

Land Degradation Neutrality Fund

Impact Report 2022



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About this report
The Land Degradation Neutrality Fund Impact Report, produced during 2023, is based on project submission data from 2022 as well as projected data.



GAUTIER QUÉRU

Director, Land Degradation Neutrality Fund

Letter from the manager

The end of 2022 brought the adoption of an ambitious Global Biodiversity Framework by the 15th Conference of the Parties (COP) to the Convention for Biological Diversity. This framework reiterates the crucial need to channel private capital towards nature protection and restoration. The Land Degradation Neutrality (LDN) Fund⁽¹⁾ was hailed during COP15 as a part of the official decision on the Strategy for resource mobilization in support of COP15 goals⁽²⁾. Since its launch in 2017, the LDN Fund, promoted by the United Nations and independently managed by Mirova, has been a pioneer and a leading player in designing, improving, and scaling high-impact investment solutions that address major global climate and environmental challenges.

After four years of full operations and successful deployment, the Mirova team announced the closing of the 10th investment of the LDN Fund in October 2022, a major milestone in the development of the sustainable land use strategy. The projects supported by the fund since 2018 have demonstrated positive impacts on the ground.

This report highlights how these projects are able to unleash the potential of talented and innovative entrepreneurs dedicated to

delivering meaningful impacts in developing countries. With the investments of the fund maturing, we are able to provide initial results in terms of impact indicators, while for more recent projects the focus remains on the target impacts.

In addition to providing patient capital to transformative projects, we strongly believe that our role as an impact investor is to accelerate the adoption of environmental and social best practices in the land use sector. In support of this belief, we initiated the creation of the Land Use Investee Knowledge Exchange, a network of like-minded entrepreneurs dedicated to fostering knowledge exchange between LDN Fund portfolio companies. This network is facilitated jointly by IDH and the LDN Technical Assistance Facility Manager⁽³⁾ and addresses diverse topics including gender equality, impact monitoring and access to carbon finance through regular meetings.

Building on Mirova's knowledge, experience and local presence through hubs in developing countries, we will now replicate and scale up our sustainable land use investment strategy. Our aim is to support the sustainable transition of land use sectors while creating financial value for our investors.

⁽¹⁾LAND DEGRADATION NEUTRALITY FUND is a Luxembourg Special Limited Partnership (Société en Commandite Spéciale), closed to new subscription. Mirova is the management company. The supervisory authority approval is not required for this fund.

⁽²⁾Convention for Biological Diversity - Montreal, Canada, 7-19 December 2022.

⁽³⁾See the « Technical Assistance Facility » section at the end of the report.

Fund profile

Land Degradation Neutrality Fund

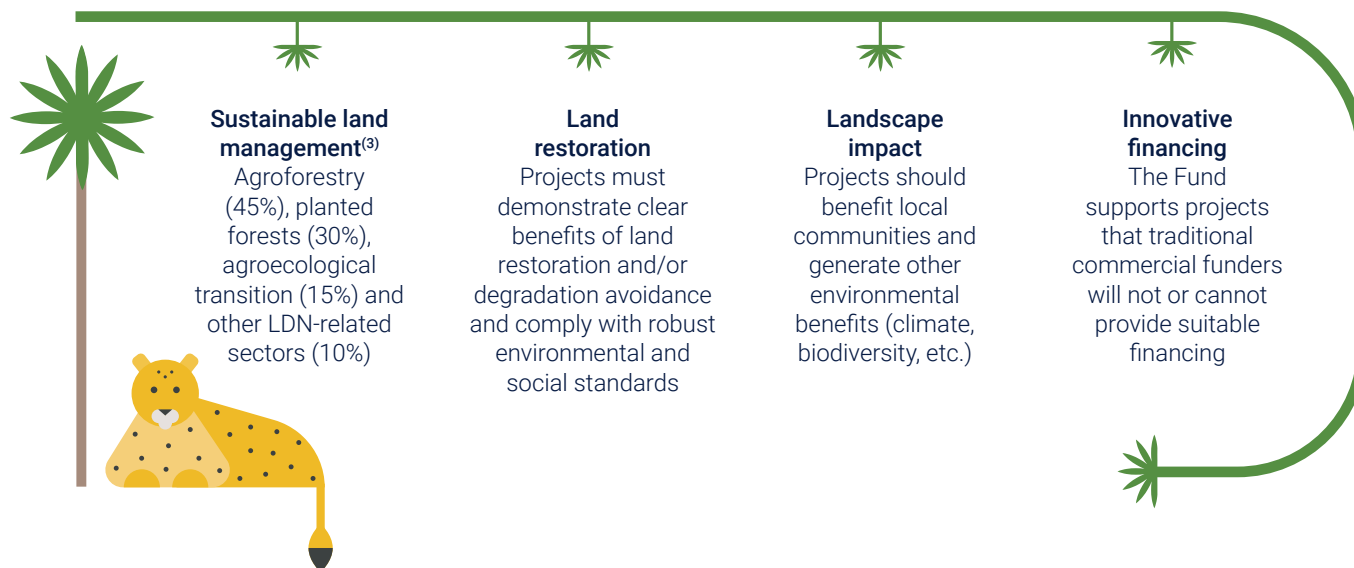
The challenge

Poor land management practices, often fuelled by exploitation for short-term economic gains instead of favouring long-term sustainability, have led to the loss of more than 25% of the world's arable land in the last two decades⁽¹⁾. A total of two billion hectares of land are degraded worldwide and through exploitative production, human activities continue to degrade another 12 million hectares of productive land every year⁽²⁾.

Investment solution

As well as the direct economic value of using land and its resources sustainably, proper management of land-based ecosystems can increase food security, decrease biodiversity loss and help combat climate change, poverty, social instability and conflicts. The Land Degradation Neutrality (LDN) concept addresses this and is therefore included in the Sustainable Development Goals (SDGs) and other initiatives. More than 120 countries have committed to LDN-related initiatives enabling LDN investments. Co-promoted by Mirova and the United Nations Convention to Combat Desertification (UNCCD) the LDN Fund is a source of transformative capital bringing together public and private investors to fund triple bottom line projects that contribute to Land Degradation Neutrality.

Scope



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⁽¹⁾United Nations.

⁽²⁾United Nations.

⁽³⁾Target (2033).

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The fund



Fund Size
\$208M



Fund Life

First closing
December 2018;
Investment period
5 year; fund life
15 years



Geographies

Primarily
developing
countries
where capital
mobilisation is
crucial.

SDGs



LDN Fund impact targets (2033)



350,000 ha
under Sustainable Land Management (SLM)



70,000
employees and smallholders benefiting
from the projects



25M tonnes CO₂
sequestered



The Team



GAUTIER QUÉRU
FUND DIRECTOR

Gautier Quéru is the Director of the Land Degradation Neutrality Fund and Managing Director at Mirova. Since its inception, Gautier has overseen the business development and overall coordination of fund creation (market study, fund design, structuring, marketing to institutional investors) and team management. He also manages investment opportunities, sourcing and analysis and works with the United Nations and other stakeholders (non-governmental organisations, business associations, international organisations).

Gautier joined Natixis group in 2004 when the European Carbon Fund (ECF), a €140 million fund dedicated to projects to reduce CO₂ emissions under the Kyoto Protocol, was launched. From 2004 to 2013, Gautier acted successively as investment manager, portfolio manager and fund director of ECF. Between 2013 and 2016, Gautier was Investment Director within the renewable energy fund division of Mirova. He participated to Mirova-Eurofideme 3 development and fundraising and ran equity investments in renewable energy projects. Prior to joining Natixis group, Gautier was at the French Ministry of Economy, in the Energy and Climate division.

Gautier is an engineer in environment and energy through the National Polytechnic Institute of Toulouse and is a graduate of Sciences Po Paris.



JOHANN FOURGEAUD
INVESTMENT DIRECTOR

Johann Fourgeaud joined the LDN Fund team as an investment director in 2019. Johann leads the LDN Fund's investment pipeline development and coordination. He has also directly led the investment process for several transactions in the portfolio.

Johann has more than 15 years' experience with investing in sustainable agribusinesses in developing countries. Prior to joining Natixis group, Johann deployed the Fair Trade Access Fund of Incofin IM in Latam, Africa and Middle East and North Africa regions. He executed trade finance loans and long-term debt transactions with 30 producer organizations and agro-SMEs involved in certified agriculture. Before that, Johann invested equity in innovative SMEs⁽¹⁾ (mainly agro-processing) in Western and Central Africa on behalf of FADEV, a social business in France, that built up the concept of equity fundraising for development. Johann started his career in South-East Asia at the French Development Agency. Johann is an engineer specialising in international agricultural development (ISTOM) and also graduated with a Master's degree in Finance from Paris Panthéon Assas. Johann has been a member of the Society for Ecological Restoration since 2018.



