WeForest

2024 Project Update

Ferlo Restoration Project (Pilot)

Improving the state of Sahelian ecosystems in Dundi, Ferlo by restoring degraded lands and supporting of pastoral communities

Project management and M&E team

Main implementing partner:
Agronomes et Vétérinaires Sans Frontières (AVSF)

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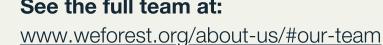
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See the full team at:
www.weforest.org/about-us/#our-team

📍 **Ferlo, Region of Louga et Matam, Senegal**
Great Green Wall

📅 Timeline:
2022 - 2025

🎯 Targeted ecosystem:
Shrub steppes, Sahelian Acacia Savanna

Project story

The Dundi Ferlo project aims to improve the condition of Sahelian ecosystems through the restoration of degraded land, simultaneously improving the livelihoods of pastoral communities. To achieve this, the project will support the pastoral communities of Ferlo in the sustainable management of their resources by supporting land restoration activities and assisting with the sustainable use of forest and fodder resources.

The project is being implemented in three well-structured pastoral units (PUs) located along a north-south rainfall gradient: the PUs of Labgar (commune of Lagbar), Younouféré (commune of Oudalay) and Vélingara Ferlo (commune of Vélingara).

Since agro-livestock farmers are the main stakeholders dependent on the resources in Ferlo, the choice was made to rely on pastoral organizations to implement the project activities. The innovation of the project lies in the consultation and involvement of pastoral communities in the activities of identifying reforestation sites, defining reforestation protocols, monitoring and supporting economic activities resulting from the exploitation of forest resources.

⚠️ Key challenges in the landscape

Inter-annual rainfall variability, with differences of 400-500mm between years.

The increase in livestock numbers is leading to growing pressure on grazing areas.

The effects of climate change, particularly the recurrence of droughts.

The demographic growth of pastoral societies and the increase in herds, putting the Ferlo ecosystem under great pressure, and affecting its capacity for sustainable regeneration.

Biodiversity loss: the project area has experienced a sharp decline in woody and herbaceous species such as Dalbergia melanoxylon, Pterocarpus erinaceous, and Grewia bicolor.

✓ Our integrated approach

Improve Forest Governance and Stewardship through:
- Training pastoral communities on sustainable natural resources management and land restoration techniques.
- Raising awareness and setting up discussion and planning frameworks with pastoral communities and local authorities in order to identify and secure land tenure in the areas to be restored.
- Supporting UPs in obtaining participatory management plans.

Conserve and Restore the Forest through:
- Scientific experiment on 72 hectares in Ferlo to test the best reforestation techniques.
- The fencing and reforestation of nine plots of between 80 and 160 hectares to achieve an average density of 200 trees/ha by the end of the project.

Strengthen Forest-Friendly Livelihoods and Behaviors through:
- The development of economic activities to exploit locally available non-timber forest products and fodder from reforested areas.

A long-term vision

Climate

The restoration of Ferlo will contribute to both climate mitigation and adaptation: increasing tree cover to sequester carbon while improving water retention and soil stability to help communities adapt to droughts and erratic weather.
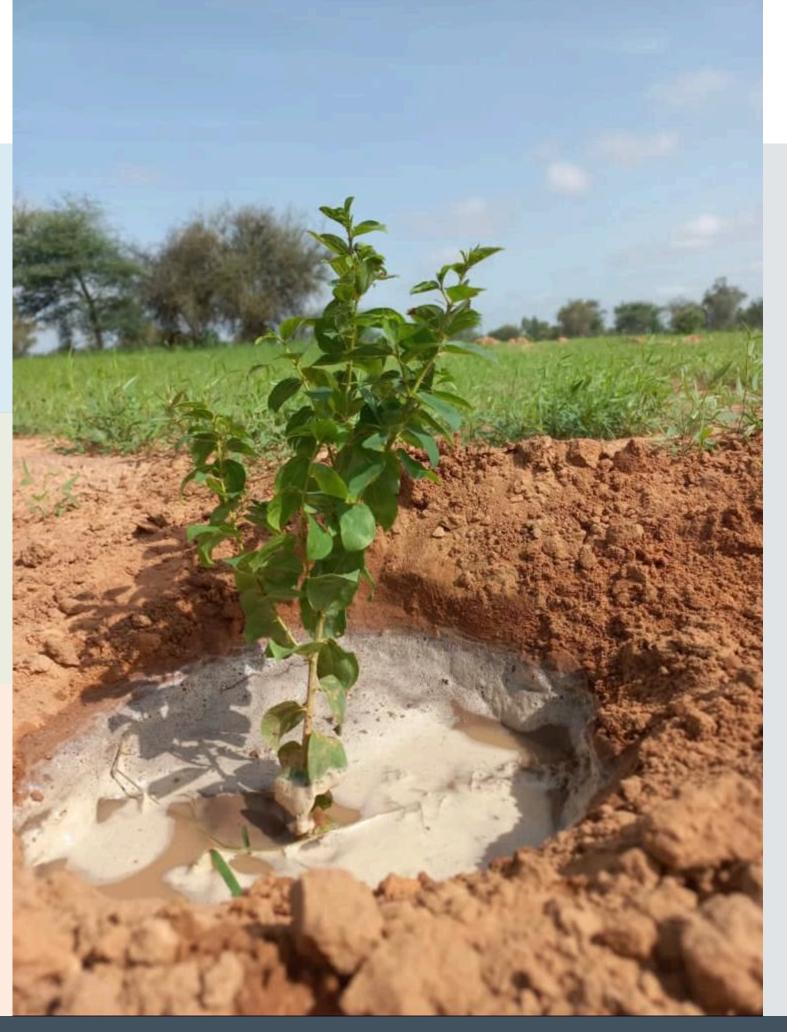
Nature

