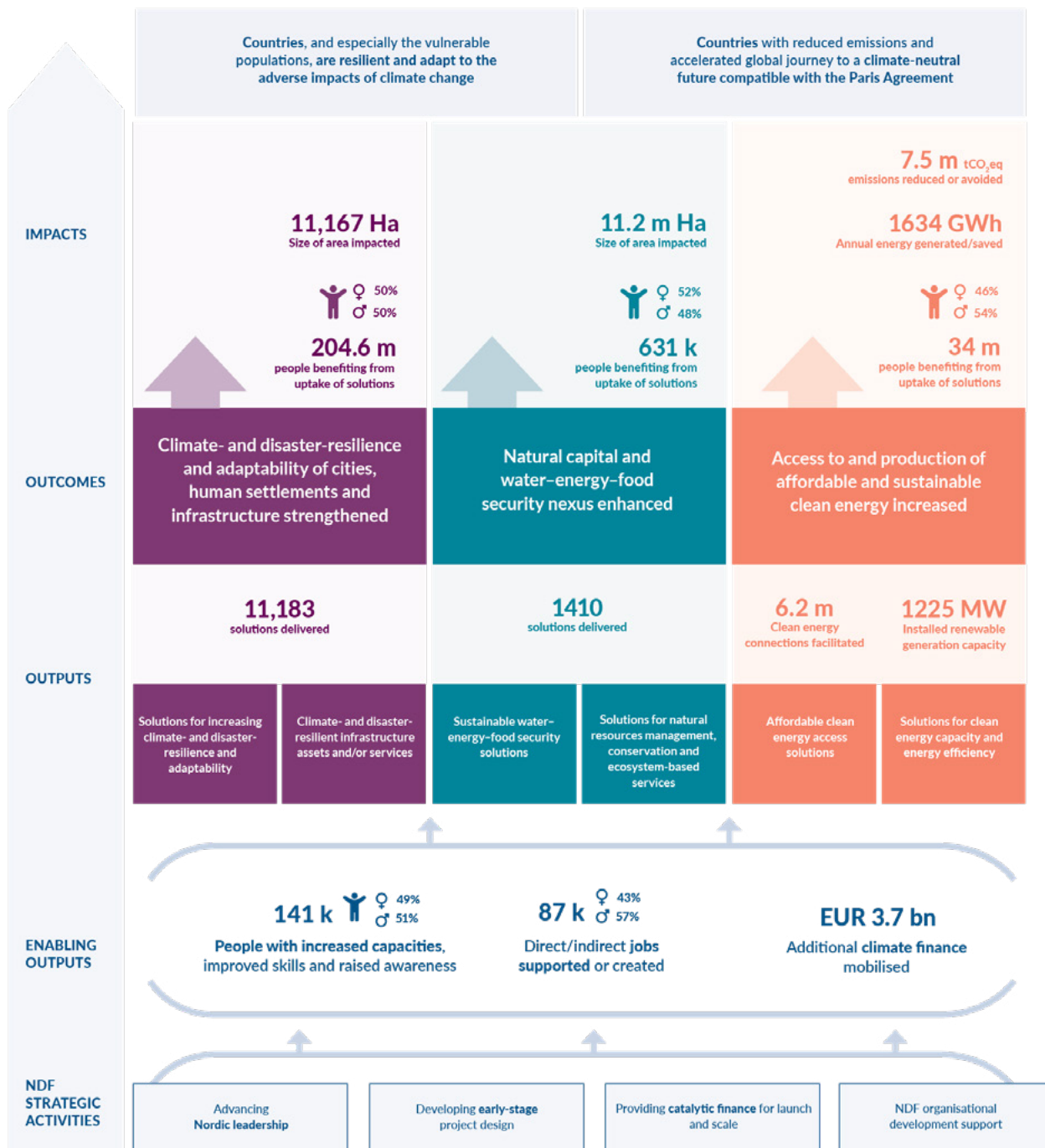
Following our Theory of Change structure, the 2022 results show a steady, incremental progress towards the 2025 projections. Our active portfolio consists of projects in different stages: inception, full implementation or near completion. All these projects inform this report: the 2021 baseline, 2022 results and 2025 projections.

However, it should be noted that several projects are in early stages of implementation and results data is not yet available. Also, many of the project-level projections go beyond 2025 and the projections presented here do not cover those of the full portfolio, but rather illustrate projections within the current NDF Strategy period. The projections are composed of aggregate projected targets and project-level estimations. These are reviewed on an annual basis as part of the results collection process and thus should be treated as dynamic and changing.

The 2022 results show a steady, incremental progress towards the 2025 projections.

Results Management Framework

Overview of 2022 results



Detailed results with project examples are presented under each results area.

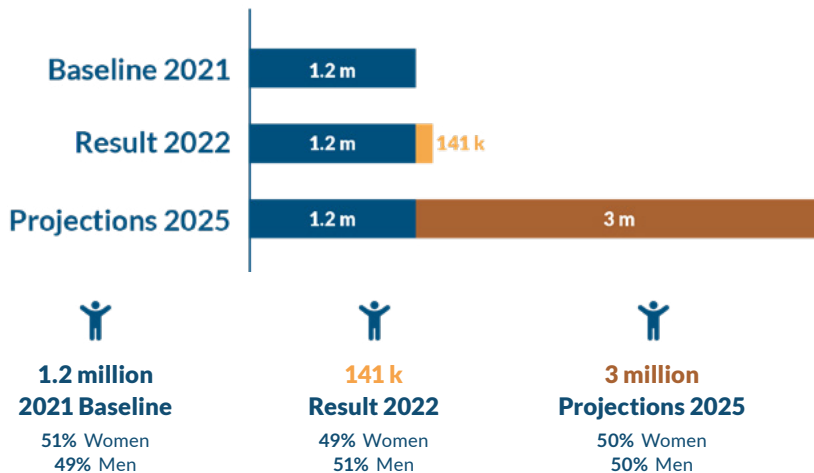
Results area 1: Resilient cities and human settlements

Results area 2: Natural capital and water-energy-food nexus

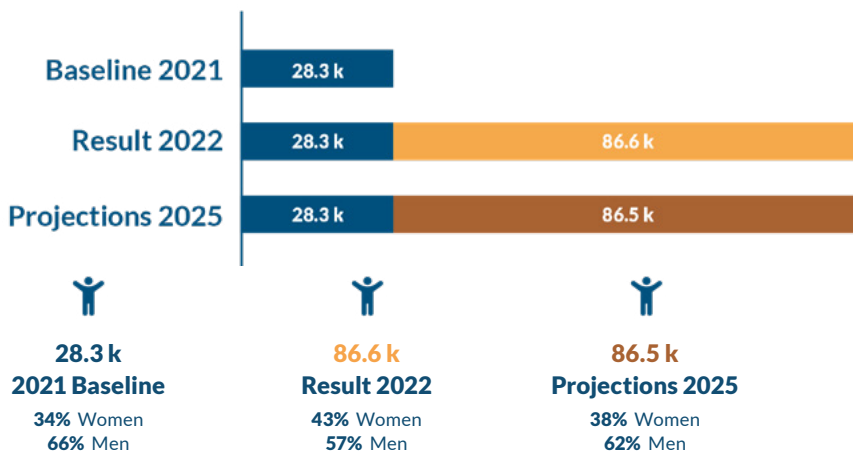
Results area 3: Access to and production of clean energy

Enabling outputs present our contribution towards increased capacities and skills, jobs supported and additional climate finance mobilised. These are common to all the three results areas.

Number of individuals with increased capacities, improved skills and /or raised awareness

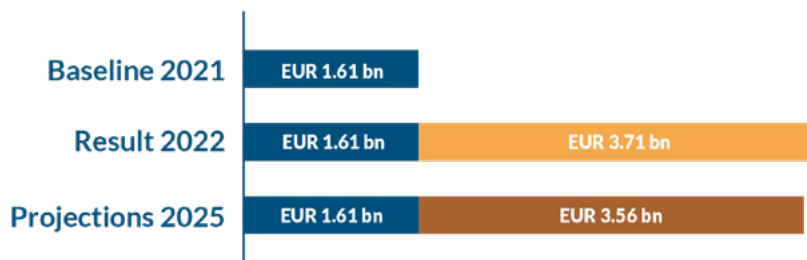


Number of direct (and indirect) full-time (equivalent) jobs supported or created



The high result against projections 2025 is due to many projects with pending projections and several projects with projections available only beyond 2025. Projections by 2027 are around 91 k / by 2038 309 k. Furthermore, many jobs are in the male-dominated energy sector, hence the large proportion of men.

