Nordic action for climate

NDF RESULTS REPORT 2023
Table of contents

Welcome on board
Reporting results
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 on board

Foreword

Our results guide us forward with hope

As we are living through rapidly worsening consequences of climate change around the world, it is encouraging to see that our climate action does have a positive impact for people and the planet. Our third edition of the Results Report shows through data and project cases that there is still hope and that our work has an impact.

We at NDF have a clear mission. By providing catalytic financing for launching and scaling climate projects, we are part of the solution. Last year, we continued to finance impactful climate adaptation and mitigation projects in the public and private sector, together with our valuable partners around the world. Our strategic geographical focus continues to be in Sub-Saharan Africa.

This report details NDF’s contribution to building climate-resilient, sustainable, and equitable societies in the least developed countries and countries in fragile situations. Our report introduces people, projects and partners behind the data. In 2023, we contributed to catalysing EUR 1.4 billion in additional climate finance, supporting over 85,000 jobs and increasing access to clean energy to 57 million people, with over half of them being women.

Climate change hits women and girls the most, especially in the Global South. At NDF, gender equality is vital, and we ensure that the gender lens is considered in the projects we finance. We do this for two reasons: Because it is a strong Nordic value and because it is essential for achieving development and
climate impact. Throughout this report, you will read how gender equality has been integrated into the projects.

Alongside our message of hope, we also bring a message of alarm. The need for climate finance is rapidly increasing, as the consequences of climate change worsen around the world. 2023 was the hottest year on record, global average near-surface temperature at 1.45 °C above pre-industrial levels. We have never been so close to the 1.5°C limit of the Paris Agreement. Climate change is a profound threat to our human existence, exacerbating existing inequalities and vulnerabilities. We urgently need to speed up our action and mobilise more funding to save our planet and all of us who call it a home.

Starting my journey as NDF’s new Managing Director, I am encouraged by the strong results showing NDF’s ability to make an impact. As a learning organisation, we will use the knowledge derived from this report for our strategic decision-making going forward. At the same time, I and the entire NDF team are committed to redoubling our efforts to contribute to increased speed and scale of climate finance in response to urgent needs.

Thank you to our committed staff, all our partners, the Nordic member states and the Board, for making our actions and results possible. Together we are stronger and together, we can create positive change.

Satu Santala
Managing Director
Nordic Development Fund

Improving conservation efforts with 6 million hectares of marine protected area

6 m Ha

Increasing access to clean energy to 57 million people – 50% of them women

57 m

7.5 million tons of carbon dioxide equivalent emissions reduced or avoided

7.5 m
# NDF in brief

NDF is the joint Nordic international finance institution (IFI) focusing on the **nexus between climate change and development** in lower income countries. We provide **co-financing** with strategic partners through **grants**, **loans** and **equity** as stand-alone or blended.

<table>
<thead>
<tr>
<th><strong>We have projects in</strong> Africa, Asia, Latin America</th>
<th><strong>Established in</strong> 1988 by the Nordic countries Denmark, Finland, Iceland, Norway, and Sweden.</th>
<th><strong>Staff</strong></th>
<th><strong>Offices</strong> Helsinki, Finland</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988</td>
<td>32</td>
<td></td>
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</table>
NDF’s portfolio in 2023

At the end of 2023, NDF’s accumulated project portfolio consisted of 138 projects with total NDF financing of EUR 563 million. This includes projects since 2009 when NDF’s mandate was changed to focus on climate projects.

NDF’s active project portfolio consisted of 44 projects with total NDF financing of EUR 348.6 million. This includes projects in different stages: inception, full implementation or near completion.

We finance both public and private sector projects. Out of our accumulated project portfolio, 68% are public sector and 32% private sector projects.

NDF also hosts two financing facilities, each managing their own separate project portfolios.

EEP Africa - Clean Energy Financing
NCF - Nordic Climate Facility

NDF’s project database
Our focus: Climate adaptation, Sub-Saharan Africa and concessionary funding

Our Strategy 2025 defines three guiding targets for NDF, setting the focus on climate adaptation, Sub-Saharan Africa and the concessional nature of our funding. These targets outline our approach in addressing the climate change and development challenges together with our strategic partners. In 2023, 47% (53% in 2022) of our financing in our active* portfolio was in the form of grants and 8% (8% in 2022) in recoverable grants. The slight decrease (-6%) is due to a combined effect of more grant-financed projects being completed than being approved in 2023 and a majority of the newly approved projects being financed with equity and loan instruments. Further, 64% (61% in 2022) of the financing in our active portfolio contributes to delivering adaptation outcomes. This is beyond the target set in our Strategy 2025 where we continue to address the critical adaptation financing gap. To assess our climate focus, we apply the OECD Rio Marker definitions. The geographic focus of our co-financed operations is in Sub-Saharan Africa and this has increased from 56% (in 2022) to 57.5%.

* The active portfolio includes all projects that have been approved by the Board of Directors and have not reached their operational completion.