CAROLINE BOUQUET
INVESTMENT DIRECTOR

Caroline Bouquet is an investment director for the LDN Fund and sits on its investment committee. She joined Mirova seven years ago when the LDN Fund was established as a pioneer fund in natural capital. She has extensive experience in the sustainable resources sector with expertise in sustainable agroforestry and forestry.

Within the LDN Fund, she works on investment strategy, deal sourcing, due diligence and the structuring of new deals as well as portfolio management. Prior to joining Mirova, Caroline worked for the French Ministry of Environment and for the French Ministry of Finance.

Caroline holds a degree in Economics from the Ecole Normale Supérieure (ENS) and an Master of Science in Environmental Economics from the Paris School of Economics (PSE).



CLÉMENT LEROY
INVESTMENT ANALYST

Clément Leroy joined the LDN Fund team as an investment analyst in 2021. He is involved in every step of the investment process as well as the monitoring of portfolio companies. Prior to joining Mirova, Clément led sustainability consulting missions for microfinance institutions in Peru and Ecuador. In addition to this field experience, he has worked as an investment analyst for the microfinance team of BNP Paribas with a focus on the investments of the bank in Latin America and Asia.

Clément holds a bachelor's in economics and applied foreign language (English) from Université Paris Nanterre and graduated from the Grande École Programme of EDHEC Business School. He speaks French, English, Spanish and Portuguese.

⁽¹⁾Small and Medium Enterprises.

Key partners



LDN Fund is amongst the 12 commitments of the one planet summit

Co-promoters



Sourcing and impact



Technical assistance

Public investors



Private investors



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Selected highlights

January 2022

Mirova began managing the €50m Carbon Investment for Orange. The investment focuses on reforestation and other nature restoration initiatives and forms part of Orange's pledge to achieve net zero carbon by 2040. Returns will be in the form of high-quality carbon credits.

May 2022

Mirova accelerated the rollout of its sustainable land use investment program and announced three new investments in Aloe Agroflorestal (Brazil), Atlas Fruits Company (Morocco), and Kennemer (the Philippines).

June 2022

Mirova released its first Mission Report following the decision to become a mission-driven company in 2020. It describes the translation of the five social and environmental objectives of Mirova's mission into concrete achievements.

Mirova announced the acquisition of SunFunder, a specialist in emerging market clean energy and climate investment, accelerating its ambition to become a global leader in impact investing.

September 2022

Mirova became a member of the 2X Collaborative initiative. Launched at the UN Generation Equality Forum 2021 in partnership with GenderSmart and the Investor Leadership Network (ILN), the 2X Collaborative is a leading industry body for gender lens investing. Its mission is to convene and equip investors to increase the volume and impact of capital flowing towards women's economic empowerment.

For the second consecutive year Mirova was named B Corp Best For The World™. This recognition is awarded by B Lab to certified B Corporations (B Corp)⁽¹⁾ that rank in the top 5% of their category in at least one of the five impact areas assessed.

⁽¹⁾Since 2006, the B Corp movement has been promoting strong values of change throughout the world to make businesses "a force for good" and to distinguish those which reconcile profit (for profit) and collective interest (for purpose). B Corp's goal is to certify companies that integrate social, societal and environmental objectives into their business model and operations. References to a ranking, prize or label do not anticipate the future results of the latter, or of the fund, or of the manager.

October 2022

Mirova announced the 10th investment of its sustainable land use strategy, aimed at supporting the development of Aqre Group, a leading producer of natural ingredients for the pharmaceutical, cosmetic, food and beverage industries. The \$10 million investment will facilitate the implementation of sustainable land management practices in Madagascar in partnership with thousands of smallholder farmers.

November 2022

Mirova co-hosted the first Land Use Investee Knowledge Exchange with IDH. This event brought together all portfolio companies around carbon finance and allowed them to exchange experiences and expertise.

The first edition of the Impact Investors Day brought together clients, speakers and partners to present Mirova's unique approach to impact investing through energy transition infrastructure, natural capital and private equity. This event provided the opportunity to present the innovative investment solutions we have built up over the past ten years and to share our vision for the future.

December 2022

Mirova participated in the 15th Conference of the Parties (COP) to the Convention for Biological Diversity. The LDN Fund is hailed in the official decisions.

LDN renews support for Komaza with a \$9.5 million investment that will help to scale operations in Kenya.



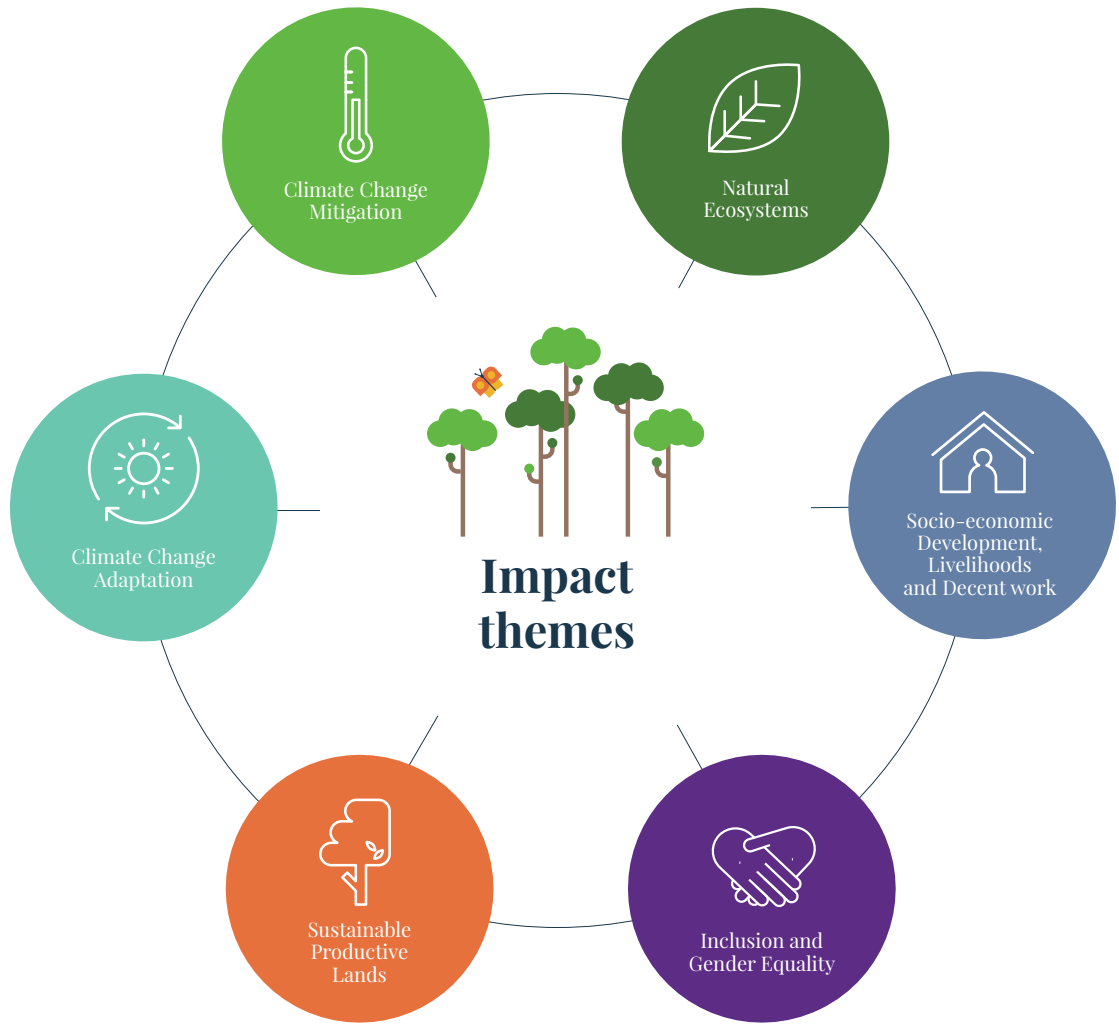
Impact approach

Farmers and rural communities are challenged by the interrelated impacts of ecosystem degradation, climate change, competition for scarce resources, poverty and food insecurity. Land use must therefore be managed intelligently to stop land and forest degradation and provide opportunities for inclusive rural development.

