

Annual Report

EthioTrees – Tembien Project



February 2020 – February 2021

Annual Report

Summary

Part A: Project Updates

Part B: Project Activities

Part C: Plan Vivo Certificate Issuance Submission

Part D: Sales of Plan Vivo Certificates

Part E: Monitoring Results

Part F: Impacts

Part G: Payments for Ecosystem Services

Part H: Ongoing Participation

Part I: Project Operating Costs

Annexes

EthioTrees – Tembien Project

Annual report February 2020 – February 2021

Submitted by: EthioTrees

Date of submission: 01 – 02 – 2021

Summary

Project overview	
Reporting period	February 2020 – February 2021
Geographical areas	Dogua Tembien (Tembien Highlands), Tigray Region, Ethiopia
Technical specifications in use	See approved PDD EthioTrees

Table 1: Summary table

Project indicators	Historical	Added/ Issued this period (Feb. 2020-Feb. 2021)	Total
No. smallholder households with PES agreements	0	0	0
No. community groups with PES agreements (where applicable) by Feb 2021	18	0	18
Approximate number of households (or individuals) in these community groups	3443	-9	3434
Area under management (ha) where PES agreements are in place	1892	0	1892
Total PES payments made to participants (USD)	86,119 USD*	58,298 during the past year	144,417 USD**
Total sum held in trust for future PES payments (USD)	2,947	0	0
Allocation to Plan Vivo buffer (tCO ₂)	4,290	1647	5,937
Saleable emissions reductions achieved (tCO ₂)	38,600	14,819	53,419

Unsold Stock at time of Submission (PVC)	
-	-

Plan Vivo Certificates (PVCs) issued to date	38,600
Plan Vivo Certificates requested for issuance (Feb. 2020 – Feb. 2021 Vintage)	14,819
Plan Vivo Certificates available for future issuance	0
Total PVCs issued (including this report)	53,419

* see previous annual report.

** USD values based on EUR to USD conversion rates on 24/02/2021 (source: www.xe.com).

Part A: Project updates

A1: Key events

- In Ethiopia, the first coronavirus case was reported on 13 March 2020, while in Tigray the first coronavirus case was reported on 7 May 2020. There has been a massive awareness creation campaign on the impact of COVID-19, through television, social media and radio. Due to those problems, the communities in our project areas were in lockdown. Citizens were restricted to go to the city, which is problematic for jobless young people. Concerning the implementation of activities, several trainings and community meetings were delayed but could continue in line with the annual targets.
- In October 2020, a locust plague was active around Raya, Axum and Adwa (Tigray). The project areas were spared from this plague. A resilient landscape is even more important in such periods.
- Tigray held unsanctioned elections for its regional parliament on September 9, with the TPLF securing 189 of 190 seats. On 3 November 2020, a regional conflict erupted in Ethiopia following these elections.
- Trainings have been organised over the reporting period: 1 training per exclosure (n = 18) was organized. Training focussed either on environmental management of the exclosure, or on the valorization of the non-timber forest products derived from these exclosures. Special attention was given to marketing training, in order to strengthen the negotiation position of the participating communities when selling the non-timber forest products such as incense and honey. Environmental investments (percolation ponds, planting) were made, in line with the annual targets.
- In 2020, four new site facilitators were hired as well as two new project employees.
- In 2020, EthioTrees held platform meetings with stakeholders from the regional bureau of agriculture, regional REDD+, SLM, Caritas and WeForest, Trees For Farmers, as well as the agricultural office of the Woreda (natural resource protection).
- Based on previous research on water quality and drinking water purification methods,

EthioTrees submitted a new proposal at the KBF to set up drinking water facilities in May Genet, Adi Lihtsi and Togoga. By June 2020, the KBF project was approved. Thus, later in 2021, EthioTrees will support rainwater harvesting structures at two schools, the establishment of an irrigation cooperative in May Genet, a chlorine water purifier in Togoga and one or more groundwater wells.

