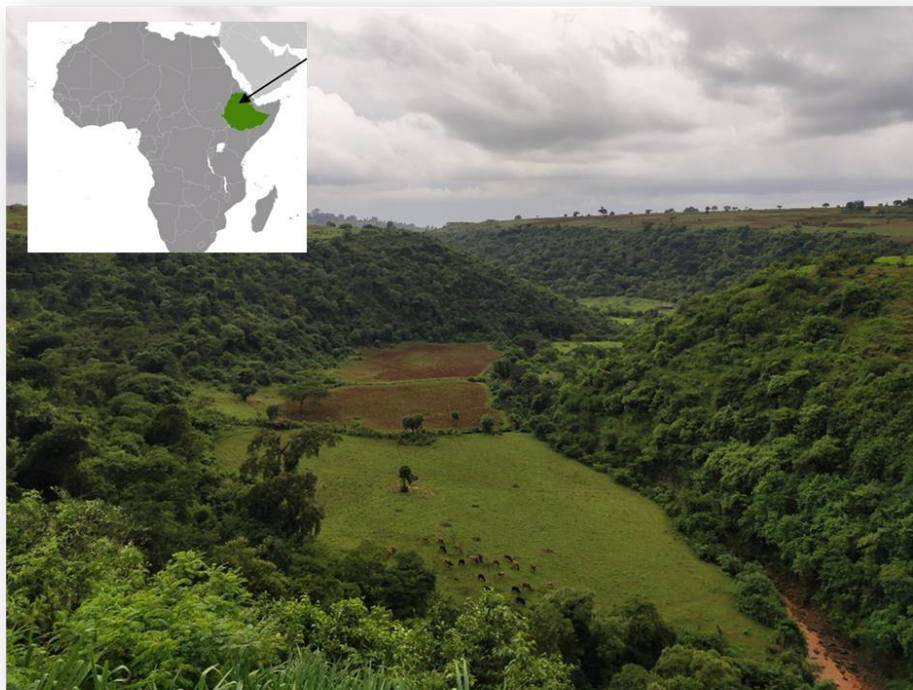




Ethiopia has suffered widespread clearance of forest as a result of agriculture, charcoal production and fuelwood and timber harvesting, causing extensive soil erosion and the formation of gullies. The region of Amhara in Ethiopia is under severe threat from land degradation and soil erosion as a result of widespread deforestation. Most of communal lands and farmlands are highly fragmented with extensive gullies that also directly threaten agricultural production as fertile soil is being washed away. Forests are fragmented, biodiversity is disappearing, and exotic trees dominate the landscape. Enabling communities to become stewards of their forests is the best way to protect and restore forests in the long term and recover degraded soils.

With local partner The Hunger Project, who specializes in community engagement, WeForest is restoring degraded communal lands in the Machakel district: the rural communities are trained with the skills they need to restore and protect their forests and farmlands in the long term.



Since the project began, with your support, the project has:

- Brought 826ha of land under restoration – that’s around 1,000 football pitches!
- Nurtured the regeneration of almost 1.5million trees
- Supported the engagement of over 3,000 community members in the programme including over 2,400 who are developing alternative forest-friendly livelihood incomes and 1,800 who have received training.

**Thank you!**

## Goals and Achievements

### Forestry

Our goal is to reach 1,149ha (approximately 1,379 football fields) of land under restoration by the end of 2021. We are over 70% of the way there with 826ha under restoration to date and over 1.4million trees regenerating.

During 2019, 276ha were brought under restoration:

- 40% (110ha) for **Agroforestry** where trees such as coffee and avocado are planted on farms. To date 281ha are under agroforestry.
- 60% (166ha) for **Assisted Natural Regeneration (ANR) and enrichment planting** in 6 villages. ANR enhances the establishment of forests by protecting and nurturing emerging seedlings and protecting new forest growth. WeForest has signed agreements with the local community to ensure local participation in restoration. To date, 545ha are now under restoration through ANR and enrichment planting.
- 56 monitoring plots were established in 2019 (20m x 20m) to measure seedling survival and monitor biomass growth in restoration sites over time.
- To ensure that restoration sites are protected, local bylaws were prepared and signed by all community beneficiaries in all 12 sites and sites close to settlements were fenced by community for protection.



