

Deraytaw Mangroves Project

Myanmar



Project Summary

Mangrove deforestation in Myanmar is the clearing of mangrove forests, usually for commercial uses or resources extraction, which is occurring mainly in 3 different regions: Rakhine State, Ayeyarwaddy Mega Delta, and Tanintharyi Division.

The project is implemented on 2265.47 ha of degraded lands of the Northern part of Ayeyarwady Division of Myanmar. The lands that will be restored under the project belong to Magyi, Thabawkan and Thaegone village tracts and this restoration will create a healthy mangrove ecosystem.

The objective of the project is to establish and maintain a sustainably managed mangrove ecosystem for carbon sequestration, natural disaster risk reduction, poverty reduction with sustainable livelihoods in the coastal communities. A vital component of the project is the conservation of bio-diversity and establishment of the first mangrove gene bank in Myanmar.



Key impacts for local communities

- 18 million trees planted in Thor Heyerdahl Climate Park;
- Number of crab fishermen increased from 2 to 22 in 2018 due to additional crab resources after mangrove restoration;
- Mangroves increase seafood resources by over 50%;
- 70% of the trained planters are women;
- 50 women assisted to establish their own clam culture ponds;
- 50 youths were trained in computer operation and English language;
- 80 fishermen benefit from increased sea food resources due to mangrove restoration, + 24 new livelihoods in crab production;
- 4 schools were awarded solar panels and computers for training;
- 2 support prosthetic legs for two students.





Aligning with the SDGs

- **SDG 13: Take urgent action to combat climate change and its impacts**

Mangroves are among the most carbon-rich forests in the tropics. It is estimated that the average annual carbon sequestration rate for mangroves averages between 6 to 8 Mg CO₂e/ha (tons of CO₂ equivalent per hectare).

- **SDG 14: Conserve and Sustainably use the oceans, seas and marine resources for sustainable development**

Mangroves provide habitats to a number of fish, mollusk, and crustacean species. Moreover, the root systems of mangrove habitats prevent erosion by slowing down incoming waves and by trapping sediment as it is carried off land and into the water.

- **ODD 15: Protect, restore and promote sustainable use of terrestrial ecosystems and halt biodiversity loss.**

This abundance of life, along with the shelter provided by its roots, make mangroves an attractive ecoregion to migrating and breeding birds, tigers, monkeys, and crocodiles.



The Sustainable Development Goals (SDGs) were established by United Nations as a universal call to action to end poverty, protect the planet and ensure all people enjoy peace and prosperity. There are 17 goals in total and this project is aligned to the following SDG goals.

Madre de Dios

Peru



Project Summary

Close to the ancient city of Machu Picchu, in the Vilcabamba-Amboro conservation corridor, the construction of an inter-oceanic road uniting Brazil with Peru jeopardises the tropical rainforest and one of the world's biodiversity hotspots.

This verified carbon standard project dramatically reduces deforestation and the threat of moving communities and illegal logging by increasing surveillance in the area and establishing sustainable forest management practices. This saves precious habitat relied upon by endangered species and tribal communities



Key impacts for local communities

- 100,000 hectares of Peruvian Amazon rainforest protected;
- 35 endangered species monitored;
- More than 470 jobs have been created to protect the area and develop sustainable forest management practices;
- 100% of employees are Peruvian;
- 2 protected native communities (Yine and Huitoto);
- 25,072,135 tCO₂e saved over 38-year life of the project.





Aligning with the SDGs

- **SDG 8: Promote sustained, inclusive economic growth, full and productive employment and decent work for all.**

All employees are Peruvians and 70% are local to the area to ensure contribution to local employment.

- **SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable.**

Preservation of the rainforest ensure the resilience and sustainability of tribal communities who depend on it.

- **SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems and halt biodiversity loss.**

Avoiding deforestation protects indigenous flora and fauna, and in particular endangered species.



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Jumuia

Tanzania



Project Summary

Tanzania loses around 400,000 hectares of its forest cover per year from man made deforestation. These forests are home to a host of endemic and endangered species such as the Rondo Dwarf Galago, whose existence depends on the preservation of such fragile ecosystems.

The Jumuaia project (“community “in Swahili) is a REDD+ initiative established over 42,000 hectares and managed by a local network of 10 villages found in the area. Not only does this project incentivize the preservation of local forest cover and precious ecosystems and wildlife, it also offers significant economic opportunities to its rural communities by providing them with payment for their involvement.



Key impacts for local communities

- Close to 42,000 hectares of protected forest cover leading to 462,631 tons of CO2 equivalent avoided;
- Training provided to locals on community-based forest management, sustainable agriculture and beekeeping;
- Income generation for local communities through of dividends from the sale of carbon credit and the sale of bee products;
- Improved access to microfinance through the implementation of village savings and loans associations;
- Provides protection to key ecosystems for the preservation of local endemic wildlife.





Aligning with the SDGs

- **SDG 8: Promote sustained, inclusive economic growth, full and productive employment and decent work for all.**

Inhabitants of the villages within the project zone are considered shareholders of the project and are accordingly compensated. Furthermore, this project develops sustainable agriculture practices in the area.