**CLIMATE**

At least 50% directed towards adaptation projects

64%

**COUNTRY FOCUS**

At least 60% targeted towards Sub-Saharan Africa

57.5%

**CONCESSIONALITY**

At least 50% of financing with grants

47%
Our approach: Respond quickly to climate finance needs

The purpose of NDF is to advance Nordic leadership in addressing climate change and development challenges through financing, knowledge and partnerships. Together with our strategic partners, we develop, launch and scale high-impact projects to support developing countries and the most vulnerable people affected by climate change.

NDF’s approach is to respond quickly and appropriately to the increasing climate finance needs. We co-create the design, preparation and delivery of early-stage projects, investments, and climate solutions. In this way, we complement the market by mitigating issues related to the lack of financing and support due to perceived risks related to early-stage financing. As a convener, we bring together public and private sectors with the aim to crowd in other investors.

Our approach is defined by three mutually re-enforcing strategic pathways: advancing Nordic leadership, developing early-stage design and structures and providing catalytic financing for launch and scale. They ensure that our work contributes with a unique added value and promotes Nordic values, such as gender equality and inclusion.

Advancing Nordic leadership

NDF is fully aligned with Nordic values and climate priorities and committed to advancing Nordic leadership at many levels and with several dimensions. Together with our strategic partners, we co-create climate solutions for increased support and visibility around the Nordic action in climate adaptation, biodiversity and other high-need areas.

It is evident that sustainable development cannot be achieved without gender equality. Guided by our Gender Equality Policy, projects co-financed by NDF aim to systematically address barriers to gender equality in the context of climate change and development.

Gender equality is a prerequisite and an accelerator for tackling climate change. It is both a stand-alone SDG goal (SDG 5: Achieve gender equality and empower all women and girls), and a cross-cutting accelerator across all the SDGs. The core goals for NDF’s co-financing are SDG 1, 5 and 13, but our co-financing contributes across all 17 SDGs.

Through our communication and outreach activities, we bring the Nordic voice to the global climate agenda and discussions. In 2023, we started implementing our strategic Communications Approach 2023-2025 and measuring our outreach.

“Having a partner that understands the importance of addressing the social, the economic and the environmental aspects as a package is important, because you also push us to do better in this regard. Working with a partner such as NDF makes us recognize and bring in the perspective of promotion of gender equality, reducing gender gaps and working on climate change and poverty.”

51 initiatives, networks and engagements with partners.*

337 communication activities promoting NDF projects and Nordic priorities*

COP28 conference in Dubai was one of the main events where we participated in 2023. As part of the Nordic Pavilion, we organised events on gender equality, blue economy and blended finance, and contributed to five events organised by our partners.

"Presenting EEP Africa’s real-life examples of women’s empowerment through energy access at the Nordic Pavilion at COP28 provided an opportunity to highlight the tangible impact of sustainable development efforts and demonstrate the vital role of women in driving change, fostering inclusivity, and promoting gender equality in the energy sector."

- Chiedza Mazaiwana, EEP Africa

*This includes joint communication initiatives, strategic partners’ news promoted through NDF’s channels and number of partner events with NDF contribution.
Developing early-stage design and structures

There is a well-recognised lack of available financing for the design, development and structuring of early-stage climate and development-focused projects, investments, and approaches. NDF has created a pipeline of early-stage projects to accelerate climate finance, develop new approaches and to pave the way for other financiers to join for a scaled-up impact.

EXAMPLE

ARCAFIM

Booster grants have proven to be efficient tools in supporting the early stages of the project preparation. NDF’s booster grant contributed to the full design of the Africa Rural Adaptation Finance Mechanism, ARCAFIM, a new financing program by the International Fund for Agricultural Development (IFAD). The project will catalyse and scale up private sector adaptation financing, targeting smallholder producers and rural micro-, small- and medium-sized enterprises in the agricultural sector in Africa. This would increase the resilience to climate change among low-income rural populations, particularly women and youth.

ARCAFIM project page
Providing catalytic financing for launch and scale

As a concessionary financier, NDF adds value by mobilising financing from both private and public sectors, especially during the risky early stages. NDF uses multiple financial instruments and structures to catalyse the flow of capital to climate and development projects.

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**Co-financing ratio 11.6%**

*based on the indicative total project cost at Board approval

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**EXAMPLE**

**InsuResilience**

InsuResilience Investment Fund supports climate adaptation action by improving access and use of insurance in developing countries, with a focus on reducing the vulnerability of disadvantaged households as well as micro, small and medium-sized enterprises to extreme weather events.

The fund invests in insurance and technology companies that help to mitigate climate-related risks, providing financing to qualified investees that offer insurance solutions for weather events and natural catastrophes. In 2023, NDF committed USD 13.5 million to the fund, with an additional USD 1 million as a grant for the fund’s Technical Assistance Facility.

InsuResilience project page
Reporting results

NDF’s results reporting in 2023

The results for this report have been collected by applying NDF’s Results Management Framework. Our 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 the least developed countries and countries in fragile situations.

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. Our active portfolio consists of projects in different stages: inception, full implementation or near completion. In the graphic below, we present a summary of our results in 2023. Following the impact pathways in our Theory of Change, the aggregate portfolio level results show an incremental progress towards the 2025 projections.

