Darwin Initiative Main Annual Report

To be completed with reference to the "Project Reporting Information Note": (https://www.darwininitiative.org.uk/resources-for-projects/information-notes-learning-notes-briefing-papers-and-reviews/).

It is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)

Submission Deadline: 30th April 2022

Darwin Initiative Project Information

Project reference	28-010
Project title	Developing rural pathways to community resilience and ecosystem restoration
Country/ies	Ethiopia
Lead partner	Tree Aid
Project partner(s)	SUNARMA (Sustainable Natural Resource Management
Darwin grant value	£383,527
Start/end dates of project	Nov 21 – Oct 24
Reporting period (e.g. Apr 2021 – Mar 2022) and number (e.g. Annual Report 1, 2, 3)	Nov 21 – Mar 22 AR1
Project Leader name	Cheru Tessema Mammo
Project website/blog/social media	www.treeaid.org
Report author(s) and date	Tekle Jirane, Cheru Tessema Mammo, Josie Ellis

Please note: Major changes in the logframe (e.g., Output and Outcome level changes) must be approved. You can do this through submission of a Change Request form which can be found here.

1. Project summary

The dry forests of Ethiopia are diverse, dynamic and resilient ecosystems. Endowed with a rich biodiversity, they provide a multitude of natural resources and environmental benefits including the mitigation of climate change and desertification. High numbers of Acacia, Boswellia and Commiphora species are found. The Combretum-Terminalia ecosystems have been found to sink higher carbon stocks both in the biomass and soil, than some other dryland vegetation reported in Ethiopia and elsewhere in the tropics. Therefore, these woodlands may play an important role in carbon sequestration in the long-term whilst supporting livelihoods of pastoral communities. Combretum-Terminalia woodlands harbour diverse woody species which produce commercial gums and resins, such as Boswellia papyrifera. Boswellia forests in Ethiopia provide a major source of frankincense, alongside other important ecosystem services. However, these dryland forests are threatened by severe biodiversity loss and degradation. B.papyrifera accounts for 2/3 of global frankincense production, a resin which is collected through tapping the tree bark, and whose global demand has great potential to support livelihoods of rural communities living in poverty. However, over-exploitation and unsustainable land use, including agricultural expansion, overgrazing and bushfires, is leading to a collapse in the regeneration potential of B.papyrifera, as well as threatening the livelihoods of locals who depend on them. B.papyrifera

is particularly important in the landscape of Metema, an arid and semi-arid area in the north-western lowlands of Ethiopia and can make up to 30% of agro-pastoral household income. This income serves as a safety net during the dry months, reducing risks associated with agricultural failures, exacerbated by climate breakdown. Insufficient regeneration of B.papyrifera leads to intensified and unsustainable tapping on the remaining Boswellia trees, negatively affecting tree vitality. Studies reveal Boswellia will produce fewer and lower-quality seeds when intensively tapped and can reduce germination rates from 80% (from untapped stands) to 14%. Studies indicate a collapsing B.papyrifera population and predict a 50% reduction of frankincense yield in the next two decades. Tree Aid conducted a community needs assessment in Metema (February 2020) involving extensive discussions with both the local community and local government. The assessment highlighted the decline in agricultural productivity, and production of forest products in the area. There is great need for effective tools to monitor land-use and frankincense regeneration and to determine and improve quality standards of extracted products. Additionally, the frankincense value chain is largely underdeveloped, with grading done by buyers rather than tappers, who lack the resources to do this effectively. There is an urgent need for protecting and restoring Boswellia forests alongside the promotion of sustainable tapping, to prevent the collapse of the species, further habitat loss and land degradation

This project seeks to reverse this trend, through improved governance and inclusive decision-making. The introduction of viable harvesting and regeneration techniques for frankincense and promotion of sustainable land management on farmland will reverse forest degradation and increase farmland productivity, reducing agricultural expansion. Livelihood opportunities will be promoted, incentivising sustainable exploitation, whilst increasing incomes. The overall objective of the project is to increase the incomes for 2,250 vulnerable households through improved management of 25,388ha of Combretum-Terminalia woodland ecosystem in six kebeles (Das Gundo, Meshiha, Delello, Lemlem Terara, Agamwuha and *Tumet**) in North Gondar.

*Please note Tumet is under approval. More information can be found in section 3.1 under activity 1.2.

2. Project stakeholders/ partners

As formal and key prerequisite to launch the project SUNARMA prepared the project document according to the government guidelines for signing with the regional government. In February, the project agreement was signed between SUNARMA and the regional government partners including the finance bureau, environmental and forest protection authority and cooperative promotion agency. After receiving this official approval and contract from the regional government the project is endorsed and copies of project documents have been distributed to Metema zonal and woreda partners to commence the project officially. The project team are now preparing to conduct project introductions to concerned government bodies and communities.