Change in amount of climate finance mobilized



The high result against projections 2025 is due to one project, **NDC Pipeline Accelerator**, having reported a total of USD 3.11 billion mobilised. Projections by 2027 are currently EUR 5.9 billion.



Photo: GOAL Global

Applying systematic results management

The results for this report have been collected by applying the Results Management Framework (RMF). NDF's RMF is the apex of the organisation's results architecture and serves as a platform for analysing performance trends, identifying underlying issues, and reflecting on agreed actions with stakeholders and strategic partners to advance our performance.

With this framework in place, we continue to analyse and present portfolio level results, reflecting the direction and targets set in our Strategy 2025. The results captured in this report build on NDF's climate mandate including the provision of concessional financing with a strong focus on climate adaptation and broader development outcomes, in particular in least developed countries and countries in fragile situations.



The RMF journey so far

The RMF journey so far

October 2020



The development of the RMF started in **October 2020**. It reflects the key objectives, main directions and operational priorities of the Strategy. The RMF design work is based on an in-depth NDF project portfolio analysis, review of policy and operational documents as well as benchmarking with the industry standards and best practice.

Considerable efforts went into holding internal and external consultation rounds, including with the NDF Board, as well as in engaging with the entire NDF staff around the design work of the RMF in order to build consensus and ownership around it.

July 2021



The baseline exercise for the RMF started in **July 2021**. As this has not been done before in NDF, developing a data collection architecture to facilitate the process was an important first step. This was followed by a deep dive into project level data of the ongoing portfolio of projects.

As most of the RMF results indicators had already been used in the active portfolio of projects, it was central for results-based management to assess the status by project and to aggregate this information at the portfolio level.



Targets for both ongoing and newly approved projects were captured at the same go. Targets for future projects will be incorporated as they become available. Therefore, the aggregate target values should be treated as dynamic, changing, and subject to annual reviews.

September 2021

The RMF was adopted by the Board in **September 2021**.

May 2022



The outcome of the baseline exercise was captured in NDF's first Results Report 2021 that was published in **May 2022**. After the launch of the Report, NDF kicked off a project to take the offline, Excel-based RMF online in order to facilitate results data collection, review, validation, analysis and reporting also in the years ahead.

As a result of the project, the RMF was integrated into NDF's Project Management Information System (PMIS), which NDF had launched in 2021 to strengthen overall project and portfolio monitoring.

December 2022



The RMF online application was launched in **December 2022** and the baseline data was migrated into this new system. 2022 results data that informs this Results Report has also been collected, uploaded, validated, and analysed in the new online system.

Methodology used

NDF is a co-financier and provides catalytic and early-stage financing in concert with other financing partners. Consequently, the data that is used for developing this report is so-called *secondary* and reflects NDF's *contribution* to the reported results and impact. NDF counts on partners' provision of accurate data and reporting.

NDF's project portfolio consists of a range of different types of projects, and each have their own reporting cycles and the timing of reporting varies. Thus, the aggregates reported by the NDF represent "*as of now*" summaries.

The indicator-based results, impact data and most updated targets and projections are provided by the implementing partners, mostly annually. This data is reviewed and quality assured by NDF, with further consultations with partners as needed.



Ignitia, a project supported by Nordic Climate Facility, provides small-scale farmers in Burkina Faso custom and accurate weather forecasting data. Photo: Ignitia

Key learnings

NDF has captured many lessons through this exercise and used them to improve our data collection, analysis and our operations.

- **Data quality.** It is sometimes difficult to ensure the quality of data. Review and data validation can be challenging and time-consuming, requiring multiple consultation rounds with partners. This is particularly the case for projects that have been active for a longer period and where the RMF was not built into the design of the projects.
- **Data availability.** Data is not always disaggregated by sex, particularly in longer-running projects, making it challenging to draw gender-specific analysis. Other data gaps also still exist. We engage in significant capacity building and dialogue with partners to improve this.
- **Co-creation for adding value.** NDF co-creates projects together with partners and extends its expertise in Results-Based Management in these designs. The use of RMF has added significant value to the overall quality of the projects.
- **End-of-project results.** With the use of RMF and the Evaluation Guidelines, more emphasis is now on end-of-project data and evaluations. Final evaluations assess the development effectiveness and likelihood of impact that occurs beyond the project lifetime, including climate adaptation and resilience benefits as well as the gendered impacts of climate change.
- **Data-driven decision-making.** The information and knowledge deriving from the analysis of the portfolio level progress data can now be used more effectively for strategic decision-making that aligns with our mandate and purpose.

We are not alone with this challenge. The **SDG Report 2022** identified the unavailability of disaggregated data as a major concern and calls for investments towards improving the data quality.

Focusing on gender equality



In this section

The central role of women and girls

Success story: Women of Roku

Photo: TripleJump

The central role of women and girls

People of all genders have skills and knowledge that can help address climate change more effectively. However, due to existing gender inequalities and the disproportional climate vulnerability of women and girls, women's empowerment plays a central role in achieving Sustainable Development Goals and combatting climate change.

This can be done through ensuring women's and girls' roles in the process as active agents of change while promoting equal and equitable opportunities for participation and decision-making. Similarly, providing women and girls with economic opportunities in terms of job creation and access, control and ownership of resources and assets is key to building resilient, sustainable and inclusive societies.

Moreover, gendered impacts of climate change must be assessed in a broader perspective that includes structural causes for disadvantage, as well as multiple intersecting factors. For the most vulnerable individuals, such as women and girls with disabilities, climate change exacerbates the pre-existing barriers. In some countries, for example, to access water and other essential supplies you might have to walk a long way.



70 k

Women with increased capacities and awareness



37 k

Number of jobs for women supported

These aspects have an impact on how climate change-related activities should be designed and implemented to ensure their effectiveness and sustainability. Our Gender Equality Policy is based on the Nordic priorities and operationalised throughout our operations and activities. The NDF Results Management Framework provides a strong mandate and tool to plan early in the project design how gender inequality gaps can be addressed. It also supports the dialogue and can even increase the level of ambition of partner agencies who may not have gender focus and action mainstreamed across their operations.

NDF's gender equality policy



103 m

Women benefitting from climate solutions



16 m

Women with improved access to clean energy

Lightsmith Resilience Partners Fund (CRAFT)

Women of Roku lead a transformation in their community

Women manage their family's water supply in much of the world. In some areas of Papua New Guinea, lack of access to safe water is a health and security threat. Most of the country's rural population drink from unsafe sources such as surface water and piped or well water that is exposed to contaminants.

In remote communities cut off from the rest of the country with little to no infrastructure, finding clean, safe water to drink can be a daily struggle, with women and girls often walking over harsh and rugged terrain to collect water for their families. Many businesses and families are forced to buy water from distributors, usually in single-use plastic bottles and always at a premium price.

Innovations can play a critical role in extending safe drinking water service. One such innovation was developed and commercialised by SOURCE Global. It is used in the south-coast village of Roku to collect water from the air using solar power to extract water vapour, condense and store it as potable water. Roku has 40 such devices which are managed by the Roku Water Committee, a community-based organisation run by women.

The women-managed project is a partnership between the local community, local private sector and international technology companies and financiers. Women who used to spend time fetching water can now spend it on more rewarding activities, such as education, entrepreneurship, managing their households or leisure.



The solar-powered method for producing potable water has given women in Papua New Guinea new opportunities and reduced the need for long trips to fetch water from wells. Photo: SOURCE

On average, the 40 units produce 6,000 litres of drinking water annually, which benefits 108 households of about 760 people in the village.

