Reversing land degradation and poverty through forest landscape restoration

The team and project experienced the most challenging year to date: the Covid pandemic, the outbreak of war and the threat of a locust plague. Achieving our restoration targets this year is exceptional considering the circumstances.

The arrival of Covid meant that restrictions on movement initially affected staff travel to the project sites in April and May, but successful discussions with government led to a permit being granted, which minimised the disruption. Planting, soil and water harvesting construction could continue by following shift patterns and social distancing, though training and consultation meetings were postponed until later in the year.

The biggest impact on the project was the postponement of some planned livelihoods support, compounded by the outbreak of war later in the year. Some of the livelihoods inputs, such as sheep, are procured in local markets that were closed by Covid. Beehive procurement was also delayed, as were the cookstoves and solar lamps.

War broke out in late 2020. We have not seen the end of the trouble here, and remain in close contact with the team. Community mobilisation in 2021 could be challenging if the district government are still in conflict and security issues remain. Conflicts often create greater pressure on the forest with those who have been displaced or affected, so we are assessing the need to increase the number and intensity of our livelihood interventions. A sample survey is being conducted in February and March 2021 to assess impact and inform our plan, as there is now a large humanitarian aid presence mobilising in Tigray.

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

Restoration activities took place before the outbreak of war. Work in 2020 extended the areas under restoration in the villages of Kalamin, Felegewoyni and Golgolnale in Atsbi Wonberta district, and Hawile village in Tsaeda Emba district.

12 nurseries raised 917,512 seedlings this year: predominantly *Olea europaea* and *Juniperus procera*, as well as fodder species for farmland. Around 80% were mature enough to plant and the remainder will be used for the next planting season. A total of 683,867 tree seedlings (428,174 *Olea*, 229,783 *Juniperus*) were planted in the new (non-Shell funded) restoration sites.

3000 ha was brought under restoration management. This is almost double our original target due to successful sign-off of local by-laws and strong community mobilisation.

1967 ha of buffer zone was placed under intensive restoration management. This means enrichment planting of an average of 400 seedlings per hectare, soil and water conservation structures, and establishing protection from livestock and illegal activity.

1033 ha of conservation zone forestland was established. This means planting as gap filling with an average 50 trees/ha, establishing ANR and protection from livestock and illegal activity.

Site baselines: Vegetation and soil carbon data is collected from 89 plots (500 m × 500 m grid intervals) to monitor progress every 5 years.
Livelihoods

Cookstoves and solar lights

1000 of the 1831 energy efficient cook stoves we planned to provide were delivered to households in Kalamin, Felegeweyni and Hawile in August 2020.

Solar lights have been provided to 384 households from Felegeweyni kebele that were delayed from 2019; some of the recipients are shown below. A further 579 solar lights were purchased already, but were unable to be distributed yet.

Beekeeping distribution (Hawile) and training session (Felegeweyni)

Supporting beekeeping is one of the most challenging tasks due to an absence of colonies around the Desa’a area.

We met 78% of the 2020 target – 668 bee colonies are now with 223 households in Kalamin, Felegeweyni and Hawile village, with over 80% participating in training.

To address the challenge of low bee numbers, our team began the creation of a queen rearing hub aiming to fulfil the demand for 800 bee colonies over three years. Moreover, it will function as a beekeeping systems training centre for the local region.
Small ruminant management training in Felegeweyni

Approximately 30% of the annual target was achieved in delivering 726 ewes and 180 rams to 242 households. 392 female-headed households (45% of the target) were trained on small ruminant production and management.

Charity and stakeholder visits

Regional charity staff visited Kalamin and Felegewoyni in August 2020.

A stakeholder visit to Kalamin took place in July 2020.

Agroforestry – collecting apple planting material

The provision of fruit trees was one of the biggest challenges during this reporting period. Despite providing 1723 apple seedlings to 151 households from Kalamin and Felegeweyni, we had planned 6000. The lack of nurseries that raise grafted apples is the major limitation.
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.