A Flourishing Future for Gewoocha Forest

Community-led restoration of native remnant forest in Amhara, Ethiopia

Annual Progress Report 2022
This is the first full-year progress report for the Gewocha Forest project.

It is taking place in Jabi-Tehnan, West Gojjam province, neighbouring our previous Amhara project in Machakel, East Gojjam, which brought about 1200 hectares under restoration. The ambitions of this project are much bigger: to restore 10 000 ha of Gewocha Forest and surrounding communal lands by 2030.

Things are going well and are on track, and the WeForest and The Hunger Project teams in the field are happy with progress made in 2022. They’re getting positive feedback from the farmers and communities involved, which is extremely important. In fact, the community engagement here and the strength of the community’s commitment is very special and rare according to our experts who have seen many projects developed over the years around the world.

Baseline assessments have taken place for vegetation as well as the socio-economic situation in the homesteads surrounding Gewocha Forest, so that we will be able to measure the impact of the project in the future. There’s still lots of work ahead, with some challenges, as we’re still at a very early stage in the project’s lifetime.

This report shares an update of our progress during 2022. Thank you for all your support!

Summary

2022 in numbers

669.97 hectares brought under restoration in 2022 (direct tree planting, Assisted Natural Regeneration and agroforestry):

- 516.03 ha in Gewocha Forest
- 53.92 ha on degraded communal lands
- 100.02 ha of agroforestry on homesteads

479 264 seedlings planted in total:

- 7 native species planted for restoration
- 11 species (of which 4 are native) planted for livelihood support on communal land and farms

Approximately 879 186 trees growing in the long term

3964 community members participated in planting

1682 families involved in agroforestry
July and August 2022 saw 3694 community members come together for the project’s very first planting season, participating in pit preparation and planting activities both in Gewocha Forest and in the communal areas earmarked for restoration.

Prior to planting, the areas were fenced off and guarded to protect any young wild seedlings and regenerating species from any cattle or other dangers. Next came pit preparation prior to planting, and then the seedlings were transported to the planting sites. For planting, seedlings should be 30 cm tall or more, healthy and free from disease, and with good straight growth.

Counting direct tree planting, Assisted Natural Regeneration and agroforestry activities together, 669.97 hectares were brought under restoration, higher than our original target of 652.9 hectares for 2022. The total number of seedlings planted on 17 sites in the forest, 7 communal areas, all the homesteads and at a school was 479 264. 16 species in total were planted across the full project, of which 9 are native.

516.03 hectares of the total brought under restoration were in the highly degraded 7932 ha Gewocha Forest itself, growing a total of 11 different tree species in 17 different sites. Our aim here is to re-establish the structure, species diversity and density of the forest. 139 ha of this 516 ha has so far only been fenced and protected, and is to be planted in 2023.

Why are more seedlings raised than are planted?

The number of seedlings raised was 494 675, although the total number of seedlings planted was 479 264. There will always be more seedlings raised than planted, as we anticipate 5-10% of seedlings will be lost through damage during transport, for example. The percentage of lost seedlings was only 4% during 2022 – so that’s a good result!
53.92 hectares were planted on 7 different areas of degraded communal land, growing a total of 9 different species. Once rejuvenated, these communal areas will become an important source of grass/fodder, fuelwood, small timber, medicinal plants, recharge of streams and groundwater, and a carbon sink.

Post-planting activities include watering, thinning, weed and pest control, and pruning and hardening off.

In addition, 100.02 hectares of agroforestry were established in 1682 homesteads, growing a total of 14 different species (see Livelihoods section).

Vegetation baseline assessment
The project’s vegetation baseline assessment also started in 2022. This inventory is an important step in any restoration project; it gives us the starting point by which we can measure the success of our activities over the years. As well as providing information on vegetation composition and structure, it also establishes the network of sampling points that we will continue to monitor during the lifetime of the project.