This data reflects the dynamic nature of our portfolio. Since several projects are still in early stages of implementation, results data from these projects is not yet available. Also, a few projects are already in completion with most of...
the achieved end results reported in 2022. We can also see how the global and local challenges, such as geopolitical conflicts and economic turmoil, often lead to delays in project implementation.

NDF captures lessons and actively applies adaptive management practices in the results management work to improve the data collection, analysis and ultimately our operations. We use the knowledge derived from our portfolio analysis to ensure that our strategic decision-making aligns with our mandate and purpose.

Overview of 2023 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**

- **Baseline 2021**: 1.2 m
- **Result 2022**: 1.2 m, 141 k
- **Result 2023**: 1.2 m, 313 k, Total: 454 k
- **Projections 2025**: 1.2 m, 313 k, 2.7 m, Total: 3.15 m

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

- **Baseline 2021**: 28.3 k
- **Result 2022**: 28.3 k, 86.6 k
- **Result 2023**: 28.3 k, 86.6 k, 85.4 k, Total: 172 k
- **Projections 2025**: 28.3 k, 86.6 k, Total: 157 k

The high result against projections 2025 is due to many projects with pending targets and several projects with targets available only beyond 2025. Projections by 2027 are around 162 k by 2034 around 470 k. Furthermore, many reported jobs are in the male-dominated energy sector, hence the large proportion of men.

**Change in amount of climate finance mobilized**

- **Baseline 2021**: EUR 1.61 bn
- **Result 2022**: EUR 1.61 bn, EUR 3.71 bn
- **Result 2023**: EUR 1.61 bn, EUR 3.71 bn, EUR 1.4 bn, Total: EUR 5.1 bn
- **Projections 2025**: EUR 1.61 bn, EUR 3.71 bn, EUR 1.4 bn, Total: EUR 5.8 bn

*NDC Pipeline Accelerator* was the biggest contributor to the 2022 result, having reported a total of USD 3.11 billion mobilised. In 2023, *Climate Resilience and Adaptation Finance and Technology Transfer Facility (CRAFT)*, *Climate Investor One (CIO)*, and *Off-Grid Energy Access Fund (OGEF)* were the highest contributors with a total of EUR 1.13 billion mobilised. Projections by 2027 are currently at EUR 8.2 billion.
The effective use of the RMF has added significant reliability to the data collected at different project stages. 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 in a consultation with partners. While we now have the tools to manage our results, we also need to acknowledge that it is sometimes difficult to ensure the availability and quality of data. Review and data validation can be challenging and time-consuming, requiring multiple consultation rounds with partners. Actively engaging and working together with stakeholders is essential to help us improve our impact management processes.

Working with stakeholders for effective results management

NDF co-creates projects together with partners and brings much required expertise in Results-Based Management into the project design and management work. In one such case, NDF worked together with its partner Serengeti Energy and Leonardo, impact management service provider, to overcome challenges in understanding socio-economic outcomes of end-users of its investments. By harmonising data collection processes and surpassing data quality challenges, stakeholders now have access to SDG-aligned result and impact data that can be used for efficient management, knowledge-sharing and decision-making.

Example

Serengeti Energy

NDF works together with Serengeti Energy to improve the quality and reliability of result and impact data. Photo: Serengeti Energy

With these updated frameworks, data collection and reporting are much richer and of a better quality.”

- Marian Grabowski, Head of Technical Assistance and Strategic Partnerships, Serengeti Energy.

Read more about Serengeti Energy in Results area 3
Mainstreaming gender equality throughout the projects

Gender mainstreaming occurs at an early stage of the project design and considers structural inequalities and the specific and differing needs and perspectives of women and girls, men and boys, and people of diverse genders in a specific context. With partners, we work towards mainstreaming gender equality in the project designs, and the results are effectively monitored and measured at different stages of the project. Data provided by partners, however, is not always disaggregated by sex, particularly in longer-running projects, making it challenging for NDF to draw gender-specific analysis and address the root causes of gendered vulnerability to disaster and climate risks. We engage in significant capacity-building and dialogue with partners to diminish this gap.

Since the adoption of our Gender Equality Policy, all our Board approved projects are aligned with Significant Objective in the OECD DAC Gender Equality Policy Marker.

Globally, more work in ensuring gender equality is still needed:

“In 2021-2022, only 43% of bilateral allocable Official Development Assistance had gender equality as a policy objective (USD 64.1 billion), down from 45% in 2019-2020.”

OECD Gender Equality Report

EXAMPLE

Community Resilience Partnership Program

NDF has worked closely with the Asian Development Bank (ADB) on the Monitoring, Evaluation and Learning (MEL) of Community Resilience Partnership Program (CRPP). This close cooperation has been crucial to the success of the CRPP. It will help increase our understanding of how change takes place in different contexts, what works and why.

Read more about the Community Resilience Partnership Program (CRPP) in Results area 1

Our common strategic focus means that NDF has been an active partner, bringing lots of experience and expertise to help to shape the MEL framework of the CRPP. Particularly in areas such as capturing the participation of women and marginalised groups in the design and implementation of projects. While implementation of CRPP is still in its early days, we are confident that the approach taken on the MEL will capture lessons that can feed back into programming,”

- Alex Fowler, Climate Resilience Specialist from ADB.