The lead implementing partner in this project SUNARMA are central to achieving the objectives. Tree Aid and SUNARMA have worked in partnership since 2013 on a series of projects so this helps to foster a strong working relationship. Tree Aid Ethiopia, Tree Aid UK and SUNARMA work closely and collaboratively to plan, implement and monitor the planned activities. Communication between parties is regular via email and remote meetings. Tree Aid Ethiopia Project Manager engages frequently with SUNARMA and they have conducted joint trips to the project location in Metema for data collection and community engagement missions.
Gondar University, with whom SUNARMA has a long-standing partnership, will provide technical support in the project, specifically around on-the-ground GIS training.

Swansea University and Forest Research based in the UK are also involved in delivering activities in this project, specifically remote sensing to monitor the condition of the Boswellia trees over the course of the project. Tree Aid UK has taken the lead in terms of contracting and engagement, however, joint meetings have been held between all partners to foster learning and plan for activities. The collaboration between Gondar University, Swansea University and Forest Research is an excellent opportunity for all partners to learn, exchange and work together to deliver a sub-set of activities.

The Ethiopian Environment and Forest Research Insititute (EFFRI) will introduce and promote improved tapping methods to beneficiaries through practical hands-on training and assessment of the comparative benefit of using improved tapping tools on the trees.

The Ethiopian Biodiversity Institiute (EBI) will establish an in-situ conservation site which will be considered a national site that focuses on conserving the Combretum–Terminalia woodlands dominated by Boswellia papyrifera trees. EBI are responsible for conducting the baseline ecological survey and socio-economic survey.

Local communities, the Participatory Forest Management Cooperatives (PFMCs), primarily engaged in conserving, developing and sustainable utilisation of local forest resources are community based local institutions that will own and manage the proper administration of local resources. These groups are pivotal to our work and achieving the objectives.

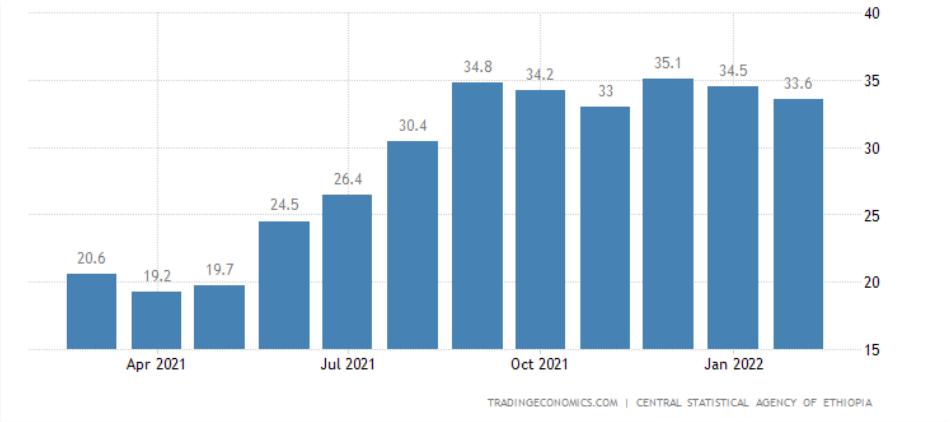
Local leaders have, and will continue to be, engaged. For example, when the RHoMIS baseline was conducted, they were part of the survey and facilitated the smooth implementation of the data collection by mobilising communities. During the project agreement process, they supported us by giving comments and arranging the agreement signing process.

3. Project progress

3.1 Progress in carrying out project Activities

As per RFC#1 (see annex section), agreed in October 2021, the start and end date of the project had to be modified to allow for the project objectives to be realised. We believe that a 31-month timeframe (to Mar-24) would have risked the desired outcomes and impact of the project being realised. Due to a late contracting date, meaning the project could only start in November, the end of the project was moved to Oct-24 and the activity plan and budget realigned accordingly.

Since budgeting, the ongoing political crisis in Ethiopia (caused by internal conflict), coupled with worldwide inflation, has seen national inflation at levels above 30%.



Over the last couple of months, the partner has been striving to fill the vacant positions both at field and head office. However, it has not been easy to get appropriate candidates with the budget available for each position. It has been necessary to make a decision to implement the project in a timely and effective manner by filling the vacant positions. SUNARMA has therefore recruited a Programme Officer at Head Office and Forestry/PFM & Livelihoods Officers at Project Office by supplementing the budget by using the unused balance from Nov. 2021 to date to fill the gap in their request.

However, we are still short of Finance & Admin Officer & Head of Finance & Admin staff both for project and head office, the main reason being inflation and the request of candidates which is way beyond the available budget. The project is operating in the absence of a Finance & Admin

officer and by using non finance staff which should not be the case for extended time. A proposal for how to manage this has been submitted to Tree Aid by SUNARMA and is under review.

The inflation is also putting pressure on current staffs' salaries, which is also under review at Tree Aid and SUNARMA levels.

Output-1: Promoting and supporting effective and equitable governance and environmental stewardship of Combretum Terminalia woodland in six kebeles through Participatory Forest Management (PFM) Cooperatives

Activity 1.1 Sensitisation on biodiversity conservation and environmental management for 2,250 PFMC members

This has been re-scheduled to take place in April-June 2022. Delays were caused due to the formal agreement with the regional government taking longer than anticipated and the complexities involved (due to the high inflation) for recruitment.