Results area 1

Resilient cities and human settlements



In this section

Datasheet: Results area 1

Voices behind the data:

Urban and Municipal Development Fund

Rural Roads Improvement Project

NDC Pipeline Accelerator

Photo: Roam

Improving resilience for cities and infrastructure under threat

During the reporting period, steady progress was made towards the set targets and projections. NDF continued financing projects and directing investments towards increasing climate- and disaster-resilience and adaptability of cities and human settlements. This work helps make where people live and work better able to withstand climate change and natural disasters.

Under this results area, NDF contributed to delivering over 10,000 climate solutions, ranging from climate-resilient infrastructure to weather stations and early warning systems, benefitting more than 200 million women and men. The size of area that was covered by climate solutions was more than 11,000 hectares.

Here we take a closer look at how NDF's support helped to build more climate resilient and sustainable cities in Africa, Cambodian farmers to improve mobility in rural areas, and people in Latin America to create electric bus networks and where additional climate finance has successfully leveraged more than USD 14 billion through green and social bonds.

Datasheet: Results area 1

Contribution to the SDGs:



Datasheet: Results area 1

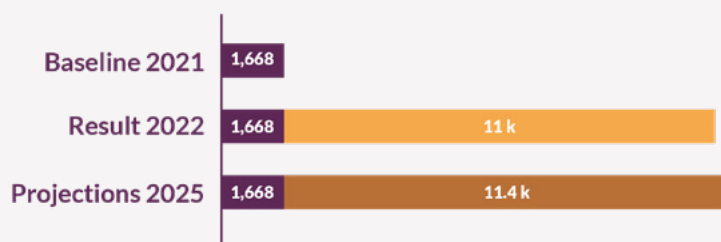
Resilient cities and human settlements

Number of disaster risk management (DRM), adaptation strategies, plans and/or weather and climate and/or early warning system/services established or improved



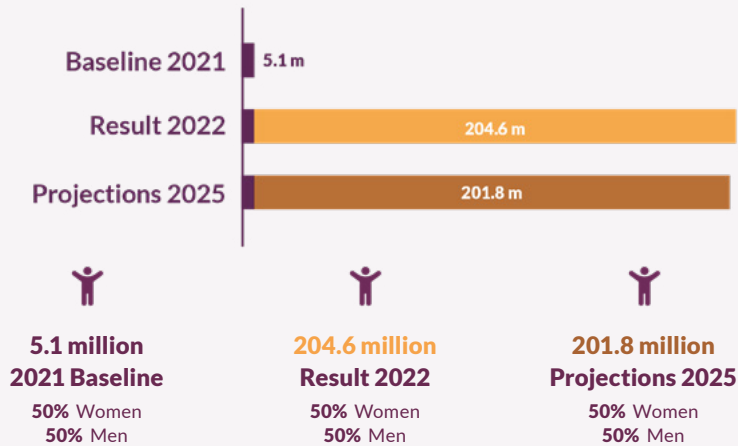
The ClimDev Special Fund reported higher results than original projections. Equally, some projects in the portfolio have projections beyond 2025. Total projected by 2027 is 246.

Number of new and existing infrastructure, assets and/or services made climate and disaster resilient



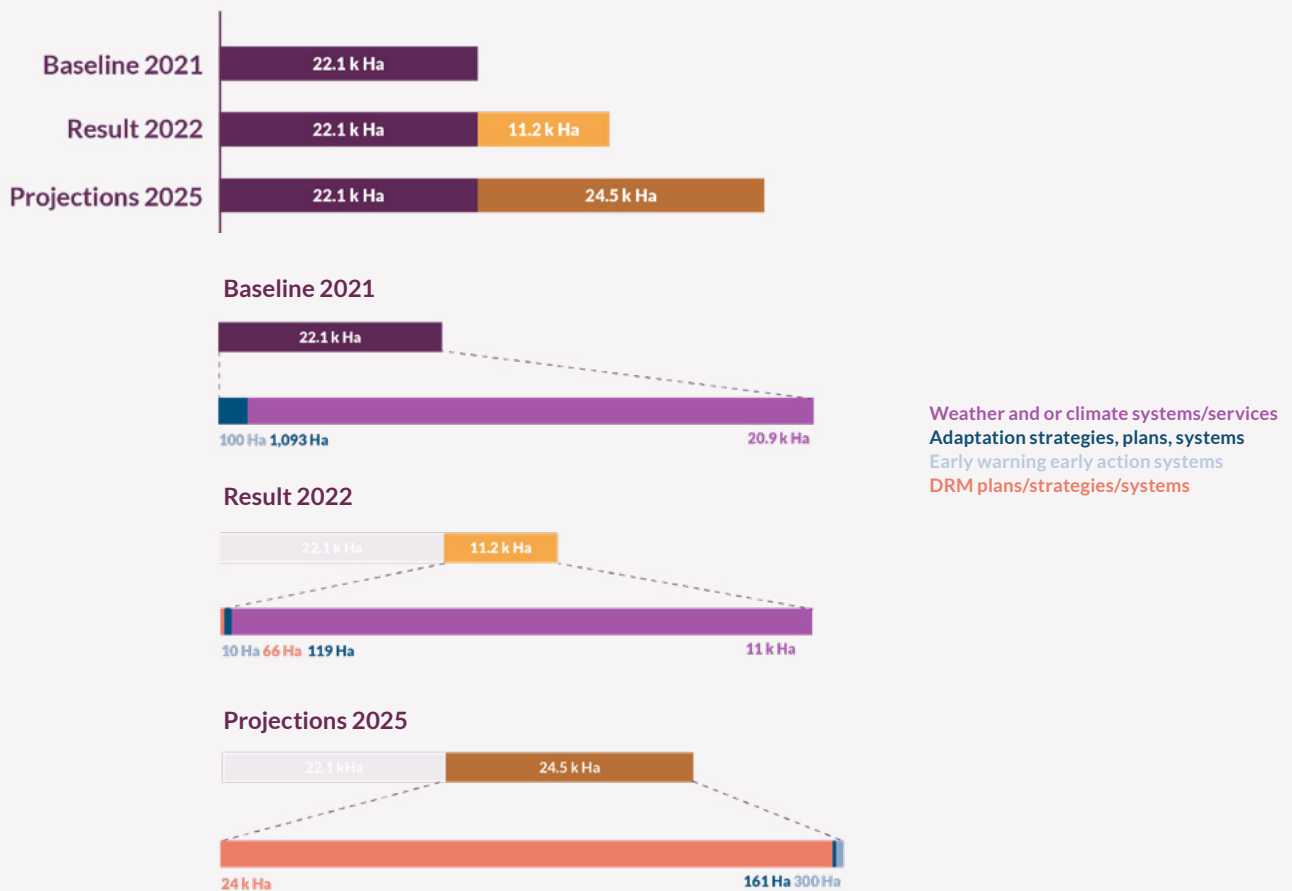
The majority of results reported (10k) represent MSMEs with improved climate resilience through the PROADAPT project.

Number of people benefiting from established or improved weather and climate services, adaptation, and disaster risk management (DRM) plans and/or early warning systems (EWS)



The ClimDev Special Fund reported 200 million people benefitting from climate solutions targeting exposure to severe drought and locust invasion. In addition, Ignitia exceeded their targets. Total projections by 2027 is 242 million.

Size of area brought under climate change adaptation and disaster risk management (DRM) plans



Urban and Municipal Development Fund (UMDF)

Sustainable and climate-resilient urban development in Africa

Urbanisation is one of the most profound transformations occurring in Africa today. While the growth in urban population provides economic opportunities, unplanned growth intensifies the risk of climate related disasters. Infrastructure and service delivery gaps, vulnerable and risky informal settlement growth and activities dominate the urban space.

NDF is the main financier to the Urban and Municipal Development Fund (UMDF) that supports African cities to improve urban planning, governance and the quality of basic services. Hosted by the African Development Bank (AfDB), the Fund provided technical assistance to eleven cities to undertake rapid assessments and develop action plans with the goal of investing in infrastructure for more sustainable and climate resilient urban development.

“For example, you could be stuck in traffic for hours every day,” explains Marcus Mayr, coordinator of UMDF. “We can help the city to assess the situation, work with the transport department to develop plans and then develop feasibility studies and design infrastructure. This could include sidewalks, bike lanes, regional trains and bus systems.”