Our vision of sustainable land management:

- ▶ Improving the sustainability of productive land use reduces the pressure on and improves the state of ecosystems and biodiversity.
- ▶ Areas kept for restoration or conservation purposes represent an important complementary lever to preserve natural ecosystems and their unique richness.
- ▶ Sustainable land-use practices are expected to generate climate-related benefits as well by reducing greenhouse gas emissions, sequestering CO₂, or ensuring a better resilience of production and livelihoods to climate impacts. Socio-economic benefits may include improved livelihoods through increased incomes, training and access to finance, but also opportunities to strengthen inclusion, notably on gender related issues.
- ▶ Key impact metrics that the LDN Fund is monitoring are presented here and will be detailed at project level in the following pages of this report.

Key impact themes targeted by the LDN Fund⁽¹⁾



	Reported progress (2022)	Current portfolio projections (2033)	Targets (2033)
Hectares under sustainable land management	133,301	211,142	350,000
Employees and smallholders benefiting	73,421	138,410	70,000
Tonnes of CO₂ sequestered	0.88M	21M	25M

Source: Mirova. These figures represent the sum of indicators of all companies in the portfolio, without considering the level of investment of Mirova in each of them. Mirova's investment in projects within the LDN Fund's portfolio is typically between 10% and 80% of the total investment raise in individual projects.

⁽¹⁾ Please refer to page 54 for detailed ESG impact indicators



Investments

Investments




Cacao Oro
Nicaragua

- Investment theme**
Agroforestry
- Main sector**
Cocoa, coffee
- Duration**
10 years




Urapi SLU
Peru / Colombia

- Investment theme**
Agroforestry
- Main sector**
Coffee, Cocoa, nuts
- Duration**
15 years




Atlas Fruits Company
Morocco

- Investment theme**
Agro-ecological Transition
- Main sector**
Citrus
- Duration**
7 years




Mountain Hazelnuts
Bhutan

- Investment theme**
Agroforestry
- Main sector**
Hazelnuts
- Duration**
10 years




Kennemer
Philippines

- Investment theme**
Agroforestry
- Main sector**
Cocoa
- Duration**
9 years




Aloe Agroflorestal (SLB)
Brazil

- Investment theme**
Planted Forests
- Main sector**
Timber
- Duration**
10 years




Miro Forestry
Ghana / Sierra Leone

- Investment theme**
Planted Forests
- Main sector**
Timber
- Duration**
11 years




Aqre Group
Madagascar

- Investment theme**
Agroforestry
- Main sector**
Natural ingredients for the pharmaceutical, cosmetic and F&B industry
- Duration**
8 years



Komaza
Kenya

- Investment theme**
Planted Forests
- Main sector**
Timber
- Duration**
8 years

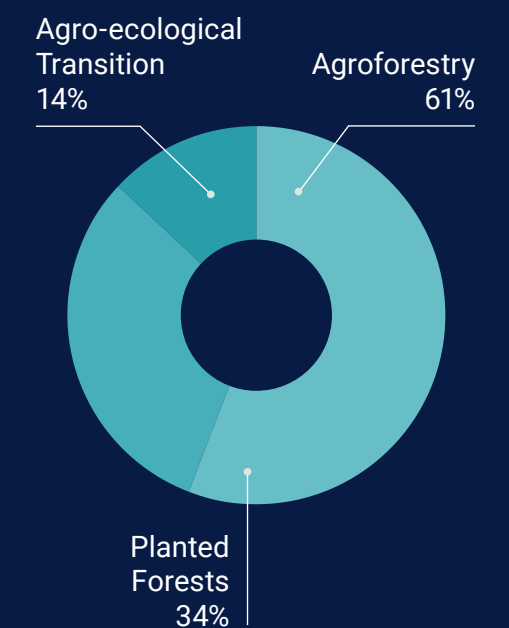


Burapha Agroforestry
Laos

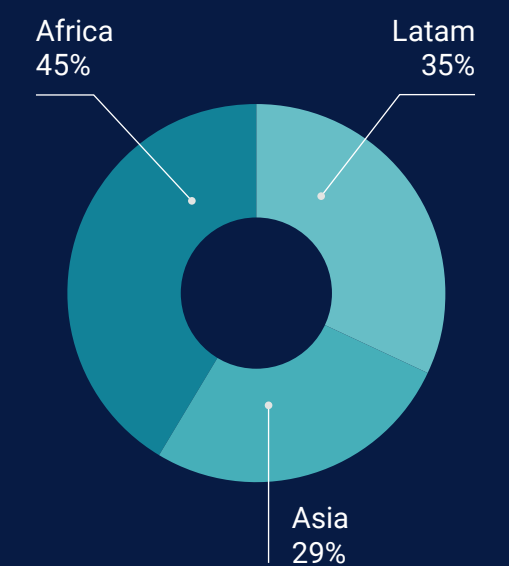
- Investment theme**
Planted Forests
- Main sector**
Timber
- Duration**
7 years

Portfolio geographic and sector diversification

Current Portfolio - Investment Pillar Repartition (% by sector)



Current Portfolio - Geographic Repartition (% by geography)



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Source: Mirova. Data as per end December 2022

Aqre Group

Aqre Group is a leading producer of natural ingredients. Founded in 2005 in Madagascar, the company specialises in the production and extraction of high-value natural ingredients (artemisinin and quinine). The company has a vertically integrated model from raw material production with smallholder farmers, using sustainable land use practices, to processing, value-added creation and distribution.

Context

According to the Food & Agriculture Organization of the United Nations (FAO), around one third of the island's land resources are degraded. In 2010, 1.9 million people were living on degraded agricultural land, an increase of 27% in a decade⁽¹⁾.

This brought the share of rural residents who inhabit degraded agricultural land up to 14% of the total rural population⁽¹⁾. Land degradation in Madagascar manifests as soil erosion and the loss of soil nutrients. Water erosion is the main soil erosion type in Madagascar with 30 million hectares affected⁽¹⁾. Most of the land is currently in a state of very high degradation.

Solution

Aqre Group BV ("Aqre") started its operations in 2005 through two entities; Bionexx for Artemisinin and Qimpexx for Quinine. Today, Aqre is a leading producer of natural ingredients for the pharmaceutical, cosmetic and the food and beverage industry. It supports smallholder farmers to reduce pressure on ecosystems compared to large-scale models, guaranteeing higher biodiversity levels and improved livelihoods for stakeholders. Planting takes place in areas that have been degraded by intensive farming and slash and burn agriculture. Aqre also has a strong commitment to biodiversity and contributes to the protection of the Ranomafana National Park with its unique biodiversity.

Bionexx works with more than 15,000 smallholder farmers on 5,000 hectares of land dedicated to the sustainable production of Artemisia Annua. Artemisinin is extracted from artemisia and sold as a pharmaceutical ingredient to WHO (World Health Organization) approved pharmaceutical companies to produce artemisinin based combined therapy used to treat malaria.

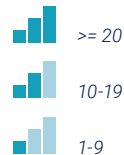
Qimpexx produces and sources cinchona bark from which quinine derivatives are extracted and used by the pharmaceutical and beverage industry (tonic water). The company is planning to develop a nucleus plantation of 1,500 to 2,000 hectares of sustainable cinchona trees supplemented by a 4,000 smallholders agroforestry system next to the Ranomafana National Park.

Over the project's 8-year life, Aqre aims to increase its environmental and social footprint in the region by expanding activities into degraded areas and supporting impoverished farmers. The objective is to significantly contribute to a sustainably managed and climate-resilient cropping system and improve the lives of more than 32,000 farmers in Madagascar.

The LDN Fund supports the Environmental and Social Action Plan (ESAP)⁽²⁾ that has been agreed with AQRE. Such support strengthens ESG management to meet local compliance and international best practice on wastewater treatment, occupational health and safety, safeguarding, and wild plant sourcing.



*Size of investments
(in M US \$)



⁽¹⁾Source: UNCCD
⁽²⁾ESAP may be designed to identify ESG performance gaps or improve the project's ESG risk management. The ESAP is always agreed on with the company's management, and is included in the investment contract.

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Impacts



Hectares under sustainable land management

4,700
2022

13,000
Target (2033)



Employees and smallholders

25,404
2022

32,000
Target (2033)

>30%
women at board level meets 2X criteria
2X Challenge

Please refer to appendix for details on the 2X Challenge initiative and criteria.



Member of UEBT
(Union for Ethical
Biotrade)

Source: company and Mirova, data as of end december 2022.

Kennemer

Kennemer is a Philippine agroforestry platform specialising in sustainable farming, sourcing, and trading high-quality crops such as cocoa beans, bananas, and abaca. It has recently been recognised that through these activities Kennemer is also providing ecosystem services. The company has been operating since 2010.

Context

In Mindanao, the second largest island in the Philippines, the development of nature-based solutions is vital to reduce the threat to ecosystems and to generate sustainable livelihoods for the local population.