ADB and NDF collaborative MEL Technical Note
Results area 1
Resilient cities and human settlements

In this section

Datasheet: Results area 1

Voices behind the data:
- Dar es Salaam Metropolitan Development Project
- Community Resilience Partnership Program (CRPP)
- Transforming Hydro-Meteorological Services (HydroMet)

With our changing climate come unprecedented uncertainties and more frequent climate hazards and disasters. The threat of rising sea levels, flooding, droughts, and wildfires urges us to prepare for, build resilience towards and adapt.

During the reporting period, NDF continued to co-create projects and direct investments towards increasing climate- and disaster-resilience and adaptability of cities and human settlements. This work is aimed at reducing vulnerability to changing climate and building resilience and adaptive capacities, especially of women and girls.

Under this results area, we contributed to delivering 146 climate solutions, ranging from adaptation plans to weather and climate services as well as climate-resilient infrastructure and assets benefiting more than 100,000 people.

In this section, we present highlights of our support in a community-led and gender-responsive climate-resilience project in the Asia and Pacific regions. Also, we introduce results of a sustainable urban planning project with climate-resilient solutions in Tanzania and an early warning weather forecast project providing adaptation solutions in Mozambique. Further detailed results and projections per indicator for this results area are provided in the datasheet.
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 the original targets (in 2022). Projections for 2027 are presented since many project targets for 2025 have already been achieved.

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 that target exposure to severe drought and locust invasion (in 2022). Projections for 2027 are presented since many project targets for 2025 have already been achieved.
Size of area brought under climate change adaptation and disaster risk management (DRM) plans

<table>
<thead>
<tr>
<th>Area</th>
<th>Baseline 2021</th>
<th>Result 2022</th>
<th>Result 2023</th>
<th>Projections 2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptation strategies, plans, systems:</td>
<td>22.1 k Ha</td>
<td>22.1 k Ha</td>
<td>22.1 k Ha</td>
<td>22.1 k Ha</td>
</tr>
<tr>
<td>Early warning early action systems:</td>
<td></td>
<td>11.2 k Ha</td>
<td>11.2 k Ha</td>
<td>11.2 k Ha + 94 Ha</td>
</tr>
<tr>
<td>Weather and or climate systems/services:</td>
<td></td>
<td></td>
<td></td>
<td>13.4 k Ha + 94 Ha</td>
</tr>
<tr>
<td>Total</td>
<td>22.1 k Ha</td>
<td>11.2 k Ha</td>
<td>11.2 k Ha + 94 Ha</td>
<td>24.6 k Ha</td>
</tr>
</tbody>
</table>

Baseline: 2021
Result: 2022
Result: 2023
Projections: 2025
In 2015, NDF joined an ambitious project, to set up a sustainable urban plan for the fast-growing city of Dar es Salaam and build climate-resilient solutions. The project strengthened operations and maintenance systems for both transportation and environmental authorities, to help prepare for the rainy season.

NDF funded planning and technical support to maximise the benefits of a bus rapid transit system. The project also strengthened operations and maintenance systems for both transportation and environmental authorities. For example, proper maintenance can help a city to better prepare for the rainy season, so assets are protected and mobility ensured, even with the increased storm severity caused by climate change.

“Before the bus rapid transport system, we faced many challenges because the normal public buses took hours on the road in traffic. You faced delays to reach your destination and to come home. Now transport has become easy,” says Beata Mrema, a local commuter.

NDF also funded nature-based, multipurpose solutions for flood control. One example is a system of drainage pipes which lead to retention basins surrounded by plants. During heavy rains the water will flow into the pond and drain naturally into the soil instead of flooding.

The project also had a clear gender focus. Women were actively consulted during project design and implementation to ensure that project interventions were appropriate to their needs. The installation of streetlights created the positive unintended consequences of improved security and freedom of movement, which in turn created opportunities for women to increase their working hours and income.

Before the bus rapid transport system, we faced many challenges because the normal public buses took hours on the road in traffic.”
- Beata Mrema, local commuter
The Community Resilience Partnership Program (CRPP) promotes women and girls as agents of change in countries and communities in Asia and the Pacific.

This innovative initiative addresses gaps in climate resilience in the region and highlights the urgent need for locally-led solutions, especially for people in vulnerable situations and who live in poverty in the region. CRPP supports, for instance, women’s leadership in community resilience in Nepal and climate vulnerability assessments for migrants in Lao PDR. Most importantly, the program aims to ensure community resilience that is inclusive and gender-responsive.

A third of the NDF grant goes to CRPP’s dedicated Gender Window. This is a unique approach that prioritises investment in projects where the primary stakeholders are women throughout the project cycle, from planning, design and implementation, through to monitoring, evaluation and learning. This broad approach ensures that solutions are truly locally-led, focused on women’s and girls’ needs and knowledge, and beneficial for local communities.

“CRPP’s Gender Window is a response to try to address the lack of funding to gender equality. I think that often there’s an assumption that if we are working on climate adaptation, it is automatically inclusive or has direct benefits to women, but that’s not always the case. The gender window is a vehicle of being intentional in putting financial resources to grassroots women’s hands,” says Zonibel Woods, Senior Social Development Specialist from the Asian Development Bank.