Soil restoration and conservation
Building dams using stones and sandbags reduces the speed and intensity of floods and reduces soil erosion, which is a big problem all over Amhara, where gullies characterize the landscape (left). These large channels are caused by the concentrated flow of water during and immediately following heavy rains. They are one of the most destructive forms of erosion in Ethiopia.

During 2022, 25.5m³ of check dams were constructed on eight gullies at three of the communal restoration sites. The m³ of soil

Species in the spotlight: *Olea europaea* subsp. *cuspidata*
The evergreen African Wild Olive grows in the afromontane forests in Sudan, Somalia, eastern tropical Africa and South Africa. Unlike Mediterranean olive trees, its olives are not edible or commercialized, but the tree is sought after for its durable timber. The leaves make good livestock fodder during the dry season, and when burnt, the smoke from the leaves and stem is used to fumigate food containers. If that wasn’t enough, the root or bark is often used to treat malaria. Because of its many uses, it has been dramatically over-harvested.
saved thanks to these activities will be measured in the coming years.

**Where did the seedlings come from?**

The main nursery raising the seedlings for the Gewocha Forest project is the community-based Geray Nursery, covering 5 ha including the office, road and other infrastructures. Its total full capacity is potentially up to 3 million seedlings.

During 2022, when Geray Nursery was still under development, we also used government or private nurseries as a backup. 410,807 of 2022’s 494,675 seedlings were raised in Geray Nursery and 83,868 were sourced from local government nurseries – so that’s a 83% / 17% split. We had originally anticipated to raise 553,807 seedlings in the first year, so nearly 90% of this target was achieved in 2022. We expect to catch up in future years.

Now Geray Nursery is fully operational and is run by 40 locally-hired and trained nursery workers, of which the majority are female. They’re receiving capacity building and training on an ongoing basis, learning such techniques as weeding, root pruning for seedlings with root growing outside the pot, and seedling grading: knowing which seedlings are ready by the rainy season for planting or not by looking at the size, and overall growth and health.

The workers in the nurseries as well as local farmers and communities are paid to collect seeds throughout the year. There is already some local knowledge about how to do this, which is complemented by additional training for the nursery workers. Our preference is always given to collecting native seeds from the local environment, as they have the highest chance of germination and it’s best for the local ecosystem, rather than getting them from the other side of the country – but it’s more challenging to find seeds from native trees than procuring exotics from elsewhere, as there’s a lot of supply and demand for exotic seeds.

The seedlings of native trees need to grow 1 to 2 years in the nurseries before they are ready for planting. This is quite long compared to exotic species: exotics tend to be very fast-growing and only need 6 months in the nurseries before they’re ready to get planted.

Every year in May and June, before the planting season, all seedlings that are about 25 cm in height are considered fully raised and ready for planting. Seedlings that are smaller will continue to grow in the nursery and be counted for next year’s planting season.

Over 1 million seedlings are already under production in Geray Nursery for the 2023 planting season (June to August, depending on the rains).

<table>
<thead>
<tr>
<th>Species</th>
<th>Origin</th>
<th>Where planted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afrocarpus gracilior</td>
<td>native</td>
<td>Forest</td>
</tr>
<tr>
<td>Olea europaea subsp. cuspidata</td>
<td>native</td>
<td>Forest</td>
</tr>
<tr>
<td>Vachellia abyssinica</td>
<td>native</td>
<td>Forest/CL</td>
</tr>
<tr>
<td>Faidherbia albida</td>
<td>native</td>
<td>Forest/CL</td>
</tr>
<tr>
<td>Cordia africana</td>
<td>native</td>
<td>Forest/CL</td>
</tr>
<tr>
<td>Albizia gummifera</td>
<td>native</td>
<td>Forest/CL</td>
</tr>
<tr>
<td>Moringa stenopetala</td>
<td>native</td>
<td>Forest/CL</td>
</tr>
<tr>
<td>Sesbania sesban</td>
<td>naturalised</td>
<td>Forest/CL</td>
</tr>
<tr>
<td>Grevillea robusta</td>
<td>exotic</td>
<td>CL</td>
</tr>
<tr>
<td>Acacia decurrens</td>
<td>exotic</td>
<td>CL</td>
</tr>
<tr>
<td>Cupressus lusitanica</td>
<td>exotic</td>
<td>CL</td>
</tr>
</tbody>
</table>