Solution

Kennemer started as a cocoa bean exporter in Mindanao before launching a contract growing model in 2012 that integrates smallholder communities into the supply chain while tackling the problem of lack of available good supply. Farmers are provided with planting materials and inputs, training, post-harvest assistance and offtake for cocoa.

Kennemer progressively developed other parts of the value chain, setting up an agri-finance arm in 2017 to bridge the financing gap to the smallholders and SMEs they are partnering with, implementing managed farms of cocoa, banana and abaca, and starting an ambitious carbon program to leverage their reforestation activities in addition to developing a REDD+ program⁽¹⁾.

Through its holistic approach, Kennemer helps break the cycle of poverty that affects many smallholders by providing technical assistance, quality solutions, and access to finance and the secondary market. Working in partnership with a network of 19,000 smallholders, Kennemer has become the leading exporter of cocoa beans in the Philippines.

The LDN Fund supports its growth plan to

implement farming initiatives which aims to regenerate areas degraded by unsustainable sugarcane farming practices that have a negative effect on biodiversity.

The Environmental and Social Action Plan agreed between the LDN Fund and Kennemer comprises numerous items including the establishment of a management system in line with international standards, conducting environmental and social impact assessments for its new developments achieving Rainforest Alliance certification and developing a Gender Action Plan (GAP).

2022 update

In 2022, Kennemer's cacao-based agroforestry program and the planting of trees to sequester carbon in direct partnership with local farmers was recognized through the first issuance of nature-based carbon credits in the Philippines.



Philippines 



Date of investment
Executed in 2022

Duration
9 Years

Size of investment*



Share of LDN
within overall
project
45%

*Size of investments
(in M US \$)



⁽¹⁾"REDD" stands for "Reducing emissions from deforestation and forest degradation in developing countries". The "+" stands for additional forest-related activities that protect the climate, namely sustainable management of forests and the conservation and enhancement of forest carbon stock.

Impacts



Hectares
under
sustainable
land
management

11,918
2022

26,000
Target (2033)



Tonnes of
CO₂
sequestered

4,767
2022

4m
Target (2033)



Employees
and
smallholders

8,683
2022

25,000
Target (2033)



>30%

women managers and senior executives meets 2X criteria

2X Challenge

Please refer to appendix for details on the 2X Challenge initiative and criteria.

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Source: company and Mirova, data as of end december 2022.

Burapha Agroforestry

Burapha Agroforestry Company, established in 1993, is a sustainable land management project operated by a Lao Swedish forestry plantation and wood products manufacturing company based in Laos.

Context

Historically, the Luang Prabang montane rainforests ecoregion was covered by rainforests. However, more than 70% of the montane habitat has been converted to shrubland, scrub and degraded forests⁽¹⁾. Deforestation is mainly driven by the expansion of agriculture and clearing for hydropower projects, mining sites and other infrastructure development. Local market forces have also driven unsustainable timber extraction, shifting cultivation, and harvesting of non-timber forest products (NTFP) which have all caused forest degradation. Illegal logging and cross-border trade were widespread until recently and contributed to both deforestation and degradation.

Solution

Since its creation, Burapha has developed a unique concession model with agro-forestry practices on over 5,800 ha. Almost all of Burapha's plantations are FSC certified and focus on using only degraded land and fallow swidden. The company's plantations are shifting unsustainable cultivation, illegal logging and degrading agricultural practices to long term sustainable management. The agroforestry model promotes intercropping during the first years, thus increasing the soil organic content, and best international management practices to avoid soil depletion. Special Management Areas (25% of total land holdings) are excluded from plantation production for the preservation and enhancement of watercourses, water quality, soil fertility, biodiversity, natural forest

and cultural heritage. Additionally, High Conservation Value areas are omitted from plantation activities.

The project is expected to sequester approximately two million tonnes (on average 15 tonnes per hectare per year) of carbon over the project's lifetime and to create around 2,000 full-time jobs with a strong focus on gender equality. Currently, 40% of full-time staff and the daily labour force are women while the percentage of women employed at the plywood mill increases to 60%.

The LDN Fund supports the scaling-up and expansion of Burapha's activities by 20,000 hectares in new Production Forest Areas concessions that have been granted by the government, largely based on the company's sustainability credentials and demonstrated environmental and social impact.

2022 update

In 2022, Burapha's forestry activities progressed. Despite challenges faced with expanding factory operations, the company planted 400 hectares.

Laos



Date of investment
2021

Duration
7 years

Size of investment*



Share of LDN within overall project
24%

*Size of investments
(in M US \$)



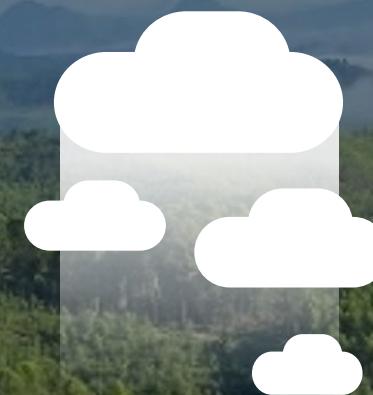
Impacts



Hectares under sustainable land management

11,004
2022

25,000
Target (2033)



Tonnes of CO₂ sequestered

89,532
2022

4.6m
Target (2033)



Employees

443
2022

2,000
Target (2033)



FSC
Certification

Forest Stewardship Council certification ensures that the production of wood or a wood-based product complies with procedures guaranteeing sustainable forest management.

Source: company and Mirova, data as of end december 2022.

⁽¹⁾"Advanced Phenology, and Land Cover and Land Use Change Studies", 2021.

Atlas Fruits

Atlas Fruits Company is a platform for sustainable citrus production in Morocco. Its objective is to foster the adoption of sustainable land management and water efficiency practices in the citrus sector throughout the country and to ensure adaptation to climate change.

The shareholders have been operating citrus orchards in the Marrakech region since 2008, with a strong focus on sustainable agricultural practices.

Context

Land degradation and soil erosion are major issues in Morocco. The government has set targets and introduced a national action plan to tackle the issue. Additionally, in arid and semi-arid regions agriculture puts groundwater under pressure. Therefore, implementing sustainable agricultural practices and proper irrigation is crucial to cope with the overexploitation of water resources and land degradation.

Solution

The LDN Fund investment allows Atlas Fruits to expand its best practices to new brownfield citrus orchards with pilot cutting-edge water-saving innovations, conduct precision agriculture and implement agroecological and organic practices and renewable energy production.

The company's management will capitalise on its experience, the farming expertise of INRA Morocco and the LDN Fund's network to scale-up the successful practices to over 1,000 hectares in Morocco. The investment from the LDN Fund will help to scale the platform activities and develop a best-in-class citrus production model, to become part of the AAA Initiative.

Mirova has developed a robust Environmental and Social Action Plan to develop and maximise the positive impacts of the project. The project's

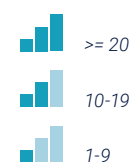
positive impacts could be scaled up with the targeted implementation of an 'outgrower' program based on the project's regenerative, water-efficient and organic farming methods as well as expanding existing technical assistance to other farmers. A gender component has also been agreed upon in the ESAP.

2022 update

In 2022, Atlas Fruits Company started to implement an Environmental and Social Action Plan dedicated to enhancing the positive impacts already generated by the company. The ESAP contributes to improving energy efficiency and water savings through precision agriculture, sustainable land management, social and environmental risk management as well as gender equality.



*Size of investments
(in M US \$)



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Impacts



Hectares under sustainable land management

180
2022

1,000
Target (2033)



Tonnes of CO₂ sequestered

100,000
Target (2033)



Employees

318
2022

1,000
Target (2033)

SMETA

SMETA Audit passed

SMETA is the world's most widely used audit. Businesses use SMETA to understand and make improvements to working conditions and environmental performance in their business and supply chain.

Source: company and Mirova, data as of end december 2022.

Aloe Agroflorestal

Aloe Agroflorestal, started in Brazil in 2008 by the SLB group, is a forestry program located in the state of Paraná. It establishes commercial forestry plantations to restore degraded land on relatively small parcels, creating a mosaic of forestry and conservation areas and favouring organic inputs and ecological management principles.

Context

Brazil's degraded land surface amounts to 140 million hectares and deforestation is expected to continue increasing at a considerable rate⁽¹⁾. Intensive agriculture is a major driver of degradation as the total grain cultivation surface increased by 80% between 1996 and 2006⁽²⁾, resulting in soil degradation, loss of forest cover and loss of biodiversity. The result has been lower yields, biodiversity loss, degraded soil, impoverished hydric capital and a local population that struggles to earn a decent living on degraded land.