Other work done by the UMDF include preparation of new investments in transport, water, housing, waste and flood management. Strong infrastructure is important to attract private investments. A key goal of the Fund is fair and sustainable development, so it also addressed issues such as gender equality and poverty reduction.

The progress made in the first phase of the project provided the basis for a second phase in 2023-2027 with new funders and a ten-fold increase in the budget.



Urban and Municipal Development Fund (UMDF) supports African cities to improve urban planning governance and the quality of basic services. Photo: African Development Bank

Partnering with African Development Bank

[Read more](#)

The climate change adaptation framework ensures access to safe drinking water and more sustainable rural life.



NDF CO-FINANCING

EUR 4 million



PROJECT PERIOD

2019-2022



PARTNER AGENCY

African Development Bank

OTHER PARTNERS

Switzerland State Secretariat for Economic Affairs (SECO) and Wallonia Export & Investment Agency (AWEX), Belgium



MAIN RESULTS

- Leveraged USD 82.5 million of additional bank and partner co-financing.
- Provided 2 million people (50% women) with improved access to climate resilient and low-carbon urban transport infrastructure.
- Produced 6 evidence-based, inclusive, climate and gender-responsive City Action Plans/Master Plans.

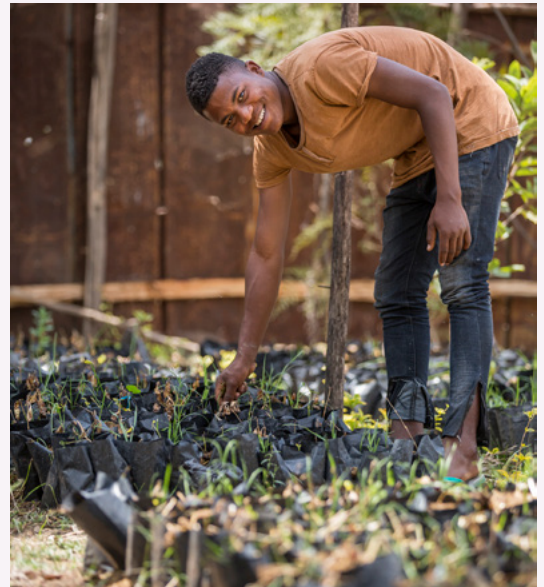
Working together

“Working with NDF has provided us with benefits you might not think of at first glance. They brought their experience working with other funds, like in Latin America, to help us. The NDF pushed us to be more ambitious, to spend wisely, to mobilise new partners – which we did in Denmark. They were instrumental in not just getting us moving, but also getting us to scale up.

The Nordics are well-known around the world as forward-looking when it comes to sustainability, and they brought this worldview into our fund. They believe in sustainable, green, people-centred development.

It is hard to measure the inspiration and learning we received from working with the NDF, but these things undoubtedly benefited cities in Africa.

– **Marcus Mayr**, Coordinator, Urban and Municipal Development Fund, African Development Bank group



NDF works with Afdb on various projects, such as the Urban and Municipal Development Fund. Photo: AfDB

Rural Roads Improvement Project

New climate-resilient roads in Cambodia

Much of central Cambodia is lowlands, dominated by the Mekong River. Many of the people who live there rely on inadequately developed rural infrastructure and suffer poor mobility during the increasingly volatile rainy and dry seasons. Building modern, paved roads has had a huge impact on people's lives.

NDF participated in paving more than 1,200 km of rural roads in nine Cambodian provinces in the Rural Roads Improvement Project headed by the Asian Development Bank. NDF jointly financed the vegetation cover around the roads, which increases water infiltration and minimises erosion and flooding. And trees are beautiful as well as useful carbon sinks.

A crucial goal of the project was to improve gender equality and to provide opportunities to women. About 560,000 people benefit from the improved roads, and 52% of them are women. They now have reliable, year-round road access from farms and small towns to markets, employment centres and social services.

"When I was pregnant, the road was not there; I had to go to the hospital a week before giving birth," explained farmer Heng Sola. "Today there is no need for that, you can get to the hospital quickly."

Also, NDF solely financed the climate change adaptation framework, making sure the rural population enjoys mobility and access to services during extreme events such as flooding. The framework ensures access to safe drinking water and more sustainable rural life. This included solar powered irrigation, biogas energy and an improved stove design which smokes less and uses less wood.

"Now I can grow two crops a year. This irrigation system helps save on fuel costs; much of this type of cultivation would otherwise be impossible," said farmer Heng Touch.

"Biogas has been a great help to us," reported student Meng Dany. "We no longer have to collect firewood from the woods. The use of gas is convenient and easy in our kitchens."



People living by the Mekong River in Cambodia now have reliable, year-round road access from farms and small towns to markets, employment centres and social services.
Video: Joonas Lehtipuu. [Link to video here.](#)

The climate change adaptation framework ensures access to safe drinking water and more sustainable rural life.



NDF CO-FINANCING

EUR 4 million



PROJECT PERIOD

2014-2022



PARTNER AGENCY

Asian Development Bank

OTHER PARTNERS

Agence Française de Développement;
and the Governments of Australia,
Cambodia and Korea



MAIN RESULTS

- Constructed 1,286 km of roads and 11 jetties for Mekong River islands.
- Planted 87,358 trees and rehabilitated 15 natural irrigation ponds. 62% of workers were community women.
- Established climate change adaptation framework (agriculture, renewable energy, water supplies).

NDC Pipeline Accelerator

Electric public transportation in Latin America and the Caribbean

Most countries in the Caribbean and Latin America are particularly vulnerable to climate change and extreme weather events. Together with national development plans they have formulated nationally determined contributions (NDCs) for climate change adaptation and mitigation. To translate these priorities into action there is a need for additional finance. NDF supported the establishment of the NDC Pipeline Accelerator fund which jumpstarts public and private investments.

“The NDC Pipeline Accelerator gets the ball rolling on complex investments,” says Gloria Visconti of the Inter-American Development Bank. “This includes feasibility studies, consultations, in-depth analysis, capacity building – all the preparation a big project needs.”

The fund supports investments in infrastructure, agriculture and land-use management, and has successfully leveraged more than USD 14 billion in public and private investments. It has supported 51 projects to help countries deliver on their climate commitments under the Paris Agreement.

One of the projects supported by the NDC Pipeline Accelerator replaced diesel buses with electric buses, helping eleven countries reduce greenhouse gas emissions, operating costs and pollution while improving service reliability and ride quality. New jobs in cleantech were created, including for women.

“This project takes gender into consideration,” Visconti says. “For example, they can have a quota for how many female bus drivers are hired, or how many women are trained as electric vehicle mechanics.”

Additionally, the electric buses project considered the transport needs of female head of households and caregivers in route planning and timetables. It contributed to decreased sexual harassment of women at stations and on buses.

“There are other benefits that you might not see immediately,” says Visconti. “For example, electric buses don’t release pollutants and particulates like old diesel buses do. This will have a positive impact on the health of people living in urban areas. It will even help reduce healthcare costs.”



NDC Pipeline Accelerator helps countries deliver on their climate commitments. With this project, diesel buses were replaced with electric buses to reduce greenhouse gas emissions, operating costs and pollution in Latin America and the Caribbean. Photo: Inter-American Development Bank

The fund supports investments in infrastructure, agriculture and land-use management, and has successfully leveraged more than USD 14 billion in public and private investments.



NDF CO-FINANCING

EUR 10 million



PROJECT PERIOD

2017-2022



PARTNER AGENCY

Asian Development Bank

OTHER PARTNERS

Austrian Federal Ministry of Finance, the Netherlands' Ministry of Foreign Trade and Development Cooperation, the Swedish Ministry of Foreign Affairs, the Finnish Ministry of Foreign Affairs



MAIN RESULTS

- Green bonds and social bonds helped unlock markets for USD 14.4 billion.
- Mobilisation of IDB investment operations and outside financing for USD 3.1 billion.
- Replaced 650 diesel buses with electric buses.