Species planted in the forest or on communal lands (CL)
The project’s baseline socio-economic survey started at the end of 2022, so that we can measure the success of all our livelihoods activities. The survey was coordinated by WeForest and The Hunger Project in collaboration with the Office of Agriculture, Injibara University and The Environment, Forest and Wildlife Protection and Development Bureau.

The communities here are dependent on Gewocha Forest for their livelihoods, and poverty and food insecurity are prevalent in the area. Communities have limited access to improved agricultural inputs, production skills, technologies and finance, as well as to water, sanitation and hygiene (WASH) services. Women are particularly marginalized, with limited participation in economic and social life. Youth unemployment is high.

The project promotes several forest-friendly livelihood activities to improve incomes and reduce pressure on the forest, the most important being agroforestry.

**Agroforestry**

The long-term aim of the project is to introduce agroforestry practices on 925 ha of land.

<table>
<thead>
<tr>
<th>Crops planted on homesteads for agroforestry: Nine species of multi-purpose trees such as Moringa stenopetala and Sesbania sesban are planted in between these crops.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Origin</strong></td>
</tr>
<tr>
<td>Mango (<em>Mangifera indica</em>)</td>
</tr>
<tr>
<td>Avocado (<em>Persea americana</em>)</td>
</tr>
<tr>
<td>Banana (<em>Musa acuminata</em>)</td>
</tr>
<tr>
<td>Coffee (<em>Coffea arabica</em>)</td>
</tr>
<tr>
<td>‘Gesho’ (<em>Rhamnus prinoides</em>)</td>
</tr>
</tbody>
</table>
of smallholder farmland with around 7900 households. Agroforestry is one of the most sustainable and profitable ways for smallholder farmers to grow cash crops for food security, nutrition and consistent income while natural resources such as soil and water are improved by the presence of the trees, which also sequester carbon as they grow.

In 2022, 100.02 hectares of agroforestry was established on 1682 homesteads, growing a total of 14 different species. This was well above the target of 1127 homesteads, due to a high interest within the community in agroforestry. The families were also provided with farm-level practical training.

**Beekeeping**

Currently farmers here mainly use traditional beehives and methods to produce honey, which has a low yield compared to transitional (intermediate) or modern beehives. A four-day training provided on modern beekeeping was provided to 47 beekeeping farmers in August. Each trainee made a transitional beehive using locally available materials to which to transfer their bee colony.

**Livestock and dairy**

1724 farmers were trained in sustainable livestock management such as breed improvement, destocking and feed improvement. They were also made aware of the

---

**Balancing ecological needs and community needs**

As a forest landscape restoration organization, naturally WeForest wants to grow and restore native tree seedlings. However, communities often prefer fast growing exotic species rather than the native species. For example, farmers tend to request eucalyptus seedlings as they grow fast and can provide a good source of income, but we don’t grow these – they are invasive and can seriously harm the local ecosystem! In this project, exotics are only planted in the communal lands and buffer zone of the forest reserve, to make these forested areas benefit local communities through fodder production. In Gewocha Forest itself, only native species are planted.
damage caused to the environment due to free grazing, and the importance of a cut-and-carry animal feeding system. The importance of dairy cooperatives is also explained to participants, and a cooperative society under the name Finote Gewocha Dairy Cooperative was established by 275 farming families.

**Irrigation-based horticulture**

308 families with access to water for irrigation and sufficient parcels of land for vegetable production were given tomato, cabbage, beetroot, green pepper and onion seeds which they sowed over a total of 49.9ha of land. Our target for this activity was 986 families, but it was difficult to identify households with sufficient land.