Solution

Aloe Agroflorestal is a unique forestry program implemented by the SLB Group, a company that has already developed 3,800 hectares of successful FSC-certified plantations in Brazil. The goal is to create thriving plantations that restore soil properties while supplying international markets with high quality, sustainably sourced wood.

SLB's model combines economic returns with ecological sustainability through the establishment of small and well spread, low density plantations that reduce pressure on ecosystems ensuring greater biodiversity. SLB focuses on highly degraded land and their plantations have an average of 40% of managed land dedicated to the conservation and regeneration of native habitats.

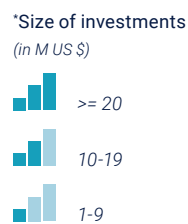
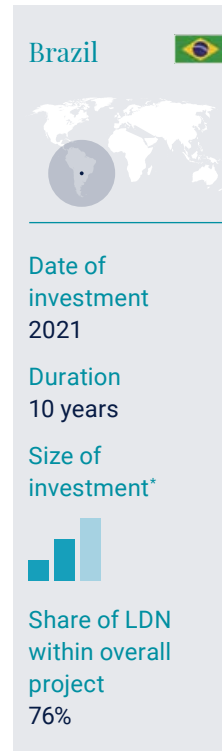
SLB have developed and patented Terra Fertilis, an organic biochar-based fertilizer that

significantly reduces the use of agrochemicals while supporting tree growth, soil health and soil organic carbon levels. SLB's research and development in this supports EMBRAPA's efforts to promote the use of biochar on a wider scale in the forestry sector in Brazil and globally. In the coming years, SLB aims to expand its model and restore up to 20,000 hectares of degraded land making a significant contribution to sustainability in Brazil's forestry sector, but also engage in even more active conservation and restoration.

The LDN Fund supports SLB's effort to cascade its good practices to its contractors and partners. The fund's support strengthens SLB's Environmental and Social Management, supports the piloting of active conservation techniques, soil impact monitoring, the Gender Action Plan and women's empowerment.

2022 update

SLB has completed all planting activities on three farms. 847 hectares were planted for sustainable commercial timber and 482 hectares were kept for conservation. The company successfully achieved its FSC certification and the first forestry inventories show growth rates in line with expectations. SLB is currently working towards carbon credit certification.



⁽¹⁾Source: Department of Forestry of Brazilian Ministry of Environment

⁽²⁾Source: World Association of Soil and Water Conservation (WASWAC).

Impacts



Hectares under sustainable land management

1,381
2022

1,400
Target (2033)

36% of native forest preserved



Tonnes of CO₂ sequestered

50,000
2022

200,000
Target (2033)



Workers for SLB operations

111
2022

310
Target (2033)



FSC Certification

Forest Stewardship Council certification ensures that the production of wood or a wood-based product complies with procedures guaranteeing sustainable forest management.

Source: company and Mirova, data as of end december 2022.

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Miro Forestry & Timber Products

Miro Forestry operates commercial FSC®-certified forestry projects in Ghana and Sierra Leone where activities comprise the planting, harvesting, and processing of timber for local and international markets and CO₂ sequestration with various tree species. The company replants and restores degraded lands and offers income opportunities to the communities living in these landscapes.

Context

West Africa experiences large-scale deforestation often as a result of illegal logging, unsustainable agricultural practices, mining and poor land governance. Ghana saw a net forest loss of 1,250,000 hectares per year between 1990 and 2010. The annual cost of land degradation in Ghana is estimated to be \$1.4 billion, or 6% of its GDP⁽¹⁾. In Sierra Leone, once a much-forested country, only 5% of intact forest remains⁽²⁾.

Solution

Miro's goal is to sustainably manage 24,000 hectares (today it's at c. 20,000) of forest and perennial plantations with FSC and IFC Performance Standards by 2030.

In Ghana, these operations are in the Ashanti region (five districts), and in Sierra Leone in the Northern Province, Tonkolili District (three chiefdoms) where local agricultural production tends to be largely at the subsistence level with minimal infrastructure and limited formal employment opportunities.

Miro develops plantations on degraded forests and scrubland with approximately 12% (Sierra Leone) and 55% (Ghana) of the area consisting of conservation areas and wildlife corridors designed to protect biodiversity.

The company aims to be West Africa's leading

forestry and timber product platform, operating high quality plantations while preserving ecological environments and supporting community development.

Smallholder and community inclusion is built into the business model. In Sierra Leone revenue from land leases provides a valuable income to communities. Through a public-private partnership agreement, ground rents are paid to the government and the traditional authorities in Ghana. A benefit-sharing system will also be in place when the company begins to make profits (20% of standing tree value to be paid out in Ghana). These ensure benefits contribute to landscape community income.

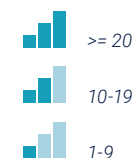
The LDN Fund investment in Miro Forestry allows for an expansion of plantation sites in Sierra Leone and Ghana on degraded land.

2022 update

Miro Forestry successfully rolled out the planting program in Ghana and Sierra Leone, where over 1,850 hectares were planted in 2022. Since the LDN Fund invested in the company, Miro Forestry has planted almost 5,500 hectares and built the first plywood mill in Ghana that entered into production in September 2021. The construction of a second plywood mill in Sierra Leone is ongoing with expected finalization by the end of 2023.



*Size of investments
(in M US \$)



⁽¹⁾Source: UNCCD

⁽²⁾Source: Food & Agriculture Organization.

Impacts



Hectares under sustainable land management

31,701
2022

42,000
Target (2033)



Tonnes of CO₂ sequestered

188,348
2022

2.5m
Target (2033)



Employees and smallholders

2,753
2022

1,500
Target (2033)



FSC Certification

Forest Stewardship Council certification ensures that the production of wood or a wood-based product complies with procedures guaranteeing sustainable forest management.

Source: company and Mirova, data as of end december 2022.

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Komaza

Komaza is an innovative social enterprise supporting local communities in Kenya. It brings planting material and knowledge to existing landowners (mainly farmers) to grow trees on their land. Komaza then buys wood at fair prices and manages the harvesting, processing, and trading.

Context

Africa is currently the world's largest consumer of wood. With population increases, this demand is expected to rise even further over the coming decades. 75% of Africa's primary energy comes from fuel wood, of which 93% originates from natural forests⁽¹⁾. In addition, it is expected that without investments in local production, 75% of the demand for industrial wood will need to be met by imports⁽²⁾. To meet these growing demands in a sustainable manner alternative solutions to traditional plantation forestry are needed allowing for positive social and environmental impacts.

Solution

Komaza supports local farmers by providing seedlings, inputs, technical expertise, and training to grow trees on the Kenyan coast, in addition to supporting existing agriculture. It then manages the harvest, industrial processing and wood product sales. Farmers are paid above-market price at harvest generating significant income for the farmer. Planting drought-resistant trees provides climate-proof income for farmers. With the long-term income the trees bring, farmers can plan for the future, they can buy land, build houses, educate their children, and start businesses.

The project uses micro-forestry, planting trees on degraded land within smallholder farms,

⁽¹⁾Source: FAO.

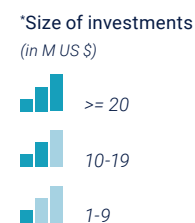
⁽²⁾Source: UN Environment Programme.

on the coastal region of Kenya. The project is expanding the supply chain into central Kenya with the establishment of a modern sawmill primarily for domestic markets.

In 2020, the LDN Fund invested in Komaza to scale-up its operations and impacts.

2022 update

In 2022, Komaza completed the construction of an industry-leading sawmill in Central Kenya and started producing higher-value timber products enabling Komaza to maximize returns for the smallholder farmers participating in its sustainable forestry program. The company also planted over 1,500 ha in Kilifi, Kwale, and Nyandarua counties with more than 3,000 smallholder farmers.



Impacts



Source: company and Mirova, data as of end december 2022.

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Cacao Oro

The Cacao Oro project is a unique large-scale cocoa program located in Nicaragua's Region Autonoma del Caribe Norte. It was established as an agroforestry plantation and works with farms and indigenous people to plant cocoa and coffee trees on degraded areas, restoring land.

Context

The North Caribbean Coast Autonomous Region (RACCN) is one of two autonomous regions in Nicaragua. 76% of RACCN consists of indigenous territories with communal lands. It is geographically isolated and so has a unique history and culture. The area was originally densely forested but has experienced severe land degradation caused by cattle ranching, timber harvesting by private companies and illegal loggers, and extreme weather events. Land conflict, which often takes place between indigenous communities and Mestizo 'colonists' who occupy and clear lands within the community's territory, further drives degradation.