Restoring Ferlo will protect biodiversity and secure critical ecosystem services like water and soil health. Improved land management will enhance habitat resilience, ensuring the forest continues to sustain both people and wildlife.

People

Strengthened governance and forest-friendly livelihoods will ensure communities see the forest as an asset - one that provides resources while being sustainably managed. By introducing forest-friendly practices, the project reduces deforestation-driven income reliance while securing long-term economic stability.

Outcomes

By integrating these interventions, the project will:

- Restore 1000 hectares of degraded land through three pastoral units.

- Develop the best practices of reforestation in the Ferlo region

- Improve the density and diversity of species of interest for the local community.

- Strengthen the governance of pastoral units and the management of natural resources in relation to land restoration.

- Improve household incomes by adding value to non-timber forest products and sustainably managing fodder from reforested areas.

- The project is delivered in collaboration with stakeholders, and the results from the pilot project will enable scaling.

- The long-term impact of our work will benefit people, nature and climate.

Theory of Change

Existing problems in the landscape

- Food insecurity
- Land degradation
- Deforestation
- Low rainfall
- Pressure from livestock
- Forest resource extraction
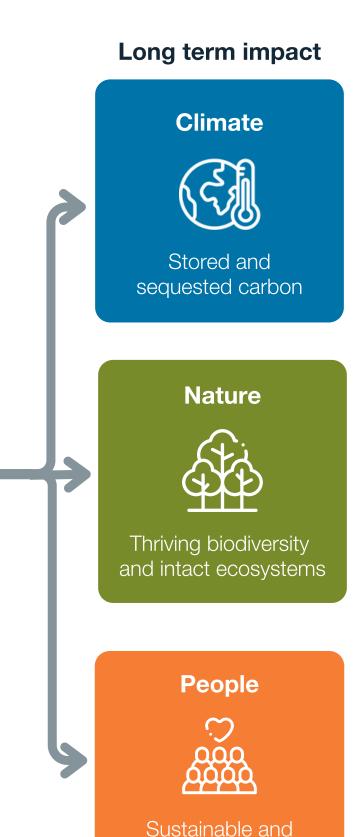- Weak forest governance

Risks

- Desertification
- Climate change

WeForest Interventions

Project outcomes

Improved forest governance and stewardship

- Community engagement
- Community participation
- Support for governance of pastoral units

→ Enhanced stewardship, governance and awareness of natural resources and forest management

Restoring and conserving at-risk forests

- Tree planting
- Assisted natural regeneration
- Scientific experimentation
- Tree nurseries

→ Increased tree cover and ecosystem services throughout the Ferlo landscape

Introducing forest-friendly livelihoods and behaviours

- Developing non-timber forest products
- Fodder
- Improving livestock practices

→ Improved household income and food security through forest-friendly livelihood schemes in local communities

Long term impact

Climate
Stored and sequested carbon

Nature
Thriving biodiversity and intact ecosystems

People
Sustainable and resilient communities

2024 Major Achievements

Organising the sale of fodder from the community plots was a crucial step in increasing the value of the restored plots. This enables the communities to continue to manage the plots beyond the end of the project with the money they earned.