Results area 2

Natural capital and water-energy-food nexus



In this section

Datasheet: Results area 2

Voices behind the data:

Building Climate Resilience in MSMEs

Testing biochar-pigeon pea agroforestry businesses

Resilience of the Blue Economy and the Coastal Ecosystem

Photo: Ignitia

Managing natural capital for water, energy and food security

During the reporting period, NDF continued financing projects aimed at enhancing natural capital, such as air, soil, water and biodiversity. The depletion of natural capital and loss of biodiversity is accelerated by climate change. Natural capital is critical for human well-being, the economy and sustainable societies. The security of water, energy and food also depends on it.

NDF's contribution under this outcome led to delivering more than 1,400 climate solutions, ranging from installing hydropanels for clean and sustainable drinking water in vulnerable communities to providing sustainable resource management services, benefitting over 630,000 women and men. The size of area covered by sustainable resource management was more than 11 million hectares.

In this section we highlight some of the results in bolstering natural capital, including our support to smallholder farmers in Latin America, fishery managers in Honduras and pigeon pea farmers in Zambia.

Datasheet: Results area 2

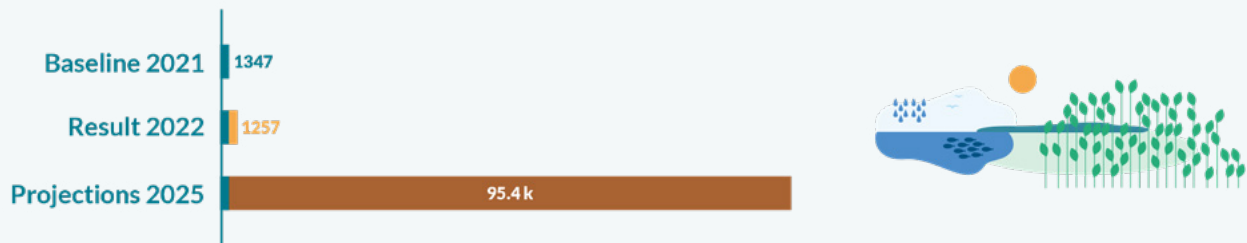
Contribution to the SDGs:



Datasheet: Results area 2

Natural capital and water-energy-food nexus

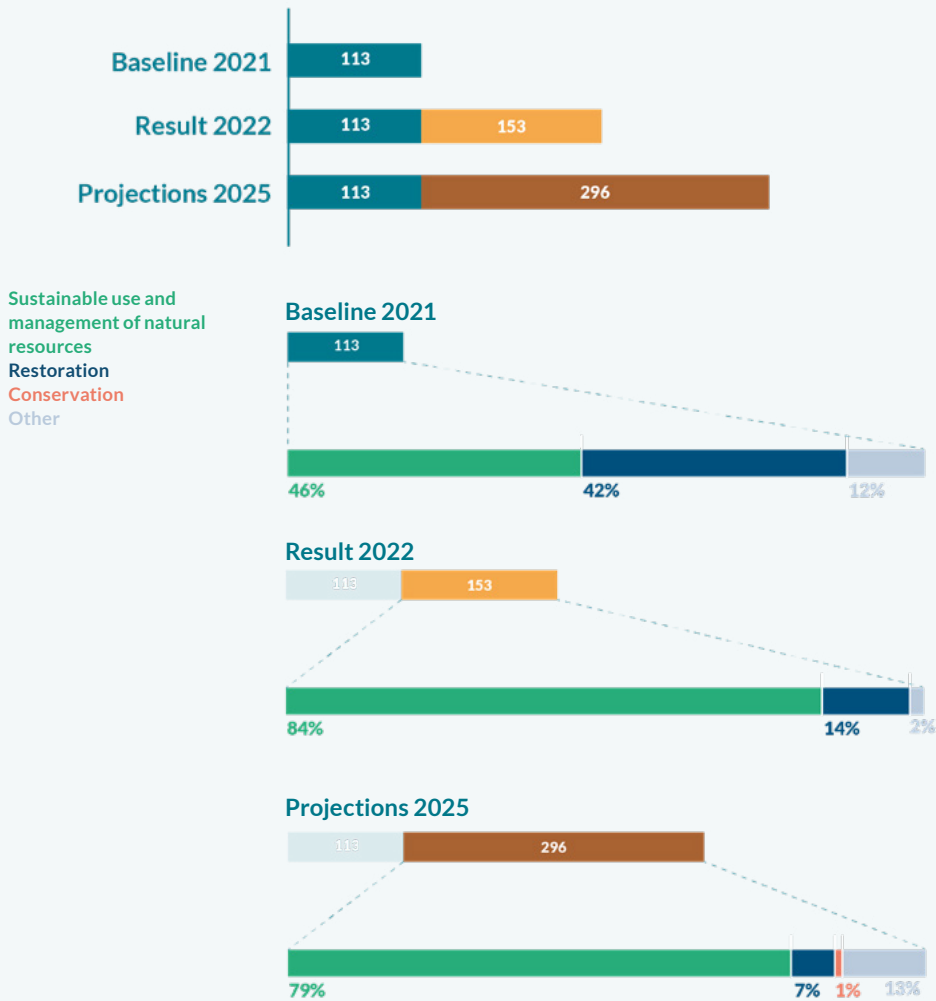
Number of policies, plans, strategies and technologies developed in support for integrated resource management (IRM) addressing specific water– energy– food security related concerns and efficiency measures



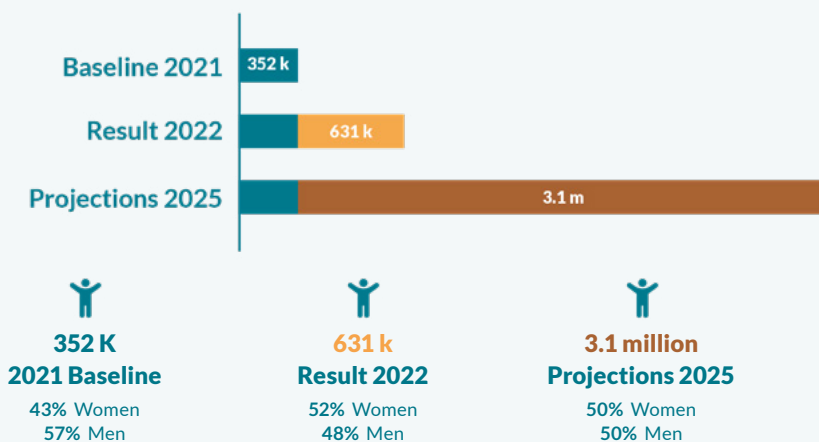
The majority of the result is from **Climate Resilience and Adaptation Finance and Technology Transfer Facility (CRAFT)**, and mainly represent hydropanels installed for clean and sustainable drinking water. The Fund has revised its method of estimating targets. The cumulative projections now include the updated targets. However, the 2022 results are assessed against the projections provided in the previous reporting cycle.