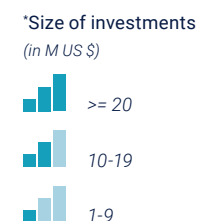
Solution

Cacao Oro de Nicaragua was founded in early 2014 to produce sustainable and certified agroforestry-grown cocoa and coffee across three areas of degraded land. The cocoa-farming operation was developed under an agroforestry model to help the restoration of the landscape and promote the diversity of the region's flora and fauna. With 2,000 hectares planted and approximately 1,000 hectares of the farm considered natural reserve and protection zones for waterways that will not be developed, Cacao Oro started to explore expansion options in the region.

Through an investment by the LDN Fund, the company aims to consolidate its current operations as well as expand its current production area.

2022 update

In 2022, Cacao Oro focused its efforts on expansion and the finalisation of its post-harvest cocoa drying centre. Cacao Oro produced almost a thousand tons of cocoa and 48 tons of coffee during the year. More than 2,000 hectares have now been planted in the North Caribbean Coast Autonomous Region.



(1)Source: IUCN.

Impacts



Hectares
under
sustainable
land
management

2,707
2022

4,120
Target (2033)



Tonnes of
CO₂
sequestered

1,973
2022

250,000
Target (2033)



Employees
and
smallholders

460
2022

2,100
Target (2033)



>30%
women managers
and senior executives
meets 2X criteria

2X Challenge

Please refer to appendix for details on the 2X Challenge initiative and criteria.



The Rainforest
Alliance
Certification
Program

The Rainforest Alliance Certification Program. The seal means that the certified product or ingredient was produced using methods that support the three pillars of sustainability: social, economic, and environmental.

Source: company and Mirova, data as of end december 2022.

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Mountain Hazelnuts

Mountain Hazelnuts was founded in 2009 to create a profitable business that provides long-term income for vulnerable communities in Bhutan by planting 10 million hazelnut trees to restore degraded mountain slopes.

Context

Agriculture, forestry, tourism and the sale of hydroelectric power to India form a significant share of Bhutan's economy. 70% of its population lives in rural areas and the majority of people are dependent on subsistence agriculture.

Constraints faced by smallholder farmers include the small size of their landholdings, limited access to technologies and inputs (including on-farm labour), changing weather patterns due to climate change, and limited access to markets in part due to poorly developed infrastructure. The typical rural household in Bhutan has a relatively low cash income, and with an increased flux of migrants from rural to urban areas, it is increasingly difficult to find farm labour due to competing livelihood opportunities in cities.

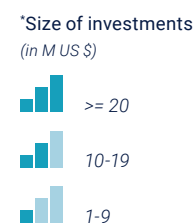
Solution

The company works with Himalayan smallholder families and community groups to provide additional income-generating opportunities that also help to restore the nation's fallow and degraded land. As agreed with the government of Bhutan, Mountain Hazelnuts buys all harvested nuts according to a guaranteed price structure that removes market risk for the growers and ensures a profitable crop. The company inspects every site to consider the ecological impact before an orchard is designed and planted. Approval is only given for those sites that meet the

agreed principle. At a national level, links between Mountain Hazelnuts' activities and the country's LDN target-setting programme have been established.

2022 update

Mountain Hazelnuts is still in the process of recovering from financial challenges brought about mainly by restrictions related to the COVID-pandemic. The company has reduced the scale of its operations to refocus on a small number of farmers and best-performing orchards. An agronomic adaptation and improvement plan has been developed and is progressively being implemented to introduce new varieties in the orchards. Mountain Hazelnuts has also successfully explored carbon credits opportunities.



Impacts



Hectares under sustainable land management

1,720
2022

5,000
Target (2033)



Tonnes of CO₂ sequestered

667
2022

600,000
Target (2033)



Employees and smallholders

8,523
2022

10,000
Target (2033)



>30%
women managers and senior executives meets 2X criteria

2X Challenge

Please refer to appendix for details on the 2X Challenge initiative and criteria.

⁽¹⁾Global Agriculture & Food Security Program.

Urapí Sustainable Land Use

The Urapí programme, designed and operated by Ecotierra, supports the development of mid-size cooperatives through the restoration of degraded land, the implementation of agroforestry systems, the construction of processing units to increase value creation potential and the generation of carbon credits.

Context

Coffee cooperatives in the project area face significant barriers to continuing their growth and transferring value to smallholder producers. Cooperatives have limited resources available to reach appropriate markets and to invest in processing infrastructure that ensures quality and traceability. This causes producers to receive lower prices.

Coffee plantations are often old and unproductive and poorly protected against climate change, leading to declining yields and low income for producers. They have little or no access to affordable long-term credit to renovate, expand or improve processes or infrastructure on their farms and a lack of knowledge and poor management practices to adapt to climate change. This all leads producers into a vicious circle of migratory agriculture, deforestation, soil erosion and a preventable loss of income.

Solution

At the end of 2018, the LDN Fund made its first investment in Urapí Sustainable Land Use, an innovative agroforestry programme in Latin America. To date, there are two sub-projects: the Café Selva Norte (CSN)

project in Peru, and the Sierra Nevada (SN) project in Colombia.

2022 update

Urapí completed the construction of a coffee processing facility in Colombia, Santa Marta. This is the second facility for the Fund, along with a Biofertilizer plant that is now also operating in Santa Marta, Colombia. Despite disruptions in the planting operations, the company has planted 411 hectares of coffee and forest massif since 2019. The Urapí program, sized at \$50 million, intends to be fully deployed by the end of 2023.



Date of investment
2018

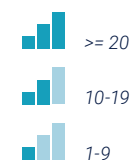
Duration
15 years

Size of investment*



Share of LDN within overall project
50%

*Size of investments
(in M US \$)



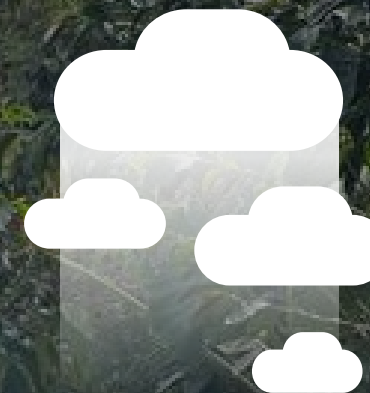
Impacts



Hectares under sustainable land management

58,236
2022

67,742
Target (2033)



Tonnes of CO₂ sequestered

6,298
2022

3.2m
Target (2033)



Employees and smallholders

435
2022

4,500
Target (2033)



>30%

women managers and senior executives meets 2X criteria

2X Challenge

Please refer to appendix for details on the 2X Challenge initiative and criteria.



Impact and ESG Engagement

Impact investor actions

Acting as a responsible impact investor implies directing investments towards companies and projects that contribute to sustainable development goals, but also demonstrate an advanced understanding and management of environmental, social and governance (ESG) risks.

Beyond that, Mirova works in multiple ways to strengthen its impact and contribute to the transition to a more sustainable economy.

- 1 Maintaining regular individual engagement with each project or company we support, in order to **support the continuous improvement of practices**
- 2 **Advancing knowledge and expertise on sustainable development issues**, both internally and collectively, notably through support for academic and applied research
- 3 **Promoting the development of sustainable finance**, through participation in market forums and advocacy actions
- 4 **Supporting impact initiatives on issues that are not accessible through our current investment strategies**, through philanthropic actions

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ESG excellence and continuous improvement

The LDN Fund investments are driven by positive social and environmental impacts, but excellence in the management of environmental, social and governance (ESG) risks in the companies that the fund supports is also a crucial component of the investment journey.

These aspects are taken into consideration throughout the life of the investment, from the initial screening of an investment opportunity to the end of Mirova's engagement.

The ESG risk management approach in the investment process ensures that activities are established on robust and systematic assessment and management of environmental and social risks, as well as underpinned by sound, accountable governance.

ESG standards

The LDN Fund assesses each potential investment project against applicable exclusion lists as well as ESG risk and minimum performance criteria. These ESG assessments of projects are based on the Mirova Natural Capital (MNC) ESG Policy as well as on the LDN Fund ESG Annex that state the Platform's and Fund's commitments and expectations in terms of ESG performance.

At the core of these ESG policies is a commitment to ensure that all projects in which the LDN Fund invests achieve material compliance with the IFC⁽¹⁾ Performance Standards (and associated sector-specific Environmental, Health, and Safety guidelines) and that they achieve Environmental & Social certifications when relevant. Considering LDN Fund's scope, compliance with the Sustainable Agriculture Network (SAN) guidelines, with the Forest Stewardship Council (FSC), or with the Roundtable on Sustainable Biomaterials (RSB), amongst others, is sometimes relevant to consider.

⁽¹⁾International Finance Corporation.

