Forest restoration to reverse land degradation and poverty

74% of the Desa’a Forest, one of the oldest remaining dry afromontane forests in Ethiopia, has already disappeared.

The immediate consequence of degradation is erosion of topsoil and the significant reduction of agricultural yields for the communities that live here and rely completely on the forest for water, energy and to feed their cattle. Even more alarming is the possible long-term impact on local cloud formation and rainfall, causing more frequent droughts and food insecurity.

WeForest is working with the Tigray government to restore thousands of hectares each year. The small remaining area of intact forest is protected. Local nurseries grow and supply seedlings, and communities are engaged in planting, maintenance and building soil and water conservation structures. In return they receive equipment, training and support to develop new forest-friendly livelihoods such as beekeeping.

Our goals for the Desa’a project:

- **2020 goal:** 3,000 ha
- **Under restoration to date:** 6,024 ha

Project’s goal by 2030:

- **38,365 ha**
What’s new in Desa’a?

Recent highlights from the field

We set up shift work and social distancing measures to make sure we stayed well on the way towards our **planting target of over 400,000 seedlings**: by July we had already planted 350,950. 60% of them were *Olea europaea* and 40% were *Juniperus procera*.

We’ve already reached our 2020 goal to **map 3,000 hectares and bring them under restoration management**. Most of this is in a buffer zone of 1967 ha with intensive planting, and the remaining 1033 ha is a conservation zone with light planting to fill gaps. Both zones have assisted natural regeneration and are strictly protected against livestock and illegal human interference. Vegetation and soil carbon data have been collected from 89 new plots to establish the baseline data so we can track our impact over time.

This photo from a monitoring visit in June shows the re-vegetation of gullies to reduce erosion and restore soil quality in Kalamin village.
The project is on track with restoration, although COVID-19 has set back some of the livelihoods activities. Staff stayed in close proximity to the project site to ensure planting could take place, and because travel was restricted between different regions in Ethiopia. WeForest had to postpone training and consultation meetings. Markets were closed, which affected procurement for some livelihood activities such as small ruminants.

Monitoring visits took place in June with the Tigray Regional Bureau of Agriculture and Rural Development (TBoARD) and village and district representatives, leaders and experts. Muez Haile, Natural Resources Management Director at TBoARD, said: “The project has achieved tremendous activities that can be a good lesson for other similar projects. With the pandemic influencing the mobility of people, achieving such targets while still keeping social distancing is much appreciated.”

Wezef A. used to use the traditional cooking stoves and reported breathing difficulties from the smoke and injuries from the flames. “I am confident it will reduce the problems encountered in the past,” she said after trying the new energy-efficient Tikikil stove provided by WeForest. “On top of that, its firewood consumption is by far below that of the traditional stove.”
What’s next?

- We’ll collect data on the annual survival rates of seedlings planted in 2018 and 2019’s restoration sites.
- Between July and September, we’ll carry out ANR management and silvicultural practices such as pruning, weeding and measures to avoid invasive plants over 3,000 ha.
- As COVID-19 restrictions ease, we’ll resume our forest-friendly livelihoods activities:
  - Distributing over 400 bee colonies to poor households, as well as supplying honey extractors, wax printers and apiculture sets, and carrying out training in apiary practices.
  - Distributing agroforestry trees to programme participants.
  - Engaging poor women-headed households in small-scale poultry production and management and small ruminant reproduction and fattening.

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.