Chidamba is a two-year-old restoration site

### Community Engagement



Community planting activities

Since the project began, over 3,000 families have benefited from the project. In 2019, 1,053 local community members (21% women) participated in the programme including elders, youth, and religious leaders. This included 967 households (17% female headed) from 6 villages that began agroforestry activities. The farmers took part in training on how to manage high value tree seedlings such as coffee and avocado.

### Biodiversity

Between 2016 and 2019 the number of tree species under restoration increased from 4 to 16 in total. In 2019, the ANR sites in the Machakel district in Choke watershed were planted with over 10 trees species (9 of which are native). This is a mountain ecosystem hosting vulnerable plant species such as *Erica arborea* and *Lobellia sp* and animals such as the Wattled ibis and Ethiopian wolf. Restoration activities aim to support these species.



*Lobelia rhynchopetalum* (front) and *Erica arborea* (back) endemic to the Afroalpine climate

## 2019 At a Glance

**Raising seedlings for quality.** All 3 WeForest “Love Nature” tree nurseries were very busy in 2019 producing a total of 463,458 seedlings (78 % native and 22 % exotics which are used mainly for fuel wood, timber and livestock fodder). 21 workers from the nurseries (14 male and 7 female) took part in nursery management training on topics such as seed treatment, day to day seedling management, hardening off, transplanting and care during transportation and root pruning. Quality management paid off: Over 90% of the seedlings grown were used for planting!



Checking seedling growth

### Planting with the community.



A female community member transporting seedlings

**Enrichment planting in ANR sites:** WeForest and its partner The Hunger Project, together with 1,053 local community members, planted 127,777 seedlings in the 6 villages in Machakel district. A further (approx.) 30,000 seedlings were also replanted in existing sites to replace those that had been damaged by floods and livestock in previous years and some were distributed to communities for planting on farms. The 10 species (64% native and 36% exotic) are *Olea europaea*, *Albizia gummifera*, *Militia ferruginea*, *Acacia abyssinica*, *Sesbania sesban*, *Cordia africana*, *Faidherbia albida*, *Gravilia robusta*, *Acacia decurence*, and *Cupressus lusitanica*.

**Agroforestry planting:** 967 farmers (799 male and 168 female) were engaged in planting a total of 266,802 seedlings including:

- 118,500 *Rahumnes prinoids* – local hops
- 12,000 *Coffea arabica* – coffee
- 2600 *Percia America* - avocado
- 133,702 different multipurpose tree seedlings mainly for timber, shade, fuelwood etc.

The farmers value high value fruit trees like avocado and cash crop shrubs such as coffee and local hops.



Gedey Terefe harvesting local hops for her household

**Survival rates exceed our target of 80%:** In 2019 the average survival rate across 11 sites planted in 2017 and 2018 were measured. Average survival rates for 2017 were 88% and 2018 were 87%.



*A beehive placed near trees and flowering plants for bees to feed*

**Creating forest-friendly value chains.** In an area where households directly depend on forest resources for subsistence, developing alternative and forest-friendly sources of income like honey is an essential step toward reducing local human pressure on forest resources. Beekeeping is a long-term and committed occupation. To date 17 beehives have been installed. Initial results were good with the first harvest of 60 kg of honey generating an equivalent of USD\$370, but some of the colony were lost and since then there were not enough hives to compensate the honey loss. We intend to develop a strategy to significantly improve the beekeeping results the project delivers.

**Developing skills for empowerment and success.** WeForest and its partner The Hunger Project establish village level task forces to improve community engagement in restoration site management. Every year skill trainings are provided to task force members on forest management and community mobilization since these experts are responsible to lead and train community representatives and the whole community. In 2019 a refresher training was organized before planting began (8 male and 2 female participants) and was complemented by government-led training on site selection, seedling transportation and planting. In total 34 experts were trained in 6 villages (24 male and 10 female).

### Improving soil health

One of the main challenges in Amhara is the high rate of soil erosion in the rainy season and lack of water availability in the dry season. The project is constructing different structures across hills in all management zones to reduce the speed and intensity of surface runoff and increase and improve soil infiltration/ water availability during the dry season that will support the seedlings to establish. During 2019, 7 eroded hillside gullies were filled with 80m<sup>3</sup> of stone and soil to stop runoff and the resulting soil erosion. The structures are built by the community and guided by the WeForest team and local technicians from district government who design and manage the activity.