A project's ESG journey

Every project considered for investment is analysed according to a three-step process:

- 1 **a preliminary ESG analysis of its potential eligibility in the Fund's mandate;**
- 2 **a desktop review complemented by exchanges with the project developer (E&S questionnaire and discussions) to understand likely key ESG risk areas and, at a high level, how they are currently being managed;**
- 3 **full ESG Due Diligence including site-visits and detailed document review. This step may involve the recruitment of external experts or local support.**

Both the pre-investment assessment and the post-investment monitoring of projects involve ESG Specialists in the Mirova Natural Capital ESG team, supported often by technical or local external experts whenever relevant.

Assessing ESG performance in practice: On-site work

Although onsite assessments and monitoring visits are key to properly identifying the local context and the associated ESG risks Covid travel restrictions postponed some visits.

Post-Covid, we are resuming and catching up on these much-needed visits and in-person meetings, trying to combine several projects at once.

If it is not possible to send our internal ESG specialists, ESG consultants are sent out to perform the ESG due diligence. Then as soon as possible, a post-investment monitoring visit will be organised to follow-up on the ESAP progress.

In 2022, our ESG senior specialists visited the following operations, often jointly with the investment team or external technical experts:

- ▶ **Aqre Group in February**
- ▶ **Cacao Oro in April**
- ▶ **Miro in September**
- ▶ **SLB in December**

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Supporting projects over the long term

Our ambition is to support the improvement of ESG practices in the projects and companies we support. This involves active monitoring, regular engagement and a presence with developers.

Following pre-investment due diligence, an Environmental and Social Action Plan (ESAP) is designed to:

- ▶ close the key ESG performance gaps identified;
- ▶ ensure compliance to local regulations and international standards;
- ▶ improve the overall project's ESG risk management;
- ▶ maximize the projects positive impacts.

The ESAP is always agreed with the project sponsors and included in the investment contract.

Defining the implementation of the action plans prior to the investment is an important part of the work. This ensures effective environmental and social risk management reinforcement. A quarterly follow-up on the progress of these action plans is systematically set up to monitor progress.

Alongside these quarterly reporting requirements, we carry out a comprehensive annual review of individual project performance with a focus on its key ESG topics. Field visits may be included in the fund's monitoring to complement the assessment on an *ad hoc* basis, and to ensure we remain in close contact with local operations.

Engagement in practice: An ESAP development for Aqre Group

The internal ESG due diligence and site visit undertaken prior to the Aqre Group investment in Madagascar led to the design of a detailed ESAP to meet local compliance, international good practices and foster further positive impacts.

Aqre Group BV specialises in the production and extraction of high-value natural ingredients (artemisinin and quinine) with a vertically integrated model from raw material production with smallholder farmers, processing and value-added creation up to distribution.

The extensive ESAP was elaborated to guide the company over a two-year period to build a more structured approach to ESG management and to align with international standards.

The first set of actions cover the overall governance and management with the reinforcement of the ESG capacity and management system as well as upgrading Environmental and Social Impact Assessment (ESIAs), developing Human Resources and Occupational Health and Safety (OHS) policies and procedures, and conducting external audits on labour and working conditions.

Several specific risks were addressed such as land acquisition, water resources and wastewater management, hazardous waste, corruption, safeguarding and child labour to make sure these are well managed and progress is made.

Finally, to maximize the positive impacts a Gender Action Plan (GAP) was developed and the Union for Ethical Bio Trade (UEBT) certification was requested for the wild plant sourcing to make sure that it is conducted in a sustainable and fair way.



Knowledge:

Supporting internal and collective expertise

Internally maintaining and deepening our expertise

Mirova's Sustainability Research team is one of the most developed in the industry with over 19 dedicated sector analysts per asset class. Three senior impact and ESG analysts are dedicated to natural capital strategies in addition to a technical director dedicated to the Sustainable ocean strategy and contributing to Impact & ESG (Environment, Social, Governance) issues.

Externally contribute to the development of knowledge and best practices

Because the financial sector is still in the process of taking environmental and social issues into account, and because ecosystem issues have not yet been mastered, particularly those relating to biodiversity, it is essential to contribute to the development of scientific knowledge and to help advance the practices of the impact finance sector. This is achieved through participation in various initiatives and partnerships. These include sector working groups where impact finance actors can exchange best practices and innovate to better integrate conservation and restoration of nature into their strategies and operations. As an example, Mirova has been supporting initiatives aimed at developing a mechanism for biodiversity certificates. Indeed, with nature-positive objectives being developed in the wake of net-zero commitments, we anticipate growing interest in such mechanisms which could lead to innovative funding channels for nature. This is the reason we have chosen to be a founding member of the Organization for Biodiversity Certificates (OBC) as well as a member of the Advisory Group of Verra's Nature Framework Development Group (NFDG).



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Engagement in practice: LDN Investee Knowledge Exchange

In 2022, the LDN investment fund, the Mirova Sustainability Research and the IDH Technical Assistance team joined forces to launch a new experience-sharing initiative for the LDN fund investees.

LDN fund Investee Knowledge Exchange is an informal series of virtual meetings focused on learning, sharing successes and challenges and exchanging best practices on specific topics. It is an opportunity for the LDN fund Investees to share best practices with other investees, ask questions and address practical matters that arise in their business.

The meetings are held quarterly, bringing together senior and ESG managers from all companies LDN fund invested in as well as external experts if needed.

The topics of interest raised to date include:

- ▶ Carbon finance
- ▶ LDN impact metrics
- ▶ Gender
- ▶ Biodiversity

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Advocacy:

Supporting the development of sustainable finance

Climate and biodiversity

Mirova is actively engaged through its research and advocacy activities in contributing to the development of sustainable finance.

Our advocacy activity consists of exchanging views with regulators and stakeholders based on our daily experience as a committed investor and taking a position to promote regulatory and market provisions that are favourable to the financing of the ecological and social transition.

Over the past five years, Mirova has been particularly active at the European and French government level supporting European regulators in the development and deployment of a sustainable finance action plan. Mirova has contributed to various working groups such as the High-Level Expert Group on sustainable finance, which initiated this European strategic reflection, and the Technical Expert Group (TEG). By responding to various public consultations, exchanging views with regulators and peers, and supporting - and sometimes criticising - the regulatory and political work in progress, we are helping to ensure the implementation of ambitious and realistic tools for sustainable development. At the heart of our actions is transparency and reporting for both companies and investors, tools such as the European environmental and social taxonomy, labels for sustainable finance products, and consultation of investors and especially savers' preferences in terms of sustainability.

In connection with its natural capital activities, particularly on the subjects of carbon sinks and agro-ecological transition, Mirova is involved in several initiatives such as the Taskforce on Nature-related Financial Disclosure (TNFD) and the Finance for Biodiversity Pledge (the Pledge). The TNFD aims to publish recommendations on biodiversity reporting for both companies and investors, starting with the first elements in 2022. The Pledge, issued in September 2021, is intended to be the voice of an ambitious financial sector for biodiversity initiatives and a call to set specific targets for mobilising investments in the post-2020 Biodiversity Framework. Mirova also joined the Natural Capital Investment Alliance, created by His Majesty the King, when Prince of Wales, which aims to unite ambitious fund managers to promote natural capital as a leading investment theme in portfolio allocations.

All of our advocacy efforts are reported in Mirova's engagement report and all our responses to regulators' questions are public.

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Our gender approach

LDN Fund engagement for gender equality

Achieving gender equality is widely acknowledged as critical to the Sustainable Development Goals (SDGs). This includes SDG 15.3 which aims to combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strives to achieve a land degradation-neutral world.

Women play crucial roles in global, regional and local supply chains, in the farms and processing facilities that supply the world with goods and services. Although women contribute significantly to these sectors, they often remain invisible and receive little to no pay. Women contend with additional barriers such as discriminatory cultural practices and social norms, which restrict their access to opportunities, resources, and decision-making power. Gender gaps are also significant in access to productive resources such as land, inputs, markets, technology, education, and financial services. Although women make up around 60% of the labour force in agriculture, they only make up to 30% of cooperative memberships (even less in leadership positions).⁽¹⁾

The LDN Fund addresses the agriculture and forestry sectors which are a significant source of employment for women working in rural areas.

Recognising that gender equality and women's empowerment is essential to addressing land degradation, the Fund is committed to addressing these challenges by mainstreaming gender across the LDN projects and programs it supports, using a project-specific contextual analysis based on the needs and priorities of women and men.

The LDN Fund's approach to gender aspects is aligned with the objectives and principles of the [UNCCD's 2018 Gender Action Plan](#), which outlines the four priority areas to incorporate in LDN implementation. The gender approach also considers the [UNCCD manual](#) that provides guidance for mainstreaming gender in LDN projects and programs with the aim of addressing gender-related issues in the land-use sector. Our gender ambition has been further reinforced by the commitment from Global Affairs Canada in the Fund and the integration of specific gender equality objectives and milestones in the Fund's theory of change.