Activity 1.2 Undertake Forest boundary demarcation and area mapping

There have been some changes made to the original plan. At the initial project design stage, it was planned to undertake boundary demarcation and area mapping for six target kebeles (8 PFMC groups). Later, it was learned that for the four of the targeted kebeles, boundary demarcation had been completed, and area maps were produced. This was conducted by Dr Phil Marsh who specialises in the burning of the forest areas where we operate. The GIS maps with GPS coordinates are documented for the four kebeles in the table and map below.

The plan is to now facilitate the boundary negotiation and demarcation processes in the remaining two kebeles. With this understanding, one new potential forest kebele, namely Agamwuha, has been identified. Important preliminary works such as stakeholders' identification and engagement have been conducted. In collaboration with Dr Marsh we will look at any existing data but also demarcate the forest using detailed imagery and local knowledge.

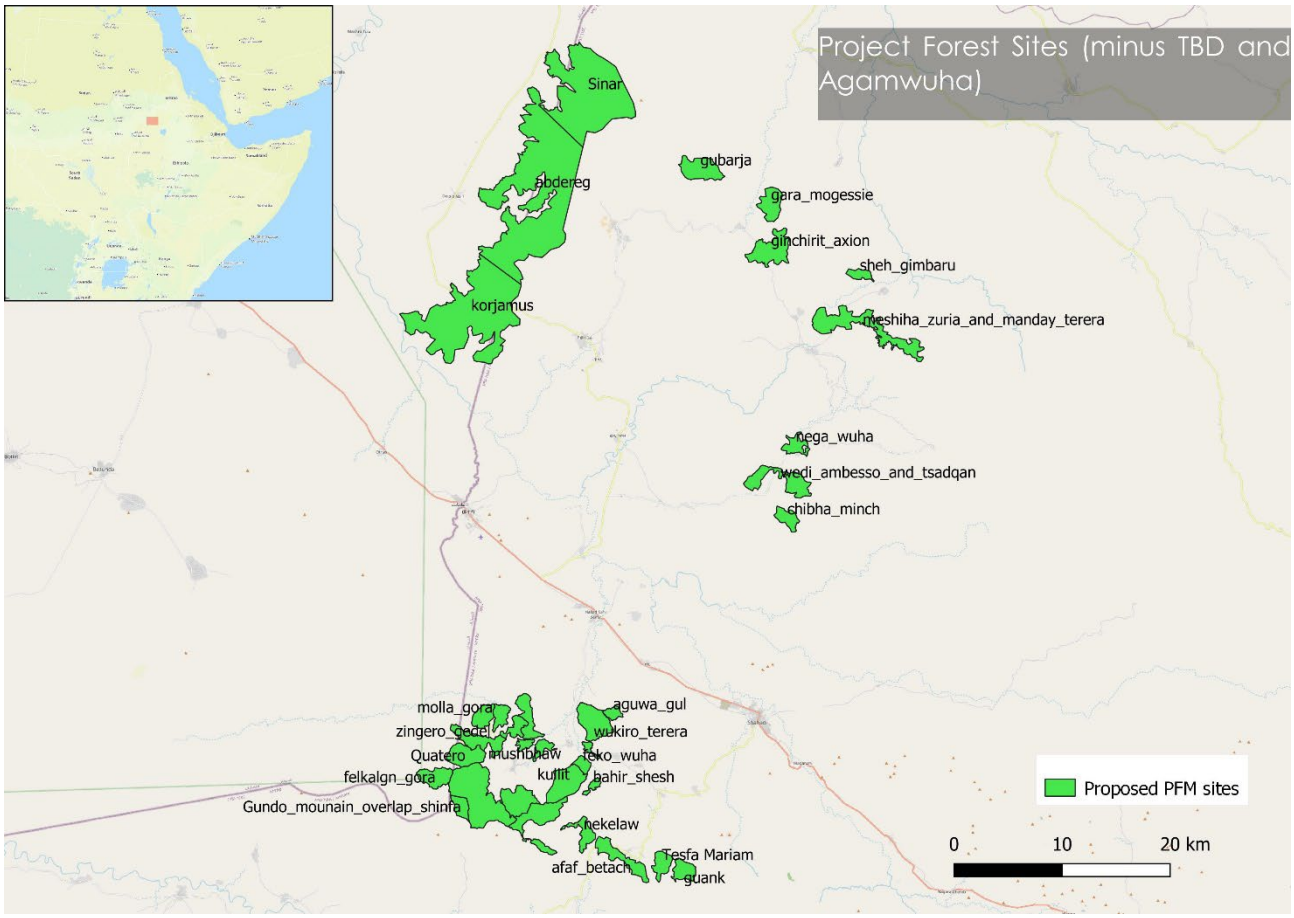
Unfortunately, due to the risk of heightened ethnic tension, we have had to make the difficult decision to cease engagement with one PFMC group, Zewdie Badma, in Gubai Jejebit kebele. In February 2022, during the household survey data collection, it became clear that the area was a risk as government staff were no longer conducting activities there. Therefore, the project team did not include the kebele in the sample for the baseline RHoMIS survey. The team assessed the situation thereafter to better understand the situation and to see if the issues would improve over the coming weeks. Although no violence has occurred, the risk is higher than other areas and this environment would make operations extremely challenging and potentially unsafe for staff and beneficiaries.