- Thanks to a recently approved Flemish fund, EthioTrees planned to expand with three new exclosures: Debremedhanit , Dawisra and Hawahiw, equivalent to 926 ha and 308 ha, and 200ha respectively. Because of the conflict, some of these expansions may be in delay.
- In its long-term strategy, covering the past and ongoing expansions, EthioTrees aims to regenerate forest patches in two altitudinal belts of Dogua Tembien Highland - an upper belt in the May Zegzeg catchment (draining towards Geba, where roughly 15 smaller exclosures are located) and a lower belt (steep slopes towards Geba, where roughly 6 larger exclosures are located) - following best practices in forest landscape restoration, with the aim to support naturally-assisted regeneration, improve ecosystem services and community resilience.

A2: Successes and challenges

- The main success this year included the further consolidation of the 18 existing exclosures. We hired new personnel in Ethiopia to include a team of 4 staff members in Tigray, and 5 site coordinators. Baseline data were gathered at 3 new sites Debremedhanit , Dawisra and Hawahiw; the first protection measures were implemented there.
- The main challenge was the start of the conflict in November 2020. We refer to Annex 3 for an impact assessment.
- Trainings and group discussions have taken place. The main focus of these discussions was the protection of the exclosures (keeping out the grazing) and on management of the exclosures (seedling planting and seedling irrigation, and soil and water conservation (percolation ponds, soil bunds and trenches). Site-specific trainings were also organized, concerning improved market access for incense at incense-producing exclosures and management of beehives at honey-producing exclosures or at homestead level.

A3: Project developments

Below, we give an overview of the project developments that have affected the governance, operations, contractual relationships or legal basis of the project:

- There are no relevant updates to the project documentation.
- In 2020, four new site facilitators were hired as well as two new project employees.
- In November 2020, erupting conflict remained far from the project area. In the project area, all phone, internet and bank access was cut. Despite the lockdown, life continued in the project area. TDF mobilized extra troops across Tigray, but the mobilization had not affected our project staff or direct partners. TPLF officials had left Hagere Selam before 4 December.
- After the regime change in Mekele, the front did move to the Tembien Highlands. In the week of 14 December 2020, shelling and fighting took place along the main road from Mekelle towards Hagere Selam. Fighting took place in Hagere Selam and the villages of Halah, Addi Qoylo and Ala'isa. In the week of 14 December 2020, external forces captured the town, looted most houses and then moved through town with convoys. Shops were not open. During the fighting, in Hagere Selam, from 25 up to 60 people would have died.

During this week, all EthioTrees staff members could flee to remote villages and caves, where they were safe from the shelling and fighting. We deeply regret the loss of the father of one of our EthioTrees staff members, who was killed in battle. All other staff members, as well as their families, remained unhurt.

Near the Plan Vivo site of Afedena, in the villages of Halah, Addi Qoylo and Ala'isa, nine civilians were executed by external troops.

With the exception of Afedena, which is near the main road, there was reportedly no fighting at other project sites. After the capture of Hagere Selam, external forces used the town as a transit area for convoys and moved on to Abiy Addi.

During the same week, the EthioTrees offices, as well as the houses of EthioTrees staff in Hagere Selam, were looted by external troops. Furniture was taken, but some important materials (EthioTrees laptops, motorcycles) were well hidden and were retrieved by EthioTrees staff.

After this terrible week in December, people self-organised at the level of

neighbourhoods (*idir*). EthioTrees staff members moved to their houses again. The Hagere Selam market reopened (on a daily basis). In town, there was no shortage of food, but prices were rising.

- In January 2021, EthioTrees staff resumed their activities in Hagere Selam. Staff members deliberated and decided to continue their useful work for the citizens of Tembien. All field coordinators were contacted; they visited all project sites. No impact on the project sites could be observed, with the exception of Afedena. All forest rangers, again with the exception at Afedena, have been continuing their work.

A4 Future Developments

- Further activities next year will focus on the recovery after the conflict. We aim to strengthen our work at the existing 18 exclosures, include trainings, seedling planting and seedling irrigation, and the installation of soil and water conservation structures such as percolation ponds, trenches and soil bunds. We aim to invest the plan vivo funds in “village recovery projects”, at the request of the citizens. The development of the new sites Debremedhanit, Dawisra and Hawahiw, equivalent to 926 ha and 308 ha, and 200ha respectively, may be delayed.
- A verification is coming up next year (2021 or 2022), at which point carbon sequestration rates will be verified and the impact of the conflict will be very clear.