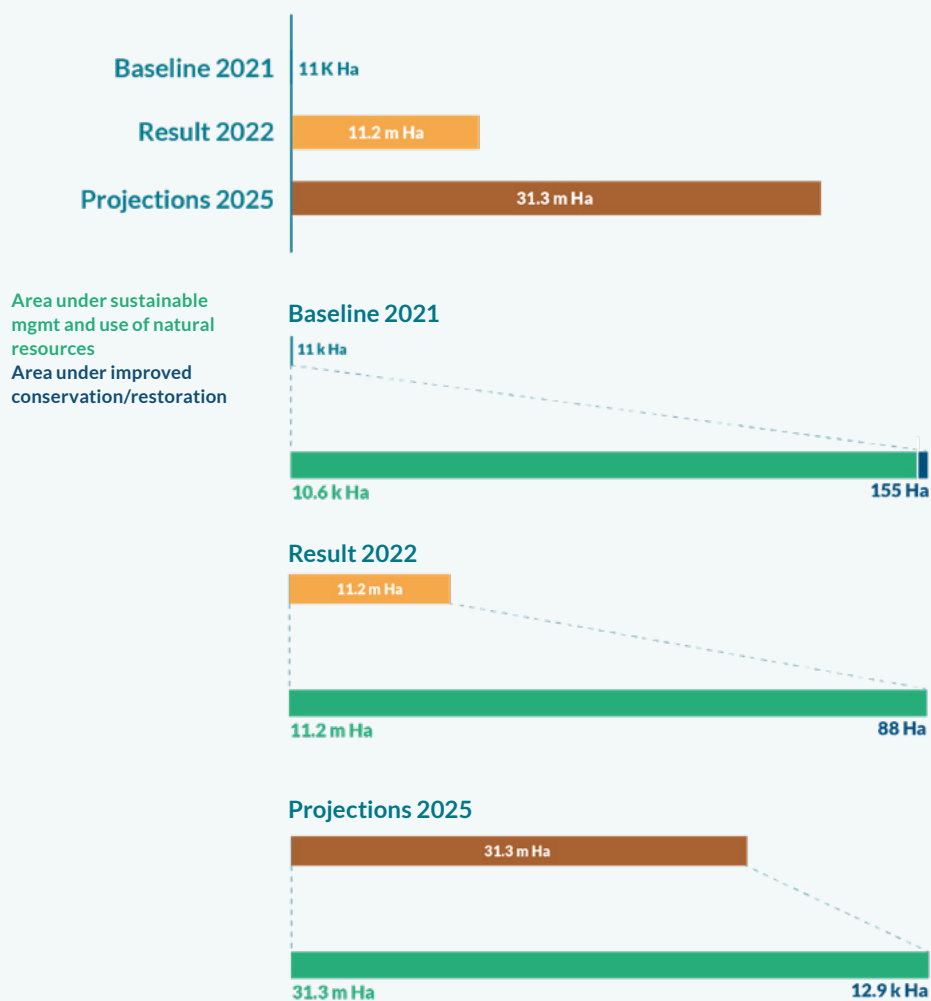
Number of measures on conservation, sustainable use and/or management of natural resources supported to benefit the habitat, biodiversity, and/or ecosystems



Number of people benefiting from improved conservation, sustainable management and use of natural resources



Size of area brought under improved conservation, sustainable management and use of natural resources



The majority of the result is from **Climate Resilience and Adaptation Finance and Technology Transfer Facility (CRAFT)**, where application of real-time monitoring solutions has allowed for sustainable resource management. Projections also include 20 million hectares under **Climate Investor 2** marine/oceans restoration investment.

Building Climate Resilience in MSMEs in Latin America and the Caribbean (PROADAPT)

Turning climate risks into opportunities

The UN's International Panel on Climate Change predicts climate change will cause a 2-6% decline in global crop yields every decade. NDF partnered with the Inter-American Development Bank and local groups in Latin America and the Caribbean to build climate change resilience in multiple sectors.

The regional facility, PROADAPT, worked with micro- to medium-sized businesses (MSME) to turn climate risks into profitable business opportunities. One example was building an early-warning system in the form of a mobile application to inform farmers about unpredictable rainfall and potential floods in the Gran Chaco region covering Paraguay, Argentina and Bolivia.

"The app group did quite well," evaluator Carmen Lacambra said in a news article. "When it rained a lot and the waters rose, thanks to the early warning systems, the losses in terms of cattle as well as income was significantly reduced."

"People are much more aware now of the need to adapt to climate change with new practices and tools for how to raise livestock and how to make the best use of water, and we're using this app to share this knowledge," said PROADAPT Project Coordinator Mauricio Moresco in a news article.

Another example is the Blue Harvest project, which helped small coffee farmers adopt sustainable agricultural practices, strengthen local water governance and improve market access.

Most coffee producers in Latin America depend upon rainfed farms, but erratic rainfall due to climate change causes havoc to their livelihood. Blue Harvest promoted water resource management in El Salvador, Honduras and Nicaragua with almost 3,500 coffee farmers and producers, 40% of whom were women.

The project promoted sustainable coffee production, including water resource management, soil use, crop diversification and gender and family issues for farmers. Local officials were involved to help in matters such as infrastructure and supervision of resources. Finally, it improved access to high-value markets for their products.

A small number of agricultural practices can have a significant positive impact on water recharge, slowing erosion and protecting water quality, allowing them to be used as best practices and adapted in other areas and contexts.



Proadapt supports micro- to medium-sized businesses to turn climate risks into business opportunities in different sectors, such as agriculture. [Video link here](#). Video: PROADAPT

"When it rained a lot and the waters rose, thanks to the early warning systems, the losses in terms of cattle as well as income was significantly reduced." - Carmen Lacambra



NDF CO-FINANCING

EUR 3.5 million



PROJECT PERIOD

2013-2022



PARTNER AGENCY

Inter-American Development Bank /
IDB Lab

OTHER PARTNERS

Conservation Farming Unit,
the Norwegian Geotechnical Institute,
the Norwegian University of Life
Sciences



MAIN RESULTS

- 28,168 farmers with increased capacities, improved skills and raised awareness.
- 10,287 MSMEs improved their climate resilience.
- 6,054 hectares under improved conservation, sustainable management and use of natural resources.

Testing biochar-pigeon pea agroforestry businesses in Zambia (ClimChar)

New crops and new uses for crop residue

In Zambia, severe droughts hit farmers already struggling with exhausted soils. Zambian and Norwegian partners had an idea that biochar from pigeon peas could help. The ClimChar project received funding from the Nordic Climate Facility, an NDF challenge fund, to develop their innovative business concept.

Biochar is the residue which remains after the pyrolysis of biomass. It can help mitigate climate change through carbon sequestering in the soil. It is also a great soil amendment, acting as a fertiliser and improving soil quality by increasing water and nutrient retention. This can be an important climate change mitigation and adaptation solution in the face of longer and more severe droughts.

The ClimChar project introduced pigeon peas, which is relatively new in Zambia, as a cash crop for export. The agricultural residue from the pigeon pea trees was used to create biochar, which was in turn used to improve the farmers' maize fields.

"We developed local and cheaper ways to make and utilise biochar, cutting out transport costs from a central biochar machine," said Collins Nkatiko of Conservation Farming Unit. "This way farmers extended the use of biochar beyond experimental plots and even started selling biochar to interested neighbours."

Initial results were good: the biochar improved soil moisture retention and drought tolerance while maize yield increased 12-37%. ClimChar proved that the idea had both economic and environmental potential, and the lessons learned are now being applied in spinoff projects in Sub Saharan Africa.



ClimChar, a project supported by Nordic Climate Facility, introduces innovative ways to create biochar and improve farmers' maize fields. Photo: Menon



NDF CO-FINANCING

EUR 456,290



PROJECT PERIOD

2019-2022



PARTNER AGENCY

Menon Economics

OTHER PARTNERS

Conservation Farming Unit,
the Norwegian Geotechnical Institute,
the Norwegian University of Life
Sciences



MAIN RESULTS

- 1,226 farmers trained on pigeon pea production and 753 farmers trained on biochar production (1,110 women, 909 men).
- 3,915 people benefiting from improved conservation, sustainable management and use of natural resources (2,153 women, 1,762 men).
- 168 hectares under improved conservation, sustainable management and use of natural resources.

Resilience of the Blue Economy and the Coastal Ecosystem

Building resilience of mangroves and fisheries

The northern, mangrove-covered coast of Honduras has many communities which depend upon artisanal fishing, which is households fishing with traditional methods. Fishing and mangroves go hand-in-hand, which is why improving the resilience of both were addressed in a project led by the Inter-American Development Bank and mainly funded by the NDF.

The northern Honduran coastline is vulnerable to deforestation and land use changes, as well as to the increasing number and ferocity of tropical storms caused by climate change. The recent pandemic years have been especially tough on local fishermen.

“The crews got sick, and then the hurricanes affected our equipment, as many dedicated themselves to rescuing people,” Rigoberto López, President of the Fisheries Association in Marión, said in the final evaluation report. “The losses during the pandemic were enormous.”

The project, Resilience of the Blue Economy and the Coastal Ecosystem in Northern Honduras, focused on the fishers and mangroves as an interconnected entity. It raised awareness of the ecosystem services the mangroves provide, such as being a fish habitat and protecting the coast from storms.

The project helped fishers reach high-value markets, improve production practices, access credit, and improve operations and record-keeping. Local officials worked to improve management of natural resources and track fish catches.

The project also specifically engaged people with disabilities, as well as their families, in capacity building and employment activities, with 5 fishing companies assigning jobs and establishing business relationships with them under the project. A particular focus was also on the key role women play in the communities.