**Grass harvesting**

Grass provides fodder for livestock, and can also be used to make shades for the seedling beds in the nurseries. In 2022 1724 families gathered 98 205 sacks (1 473 075 kg) of grass from 14 sites in 6 Kebeles, with a total value of 4 910 250 ETB (US$98 205).

7920 grass splits of desho (*Pennisetum pedicellatum*) and Vetiver (*Chrysopogon zizanioides*) species were planted on one communal restoration site to assist faster gully rehabilitation and use as fodder in the future.

**Improved savings and credit**

Financial resources such as loans or financial ‘safety nets’ made available through Saving and Credit Cooperative Cooperatives (SACCos) – community membership-based financial institutions that are formed and owned by their members – can boost involvement in livelihoods activities, while also making sure that people don’t resort back to cutting trees in times of hardship.

During 2022 the project established 31 women-only self-help groups (SHGs) to support each other in saving money and overcoming financial challenges. All 613 members from 8 of the 14 villages in the project area were trained on how to formulate bylaws for their operation and leadership processes. To date, these groups have saved a total of 116 751 ETB (US$2176). Next year, these SHGs will be supported to evolve into SACCos with both men and women as members. The overall target in the project’s lifetime will be to have 2240 people as members of SACCos, half of them women.

**Improved quality of life**

The project also aims to bring a better quality of life to the surrounding communities through development schemes focused on WASH services and improved fuelwood efficiency. Improved toilets, efficient stoves and improved access to water will be provided through these schemes.
Enhanced stewardship, governance and awareness in natural resources/forest management is one of the most important objectives of the Gewocha Forest project, so that the restoration that takes place here will be protected for the long term.

During 2022, one Woreda (district)-level and 12 Kebele (village)-level task force groups were established to assist and support the project implementation and share roles and responsibilities. The bylaws have been developed and signed, and a Gewocha Forest land use plan has been developed.

479 school children, 243 of them girls, are involved in the project through environmental clubs that have been established in seven primary schools, chosen for their adequate fencing, space for planting and water access so that seedlings can be planted and cared for on school grounds. Each school also has staff

Empowering women

The local team has a policy to ensure that 50% or people engaged are women. This has already been achieved in the nursery, where most workers are women (62%). Progress in other areas will be monitored over time now that the project is up and running.
Why is community engagement so important?

Community management and engagement is the most important activity in this project. We need to have community agreement before any planting can happen, as it is crucial to the survival of the planted seedlings.

It takes a while before farmers are convinced: why would they protect the forest rather than letting their cattle roam everywhere? Why should they trust The Hunger Project and WeForest? It takes a long time to build trust with communities. Already we have seen through the engagement sessions that the community is committed to the process.

It will also mean long term success of the forest restoration. The social structures and norms here mean that disobeying community-agreed principles like not grazing your cattle in the protected areas is not socially acceptable. It supports a real community-led approach to protecting the forest. Communities are also known to pay for forest guards themselves, and fine those caught disobeying the rules.
What’s Next?

- The project has already started tree seedling production for planting in 2023, with a million posts sown or ready for sowing. In addition to the nursery staff, 20 short-term labourers for pot filling were employed.
- There will be continued technical training for nursery staff in the Geray Tree Nursery to improve abilities in tree species selection and grading.
- Community engagement will continue, and the remaining schools will receive their seedlings.
- The location of the new hectares to be brought under restoration in 2023 will be agreed with the communities.
- Spring development and hand dug well construction will take place at Mana and Mebeshe kebeles to improve water access.

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. We track survival of planted seedlings up to three years after planting in the forest, communal lands and homesteads to make sure the majority survive to become mature trees, and we plan to have remote-sensing based analysis of tree cover performed periodically, to make sure Gewocha Forest and the communal lands develop a closed canopy.

Where social impacts are also critical, we measure socio-economic indicators such as the number of families benefiting, people trained, and yields and incomes generated from forest-friendly livelihood activities.

Please visit our What We Do webpage.

Stay up-to-date with your interactive Gewocha map, and check out the photo album of the project on Flickr.