Part B: Project activities

B1: Project activities generating Plan Vivo Certificates

- We list the technical specifications being used in the project, the area covered and participants using these specifications in table 2 below. We only include those areas where PES agreements have been signed.

Table 2: Project activity summary

Name of technical specification	Area (Ha)	No smallholder households	No Community Groups

Ecosystem Restoration in the Tembien Highlands	1892 ha	3434 in total	18
--	---------	---------------	----

B2: Project activities in addition to those generating Plan Vivo Certificates

- Trainings were organized to support non-timber forest production, including incense production in Adi Lihtsi (Amanit), Zban Dake (Walta) and Gojam Sefra (Enda Selassie). Around the Seret site (issuance request not included in this report, as the discussions with WeForest are still ongoing), community members are engaged in a variety of project activities for income generation purposes. They are trained to nurture the seedlings at community-nurseries and then plant and protect the saplings. Alongside this, the project targets women and young adults for training in additional livelihood initiatives to satisfy their nutritional, financial and energy needs in ways that ease pressure on the forest. These initiatives include apiculture, agroforestry and fodder production. Locals are trained to harvest grasses sustainably through a cut and carry system, which is then divided amongst community members to feed livestock in place of open grazing. Honey is a very attractive livelihood option for the community. There are two beehive cooperatives set up in the Seret area. In Seret, two nurseries are now in operation: Mygoa and May'sehe.
- In 2020, schools and drinking water reservoirs were constructed. We refer to Annex 2 for a photographic report on such activities in addition to those generating Plan Vivo Certificates.

Part C: Plan Vivo Certificate issuance submission

C1: Contractual statement

- This issuance is based on Plan Vivo maps and signed PES agreements with participants complying with all the minimum requirements stated in these agreements.

C2: Issuance request for projects where issuance is made on the basis of

ongoing activities on land already managed by the project (calculated ex-post).

Table 3: Statement of tCO₂ reductions available for issuance as Plan Vivo Certificates based on activity for reporting period February 2020 – February 2021 for all sites.

Area ID	Total area (ha)	Tech. Spec	Saleable ER's (tCO ₂) available from previous periods	Total ER's (tCO ₂) achieved this period	ER's minus leakage of 2%	% Buffer	No. of PVCs allocated to buffer from ER's achieved this period	Saleable ER's (tCO ₂) from this period	Issuance request (PVCs)	ER's (tCO ₂) available for future issuances
Adi Lehtsi	412.00	Ecosystem restoration	0	4536.00	4445.00	10	445.00	4001.00	4001.00	-
Gidme Gestet	46.00	Ecosystem restoration	0	270.00	265.00	10	26.00	238.00	238.00	-
Meam Atali	83.00	Ecosystem restoration	0	731.00	716.00	10	72.00	645.00	645.00	-
May Getnet	51.00	Ecosystem restoration	0	281.00	275.00	10	28.00	248.00	248.00	-
May Hibo	53.00	Ecosystem restoration	0	272.00	267.00	10	27.00	240.00	240.00	-
Afedena	81.00	Ecosystem restoration	0	0	0	10	0	0	0	-
Adilal	83.00	Ecosystem restoration	0	671.00	658.00	10	66.00	592.00	592.00	-
Gemgema	65.00	Ecosystem restoration	0	309.00	303.00	10	30.00	273.00	273.00	-
Zban Dake	300.00	Ecosystem restoration	0	3413.00	3345.00	10	334.00	3010.00	3010.00	-
May Baeti	45.96	Ecosystem restoration	0	291.64	285.8	10	28.58	257.22	257.22	-
Lafa	44.97	Ecosystem restoration	0	228.75	224.18	10	22.42	201.76	201.76	-
Daero Hidag	112.05	Ecosystem restoration	0	936.78	918.04	10	91.8	826.24	826.24	-
Togul	36.00	Ecosystem restoration	0	190.12	186.32	10	18.64	167.68	167.68	-
Sesemat	46.00	Ecosystem restoration	0	510.18	499.96	10	50	449.96	449.96	-
Adi Meles	64.79	Ecosystem restoration	0	399.72	391.72	10	39.18	352.54	352.54	-
Chele Quot	50.00	Ecosystem restoration	0	277.82	272.26	10	27.22	245.04	245.04	-
Katna Ruba	44.00	Ecosystem restoration	0	480.40	470.8	10	47.08	423.72	423.72	-
Gojam Sefra	275.00	Ecosystem restoration	0	3002.52	2942.48	10	294.24	2648.24	2648.24	-
TOTAL	1892		0	16801	16466		1647	14819	14819	-

C3: Allocation of issuance request

- The table below details the allocation of issuances from this project.