Therefore, this has required us to assess another area to engage in which is now underway. Another kebele, Tumet, is being assessed for its forest potential and talks are well underway with the concerned stakeholders including local communities and governments for their consent before the commencement of project activities there. Exhaustive stakeholders' identification is needed as it is crucial for future smooth facilitation of the boundary negotiation and demarcation processes as well as reducing potential disputes over boundaries or resource uses. The kebele is agreed in principal, but awaiting official approval from the authorities.

Kebele	**FMC**	**Comments**

Das Gundo	Das	GPS coordinates and maps available
Das Gundo	Gundo	GPS coordinates and maps available
Lemlem Terera	Tach Lemlem Terera	GPS coordinates and maps available
Lemlem Terera	Lay Lemlem Terera	GPS coordinates and maps available
Meshiha	Meshiha	GPS coordinates and maps available
Delello	Delello	GPS coordinates and maps available
Gubaj Jejebit	Zewdie Badma	Ceasing operation. New FMC/kebele Tumet to replace this one.
Agamwuha	Agamwuha	GPS coordinates and maps to be sourced and produced

Table 1-List of kebeles and PFMC groups



Map of project sites

Activity 1.3 Training on cooperative management for PFMC leaders (10pp in 8 FMC)

Preparations were made in the reporting period to facilitate training on cooperative management for the target PFMC leaders. This included preparing terms of reference that define the training contents and approach and roles and responsibilities of the trainer. Preparations have been made and the training will be delivered in May 2022.

Output 2: Building sustainable harvesting and regeneration techniques of frankincense (Boswellia papyrifera) in Combretum-Terminalia woodlands to promote responsible exploitation and reverse resource degradation

The following activities were all planned to be completed in y1 – these have not been completed before March 2022, but are scheduled to take place in the Apr-Oct period.

2.1 Forest inventory, in-situ site establishment, and socioeconomic study (completed April 22)

The contract agreement with EBI has been signed. EBI have conducted the in-situ site identification, forest inventory and socio-economic study. The report is currently being written.

2.2 Site identification for comparative analysis of traditional vs indian tapping method (by Ethiopia Environment and Forest Research Institute (EEFRI)

The contract with EFFRI has been signed. The schedule of work and plan has been developed and work commences end of April and will be completed early May. This will involve the following set of activities:

- Stakeholder discussion including with SUNARMA and government and agricultural officials
- Site selection for tapping experiments in the six kebeles/PFMC sites. One experimental site will be selected per kebele/PFMC site, where both tapping methods will be tested.
- Experimental sites will be selected and established where healthy *Boswellia papyrifera* trees are found, and the site is not disturbed by farming activities.

2.3 Training on indian tapping method 120 people in year-1 and 120 people in year-2 2.4 Distribution of improved tapping tool

This will be conducted by EFFRI. The ToR for the training has been drafted, participants have been identified and the venue has been secured.

2.5 Field and spectral data collection for inventory and condition assessment

The contracts have been prepared but not signed. We are very close to finalising, but the process has experienced significant delays from the University and Forest Research contract departments. Planning meetings have been held and some equipment purchased including x4 drones. Swansea University and Forest Research are now beginning their research into the project area and sites and further preparations for their involvement will be made. The civil unrest in the country may result in their involvement being solely remote from the UK, but the collaboration with Gondar University should enable them to work collaboratively on this area of work to achieve the same outcomes.

2.6 Development of cartographic products using remote sensing to support the development of forest management plans (by Swansea University with Forest Research)

See 2.5.

2.7 Training government and project staff on GIS and remote sensing (by Forest Research remotely)

See 2.5.

Output 3 Improved farmland productivity through the adoption of sustainable land management and climate smart agriculture practices for 2,250 households

3.1 Training on locally appropriate climate smart agriculture practices and technologies for project staff and local government experts for 3 days at woreda level

Training is due to take place between May- June.

Activity 3.4 Distribution of forage seeds, cutting, and seedlings for selected 540 households 50 per household

The establishment of a nursery site and raising of different tree seedlings (funded by FCDO project) is underway with more than 80,000 pots filled with soil and seeded with endangered tree species. When these reach maturity they can be distributed among households.

Output 4: Household income of 360 men and women households improved through establishment of Village tree enterprises

Activity 4.1 Establishment of 18 VTEs (12 frankincense, 6 beekeeping)

PFMC site selection for the frankincense and beekeeping enterprise development has taken place. This activity will take place in the next quarter.

Activity 4.2 Training on drying, storing and grading of frankincense for 240 tappers

This will take place in the next quarter.