Case study

In April 2024, an evaluation mission was conducted to assess the herbaceous biomass in the experimental plots of Younouféré and Vélingara Ferlo. The mission, led by an engineer from ISRA/CNRF with support from local project facilitators and two members of the Pastoral Unit, aimed to collect data and samples before the fodder harvest. The process involved identifying mowed and unmowed areas from the 2023 fodder harvest, then setting up yield plots in these zones. Inside each plot, grass was mowed, weighed, and recorded, with a portion reserved for bromatological analysis.

The data collected focused on quantifying dry biomass, comparing biomass between mowed and unmowed areas, and analyzing the nutritional value of the grass samples. These findings will help evaluate the straw production, which will later be compared to the amount of straw harvested and sold.

2024 activity update

Improved forest governance and stewardship

- Update of **Pastoral unit management plans** in Younouféré, Vélingara Ferlo and Labgar.
- Pastoral unit steering committees **trained** in administrative and financial management.

Restoring and conserving at-risk forests

- **585** hectares of degraded land newly fenced off at 5 sites.
- **82,337** nursery-raised seedlings planted.
- **1.94** tonnes of woody seeds and 51.43 Kg of herbaceous seeds collected by local communities
- **420** tonnes of organic manure collected by local communities.
- **240** community members trained on reforestation techniques
- **Nine sites** monitored to evaluate seedling survival rate after three months and one year.
- **Biannual** monitoring of the experimental plot.

Introducing forest-friendly livelihoods

- **7,700** Euros raised from the sale of fodder from restored sites.
- **Technical specifications** for the collection and storage of non-timber forest products (NTFPs) developed and validated.
- **A collective of NTFP collectors** in each UP, responsible for organising the collection and sale of NTFPs, was created and structured.
- A **guide to good practice** in the processing of NTFPs in development.

Progress tracker

| 2022 | | 2025 |

Hectares planted, conserved and restored

Target: 1071
Achieved: 1000

+

| 0 | 200 | 400 | 600 | 800 | 1000 |

Number of trees conserved and restored

Target: 250,000
Achieved: 267,855

+

| 0 | 50,000 | 100,000 | 150,000 | 200,000 | 250,000 |

Number of households positively impacted

2112

Trees planted to date

114,172

seedlings planted
from nurseries

Woody species in project to date

14

Tree species for forest
conservation and restoration

The management committees were able to sell around 30 tonnes of fodder

In 2024, the project organized plot management committees to manage the fodder on the restored plots for the benefit of pastoral communities. Discussion workshops involving all stakeholders enabled the fodder to be sold at an average of €6 per cart. At the end of the sales campaign, the management committees were able to sell around 30 tonnes of fodder to 1,116 pastoralists, generating revenue of 7,700 euros.

The income from the sale of fodder was distributed as follows:
- 80% for the maintenance of the restoration areas
- 10% for the management committee for its activities
- 10% for the pastoral unit

⚠️ 2024 Challenges

In 2024, despite efforts to increase the number of meetings, there was a low level of communication between the NGOs, research centers and farmers' organizations in the project consortium. In 2025, effort will be made to ensure that project partners share information more regularly.

As communities are currently paid for all activities in which they are involved (seed collection, planting, nursery management, etc.), the long-term durability of community mobilization is a concern. Our research actors are helping us identify ways to mobilize communities without financial compensation, but with other sources of motivation.

≫ Looking ahead to 2025

The activities of the Ferlo Restoration Project will continue into 2025, with priorities including:

- Project evaluation to design the scaling-up phase.
- Scientific paper to be produced by our research partners (theses, articles, etc.).
- Capitalization of project outcomes and results valorization for Great Green Wall actors.

Supporters & Partners

2024 project partners

Agronomes et Vétérinaires Sans Frontières (AVSF) led the project team.

Pôle Pastoralisme Zones Sèches (PPZS) were part of the project team.

Senegalese Institute of Agricultural Research (ISRA) were part of the project team.

International Center for Research in Agriculture and Development (CIRAD) were part of the project team.

Association for Integrated and Sustainable Development (ADID) were part of the project team, and supported community mobilization activities.

Entente des groupements associés à la base (EGAB) were part of the project team, and supported community mobilization activities.

The Territorial Authority (municipality) monitored project activities, raised community awareness and gave authorisations to facilitate our intervention.

