

Seret, Ethiopia

Empowering communities
and fighting deforestation

Yearly Update 2021



Summary

Our five year project to restore an encroached 56 ha of forest land in Ethiopia's Dogua Temben district began in 2017 and was planned for completion last year.

Since war broke out in the wider region in late 2020, project follow-up has been significantly affected as movement in the area and surroundings was restricted and we are extending the project for at least one more year to account for these delays.

Our vegetation survey measured data from 10 plots to assess the ecological impact of the project after 5 years. The survival rate for the trees planted in 2017 and 2018 ranges from 56% to 60%, which is not as high as our target, though we are satisfied it is as good as possible, considering the prolonged dry spells and restricted follow up. The wider ecological analysis, based on the data, is still underway.

The team was also busy supporting and training the livelihoods participants – distributing chickens to 80 households – and supervising the forest guards to patrol the enclosure and in their implementation of various silvicultural practices.

This report shares an update of our progress during 2021. Thank you for all your support!

The project in numbers

56 ha restored through ANR and enrichment planting

41 383 trees planted

3000 bee forage shrub species planted

3 government nurseries strengthened and provided with training for workers

40 young landless people organized in to cooperatives and engaged in different forestry activities

145 households sustainably increased their income

583 households report sustainable use of enclosure resources



Restoration

56 ha of forest land under restoration, with 66 239 planted or naturally regenerating trees

Land degradation is among the major challenges in agricultural production and sustainable development in many parts of Ethiopia. Rehabilitating degraded lands in arid and semi-arid environments usually involves fencing sites to protect them from the trampling and grazing of , they are often called “exclosures”.

In our Seret project, 56 ha of forest land – the Seret-Walta Exclosure – in Dogua Temben district has been protected to bring back the original native tree species while delivering important social and economic needs of the local community. The project is expected to positively impact a total 733 ha within the landscape.

The planting of 41 383 seedlings of mainly native species was carried out in 2017 and gap filling in 2018. Exotic species were included to provide a buffer between the exclosure and the nearby agricultural lands, and planting additional trees and shrubs that serve as a source of fodder for bees was important for the success of the beekeeping livelihood scheme. 3000 seedlings of two bee fodder shrubs (*Leucas abyssinica* and *Becium grandiflorum*) were planted in 2019 (1000 seedlings) and 2020 (2000 seedlings).

In addition to enrichment planting, there was direct seed sowing in the exclosure to improve the vegetation cover. More than 7kg of seeds of three tree species (*Vachellia abyssinica*, *R. natalensis* and *Vachellia etbaica*) were collected from the vicinity and sown in 36 ha of the exclosure in 2019.

Sowing seeds in the rest of the exclosure was planned for 2020, but due to poor seed production by mother trees and security problems owing to the war during 2021, it was not possible to carry this out.



The community will protect the restored enclosure

Long-term success for land management needs an agreed plan. Enclosures such as our Seret-Walta Enclosure are usually found within the boundaries of villages, and are managed communally by the local communities. Strong collaboration with the villagers is essential for the effective management of such resources.

By the end of 2020, we were aiming to have developed land use plans for each village and updated the bylaws. The first consultations took place but couldn't be finalised because of the COVID-19 pandemic. Instead, this activity resumed in 2021, when the project worked with community members to develop a land-use map and updated the bylaws, including regulations to guide the participants of the beekeeping livelihood scheme to managing their share of the enclosure.



considering the dryness of the area and the consecutive years with low rainfall (less than 500 mm), this result is considered good. The survival rate for the tree planted in 2018 is about 60%. Species-wise, *Acacia polyacantha* have a higher survival rate (67%) compared to *Olea europaea* (44%).

The soil samples taken from the plots reveal that carbon in the soil has increased by 50%, with an average carbon value of 67.64t per ha compared to 43t per ha in 2017.

The plots have also served as experimental plots for a moisture retention gel experiment, for which data from the last four years on the survival of seedlings with different levels of gel has been taken and is being analysed.

However, during 2021 the forest guards continued their work weeding 5025 planted and naturally regenerated saplings and trees.