“In these socio-environmentally vulnerable communities, women have the fundamental role in ensuring the proper management of the family economy,” said local businesswoman Pili Luna. “Being able to give them an income translates into a transformation in their lives and communities.” Luna helped set-up a women-led enterprise for processing fish skin into fish leather that is now being used in shoe production.



Fishing and mangroves go hand-in-hand, which is why improving the resilience of both were addressed by the project, Resilience of the Blue Economy and the Coastal Ecosystem in Northern Honduras. [Video link here](#). Video: GOAL Global

“In these socio-environmentally vulnerable communities, women have a fundamental role in ensuring the proper management of the family economy.” - Pili Luna, entrepreneur



NDF CO-FINANCING

EUR 3.1 million



PROJECT PERIOD

2016-2022



PARTNER AGENCY

Inter-American Development Bank

OTHER PARTNERS

GOAL Global,
the Government of Honduras



MAIN RESULTS

- 3,151 jobs supported
- (1,739 women and 1,412 men – 53 persons with disability).
- 3,951 fishers with increased income.
- 31 communities adopted new sustainable conservation practices in the mangrove swamp.

Results area 3

Access to and production of clean energy



In this section

Datasheet: Results area 3

Voices behind the data:

Empowering zero food loss

Sustainable Energy Fund for Africa

Energy Entrepreneurs Growth Fund

Photo: PowerLive

Making clean energy more accessible and affordable

In 2022, NDF continued financing projects and directing investments towards increasing access to and production of affordable and sustainable clean energy.

NDF's contribution helped to facilitate more than 6 million clean energy connections, the majority of which was solar, benefitting close to 34 million women and men. Further, NDF's support contributed to job creation, mobilising climate finance and increasingly empowering women in what has traditionally been a male-dominated industry. The support contributed to over 7 million tons of reduced, avoided or removed carbon emissions.

In this section we highlight public-private partnerships for solar-powered refrigeration in Kenya, electrification in Tanzania and powering smallholder farmers in Sub Saharan Africa.

Datasheet: Results area 3

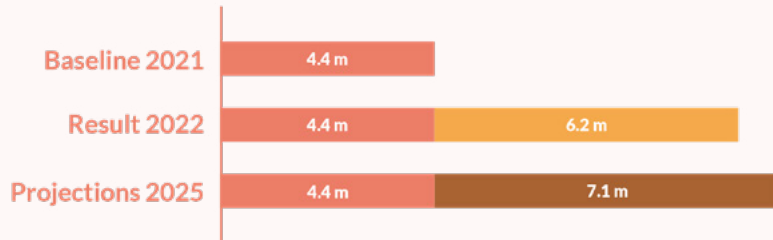
Contribution to the SDGs:



Datasheet: Results area 3

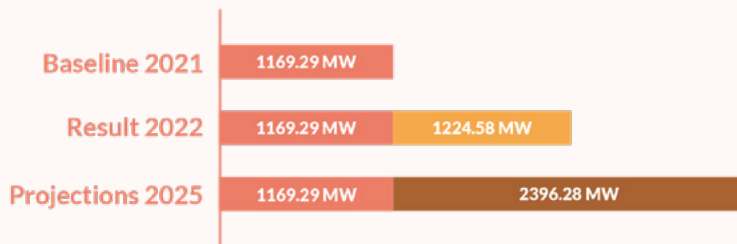
Access to and production of clean energy

Number and types of affordable, clean energy connections facilitated



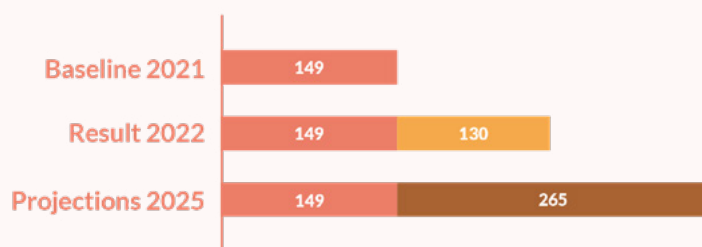
Major proportion of baseline and results are from one project, **African Guarantee Fund Green Guarantee Facility**, where projections, however, are not available.

Installed renewable energy generation capacity

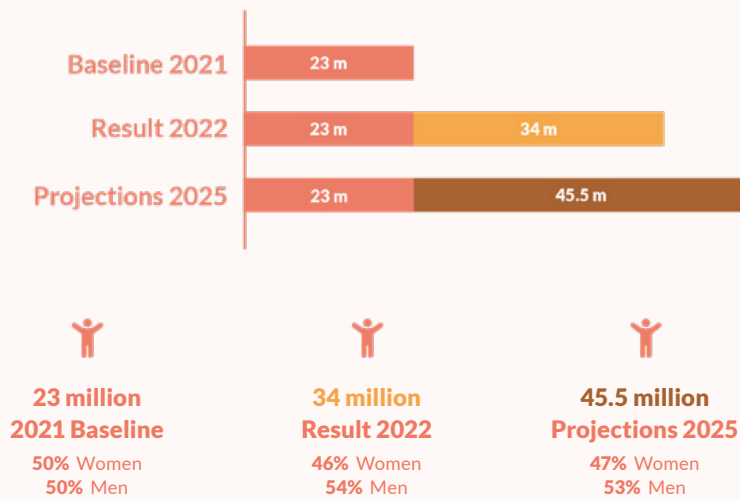


Major proportion of results (761 MW) are from one project, **Climate Investor One (CIO)**, representing installed energy generation capacity through solar energy, wind energy and hydropower.

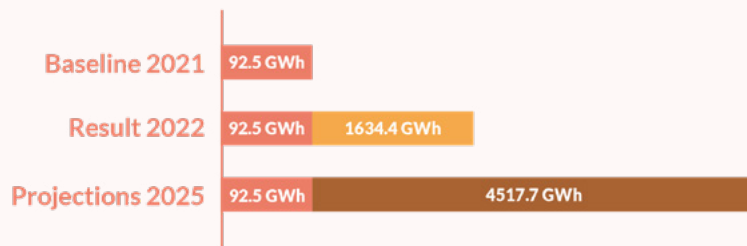
Number of private entities supported with measures to increase their capacity to promote energy efficiency and clean energy



Number of people with improved access to clean energy



Annual energy generated/saved by installed clean energy capacity (GWh)



Major proportion of results (1285 GWh) are from one project, **Climate Investor One (CIO)**, representing annual energy generated by installed solar energy, wind energy and hydropower.

Tons of carbon dioxide equivalent emissions reduced, avoided or removed (measure in total tCO₂ eq.)



The baseline is significantly higher than result and projections due to one project, **African Guarantee Fund Green Guarantee Facility**, having already achieved 68.9 million tCO₂e reductions in GHG emissions by 2020.

Empowering zero food loss (SokoFresh)

Reducing food waste to help farmers and the environment

The UN's Food and Agriculture Organization estimates one third of all food is wasted. Not only can this contribute to human malnutrition, all the resources which went into producing and transporting that food are also wasted. Refrigeration is a simple way to reduce food waste, but this isn't available for many rural, developing areas without access to safe and reliable electricity.

SokoFresh, a Kenyan social enterprise, developed a plan focused on smallholder avocado farmers involving refrigeration, processing facilities and market access. They received financing from the Energy and Environment Partnership Trust Fund (EEP Africa), an NDF-managed financing facility for early-stage clean energy projects.

"SokoFresh uses solar-powered refrigeration units," explains Faith Chege, EEP Africa Portfolio Manager. "The unique business model aspect is that the cold storage units are mobile, therefore they are relocated to different regions based on produce seasonality. This increases the utilisation of the asset."

They also provide solar-powered avocado oil presses, so smallholder farmers have the option to produce oil from lower quality avocados which might not sell in a grocery store.

"Previously smallholder farmers had no access to the market," Chege continues. "They sold their produce to a broker who got most of the profit. Now they have access to offtakers in large cities like Nairobi, as well as export markets."

Over 8,000 farmers participated in SokoFresh's pilot project, enjoying a significant drop in food waste and jump in income. Farmer income increased by 20% on average. "Now with the increased income they can afford school fees for their kids," says Chege.

SokoFresh has created 821 jobs, of which 65 are for women and raised 2.5 EUR million in equity, debt, and grant funding to scale up.