Activity 4.3 Material support for drying and storage of frankincense groups

As learned during the field monitoring visit, out of the eight PFMCs targeted by this project four of them - Das, Gundo, Meshiha, and Delello, have engaged in the collection of frankincense from their managed forests. Altogether they produced 523 quintals of frankincense (Das 30, Gundo 43, Meshiha 250, and Delello 200). Still, more yields are anticipated during the harvest season which lasts until May.

Thus, to support the PFMCs in the areas of improved post-harvest handling, a needs assessment was conducted. Accordingly, the necessary drying and storage materials were identified, including drying matts and sisal sacks. A bid document has been prepared, and the procurement process will be done shortly.

3.2 Progress towards project Outputs

Output 1: Promoting and supporting effective and equitable governance and environmental stewardship of CombretumTerminalia woodland in six kebeles through eight Participatory Forest Management Cooperatives (PFMCs)

Indicator 1.1 Eight legally recognised Participatory Forest Management Cooperatives (PFMCs) active by end of year 1 Baseline: 0

The PFMCs are legally registered, including the one awaiting final approval for involvement in the project.

However, the groups are not active. The PFMCs are in need of support to develop and strengthen. For example, from the Organizational Capacity Assessments conducted for baseline, it was found that;

14% of PFMC report having good financial management capacities
29% report good production capacity
0% report access to market information
43% report good capacity in NTFP collection
14% report good capacity in NTFP aggregation

These metrics will be tracked over time to assess how the groups are progressing over the course of the project and will enable us to track progress towards the groups becoming ‘active’. Source – Sunarma records and OCAT.

Indicator 1.2 Women account for 30% of membership and leadership positions in PFM Cooperatives (year 2: 21%; year 3: 30%) Baseline: 18.8%

Of 7 PFMCs assessed in detail to date, of the 1,480 members, 278 (18.8%) are women and 8 of 62 leadership positions are held by women (12.9%).

Source of evidence – OCAT conducted with 7 PFMCs (March 2022). Our Organisational Capacity Assessment is a supported self-assessment which tracks a range of metrics including membership, management, governance and finance of community groups.

Indicator 1.3 Eight local land and forest tenure charters (by-laws) developed and adopted for the inclusive management of the woodland by the end of year 2

Activity scheduled to begin Q3 YR 1.

Indicator 1.4 8 Forest Management Plans reviewed/developed and adopted, for the area under the responsible of the PFMC Cooperatives by the end of Yr 2 Baseline: 5/8

5 of the target PFMCs have reported having a management plan in place. The Forest management plan entails 4 key aspects: 1. Forest protection from fire, illegal tree cutting/deforestation, 2. Forest development- tree planting, assisted regeneration, 3. Forest utilisation - harvesting of Frankincense, and 4. M+E. These aspects will be agreed by members of FMCs and the necessary timeframes, including where, when, what, and who will be responsible will be arranged.

The project will focus on the review of these plans and updating them based on project activities and other identified needs. 5 PFMCs have management plans for their forest areas those without plans are Agamwuha and Dellelo, plus the new kebele/PFMC, but these management plans should be revised regularly. We have found there to be a lack of commitment to implement the prepared plans and there are also technical issues to be addressed.

Source: SUNARMA records.

Output 2: Building sustainable harvesting and regeneration techniques of frankincense (Boswellia papyrifera) in Combretum-Terminalia woodlands to promote responsible exploitation and reverse resource degradation

Indicator 2.1 One in-situ biodiversity conservation enclosure site established and managed under the responsibility of Participatory Forest Management Cooperatives by the end of year 2 Baseline: 0

In April 22, EBI completed the identification of the in-situ site and the forest inventory, and are in the process of conducting the data analysis and compiling the report.

Indicator 2.2 80% (192/240) of producers (VTE members) trained are using new tapping techniques by the end of year 2 (year 1: 96 (40%); year 2: 192 (80%)) Baseline: 0

In April and May 2022, EEFRI will be conducting stakeholder engagement and site selection for testing the two comparative tapping methods across 6 kebeles. The training will follow thereafter.

Indicator 2.3 50% increase of 1st (1A) and 2nd (1B) grade frankincense products produced and sold by each (of the eight) PFM Cooperative as measured from project baseline by the end of the project

The indicative project baseline has been gathered from capacity assessments from 4/8 PFMCs. The rates of White (High) grade frankincense is already high (see below) and therefore we will submit a request for change to the log frame to increase the high-grade target by 4% to 92% by year 3.

Baseline
High grade contains (1st grade special (1A), 1st grade (1B), 2nd grade, 3rd grade)
Medium grade (4th grade special and 4th grade normal)
Lower grade (5th grade)

White: 545.73 Quintals (87.7%) - High grade
Black: 76.45 Quintals (12.3%) - medium grade
(Based on x4 PFMC: Das; Gundo; Delello; Agamwuha)

Indicator 2.4 70% survival rate (naturally regenerated seedlings) as measured from project baseline by the end of the project (Disaggregated by species) Indicative baseline 16% (source: Adamu et al, 2012)

In the next reporting period, we will be setting up monitoring plots in the areas identified for high regeneration (2 in each site). After one year we will assess both the survival and population stratification of trees in terms of their height and diameter compared to baseline to see how this has changed over time. We will set up plots in control areas to monitor the situation in sites outside of our intervention.