Table 6: Allocation of issuance request

Buyer name/ Unsold Stock	No. PVCs transacted	Registry ID (if available) or Project ID if destined for Unsold Stock	Tech spec(s) associated with issuance
<i>Ethiotrees (first issuance)</i>	4,873	104000000014099	<i>Ecosystem Restoration</i>
<i>Ethiotrees (second issuance)</i>	5,856	104000000014099	<i>Ecosystem Restoration</i>
<i>Ethiotrees (third issuance)</i>	9,769	104000000014099	<i>Ecosystem Restoration</i>
<i>Ethiotrees (fourth issuance)</i>	5,572	104000000014099	<i>Ecosystem Restoration</i>
<i>Ethiotrees (fifth issuance)</i>	12,530	104000000014099	<i>Ecosystem Restoration</i>
<i>EthioTrees (this issuance)</i>	14,819	104000000014099	<i>Ecosystem Restoration</i>
TOTAL	53,417	104000000014099	<i>Ecosystem Restoration</i>

C4: Data to support issuance request

- We provide the monitoring data for areas of land and participants which support our issuance request in Annex 1.

Part D: Sales of Plan Vivo Certificates**D1: Sales of Plan Vivo Certificates**

- To date, 38,518 Plan Vivo Certificates have been sold (not including this issuance, which credits will be sold over the course of 2021).

Table 7: Sales of Plan Vivo Certificates to date

Buyer	Year of transaction	Credits bought (tCO2-e)	Value per tonne (EUR)
Carbon Sink (IT)	2018	5000	Internal reporting only

Zero Mission (SE)	2018	5000	Internal reporting only
Carbon Sink (IT)	2019a**	5000	Internal reporting only
Zero Mission (SE)	2019a**	5450	Internal reporting only
Carbon Sink (IT)	2019b**	5000	Internal reporting only
Victor Buyck (BE)	2019	162	Internal reporting only
Zero Mission (SE)	2020a**	550	Internal reporting only
Zero Mission (SE)	2020b**	5696	Internal reporting only
Carbon Sink (IT)	2020a**	5000	Internal reporting only
Zero Mission (SE)	2020c**	1660	Internal reporting only

*USD values based on EUR to USD conversion rates on 05/09/2019 (source: www.xe.com)

** letters a, b and c refer to the sales of credits in spring, summer and in autumn respectively

Part E: Monitoring results

E1: Ecosystem services monitoring

- We provide annual monitoring results that support the request for new issuances in Annex 1.
- All monitoring targets were achieved, with the exception of project site Afedena, where heavy fighting took place and where at least 9 civilians were executed.
- No other corrective actions needed to be agreed with participants during this reporting period.

E2: Maintaining commitments

- As no participants have resigned or been removed from the project, or had Plan Vivo Certificates allocated against their activities, we do not provide a table with their details in an Annex. We lost 9 participants in Afedena.

E3: Socioeconomic monitoring

- We provide the results of monitoring of socioeconomic impacts (survey) every 5 years after baselining (impact indicators). Nevertheless, on a yearly basis, the project monitors its activities (yearly activity-based indicators).

These activities include in this reporting period the organization of 18 training sessions at the different sites.

The restoration project has also clear benefits for the wider communities living around the project exclosures. The most important factors include reduction of erosion and gully, conservation of soil nutrients and groundwater. For instance, forest restoration will locally benefit water availability for the upslope communities. Overall, we expect a net gain in (ground)water availability, also for the upslope communities. This is clearly visible at the site of May Genet. More socioenvironmental investments will be made in 2021, through the sales of the Plan Vivo credits.