In 2021 vegetation and soil data was collected in the 10 permanent plots within the 56 ha enclosure, where baseline data had been collected in 2016/2017. This new data is still undergoing analysis, but has so far revealed that the survival rate for the trees planted in 2017 (*Olea europaea* and *Acacia polyacantha*) is about 56%, a little below the target of 60% after three years. However,





Livelihoods

Alternative livelihood schemes are providing reliable income and decreasing the pressure on the exclosure

In an area where 86% of households directly depend on forest resources for subsistence, developing alternative, forest-friendly sources of income such as honey or egg production is an essential step toward reducing local human pressure on forest resources.

Two cooperatives, one in Seret and the other in Walta, have been trained in beekeeping and set up with beehives in the exclosure, as in Tigray, honey has high value. It requires little input, can be easily stored and sold at the local markets and, as such, it is an ideal annual income-generating activity for landless households. To date the income from beekeeping has not been as high as expected and the co-operatives are looking to develop other income generating opportunities.

In 2021, 80 households living around the exclosure received 10 pullets each to start small-scale poultry businesses. Of these, 58% were female-headed households, and participants were selected from both villages: 48 in Seret and 32 in Walta. The target for this year had been to provide 1200 chickens to 120 households, but because of the conflict it was difficult to obtain the required amount. As soon as the security

Securing the harvest for the farmers in Seret and Walta

With COVID-19 closing markets and limiting mobility, a locust outbreak, a dry spell, and internal conflict and unrest, 4.5 million people in 94 districts in Tigray in Northern Ethiopia are facing a severe crisis. We knew we had to find a solution for the 23 000 farmers we work with across 13 villages in Northern Ethiopia, including Seret and Walta, even though humanitarian aid is not our normal focus.

During 2021 we were able to raise \$1.2 million to secure the wheat and barley harvest of all these farmers, who have and are still suffering with the conflict in Tigray.

Watch our video about this initiative [here](#).





Community soil and water conservation activities

Soil and water conservation structures are a crucial step in forest restoration to avoid further soil erosion and facilitate rainwater infiltration to restore critical watersheds. These structures, which can be built by the communities, replenish groundwater, help infiltration and stop heavy topsoil from washing away.

More than 5000 microbasins for the most recently planted and naturally regenerating saplings and trees were constructed in 2021. These small pits keep rainfall around their roots, which supports their growth in this dry region.

situation improves, the rest of the chickens will be purchased and distributed.

Harvesting grasses from the enclosure helps to maintain the area, and the grasses are used either as a source of feed for livestock or as shade for homes. In 2021 the project's grass cooperatives harvested grass from the enclosure and sold it to other members of the community as livestock feed at the local market. WeForest's neighbouring Desa'a project also bought some grass to use to shade the seedling beds in their nurseries. From the grass sales, the beekeeping cooperatives

earned US\$408 (20,000 ETB) which is the equivalent of eight times the annual income for the average household here. The income will be used for beekeeping supplies and equipment.

An endline survey was planned during 2021 to measure changes in the incomes of households, the baseline survey having been collected at the beginning of the project. Owing to the challenges posed by the war, this survey is now planned for 2022.





What's Next?

- **April/May:** Managing naturally regenerated seedlings/trees through pruning and other appropriate silvicultural practices; seed collection for direct sowing
- **June:** Direct seed sowing
- **End June:** Technical training about managing naturally regenerated seedlings and direct seed sowing
- **End June:** Monitoring honey harvested by user groups
- **June/July:** Engage 100 community members in poultry production
- Following up with forest guards
- Strengthening and follow up of participants engaged in beekeeping
- Enhance fodder production by planting forage trees
- Maintaining terraces and other soil and water conservation structures. Damage to previously constructed soil and water conservation structures will be fixed.
- Analysis and reporting of biophysical information; socio-economic survey and reporting

How do we know our restored forests are growing and making an impact?

Every hectare under restoration is mapped with GPS points to generate polygons (areas on a map) that are assigned to sponsors. Permanent monitoring plots are established in our sites and our forestry and science teams conduct surveys to monitor progress of biomass growth, tree density, survival rate and species diversity, among other indicators. Where social impacts are also critical, we measure socio-economic indicators such as the number of beneficiaries, people trained, and income generated from forest-friendly livelihood activities.

Please visit our [Why and How](#) webpage for more information.



Stay up-to-date with your interactive [Seret map](#), and check out the [photo album](#) of the project on Flickr.

Thank you for supporting the Seret project!