Output 3: Improved farmland productivity through the adoption of climate smart agriculture (CSA) practices for 2,250 household

Indicator 3.1 20% increase in crop yields (per Ha), as measured from project baseline, by the end of the project

In this reporting period we collected baseline data for this indicator, as follows:

Beneficiaries (Median Averages)
Cotton: 900Kg
Sorgum: 500kg
Teff: 400 Kg
Other Vegetables: 67kg
Sesame: 53kg
Maize: 42kg
Soya Beans: 40kg

Source: Rural Household Multi Indicator Household Survey (RHoMIS).
RHoMIS is a household level digital survey that was developed to target smallholder farmers in low-income countries. Tree Aid uses RHoMIS to capture information at project baseline and end line on a wide range of issues including household income (disaggregated by source of income), changes in agriculture practices, livelihood strategies, dietary diversity, food security (disaggregated by source of calories), and fuel wood consumption. In addition to core RHoMIS modules, Tree Aid has developed additional specific modules on Forest Governance, Voice/Choice/Control (gender metric), Non-Timber Forest Products (NTFPs) and Natural Resource Management (NRM) techniques. Data is collected digitally and stored on https://ona.io/. Sampling is done to 90% confidence and 5% margin of error. Data is analysed geographically and thematically12, and is compared to other projects across the Tree Aid portfolio. Data is anonymised and shared with the wider global RHoMIS community of practitioners.

Indicator 3.2 70% (1,575) of farmers practicing at least 3 climate smart agricultural techniques on their farms by the end of the project

Of the 349 beneficiaries surveyed at baseline, 60 responded that they are utilising at least three Climate Smart Agricultural techniques (17%). These are a range of Biological and Soil & Water Conservation techniques. Tree Aid is not considering Gully Control techniques, which are natural resource management techniques, to be Climate Smart Agricultural techniques.

Source: Rural Household Multi Indicator Household Survey (RHoMIS).

Output 4: Household income of 360 men and women households improved through establishment of Village tree enterprises

The indicators in Output 4 refer to 18 Village Tree Enterprises (VTEs) that will be developed throughout the project. There is no data to use as a baseline for these groups as yet.

Indicator 4.1 18 VTEs established and develop appropriate Enterprise Development Plans (EDPs) by the end of year 2 (currently funded through UKAM)

Indicator 4.2 Average turnover for active VTEs established and increase to 150,000 Birr/enterprise/year ($3,800) by the end of the project (year 2: 75,000 Birr; $1,800) (To be confirmed)

Indicator 4.3 Three contract relating to frankincense signed with buyers by the end of the project (To be confirmed)

3.3 Progress towards the project Outcome

Increased incomes for 2,250 vulnerable households through improved management of 25,388ha of CombretumTerminalia woodland ecosystem in six kebeles in North Gondar.

Indicator 1: Household income increase by 25% by end of the project as measured from project baseline

The baseline data has been collected through the household survey, as follows (with sources of income disaggregated):

Total HH Income: $4,099.75 (mean/hh)

NTFP Income: $129.34 (mean/hh) (3% hh income)

Crop Income: $2,286.13 (mean/hh) (56% hh income)

Livestock Income: $835.34 (mean/hh) (20% hh income)

Off-Farm Income: $848.93 (mean/hh) (21% hh income)

Indicator 2: 5% increase in vegetation cover and production potential of 25,388ha of woodland area under forest management plans in the project area by the end of the project from project baseline

The forest inventory has been completed and the report is currently being compiled. Results of this will inform the baseline for this indicator. We will also establish current vegetation cover using remote sensing, led by Forest Research. This will be done at the end of the project in order to assess change. We will also establish 2 monitoring plots per PFMC site which will provide on the ground details.

Indicator 3: Tree density in enclosure areas increases in each of the PFMC sites established, by an average of 25% by end of the project as measured from project baseline (disaggregated by species)

The forest inventory may help to inform the baseline for this indicator, but if the data was not collected in the specific sites where enclosures will be established, we will set up specific monitoring plots in sites for high regeneration and protection activities. These will be compared over time and with control sites (i.e those not under protective measures such as firewalls, grazing and human interference bans etc).

3.4 Monitoring of assumptions

Assumption 1 Output level: No reappearance of civil unrest. Mitigations: Project kebeles have been selected due to the relatively low amount of civil unrest. Conflict management work is being done through the programme of work proposed. Prospective participants confirmed that they are open to working together with people from different ethnic groups.

Comments: A State of Emergency was declared in Ethiopia November 2021 following the Tigray People's National Front gaining ground in the Northern and North Eastern regions (part of Amhara, Tigray, and part of Afar regions). However, Metema, the project area, was not affected. The team monitored the situation closely and have been working according to the original plans. As of February 2022, the State of Emergency was lifted.