- **SDG 13: Take urgent action to combat climate change and its impacts**

This project leads to over 460,000 tons of CO₂ avoided, thereby contributing to the fight against climate change.

- **SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems and halt biodiversity loss.**

This project safeguards the habitat of several endemic and endangered species, ensuring the preservation of Tanzanian biodiversity.



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Project in France - *Label Bas Carbone*

Verreries-de-Moussans - Hérault



Verreries-de-Moussans - *Label Bas Carbone*

Since 2018, the *Label Bas Carbone* has been working to certify carbon offset projects on French territory as part of the National Low Carbon Strategy. These offsetting projects aim to make a significant contribution to achieving carbon neutrality on the territory by 2050.

Today, the *Label Bas Carbone* is mainly represented by forestry projects, but it plays a key role in the implementation of carbon sinks that sequester tons of CO2 equivalent in the soil on a sustainable basis, thus contributing to the fight against climate change.

The projects it represents today are largely afforestation of former agricultural land, reforestation of forest populations decimated by disease, natural hazards, or fire, as well as balivage, or improved forest management.

In Verreries-de-Moussans in Hérault, 10 hectares of forest burnt in 2018, with vegetation totally dried out by a long absence of rainfall.



Key impacts for local communities

- Diverse and regionally adapted tree species contribute to soil quality and healthy and resilient forest populations;
- Contribution to the maintenance and restoration of the local ecosystem, allowing the preservation of local flora and fauna;
- These projects allow for better water filtration capacity in the soil, improving the quality of the surrounding waterways;
- Job creation in agroforestry and sustainable forestry on a local scale.
- Sustainable management of PEFC-certified forests allowing sustainable production of bio-based materials



Aligning with the SDGs

- **SDG 3: Enable all people to live in good health and promote well-being for all at all ages**
- Projects that contribute to the sequestration of greenhouse gases, thereby contributing to the improvement of local air quality, and more globally for the territory.
- **SDG 13: Take urgent action to address climate change and its impacts**
- By enabling improved CO2 sequestration through forest stand restoration and the creation of carbon sinks, these projects contribute to mitigating the effects of climate change.
- **SDG 15: Conserve and restore terrestrial ecosystems, ensuring their sustainable use, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss**
- The project contributes to the restoration of forest habitats as a vector for development and preservation of local biodiversity.



The Sustainable Development Goals (SDGs) were established by the United Nations to provide a roadmap to a better and more sustainable future for all. They address global challenges, including poverty, inequality, climate, environmental degradation, prosperity, peace and justice.

Darfur Cookstove Project

Sudan



Project Summary

Our award-winning cookstove project is the first registered carbon credit project in Sudan and the first to be developed in a conflict zone.

It was developed to improve household health by replacing traditional cooking methods – burning wood and charcoal inside the home – with low smoke LPG stoves.

90% of households in Sudan use biomass for their stoves and for every 10 trees cut down, only 1.5 are regrown. In addition to this, burning wood releases large amounts of particulates, carbon monoxide and other pollutants. So the project helps to reduce both deforestation and the risks to human health caused by the burning of biomass.



Key impacts for local communities

- Almost 100% of families using the new cookstoves delivered by the project state that indoor air quality has greatly improved;
- Each stove installed in a household in Darfur saves 4.5 tCO_{2e} – equivalent to one passenger flying 3 times between London and New York;
- The Global Alliance for Clean Cookstoves states that cooking with efficient low smoke LPG reduces most key pollutants by over 95% and reduces energy consumption by 50-70%;
- 100% of households have reported decreases in energy expenditure;
- 26 % of women are starting new income generating activities, with a further 8% expanding existing activities with the time saved no longer having to collect wood;
- 58% of women said they had more time to spend with their children;
- 48% of women surveyed said their husbands have even showed more interest in the cooking with the new stoves.





Aligning with the SDGs

- **SDG 3: Ensure healthy lives and promote well-being for all at all ages.**

The World Health Organization (WHO) estimates that smoke inhalation from traditional wood burning stoves is equal to smoking 2 packs of cigarettes a day. Beneficiaries enjoy better indoor air quality, which reduces respiratory diseases.

- **SDG 5: Achieve gender equality and empower women and girls.**

Not only does the project reduce the amount of wood collection time for women and improve their health, it also provides opportunities for female employment e.g. undertaking the project surveys.

- **SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all.**

The stoves are made affordable to families via micro-finance loans, managed by the women-led Development Association Network. The stoves are also more efficient and affordable to run.



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Kupika Cookstoves

Kenya



Project Summary

In Kenya, over 73% of the population rely on traditional cooking methods that use biomass fuel in a '3-stone fire'. However, the burning of biomass poses a significant health threat, as it is a major contributor of household air pollution- the fourth largest death and disability risk factor in Kenya.