The Water and Forestry Department supported the project by providing technical support, permission facilitation and provision and giving technical training for nurseries workers and the community.

With thanks to our supporters in 2024, including:

WEX™   **Deloitte.**

Contact us

Visti **www.weforest.org** or for more information or email: **contact@weforest.org**

How we measure and forecast our impact

Baseline

For the sake of simplicity, the progress bars in this report show a baseline of zero. This represents the concept that the area covered by WeForest forest and landscape restoration (FLR) activities was zero; thus the associated trees conserved and restored, carbon stored and households impacted through WeForest intervention was also zero.

In reality, when a WeForest project begins, our Monitoring, Evaluation and Learning team undertakes a detailed survey on forest structure and regeneration through establishing Permanent Monitoring Plots, and conducts an extensive questionnaire on livelihoods, to establish meaningful baseline values. You can read more about our full MEL activities here.

Hectares planted, conserved and restored

Progress up to 2024

Verifiable cumulative total since the project began of all mapped intervention sites, also known as polygons, of:
1) Conservation forest areas, such as forest reserves
2) Restoration forest areas, such as Assisted Natural Regeneration and planting areas
3) Agroforestry areas on community/farm land

End of Project Target

Target number based on the potential area of land able to be conserved, restored and planted in the project area under the known and expected conditions at project start. However, it is subject to change based on unforeseen opportunities or challenges that may arise.

Anticipated tons of CO2 to be sequestered through project activities

Progress up to 2024

Extrapolated tons of CO2 calculated from the measured areas of different types of land use (for example forest or agroforestry) under "Hectares of forest planted, conserved and restored" to date, and the average amount of projected long-term CO2 per hectare provided from literature review for each land use type in their locations. Although totalled, please note the methodology for calculating these CO2 projections are specific to land-use type, and span a period corresponding to the expected time taken for the trees to reach maturity, which varies between locations.

End of Project Target

As above, but using the target (and not current) number of hectares planted, restored and conserved and their respective area totals as a parameter for calculations. As this parameter is subject to change, the associated CO2 target may also change over time.

Number of trees conserved and restored*

Progress up to 2024
Extrapolated number of trees calculated from the measured areas of different land use types (for example conservation areas, restoration areas or agroforestry) under "Hectares planted, conserved and restored" to date, and the average tree densities observed for each land-use type when mature, known through our MEL activities or scientific literature.

End of Project Target
As above, but using the target (and not current) number of "Hectares of forest planted, restored and conserved" and their respective area totals as a parameter for calculations. As this parameter is subject to change, the associated trees conserved and restored target may also change over time.

*Estimations based on average numbers per hectare

Trees planted to date (2024)

Total
Actual counted number of planted seedlings and saplings of woody (tree and shrub) species in the project to date.

Trees planted for forest-friendly livelihoods and behaviors
Only woody species directly planted for livelihood improvement. This also includes woody fruit, fodder & timber trees, and woody cash crops, exclusively planted on community or farm land.

Trees planted for forest conservation and restoration
Only woody species that were directly planted for ecological reasons, aiding restoration of the natural forest ecosystem.

Woody species in project to date (2024)

Total
Actual observed number of woody (tree and shrub) species:
- Regenerating in the conservation/restoration zones (i.e. in the Permanent Monitoring Plots) and
- Planted, either for restoration or livelihood improvement
- Growing as mature trees in the conservation/restoration zones (i.e. in the permanent monitoring plots).
- Please note, these numbers are not exhaustive and the true species richness is likely to be higher.

Tree species for forest-friendly livelihoods and behaviors
Only woody species directly planted for livelihood improvement. This also includes woody fruit, fodder and timber trees, and woody cash crops, exclusively planted on community or farm land.

Tree species for forest conservation and restoration
The woody species observed in the project area that are not used for livelihood improvement purposes. Where species are used for both livelihood improvement and restoration (which is sometimes the case, as we use native species as much as possible), they have been counted under 'forest-friendly livelihoods and behaviors'.

Mammal and bird species sighted to date

Numbers are included where we have a good level of biological monitoring, for example using camera traps or audio devices - please note that numbers are unlikely to capture the full species richness of the project area and that the absence of reporting does not imply the absence of species.

Other notes

WeForest works in close cooperation with local partner organisations, institutions, community-based organizations and local people. Therefore, our impact can never be fully separated from the work of our partners. WeForest acknowledges that the presented impact numbers cannot be solely attributed to our work, but is also supported through the hard work contributed by all our local partners.