

Ethiopia Seret

Yearly report 2020

Empowering communities and fighting deforestation

Tigray region, Ethiopia

2020 was a difficult year for almost everybody, and the work on community exclosure management in Seret and Walta was no different.

The COVID-19 situation restricted staff mobility and delayed some livelihood activities. Poultry production supports women with a source of regular income from the sale of eggs, but the distribution of chickens (10 per household) was unfortunately affected by COVID-19, though the planned poultry management training was delivered to 30 women in preparation for activities to resume as soon as they are able in 2021. It also meant that some achievements planned for 2020 - such as developing landuse plans along with communities, and updating the bylaws - have had to be postponed until 2021.

However, one of the defining moments of 2020 in Ethiopia was the development of a fully-fledged war with the federal government. Though we are hopeful that things will improve in the coming couple of months, the project could be affected if the situation persists.

This report shares an update of our progress during 2020. Thank you for all your support!

Area under restoration: 56 ha

Potential carbon sequestration after 20 years: 9,688 t CO₂ Restoration techniques: $\label{eq:ANR} ANR$ with enrichment planting

13 tree species are being planted predominantly *Olea europaea* and *Acacia polyacantha*













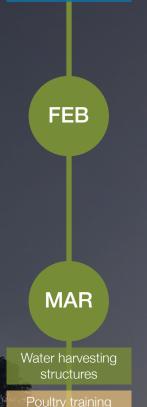
Double the grass

Harvesting grass is of incredible importance for local communities and therefore the success of this project. "Dirqua" grass is used as feed for livestock and others grasses are used as a roofing material; these grasses reduce the dependency of the community on nearby forest areas from using as grazing area. The total planned target of 6000kg h in 2020 was in fact a whopping 12,312 Kg! We saw an 85% increase in "Dirqua") and a more than 200% increase for the roof material in Seret. The increased production here correlates with the strength of the patrolling by the exclosure guards and community commitment to manage exclosures in a participatory way. The grass harvest increases the income of the cooperatives and improves livestock feed availability for local families, even during the dry season. This year, this grass was bought by WeForest's sister project in Desa'a to make seedling bed shades in the tree nurseries.

Protecting saplings

Starting at the end of May, the local community members who work as forest guards were supporting sapling growth. They carried out weeding at 2,800 planted and naturally regenerated seedlings and saplings, and built small water basins around them to keep any rainfall around their roots, which supports their growth in this dry region.





APR

Water harvesting structures Poultry training

MAY

Poultry training Managing ANR trees

Seed sowing

JUN

Seed sowing

Silviculture



Reviewing beekeeping progress

A meeting was held in Seret to monitor the progress of two beekeeping cooperatives, one in Seret and the other in Walta. The Walta cooperative was experiencing challenges from group member commitments, and low yields of honey. Their beehives were moved to a new location, as the current one was very exposed to rodents - natural enemies to bees. They received additional support and follow-ups from WeForest, the district office of agriculture and the village administration office, and Seret cooperative members kindly offered to share their experience to help the neighbouring Walta cooperative.

Pruning time

Pruning and thinning of mature woody plants is carried out at the end of June and encourages healthier and faster growth. A total of 2,130 naturally regenerated trees and shrubs in 30 ha of the exclosure were pruned, led by the forest guards and trained members of the cooperatives. This year, 100-man loads of wood from pruning were collected and distributed to the local community as fuelwood. This local source of wood benefits women in particular as they are often the ones that collect wood, sometimes having to walk far from home.





A dry year means fewer seeds

To improve vegetation cover in the exclosure and enhance the rehabilitation process, direct sowing of native tree species is carried out. Acacia abyssinica seeds were collected from the exclosure, but because it was a particularly dry year, very few mature trees had produced seeds. Only 3 kg were collected from the exclosure - only 28% of the expected amount. With these seeds from the exclosure 10 ha out of the planned 36 ha was planted, and to cover the rest of the area, forest guards collected the remaining seeds from other nearby exclosures and fragmented forests, which allowed the remaining 26 ha to be sown in August.

Flooding reduced

Reducing soil erosion and runoff is one of the benefits of Exclosure management. Before the project started, households downstream reported severe impacts from flooding. Since then, they've reported a noticeable reduction in flooding events, such as mudflow and stones rolling down to the village and farmlands. Heavy runoff coming from the upper part of the exposure, which impacts croplands by washing away young crops, making gullies on downstream farmlands and grasslands, destroying water points, has also been reduced. It's hoped that by 2021 the occurrence of these will be minimal.

JUL

Survival data collection

Planting bee fodder

AUG

Nursery training

Nursery training

SEP

Survival data collection Beekeeping training

OCT

NOV

Survival data collection Beekeeping training

DEC

Tree survival rates

The survival rate for the trees planted in 2018 was about 60%, on track to meet our three-year target of a 60% survival rate, although the survival rate for *Olea europaea* and *Acacia polyacantha* planted in 2017 was only 56% on average. This was the result of prolonged dry spell in the area. Species-wise, *A. polyacantha* have a higher survival rate (67%) than *O. europaea* (44%). To compensate for this, more direct seed sowing with mixed native trees over the whole 56 ha will take place in 2021.



Increasing food sources for bees

The Exclosure has several shrubs and tree species that serve as bee food (fodder), but not enough, especially in the dry season. Since, the beekeeping user groups are scaling up their capacity, additional bee fodder is essential to increase the honey production from the Exclosure and its surroundings so when the rains began, 2000 seedlings of Leucas abysinica (Siwakerni) were planted around the beekeeping area. In September, those looking after the 2,000 seedlings of bee forage species received training in silvicultural management and post-planting, such as watering and mulching.

Planning for the future

Long-term success for land management needs an agreed plan. 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 pandemic. Instead, this activity will be resumed in 2021.

What's next?



Restoration

- Managing naturally regenerated tree species through pruning and other Farmer Managed Natural Regeneration activities
- Direct seed sowing with mixed native species over 56 ha
- Planting additional bee fodder species
- Maintaining terraces and other soil and water conservation structures

Livelihoods

- Providing training on apiculture management for each cooperative, to enhance honey production
- Engagement and refresher training for female-headed households in poultry management
- Organizing exclosure visits for cooperatives; strengthen their management

Monitoring and evaluation



- Survival count data collection on planted seedlings and direct seed sowing; data collection on grass harvest
- Developing land use plan for each village and their common exclosure; training and sharing information on best practices with stakeholders
- With local, district and regional government, develop exit strategies and the handover to the community

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** on Flickr.