E4: Environmental and biodiversity monitoring

- The South Initiative of Mekelle and Ghent University was expanding the existing monitoring program that was successfully applied to the previous 9 exclosures to all 1892 hectares (18 exclosures), in order to achieve (statistically) meaningful monitoring data distributed across the Tembien Highlands.
- Besides biomass and soil carbon estimations, the South Initiative also included monitoring of hydrology. Samples for hydraulic conductivity were taken from different exclosed and adjacent non-exclosed area.
- Based on correlations between soil carbon, above-ground biomass and explaining factors (topography, geomorphology, human activity), the Initiative created a scientific paper on carbon storage potential in the Tembien Highlands (paper currently in review in Land Degradation and Development).
- No other changes to the monitoring plans or protocols of the project need to be reported in the updates section of this report.

Part F: Impacts

F1: Evidence of outcomes

- We report research outcomes, patterns or trends from ongoing monitoring or other information which supports the impacts – socio-economic, environmental or cultural – which the project has had every 5 years after baselining. In Annex 2, we provide a short description of activities with photographs. To date, no scientific publications resulting from the project are available yet.

Part G: Payments for Ecosystem Services

G1: Summary of PES by year

- We use the following formula to allocate PEServices to n villages (see PDD):
$$\text{PES allocation} = 1/n * 50\% \text{ PES} + \text{Size}(\%) * 50\% \text{ PES}$$
- As of 20/01/2021 a grand total of 118,696 EURO or 144,417 USD (xe.com dd. 24/02/2021) derived from 38,518 Plan Vivo Certificates has been allocated as follows (in line with the allocation formula, PDD) (sum of all payments to participants since the project's inception in USD):
 - Adi Lehtsi (412 ha): 16217 euro = 19,737 USD
 - Gidmi Gestet (46 ha): 4740 euro = 5,768 USD
 - Meam Atali (83 ha): 5900 euro = 7,180 USD
 - May Getnet (51 ha): 4896 euro = 5,958 USD
 - May Hibo (53 ha) 4959 euro = 6,035 USD
 - Afedena (81 ha): 5837 euro = 7,104 USD
 - Adilal (83 ha): 5900 euro = 7,180 USD
 - Gemgema (64,7 ha): 5326 euro = 6,482 USD
 - Zban Dake (300 ha): 12705 euro = 15,462 USD
 - May Baeti (45,96 ha): 4738 euro = 5,766 USD
 - Lafa (44,97 ha): 4707 euro = 5,728 USD
 - Daero Hidag (112,05 ha): 6811 euro = 8,289 USD
 - Togul (36 ha): 4426 euro = 5386 USD
 - Sesemat (46 ha): 4740 euro = 5,768 USD
 - Adi Meles (64,79 ha): 5329 euro = 6,484 USD
 - Chele Quot (50 ha): 4865 euro = 5,919 USD
 - Katna Ruba (44 ha): 4677 euro = 5,690 USD
 - Gojam Sefra (275 ha): 11921 euro = 14,504 USD
- There are no funds being held by the project coordinator at reporting period end and there are no withheld payments at reporting period end.
- All payments are made in line with the terms of PES agreements signed.

Part H: Ongoing participation

H1: Recruitment

- Recruitment of the associations / focus groups of all exclosures was completed before. All sites comply with the eligibility criteria set out in the PDD.

H2: Project Potential

- No participant or area under management is on the project's 'waiting list' i.e. where a PES agreement is not yet signed but a *plan vivo* is in use.

H3: Community participation

- We briefly report on the community meetings held throughout the reporting period and attach the pictures of these to Annex 2.

Part I: Project operating costs

I1: Allocation of costs

- We completed the table below summarizing project costs during the reporting period and the sources of income used to meet these costs. The costs (excluding Plan Vivo investments) were fully covered using private donations and limited subsidies.

Table 8: Allocation of costs (for the Feb 2020 – Feb 2021 reporting period).