The project distributes improved cookstoves to households across Kenya. The project works with local community groups to demonstrate the correct usage of the stove in order to ensure that the stoves are suited to the local context and the dangers of fuel combustion are reduced as much as possible.

Each improved cookstove saves at least 50% of wood required for each household, reducing the hours that women spend collecting wood fuel, and alleviating the pressure of wood demand on the local environment.



Key impacts for local communities

- 65,218 tCO₂e are annually reduced with the distribution of cookstoves to households in Meru and Shimba hills area;
- 456,530 tCO₂e are reduced during the project lifetime;
- Distribution of 37,000 cookstoves in Meru and Shimba hills area;
- Reduction of 60,000 tons of wood being burnt annually as a result of the project;
- This project will also reduce householder health issues due to the indoor smoke exposure;
- The decrease in wood collecting reduced pressure on local woodland and enhance biodiversity.





Aligning with the SDGs

- **SDG 3: Ensure healthy lives and promote well-being for all at all ages**

The project reduces health issues due to indoor smoke exposure and burnt induced by 3-stone open fire within households.

- **SDG 5: Achieve gender equality and empower all women and girls**

With these improved cookstoves, women will spend less time to collect wood and cook meals. Thus, they have more time to develop their own activities.

- **SDG 13: Take urgent action to combat climate change and its impacts**

With the decrease of wood collecting and smoke issuance 456,530 tCO₂e are reduced during the project lifetime which contributes to the climate change mitigation.



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Hifadhi Livelihoods

Embu and Tharaka Nithi Counties, Kenya



Project Summary

“Hifadhi” means “to preserve” in Swahili.

Access to energy is limited in parts of Kenya meaning rural households are dependent on local biomass from forests. Kenya loses 18,000 hectares per year and has forest cover of just 7,8%.

The Hifadhi Livelihoods Cookstoves are developed and financed by the Livelihoods Carbon Fund, in partnership with EcoAct and its Kenyan subsidiary Climate Pal.

These Gold Standard certified projects provide poor local households with affordable, clean and efficient cookstoves that reduce the consumption of firewood and emit less smoke with multiple positive social and environmental impacts.



Key impacts for local communities

- 60,000 already distributed and 300,000 people impacted;
- Cookstove efficiency reduces wood usage by 60%;
- Time spent gathering wood, particularly for women and children, is reduced from 12 hours to 5 hours weekly;
- The project will avoid around 1,7 million tons of CO₂ over a 10-year span;
- Health is improved from reduced emissions of noxious gases in the home;
- 200+ direct and indirect jobs created; (30 local artisans have been trained to manufacture the stoves and around 45 permanent local employees have been recruited to develop and monitor the project on the field).





Aligning with the SDGs

- **SDG 3: Ensure healthy lives and promote well-being for all at all ages.**

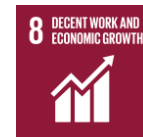
The World Health Organisation (WHO) estimates that smoke inhalation from traditional wood burning stoves is equal to smoking 2 packs of cigarettes a day. 100% of beneficiaries enjoy better indoor air quality, which reduces respiratory diseases.

- **SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all.**

300,000 people have benefited from access to improved affordable cookstoves, which have provided them with a cleaner and more sustainable energy source.

- **SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.**

200+ direct and indirect jobs created.



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Rano

Madagascar



Project Summary

Madagascar is faced with severe water availability issues, with as much as 58% of its population lacking access to safe drinking water. For many Malagasy, basic necessities such as hygiene and adequate hydration are a daily struggle. To make up for this, locals usually boil water prior to consumption, releasing CO2 emissions in the atmosphere by burning firewood and coal in the process.

The Rano project looks to improve access to safe drinking water for over 8,000 Malagasy through various technologies such as borehole restoration and solar powered water systems. This project is looking for committed buyers willing to support its development by purchasing the totality of the 12-20 thousand credits generated each year, over at least three years.



Key impacts for local communities

- Over 77,000 litres of water made available each day for over 8,000 people, providing over 9 litres per person per day;
- Reduction in sanitary and health-related issues from lack of water accessibility for the project's beneficiaries, improving the local standard of living;
- Less time spent by women and children gathering wood to boil water, meaning they can dedicate their time to other productive activities;
- Reducing the need for firewood to boil water helps limit the strain on Madagascar's forests;
- The elimination of the need to boil water leads to a reduced level of emissions of over 95,000 tons CO₂e over its lifetime.





Aligning with the SDGs

- **SDG 3: Ensure healthy lives and promote well-being for all at all ages.**

This project improves the health and lives of its Malagasy beneficiaries by preventing their exposition to dangerous water related illnesses such as diarrhea and providing improved sanitation.

- **SDG 6: Ensure availability and sustainable management of water and sanitation for all.**

This project enables over 8,000 Malagasy to have access to clean drinking water – with over 77,000 litres provided daily.

- **SDG 13: Take urgent action to combat climate change and its impacts.**

This project eliminates the need to boil water prior to consumption, thereby reducing associated emissions by over 95,000 tons CO₂e over its duration and contributing to the fight against climate change.



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