The program also invests in learning and building new skills, which are needed to adapt to climate change. This is crucial to enable more women to find employment in green economy sectors, such as in agriculture, renewable energy and water management, where women remain underrepresented.

NDF was the first financier to fund this initiative and has since been joined by other financing partners.
HydroMet was set up to strengthen hydrological and meteorological information services to better protect local communities in Mozambique, which is one of the most vulnerable countries to climate change and often affected by extreme weather conditions. One element of this project, financed by NDF, was to develop FEWS-INAM, a national coastal forecasting system.

“We wanted to improve the early warning system to reduce the impact of disasters. We needed to build our capacity to gather data, analyse it and make forecasts,” explains Anacleto Duvane, the National Project Director for Instituto Nacional de Meteorologia (INAM), which manages and hosts the FEWS-INAM system.

The FEWS-INAM system became operational in 2019 and now provides forecasts to nearly 200 recipients, including ports, fishing communities, NGOs, and private companies. They receive regular daily bulletins with forecasts about waves, water surges, wind speed, rainfall, temperature and air pressure.

“We share long-range seasonal weather forecasting information with a national forum,” says Duvane.

“Road transportation authorities get better information to prepare roads for rains, or to get ready for possible flood repairs. Water management authorities get rain predictions which they use to check dams and flood basins. If an extreme event is coming, the information goes to disaster management authorities and municipalities like provinces and districts.”

More reliable forecasts also benefit citizens directly as they can now check the weather on TV, radio and online.

FEWS-INAM was one part of the HydroMet technical assistance project financed by the Nordic Development Fund and World Bank Group.

We wanted to improve the early warning system to reduce the impact of disasters. We needed to build our capacity to gather data, analyse it and make forecasts.”

- Anacleto Duvane, the National Project Director for Instituto Nacional de Meteorologia (INAM)
Results area 2
Natural capital and water-energy-food nexus

Managing natural capital for water, energy and food security

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. In 2023, NDF continued financing projects aimed at enhancing natural capital and improving water-energy-food security of climate vulnerable people.

Our contribution under this outcome led to delivering 2626 climate solutions, ranging from climate-resilient water supply and sanitation services to sustainable drinking water solutions and natural resource management services in vulnerable communities. In addition, 6 million hectares of marine protected area was supported through our co-financed projects. This work is aimed at decreasing vulnerability to natural resource depletion due to climate change, especially of women and girls.

In this section, we introduce a climate-friendly energy sourcing project that helps to prevent forest fires in Nepal and supports women’s employment, a climate-resilient approach to increase food security in Africa and a microcredit model to support climate-resilience and small-scale coffee-producers in Peru. Further detailed results and projections per indicator under this results area are provided in the datasheet.
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.

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

<table>
<thead>
<tr>
<th>Baseline 2021</th>
<th>Result 2022</th>
<th>Result 2023</th>
<th>Projections 2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>352k</td>
<td>631k</td>
<td>6.9k</td>
<td>893k</td>
</tr>
<tr>
<td><strong>Total:</strong> 1.53m</td>
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</tbody>
</table>

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 (in 2022). Climate Investor 2 contributed to improving conservation efforts with 6 million hectares of marine protected area in Ecuador.

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

<table>
<thead>
<tr>
<th>Baseline 2021</th>
<th>Result 2022</th>
<th>Result 2023</th>
<th>Projections 2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>11k Ha</td>
<td>11.2 m Ha</td>
<td>11.2 m Ha</td>
<td>11.2 m Ha</td>
</tr>
<tr>
<td><strong>Total:</strong> 17.3 m Ha</td>
<td></td>
<td>17.3 m Ha</td>
<td></td>
</tr>
</tbody>
</table>

Area under improved conservation/ restoration: 155 Ha
Area under improved conservation/restoration: 88 Ha
Area under improved conservation/restoration: 6 m Ha
Every year in Nepal, the plantation forest at Sagarnath suffers from forest fires. The forest understory bushes grow during the rainy seasons and then dry out during the winter, serving as an ignition for forest fires, but also as a fuel source. This Nepal-based project used biomass pellets sourced from invasive shrubs to replace fossil fuels and demonstrated how this process can improve both the well-being of the environment and local communities, while contributing to positive climate impacts.

A Nepalese company, BAKAS Renewable Energy Ltd. (BREL), investigated methods of turning invasive shrubs into climate-friendly energy sources, with the added benefit of preventing forest fires. BREL teamed up with a forestry and IT technology company from Finland, Arbonaut Ltd, to digitalise important components, such as creating an online platform to share collected data to provide support in harvesting and fire prevention.

A key achievement of the project was the establishment of a pellet factory with a production capacity of 20,000 tons per year, which leased the plantation forest to extract understory and fire-prone shrubs.

The project supported training and skills development in shrub harvest and collection of raw materials, which led to new jobs for local residents, especially for women. At the end of the project, the factory created employment opportunities for 230 locals related to harvesting, material processing, and administrative work. One-third of these positions were taken up by women who have experienced the factory as a transformative opportunity.