Expense	Narrative	Amount (USD\$)	Contribution from sale of PVCs	Contribution from other sources (Belgian subsidies)
Investments	Costs for soil and water investments, planting	8,500	0%	100%
Functioning	Materials, paper, equipment, transport costs	4,200	30%	70%
Personnel	Wages for project coordinators	11,200	30%	70%
Plan Vivo investments	See the socioecological investments described in section A1	58,298 USD*	100%	0%

* Equal to 144,417 USD (118,696 EURO according to xe.com dd. 24/02/2021) minus 86,119 USD (see previous report)

Annexes

Annex 1. Monitoring results that supports the issuance request

Ecosystem Services Monitoring (note: red circle indicates which target value was met)

Activity	Activity Indicator (measure annually)	Annual Targets			Results
		Full Target Achievement	Partial Target Achievement	Missed Target	
Restoration activities	Area of each enclosure undergoing active restoration activities	>10%	=10%	<10%	Adi Lehtsi > 10% Gidme Gestet > 10% Meam Atali > 10% May Getnet > 10% May Hibo > 10% Afedena > 10% Adilal > 10% Gemgema > 10% Zban Dake > 10% May Baeti > 10% Lafa > 10% Daero Hidag > 10% Togul > 10% Sesemat > 10% Adi Meles > 10% Chele Quot > 10% Katna Ruba > 10% Gojam Sefra > 10% → Guarding and restoration activities were covering all areas bar Afedena, which has been excluded from this year's issuance due to damage due to conflict.
Tree Planting	Number of seedlings	4000 seedlings	3000-4000	<4000 seedlings	12000 seedlings planted
	Survival Rate	>30%	25-30	<30%	Most recent survival rate estimate: 56.1 %

Socioeconomic Monitoring

Activity	Activity Indicator (measure annually)	Annual Targets	Results
----------	---------------------------------------	----------------	---------

		Full Target Achievement	Partial Target Achievement	Missed Target	
Capacity-Building	Number of organized trainings for landless farmers (M/V) per year per enclosure	1		0	Adi Lehtsi = 1 Gidme Gestet = 1 Meam Atali = 1 May Getnet = 1 May Hibo = 1 Afedena = 1 Adilal = 1 Gemgema = 1 Zban Dake = 1 May Baeti = 1 Lafa = 1 Daero Hidag = 1 Togul = 1 Sesemat = 1 Adi Meles = 1 Chele Quot = 1 Katna Ruba = 1 Gojam Sefra = 1
	Participants from more vulnerable groups (women, youth, elderly people)	>25%		<25%	At all sites > 35%
Availability of grass fodder	Beneficiaries of grass fodder per enclosure	>3	<3	<1	In all enclosures: cut-and-carry system implemented
Countering displaced grazing	Number of observations of displaced grazing mentioned during the yearly meeting of association, other NTFP users and the village council	<2	2	>2	Adi Lehtsi = 0 Gidme Gestet = 0 Meam Atali = 0 May Getnet = 0 May Hibo = 0 Afedena = 0 Adilal = 0 Gemgema = 0 Zban Dake = 0 May Baeti = 0 Lafa = 0 Daero Hidag = 0 Togul = 0 Sesemat = 0 Adi Meles = 0 Chele Quot = 0 Katna Ruba = 0 Gojam Sefra = 0
Countering timber harvesting on public lands	Number of observations of timber harvesting on public lands mentioned	<2	2	>2	Adi Lehtsi = 0 Gidme Gestet = 0 Meam Atali = 0 May Getnet = 0 May Hibo = 0 Afedena = 0

	during the yearly meeting of association, other NTFP users and the village council				Adilal = 0 Gemgema = 0 Zban Dake = 0 May Baeti = 0 Lafa = 0 Daero Hidag = 0 Togul = 0 Sesemat = 0 Adi Meles = 0 Chele Quot = 0 Katna Ruba = 0 Gojam Sefra = 0
--	--	--	--	--	--

Environmental Monitoring

Activity	Activity Indicator (measure annually)	Annual Targets			Result and mitigating actions
		Full Target Achievement	Partial Target Achievement	Missed Target	
Water Management	Number of Percolation Ponds per enclosure	2	<2	<1	Adi Lehtsi = 2 Gidme Gestet = 2 Meam Atali = 2 May Getnet = 2 May Hibo = 2 Afedena = 2 Adilal = 2 Gemgema = 4 Zban Dake = 2 May Baeti = 2 Lafa = 2 Daero Hidag = 2 Togul = 2 Sesemat = 2 Adi Meles = 2 Chele Quot = 2 Katna Ruba = 2 Gojam Sefra = 2

Annex 2. Project activities report

Our latest quarterly activity report – submitted to Plan Vivo Foundation in separate document.