Over 8,000 avocado farmers participated in SokoFresh's pilot project, enjoying a significant drop in food waste and jump in income. Photo: SokoFresh

Over 8,000 farmers participated in SokoFresh's pilot project, enjoying a significant drop in food waste and jump in income. Farmer income increased by 20% on average. "Now with the increased income they can afford school fees for their kids," says Faith Chege.

**NDF CO-FINANCING**

EUR 457,676

**PROJECT PERIOD**

2021-2022

**PARTNER AGENCY**

EEP Africa Trust Fund (with funding from Austria, Denmark, Finland, Iceland, NDF, and Switzerland)

OTHER PARTNERS

Enviu, EcoZen, One Acre Fund, World Food Programme

**MAIN RESULTS**

- 6 solar PV cold storage units in six regions and 4 oil press machines installed
- 6,000 farmers with improved livelihoods
- USD 2.5 million additional funding mobilised

Sustainable Energy Fund for Africa (SEFA)

Electrifying rural areas in Tanzania

“Electrification is a precondition to sustainable development,” explains Leo Schiefermüller, Managing Director of Terra Projects Renewable Energy. “We need electricity not just for households, but for businesses, schools and health centres.”

Electrification has been slow around the rural shores and islands of the Great Lakes of Africa. To help meet this need NDF provided funding to the Sustainable Energy Fund for Africa, SEFA, which is administered by the African Development Bank. SEFA made a project preparation grant to JUMEME Rural Power Supply, a Tanzanian off-grid solar developer, to identify and develop minigrids.

The grant helped with early-stage activities, such as identifying villages, GPS and customer tagging, site sizing and distribution network design. It also contributed to developing a monitoring and evaluation system, and legal and financial support to source financing.

“JUMEME developed 23 minigrids around the islands and shores of Lakes Victoria and Tanganyika,” Schiefermüller continues. “We didn’t just bring electricity, but other incentives to help sustainable development. For example, we provided financing so millers could replace their old diesel engine with an electric engine in their mills.”

Another project supported women entrepreneurs and provided clean energy to ten healthcare facilities in the Lake Victoria Islands during the pandemic.

“SEFA was instrumental in helping us to scale the project,” says Schiefermüller. “Unfortunately, the regulatory framework changed and now we are required to sell electricity below cost so we’ve had to reduce the energy services offered to our customers. It’s important to maintain an economic and legal climate that encourages private sector involvement in projects like this.”



Electrification has been slow around the rural shores and islands of the Great Lakes of Africa. SEFA has facilitated incentives to help sustainable development in the region. Photo: African Development Bank

One of the projects supported women entrepreneurs and provided clean energy to ten healthcare facilities in the Lake Victoria Islands during the pandemic.

**NDF CO-FINANCING**

EUR 457,676

**PROJECT PERIOD**

2021-2022

**PARTNER AGENCY**

EEP Africa Trust Fund (with funding from Austria, Denmark, Finland, Iceland, NDF, and Switzerland)

OTHER PARTNERS

Enviu, EcoZen, One Acre Fund, World Food Programme

**MAIN RESULTS**

- 6 solar PV cold storage units in six regions and 4 oil press machines installed
- 6,000 farmers with improved livelihoods
- USD 2.5 million additional funding mobilised

Energy Entrepreneurs Growth Fund (EEGF)

Solar irrigation increases crop yields in Kenya

In Sub Saharan Africa, one roundtrip to collect water takes 33 minutes, on average, according to UNICEF. This task falls disproportionately on women and particularly girls, who have to spend time fetching water instead of studying or playing. Lucy Jong'a knows how hard it is on them, and how much worse it will become as the result of climate change. She is the General Manager of SunCulture, a Kenya-based company which provides solar-powered water pumping and irrigation systems to smallholder farmers.

"The effects of climate change on agriculture are extensive," Jong'a says. "Some of the more prominent effects include increasingly severe weather events such as flooding and prolonged droughts. Our team works to provide innovative solutions that will empower smallholder farmers and continue to combat the effects of climate change."

Innovative solutions need financing, which is where the Energy Entrepreneurs Growth Fund (EEGF) helps. EEGF is a blended investment fund, managed by Triple Jump, for early-stage businesses specialising in access to energy in Sub Saharan Africa, especially in rural communities. NDF joined the fund as an investor, helping to provide companies like SunCulture the resources they need to promote sustainable development, climate adaptation and mitigation.

"Our flagship product has delivered significant results for farmers," Jong'a continues. "With an average increase in crop yields of 2-5 times and income growth of up to 5 times, we have proven the transformative impact of our technology."

Farmer Josephine Waweru used to hire petrol pumps to pump water from the river, which was expensive and polluting. After getting SunCulture's solar-powered pump her coffee production has improved and she has diversified her production, such as adding a small fish pond.



Baobab, supported by the EEGF, provides access to solar energy and digital transformation. Photo: TripleJump

"Since I got this pump it has changed my life. I can pump water from my own borehole and things are easier and it is saving me time." - Josephine Waweru

**NDF CO-FINANCING**

EUR 10 million

**PROJECT PERIOD**

2022-2033

**PARTNER AGENCY**

Triple Jump

OTHER PARTNERS

Shell Foundation, FMO, FinDev Canada

**MAIN RESULTS**

- USD 110 million additional finance mobilised.
- 1,945,159 people benefitting from climate solutions (50% women).
- 65,348 female borrowers supported from SHS companies.

Our journey continues



In this section

Our journey continues

Photo: GOAL Global

Our journey continues

This report gave an evidence-based overview on how NDF's co-financing is building resilient, sustainable and equitable societies in the least developed countries and countries in fragile situations. We are pleased to see that, despite many global challenges, we are on a solid path to reach our Strategy 2025 targets. A lot of continued hard work is needed, however, and we are committed to working together with our partners to address the climate and development challenges in the Global South.

The data shows that we are on the right path in giving focus to climate change adaptation. More than 60% of the financing in our active portfolio is aimed at delivering adaptation outcomes. This is beyond the target set in our Strategy, but we also know that much more needs to be done. According to UNEP's most recent Adaptation Gap Report, global adaptation finance needs are estimated at USD 160-340 billion by 2030. As a catalyst, we have an important role in bringing additional funding for adaptation initiatives.

In 2022, 53% (67% in 2021) of our funding has been in the form of grants and 8% in recoverable grants. The share of equity financing has grown slightly due to some high-volume private sector projects and the share of loans remained very small. By combining concessionary risk-tolerant and patient capital from NDF and other like-minded investors, we have been able to leverage capital from the private sector and more commercial investors. Our funding for the early stages of a project can be crucial for getting it kicked-off and is an incentive for others to join.



NDF is committed to working with our partners to address the climate and development challenges in the Global South. In this picture Birhane Habebe and Lome Vilma are selling their milk to the Jaatee Farmers Milk Unit in Ethiopia. Photo: African Development Bank.

We have continued financing both private and public sector activities, which are crucial for delivering sustainable climate and development solutions. Our support addresses development priorities of the countries and regions where our projects operate. By building firm foundations we are increasing the likelihood of lasting positive results from investing in climate adaptation and sustainable development.

None of this would be possible without solid internal processes to ensure high quality. We have improved our already rigorous process for identifying projects with high impact potential and apply systematic results management across our operations.

Following our values and Nordic principles, we are taking special care to look out for the most vulnerable, often women and girls. We have worked with our partners to advance gender equality throughout our operations. In this report, we showed the potential of this approach based on the collected data.

Because, in the end, it is all about people. We have introduced people, projects, and partners behind our data. We hope this gave a good understanding of the impact of NDF's work. We understand there is a lot more that needs to be done in achieving the Sustainable Development Goals and combatting climate change. We are committed to being part of framing the future through our work and finding solutions with our partners in global climate contexts.

Following our values and Nordic principles, we are taking special care to look out for the most vulnerable, often women and girls.

Contact us

Explore our website

Subscribe to our newsletter

Meet our staff

Follow us



For more information

Results and data management: Sofia Chaichee

Communication and outreach: Mira Banerjee

Graphic designer: Rebekka Gröhn

Editorial consultant: David Cord