"Before the pellet project arrived in our remote village, I struggled with unemployment. Now, working in the factory not only provides financial stability but also brings a sense of fulfilment. It has positively impacted my life both economically and emotionally," says Jina Khatun, one of the women employed through this project.

The pellet factory uses invasive shrubs as climate-friendly energy sources. Photo: BAKAS Renewable Energy Ltd. / Arbonaut Ltd.

"Before the pellet project arrived in our remote village, I struggled with unemployment. Now, working in the factory not only provides financial stability but also brings a sense of fulfilment."

- Jina Khatun, one of the women employed through this project

NDF CO-FINANCING
EUR 500,000

PROJECT PERIOD
2020-2023

PARTNER AGENCY
BREL, Arbonaut

MAIN RESULTS
- 230 jobs created for local residents - 30% women.
- 1140 tons of highly inflammable forest understory removed.
- 797 tons of CO₂ equivalent emission reductions during the project lifetime.
Cold chain solutions promoting food security and climate-resilience

The Emerging Market Climate Action Fund (EMCAF), an innovative blended finance Fund of Funds, has invested in the ARCH Cold Chain Solutions Fund, which has an investment strategy focusing on climate adaptation and resilience.

With the aims of raising income and increasing the food security of rural populations in regions vulnerable to changing climate conditions, ARCH has set off to build a network of cold chain infrastructure across East Africa.

ARCH’s temperature-controlled facilities will extend the availability of agricultural produce to non-harvest seasons and reduce food waste. This solution will contribute to improving resilience to rising ambient temperatures and strengthening adaptation by reducing energy and water consumption and bringing down GHG emissions. The Fund’s flagship facility in Tatu City, Nairobi, was launched in October 2023.

“The project will boost food security, stabilise fresh food prices for smallholder farmers and decrease reliance on food imports. It also aims to support more resilient pharmaceutical supply chains, boosting access to lifesaving medicines and vaccines for local communities. Also, the Fund has seen a significant contribution to local employment. Over the two-year construction period, almost 1,800 people were employed, over 1,000 of which were unskilled workers from the local communities and 61 women. Now the facility is open, the company has 13 permanent employees in addition to 28 full-time contract workers, 16 of which are women,” says Matthew Lister, Investor Relations Manager at ARCH.

Work is progressing also in other cities with the ambition to build a cold chain infrastructure network covering Kenya, Uganda, Rwanda and Tanzania.
Coffee producers in Peru get a boost through green microfinance

Since 2019, EcoMicro has piloted an innovative project aimed at supporting climate-resilience of the coffee production chain in Peru. Working in collaboration with Perales Huancaruna (Perhusa), a local coffee production business, the project provides access to microcredit financing that equips farmers with tools and resources to produce their coffee sustainably, and cope with the changing weather conditions in the rainforest.

Leveraging Perhusa’s extensive network of 20,000 coffee-producing small scale-farmers, the project has offered financing to invest in tools that reduce the physical strain of the work, increase productivity and enhance efficiency, particularly in the sorting and processing stages, such as coffee hullers for bean separation and drying beds.

Aurelina Domínguez, and Evangelisto García, seasoned coffee farmers in the Cajamarca region, previously relied on the “patio drying” method, where coffee beans are spread out on cloth under the sun for drying. This method poses challenges, especially in a rainforest climate where weather conditions can change quickly, potentially ruining the beans in a sudden downpour. Also, due to the coffee beans’ hygroscopic nature, they easily absorb odors from their environment, which can negatively impact the product’s quality. Drying beds have made a big difference.

“Now the coffee is better, and it’s less work for us. We don’t have to constantly pick up the beans from the ground, with chickens and dogs getting in the way.”

Now the coffee is better, and it’s less work for us. We don’t have to constantly pick up the beans from the ground, with chickens and dogs getting in the way.”

- Aurelina Domínguez and Evangelisto García, coffee farmers

Technology and sustainable farming practices increase the farmers’ income and enable them to dedicate more time and resources to their households and prioritise their children’s education and healthcare.

NDF CO-FINANCING
EUR 4.1 million

PROJECT PERIOD
2015-2024

PARTNER AGENCY
Inter-American Development Bank

OTHER PARTNERS
Multilateral Investment Fund and Global Affairs Canada (GAC)

MAIN RESULTS
- 106k people with increased capacities and awareness in climate adaptation and mitigation measures and green finance - 50% women.
- 140k hectares brought under improved conservation, sustainable management and use of natural resources.
- 138k people benefitted by the programme to date - 50% women.
Results area 3
Access to and production of clean energy

In this section

According to the UN, 675 million people, mainly in the least developed countries and Sub-Saharan Africa, remain without access to energy and more than 2.3 billion people rely on unsafe and polluting fuels and technologies for cooking.

In 2023, NDF continued co-creating projects and directing investments towards increasing access to and production of affordable and sustainable clean energy. Our contribution helped to facilitate close to 12 million clean energy connections, the majority of which was solar, benefiting close to 57 million women and men. Moreover, our 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 7.5 million tons of reduced or avoided carbon emissions.