However, as reported, to date we have not been able to engage with one PFMC due to the presence of ethnic tension between the two major groups Qimant/Amhara. There is no violence,

but it has been identified that the risk of working there is higher than other areas and engagement and implementation will be more challenging. We have therefore decided to cease operation in this area and will add a new PFMC site (Tumet) to the project in due course, as mentioned in 3.1.

Assumption 2: rate of inflation and the impact on the budget

Comments: The current rate of inflation is 35%. This is impacting on smooth project implementation. For example, on recruitment, the original budget allocation in Ethiopian birr is not sufficient to match candidates' expectations and has slowed down the appointment of staff at the SUNARMA Head Office. The inflation is increasing the cost of raw materials as well, for example, increasing costs of materials needed to establish the nursery site. The management of the inflation will require regular monitoring of both inflation and exchange rates to ensure that the budget can match the needs and keep up with changing prices (though the exchange rate has only moved 11% in 6 months meaning that the financial resources are becoming more limited).

3.5 Impact: achievement of positive impact on biodiversity and poverty alleviation

Reducing pressures on natural resources alongside establishing sustainable management and restoration activities will contribute to the protection and conservation of genetic resources, improved biodiversity and enhanced forest ecosystems. Healthy forest ecosystems will in turn increase resilience and reduce poverty in the region.

During the project life span, the project aims to achieve a 5% increase in vegetation cover and production potential of 25,388ha of woodland area under 8 PFMCs. The project will create framework for the 25,388ha of Combretum-Terminalia woodland ecosystem to be sustainably protected and managed including through building the capacity of 8 PFMCs in effective forest governance and development of bylaws and management plan for each PFMC. As reported in section 3.1, forest boundary demarcation and area mapping are completed in 4 kebeles which constitutes the first step toward the development of the bylaws and the management plans. The PFMC will receive training in the next quarter to strengthen the management of the cooperatives. Some preparations works have been going on during the last 6 months, including development of the terms of reference for the training.

Boswellia papyrifera populations will continue to increase through the actions of the project, securing this vital natural resource base for future generations. Sustainable frankincense harvesting will be promoted through alternative and improved tapping techniques taught to 240 tappers. Additionally, the regeneration of B.papyrifera will be achieved through development and effective management of enclosure areas in order to prevent tappers from continuing to tap at an unsustainable rate. The project will encourage tapping on designated areas on a rotational basis to ensure tapped areas are given sufficient time to recover to the previous year's tapping. Together this will prevent further degradation of the landscape and restore the Boswellia population. During the reporting period, partnership agreements have been signed with EBI and EFFRI who will start their activities in April /May 2022. The in-situ site, identified by EBI, will be formally handed to local government for their management and will be recognised as a national site of conservation in the Combretum–Terminalia woodlands dominated by Boswellia papyrifera trees. In addition, Swansea University and Forest Research are now beginning their research into the project area.

By building the capacity of 2,250 farmer in climate smart agricultural practices, they will be able to restore their agricultural lands. The restoration of degraded landscapes will increase land productivity and availability of tree resources, leading to an increase in income and resilience to climate change and a decrease of the pressure on Boswellia woodland. The training in climate smart agricultural practices will happen during the next quarter as well as the distribution of forage seeds, cutting and seedlings to farmers.

360 households (25% women) will be incentivised to sustainably manage forest resources through the establishment of 18 economically viable VTEs. Based on our experience and market analysis, households engaged in the VTEs will experience an average 100% increase in income from NTFPs by the end of the project. The additional household income generated can help address key basic needs such as food, health and education. During the reporting period, the specific sites with potential for frankincense and beekeeping enterprises development were identified. The VTEs themselves will be established, trained and equipped in the next quarter

4. Project support to the Conventions, Treaties or Agreements

Ethiopia has a National Biodiversity Strategy and Action Plan (2015-20) for implementing the Convention on Biological Diversity (CBD) at the national level. The project will contribute to the targets of the strategy. The project will contribute especially to the targets 4, 5,10 and 14, by promoting sustainable harvesting of forest resources to support local livelihoods, reducing anthropogenic pressures on tree resources alongside strengthened forest governance (through PFMC) and natural regeneration. Additionally, the promotion of sustainable land management and climate smart agriculture, will increase land productivity, reducing agricultural expansion. The reduction of damaging practices and increased forest cover will contribute to increased ecosystem services, including carbon sequestration.

This project will be implemented with support from the EBI, the CBD focal institution in Ethiopia. The EBI signed a partnership agreement with Tree Aid and is responsible for the in-situ site identification, forest inventory/ecological which will happen in April 2022.