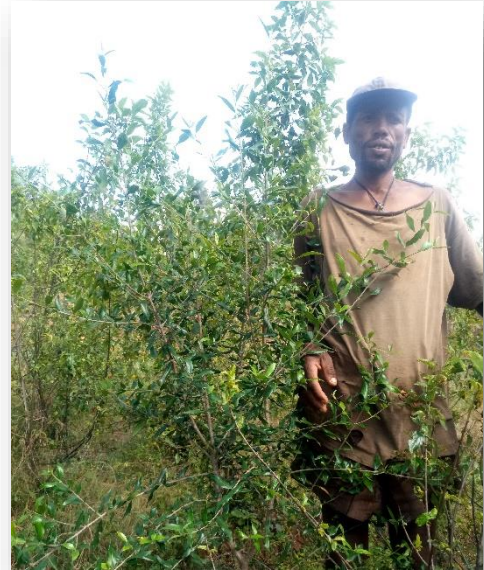


*The two pictures illustrate the 'before' and 'after' scenarios of erosion management. On the left the construction and on the right the fully grown over vegetation slows water and reduces soil erosion. Note that they are not taken from the same site.*

## Stories from the Field

### Boosting household income through agroforestry

Worku is married with two children and since enrolling in the agroforestry project in 2018 has received 160 seedlings of 3 varieties for his farm. “I am very happy that I am part of this project. I have received quality planting materials particularly *Rahmnus* seedlings which I have been searching for. I know neighbors that have changed their life within short period of time by selling *Rahmnus* leaves. Within one year I have harvested 27kg of leaves which I sold for 8100 ETB (equivalent to USD\$270)”. Through the adoption of agroforestry, he says he is diversifying his income. Now he can harvest *Rahmnus* prinooids (“Gesho”) leaves all year round and harvest crops during rainy season. The small plot of agroforestry land provides great income compared to other crops that take up more space and produce less but take up all the family’s time to cultivate!



Worku Taddese has been part of the project since 2018

Farmers value trees from which they can harvest products and earn income such as avocado and apple coffee. Husband and wife Alemayhu and Yeshalem are from Laydamot village. They enrolled in the project in 2017 and own 1.05 ha (the size of around 1.2 football fields). Alemayhu used to plant only maize on his backyard and harvest once a year. “I have started learning from this project since 2017 when I joined in the communal land rehabilitation program of my village. I have planted 500 *Rhamnus*,



Alemayhu and Yeshalem with their new avocado tree

15 apple, 12 improved avocado trees, and 50 coffee trees. I have sold 45 kg of *Rhamnus* leaves and earned 450 ETB (approximately USD\$14) in just only half year of 2019”. “I learned the improved avocado and apple trees mature fast and able me to earn some money to support my family and send some money to my son attending in Dilla University. I see already the (apple) fruits of my plant you gave me 2 years ago. Our community (Gena memecha) also rehabilitated a gully, we planted trees which are already more than 4 metres now. The area was open

bare land before 2 years but now you can’t see people inside!” Alemayhu is clear that the benefits of restoration work for everyone “Trees have so many benefits such as fuel wood, clean air and cooling

effect, income, and stop soil erosion. Our community learns a lot from this project, and we want to restore many of our degraded lands”.



Bayeh Nega has been involved in agroforestry activities since 2018

Bayeh is 63 and married with 4 children and has been enrolled in the project since 2018. He has allocated all his farm to practice agroforestry (2.5 ha) and now grows *Rhamnus prinoidess*, *Olea europaea*, *Corrdia Africana*, *Militia fergune*, coffee and avocado. He sees that growing trees can deliver an income. “I am old, I cannot travel long and able to earn money like in my young age. I have to use all the opportunity and resources I have land and WeForest-THP project support. In just one year I harvest few leaves for market and earn 4500 ETB (approximately USD\$150 USD)”

### Coming up in 2020

- Identification of restoration sites for 2020 in progress.
- Seedling production in progress. Currently, a total of 251,108 tree are sown in two nurseries.
- Provision of training for farmer entrepreneurship (agroforestry, beekeeping).
- Assessment of needs for soil conservation structures across 9 villages and build check dams where necessary.
- Development of strategy to strengthen the livelihoods program (including beekeeping)

For more information on the project in Amhara

<https://www.weforest.org/project/ethiopia-amhara>

For more high-quality photos from Amhara [click here](#)