Here we present three projects that deliver access to clean energy and support economic empowerment of climate vulnerable communities in Sub-Saharan Africa. The results highlight our focus on capturing longer-term development impacts, such as improved socio-economic conditions and gender equality outcomes deriving from improved access and generation of clean energy products and services. Further detailed results and projections per indicator under this results area are provided in the datasheet.

Making clean energy more accessible and affordable

Contribution to the SDGs:

Datasheet: Results area 3

Voices behind the data:
Serengeti Energy
EEP Africa
The Off-Grid Energy Access Fund (OGEF)
Datasheet: Results area 3
Access to and production of clean energy

Number and types of affordable, clean energy connections facilitated

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline 2021</td>
<td>4.4 m</td>
</tr>
<tr>
<td>Result 2022</td>
<td>6.2 m</td>
</tr>
<tr>
<td>Result 2023</td>
<td>11.9 m</td>
</tr>
<tr>
<td>Total 2023</td>
<td>18.1 m</td>
</tr>
<tr>
<td>Projections 2025</td>
<td>1.9 m</td>
</tr>
<tr>
<td>Total 2025</td>
<td>20 m</td>
</tr>
</tbody>
</table>

Major proportion of baseline and results are from one project, African Guarantee Fund Green Guarantee Facility.

Installed renewable energy generation capacity

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline 2021</td>
<td>1169.29 MW</td>
</tr>
<tr>
<td>Result 2022</td>
<td>124.58 MW</td>
</tr>
<tr>
<td>Result 2023</td>
<td>847.14 MW</td>
</tr>
<tr>
<td>Total 2023</td>
<td>2071.72 MW</td>
</tr>
<tr>
<td>Projections 2025</td>
<td>1530.93 MW</td>
</tr>
<tr>
<td>Total 2025</td>
<td>3602.65 MW</td>
</tr>
</tbody>
</table>

Major proportion of 2022 results (761 MW) are from one project, Climate Investor One (CIO), representing installed energy generation capacity through solar energy, wind energy and hydropower. In 2023, Climate Investor One (CIO) and Emerging Market Climate Action Fund (EMCAF) were the highest contributors to this result.

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline 2021</td>
<td>149</td>
</tr>
<tr>
<td>Result 2022</td>
<td>130</td>
</tr>
<tr>
<td>Result 2023</td>
<td>38</td>
</tr>
<tr>
<td>Total 2023</td>
<td>168</td>
</tr>
<tr>
<td>Projections 2025</td>
<td>124</td>
</tr>
<tr>
<td>Total 2025</td>
<td>292</td>
</tr>
</tbody>
</table>
Number of people with improved access to clean energy

Major proportion of 2023 results were contributed by Energy Entrepreneurs Growth Fund (EEGF) and African Guarantee Fund Green Guarantee Facility.

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

In 2023, major proportion of results (859 GWh) are from Climate Investor One (CIO), representing annual energy generated by installed solar energy, wind energy and hydropower. Energy Entrepreneurs Growth Fund (EEGF) (547.9 GWh) and Serengeti Energy (282.1 GWh) were also major contributors. Updated targets for 2025 have not yet been received from a few partners.

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. In 2023, the biggest contributor to the result was Energy Entrepreneurs Growth Fund (EEGF).
Through NDF’s investment in Serengeti Energy, we support an increase in the renewable energy supply in Sub-Saharan Africa. The project contributes with access to reliable clean energy and reduced greenhouse gas emissions, and it also mobilises green capital and empowers local communities.

Local communities may experience both positive and negative impacts from large-scale renewable energy projects. To better understand these impacts, Serengeti Energy, leonardo and NDF - as a shareholder - had surveys carried out to capture the voices of the affected people directly and to measure impacts. Of particular interest were the outcomes related to the use of solar lights delivered through the Corporate Social Responsibility activities, especially in critical community buildings such as schools.

The outcome was very clear: 68% of the affected respondents reported that Serengeti’s activities improved their quality of life.

“Through Serengeti Energy’s activities, my husband has a secure job, and my kids can study more with the solar lights that were provided,” said a local community member.

The data also showed that only 5% of the community has access to clean on-premise water, and revealed persisting inequalities between genders, such as differences in income, perceived safety, satisfaction with public services and well-being. This monitoring data provides important information for planning future operations.

Surveys were carried out to measure impacts and capture the voices of local communities who are directly affected by the projects, such as in the Nkhotakota solar project in Malawi. Photo: Serengeti Energy

68% of the affected respondents reported that Serengeti’s activities did improve their quality of life.”

Access to clean energy and understanding community needs
This EEP Africa project developed solar-powered milling machines, a climate-smart solution to help rural entrepreneurs in Africa to grow their business with off-grid energy.

Previously, people – mostly women – would spend hours milling grain by hand or travel great distances and pay high prices to get their grain milled. These new machines provide improved agro-processing capabilities even to the remotest communities on a pay-as-you-go basis.

Milling machines not only facilitate food processing at the local level, but also generate income, enhance labor efficiency, and keep financial resources within local communities. They have also had a positive impact on women’s economic empowerment.