In this context, in 2021, Mirova and IDH, the manager of the LDN Technical Assistance Facility issued a Request for Proposals targeted at [gender responsive projects](#).

⁽¹⁾Source: Food & Agriculture Organization.

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2X Challenge initiative



The [2X Global](#) is a leading industry body for gender lens investing, launched at the Generation Equality Forum 2021 in partnership with GenderSmart and the Investor Leadership Network (ILN). It builds on the [2X Challenge](#) which has invested and mobilised more than US\$ 16 billion under the [2X investment criteria](#) since its launch at the G7 Summit 2018, benefitting 473 businesses across Asia, Africa, Central and Eastern Europe, Latin America and the Caribbean.

In September 2022, Mirova became a member of the 2X Global with the objective of leveraging this

unique global network to engage in peer learning and knowledge exchange on practical insights and good practice, and benefit from co-investing and co-financing opportunities.

All LDN Fund's portfolio projects are intended to generate positive impact in terms of gender equality.

Six projects in the LDN Fund portfolio (Urap, Mountain Hazelnuts, Komaza, Cacao Oro, Kennemer and Aqre Group) are meeting the 2X criteria on leadership, qualifying the LDN Fund for the initiative's 5th criterion.

To qualify for the 2X Challenge an investment must already meet – or have an explicit commitment to meet – at least one of the following criteria:

Direct Criteria	1	Entrepreneurship	Criteria	Threshold
			1A. Share of women ownership	51%
			OR	
			1B. Business founded by a woman	Yes/No
	----- OR -----			
	2	Leadership	2A. Share of women in senior management ¹	20-30% ²
			OR	
			2B. Share of women on the Board or IC ¹	30%
	----- OR -----			
	3	Employment	3A. Share of women in the workforce ¹	30-50% ²
AND				
3B. One "quality" indicator beyond compliance			Yes/No	
----- OR -----				
4	Consumption	4. Product or service specifically or disproportionately benefit women		
		Yes/No		
		----- OR -----		
Indirect	5	Investments through Financial Intermediaries ³	On-Lending facilities: Percent of the DFI loan proceeds supporting businesses that meet direct criteria ¹	30%
			OR	
			Funds: Percent of portfolio companies that meet the direct criteria ¹	30%

Sector-Specific Thresholds		
2.A Women in Senior Management*		
Grp.	Sector	%
Low	Infrastructure, Power, Telecoms	20%
Mid	Financial Services, Manufacturing	25%
	Agribusiness & Food, Professional Services, Consumer Services	
High	Healthcare, Education	30%
3.A Women in the Workforce*		
Grp.	Sector	%
Low	Infrastructure, Power, Telecoms	30%
Mid	Financial Services, Manufacturing	40%
	– Heavy, Agribusiness & Food, Professional Services	
High	Healthcare, Education, Consumer Services, Manufacturing – Light ³	50%

*Room for judgement: Investees in unique sectors or geographies may require case-by-case consideration.

Sector-Specific Thresholds

2.A Women in Senior Management*			
Grp.	Sector		%
Low	Infrastructure, Power, Telecoms		20%
Mid	Financial Services, Manufacturing		25%
	Agribusiness & Food, Professional Services, Consumer Services		
High	Healthcare, Education		30%

3.A Women in the Workforce*			
Grp.	Sector		%
Low	Infrastructure, Power, Telecoms		30%
Mid	Financial Services, Manufacturing		40%
	– Heavy, Agribusiness & Food, Professional Services		
High	Healthcare, Education, Consumer Services, Manufacturing – Light ³		50%

*Room for judgement: Investees in unique sectors or geographies may require case-by-case consideration.

¹ Commitments to achieve targets in these categories also make investments eligible, including new commitments by existing investees.

² These thresholds vary depending on the sector of the investment. See sector-specific thresholds.

³ Investments through financial intermediaries may also be eligible if the financial intermediary meets any of the direct criteria. For funds, this requires either that the fund manager itself meeting one of the categories, or if the fund itself has a clear investment thesis to invest in women.

Technical Assistance Facility

The LDN TAF

The Land Degradation Neutrality Technical Assistance Facility (LDN TAF) is the grant-making arm of the LDN Fund and is managed by [IDH the sustainable trade Initiative](#).

The LDN TAF can provide grants and repayable grants to (potential) LDN investment projects. The aim is to improve technical quality and strengthen environmental and social impacts, strengthen project design and enable the investment project to meet the LDN Fund investment criteria.

The TAF also supports projects post investment to reduce project risks and increase positive social and environmental impacts, as well as to better monitor their impact and practice adaptive management more effectively.

By the end of 2021 the LDN TAF had contracted TA projects with 16 partners, and five new projects had been approved. Through the LDN TAF, IDH also supports LDN Fund and its investees to monitor and report on LDN impact and to share lessons and case studies with other stakeholders.

LDN Insights

Would you like to learn more how LDN Fund and TAF work together? We invite you to dive into our [updated LDN Insight website](#).

IDH, the sustainable trade initiative

IDH convenes companies, civil society organisations, governments and others in public-private partnerships worldwide around sustainability challenges in agriculture and supply chains.



20

commodities from
coffee and cocoa to
timber and artemisia



18

project partners around
the world



15

countries across Latin
America, Africa, Asia

Source: IDH

The information provided reflects Mirova's opinion / the situation as of the date of this document and is subject to change without notice.

Highlights from LDN's projects



Mountain Hazelnuts

Protecting land from degradation and improving rural livelihoods through hazelnut production in Bhutan



Cacao Oro

Rehabilitating land and partnering with indigenous communities through cocoa and coffee agroforestry in Nicaragua



Miro Forestry

Sustainable forestry landscapes in Ghana and Sierra Leone

The LDN TAF have partnerships with project partners in Latin America, Africa, and Asia



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Detailed positive impact indicators

	THEME	KPI
ENVIRONMENTAL	General	Area of a/reforestation (including agroforestry) (# ha)
	Sustainable productive lands	Hectares of land under sustainable productive management
	Natural ecosystems	Hectares of land under conservation or restoration
		Hectares of seascape under conservation or restoration
		IUCN Red List species in the area of the project
		Number of threatened species (IUCN Red List) in conservation areas
	Climate change mitigation	Avoided greenhouse gas emissions from the landuse sector
		Carbon sequestration (tCO ₂ e)
		Emissions Reductions that led to the generation of tradable carbon units (teCO ₂)
	LDN contribution	Land cover (# ha)
Land productivity dynamics (# ha)		
Soil organic carbon (# ha)		
GLOBAL		Internationally recognised certifications achieved
SOCIAL	Livelihoods and decent work	FTE equivalent (direct employment) supported by projects
		Number of people directly employed by the project
		People benefitting directly from livelihoods generated by the project (excluding direct employees)
		People with their main source of income provided by the project (excluding direct employees)
		Permanent employees - FTE
		Permanent young (under 25 years old) employees - FTE
	Inclusion	Community engagement events held (#)
		FTE equivalent (direct employment) supported by projects that are held by women
		Gender ratio for management roles (%)
		Number of people attending community engagement events (m/f) (#)
		Number of women directly employed by the project
		Permanent female employees - FTE
		Women benefitting directly from livelihoods generated by the project (excluding direct employees)

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By using ESG criteria in the investment policy, the relevant Mirova strategies' objective would in particular be to better manage sustainability risk and generate sustainable, long-term returns. ESG criteria may be generated using Mirova's proprietary models, third party models and data or a combination of both. The assessment criteria may change over time or vary depending on the sector or industry in which the relevant issuer operates. Applying ESG criteria to the investment process may lead Mirova to invest in or exclude securities for non-financial reasons, irrespective of market opportunities available. ESG data received from third parties may be incomplete, inaccurate or unavailable from time to time. As a result, there is a risk that Mirova may incorrectly assess a security or issuer, resulting in the incorrect direct or indirect inclusion or exclusion of a security in the portfolio of a Fund. For more information on our methodologies, please refer to our Mirova website: www.mirova.com/en/sustainability



ABOUT MIROVA

Mirova is a management company dedicated to sustainable investment and an affiliate of Natixis Investment Managers. Through conviction management, Mirova's goal is to combine long-term value creation and sustainable development. Pioneers in many areas of sustainable finance, Mirova's talents aim to continue innovating in order to offer their clients solutions with high environmental and social impact. Mirova and its affiliates manage €29 billion as of March 31, 2023. Mirova is a mission-driven company, labeled B Corp*.

**The reference to a ranking or a label does not prejudice the future performance of the funds or its managers.*

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