“Thanks to the affordability of these milling services, I’ve managed to save money that I’ve used to invest in rearing chickens at home. This provides extra income and also enhances my resourcefulness and independence. I no longer rely solely on my husband for financial support. We are now able to eat well, and I have the satisfaction of contributing to my family’s income,” says Caroline, a mother of four in Laikipia, Kenya.

The machines have reduced working hours and physical strain on women, enabling them to pursue new opportunities for themselves and their communities. The technology developed by AgSol is a good example of how innovative climate-smart energy solutions can contribute to food security, economic independence, and women’s empowerment.

Thanks to the affordability of these milling services, I’ve managed to save money. I no longer rely solely on my husband for financial support.

- Caroline, a mother of four from Kenya.
Over half of the people in Sub-Saharan Africa lack reliable access to energy. The Off-Grid Energy Access Fund (OGEF) helps solve this problem by providing debt financing to local companies that bring clean energy to people living off the grid.

“It’s important for these companies to be able to match assets and liabilities in local currencies, particularly when they operate in more fragile economies,” explains Alix Graham, Managing Director of Cygnum Capital, the Fund Manager of OGEF.

OGEF portfolio companies support a wide range of local entrepreneurs; from tailors powering their sewing machines and farmers using hot lamps for their chickens to businesspeople setting up local cinemas. Graham mentions several companies that have made a difference in the lives of people living in the region.

“Bboxx offers televisions, lighting, torches and radios for shop owners. SunCulture sells solar lighting kits and televisions powered by the sun and batteries for farmers. BioLite has cooking systems, home solar systems and chargers, and sells to local retail stores and even to the developed market.”

A social impact measurement company, 60_decibels, was commissioned to assess the impact of OGEF’s portfolio companies. Nearly 75% of customers surveyed say they did not previously have access to clean energy products or services. About 61% of respondents say they see a significant improvement in their quality of life. With access to energy, their ability to work or study has improved, and their autonomy increased.

A specific area highly impacted by access to clean energy is cooking, a daily activity often handled by women and girls. The study points out that cleaner fuels, like electricity and biogas, also have fewer negative health effects than dirtier fuels such as wood and basic charcoal. The survey found 67% of cookstoves sold by portfolio companies were bought by women; 65% of these women reported the stoves “very much decreased” the time they spent cooking.

About 61% of respondents say they see a significant improvement in their quality of life with more reliable access to energy.
Our journey continues

This report highlights the impact and results of our co-financed projects, featuring the voices and stories behind the data. In our third Results report since adopting the Results Management Framework in 2021, we show how the knowledge and data from the portfolio analysis ensures that our strategic decision-making is aligned with our mandate and purpose.

In 2023, we continued to witness severe climate events, such as new records in average global warming, severe flooding, drought and the numbers of people affected by climate shocks continues to increase dramatically. As co-financiers, our ethos is collaboration with our strategic partners and building sustainable and climate-resilient societies. It is crucial to keep mobilising climate finance for climate solutions that improve the lives of vulnerable communities. We continue to manage our impact and results to understand how we can do even better and to ensure we reach those who need the support most.

We are pleased to see that, despite many global challenges, we are on a solid path to reaching our targets outlined in our Strategy 2025. However, a lot of continued work is needed, and we are committed to continue to work together with our partners to address climate and development challenges in the Global South.

We convene, co-create and complement high-impact projects. As co-financiers, it is important for us to be actively involved and add value to the projects we finance and to work closely with our partners in all stages of the project. In
In this report, we bring expertise in Results-Based Management into the project design and project cycle management work and ensure that our Nordic priorities, including gender equality and inclusion are effectively mainstreamed in this work. By working together, we have been able to communicate results on improved gender equality in our projects, ensuring that women and girls are active agents of change and benefit from the projects we finance.

We can see in the report that we have developed a robust portfolio, demonstrating significant progress in promoting sustainable solutions for both climate change adaptation and mitigation. We continue our support in Sub-Saharan Africa, our focus region, with both private and public sector financing initiatives, which are vital now and, in the future, to find solutions in the nexus of climate and development. By building firm foundations and partnerships, we are investing in lasting positive results.

The insights gained from this Results Report are invaluable. By continuously assessing our progress with effective results management and capturing lessons learned, we can refine our approach and achieve even greater climate action with our stakeholders and partners.

Our commitment to provide catalytic finance for sustainable climate solutions for our planet will continue to be strong. Together with our broad network of strategic partners we will continue to build on the successes and develop solutions for obstacles we see, to be able to build on the hope of driving development towards a more resilient and equal future for all.

“We are pleased to see that, despite many global challenges, we are on a solid path to reaching our targets outlined in our Strategy 2025.”
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. 2023 results data that informs this Results Report has also been collected, uploaded, validated, and analysed in the new online system.
Our Methodology

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 to provide accurate data and reporting.

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.

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

NDF’s project portfolio consists of a range of different types of projects, and each have their own reporting cycles. Thus, the aggregates reported by NDF represent “as of now” summaries.

The projections presented in this report reflect the current NDF strategy period 2020-2025, although many project-level projections go beyond that period. The projections are composed of aggregate project-level targets and estimations that have been made available by the partners. These are reviewed on an annual basis as part of the results collection process and thus should be treated as dynamic and changing.
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