The project will promote the community based PFMC model which will empower the local community to manage their own forest resources and develop bylaws and management plans for each PFMC contributing to the Aichi B7 and article 8f. The training for the PFMC leader will happen during the next reporting period as well as the demarcation of the two kebeles. This demarcation and the mapping are the first steps toward the development of the bylaws and management plans. This exercise has already been done in 4 of our targeted kebeles. In addition, building the capacity of PFMC members on sustainable frankincense harvesting will help prevent further degradation of forest in the targeted area (Aichi B5). The project will increase local knowledge on forest value and importance included through sensitisations that will start in April 2022 (article 8d). Actions through this project will protect Boswellia forests from further degradation, contributing to the safeguarding of vital ecosystem services including availability of non-timber forest products to support livelihoods taking into account specific needs and perspectives of women (Aichi D14). Additionally, the protection of Boswellia forests and reduction in further forest loss will promote carbon sequestration in the area, contributing to climate change mitigation and prevention of desertification (Aichi D15). The project is based on a bottom-up approach where the design is centred on the needs of the local population. Project activities will build capacity within these communities who will be empowered to take practical actions to manage and restore biodiversity (article 10c). The project will protect and restore 25,388ha of Combretum-Terminalia woodland, contributing to the reduction in greenhouse gas emissions, and so to the UNFCCC, which Ethiopia ratified on 9 March 2017.

5. Project support to poverty reduction

The project aims to increase household income by 25% for the 2,250 vulnerable households involved in the project in six kebeles (Das Gundo, *Gubai Jejebit*, Meshiha, Delello, Lemlem Terara, Agamwuha, TBC Tumet) in North Gondar (outcome indicator 1).

Our baseline data shows that the mean household income is $4,099.75, so a 25% increase would represent about $1,024. To achieve this increase, the project will support the development of 18 VTEs (360 people), 12 based on frankincense and 6 based on honey. The project aims to increase the average turnover for active VTEs established to 150,000 Birr/enterprise/year. Women, who are the most significantly impacted by poverty, compose 25% of the direct recipients of the VTEs.

Furthermore, the project is targeting both a more sustainable use of the frankincense forest and a higher grade of frankincense to be harvested. This should both increase incomes in the short-term and protect a key resource for the longer term. The project aims to increase the (1A) and 2nd (1B) white grade frankincense products produced and sold by 4% bringing it to 92%.

The climate smart agriculture practices adopted by a large number of farmers in the intervention area (an estimated 2,250 farmers) will contribute to increase their land productivity (crop yields) and the household income in the long-term.

In addition, the extra income will enable beneficiaries to use the extra cash to buy food which will help them to get through the lean season or to cover some medical case.

6. Consideration of gender equality issues

The project will actively target women and ensure inclusion in project assessment, interventions and outcomes. Tackling strategic gender interests will be through the active support of women, enabling them to become a more effective voice and actor in Combretum-Terminalia woodland management. Women will be supported to participate in governance structures, increasing capacity and sense of ownership over natural resources, and will increase their voice and decision-making power. The project aims to increase the percentage of women members of PFMC to 30%. In addition, 25% of the VTEs members will be women. They will then have access to business training, production equipment and market. We use the RHoMIS a household socio-

economic survey which includes a Voice, Choice and Control tool in order to assess and monitor changes to availability and access to NTFPs and agricultural products, the non-income and income stream provided by NTFPs and differentiated impact on household economies and gendered distribution of benefits.

Integrating women in this way should improve their confidence in raising income for their household and their ability to take up leadership positions and access the benefits of new income resources subject to household decision-making. The organisation of training and other activities will be adapted to women's schedules to promote participation.

The project will also conduct a gender study to map, support and measure the gendered impacts of the interventions at community and household level (activity 1.7).

7. Monitoring and evaluation

Tree Aid prepared a Rural Household Multi-Indicator Survey and conducted training for the partner staff and 7 enumerators between 11-14th February 2022.
The household survey was collected 14-22nd February 2022. A sample size of 383 provides 95% statistical confidence, with a 5% margin of error. The baseline survey was led by Tree Aid, and the project team was actively involved in the entire baseline data collection. In this baseline survey, 383 households (349 beneficiaries, 34 control households) were interviewed, and data was collected from seven forest management cooperatives focusing on tree management practices, forest coverage, frankincense production, members' participation in PFM, etc. Data was also collected from a Cooperative Union regarding capacity assessment in terms of marketing (quality, reaching out to the export market, bargaining, etc.) and leadership.

RHoMIS will enable us to track a number of indicators from baseline to endline including household income increases, increase in crop yields and use of climate smart agriculture techniques.

The project beneficiary list has been collected with 2,281 in total, of which 1,614 beneficiaries are forest management committee members.

Other sources for monitoring project indicators include;

- The ecological survey to be conducted by the Ethiopian Biodiversity Institute may provide baseline data for vegetation cover and tree density (awaiting results).

- Forest resource mapping of project intervention sites will provide baseline and endline data on vegetation cover and tree density.

- Permanent monitoring plots will be established in enclosure/high regeneration sites to establish tree survival and population stratification based on seedling regeneration.

To track change over time based on our intervention, we are tracking socio-economic metrics with non-project (control) households from neighbouring kebeles. Change over time in beneficiary households will be compared to change over time in control households.

We are also planning to track tree density and survival rates of trees in non-project areas. Change over time in project areas will be compared to change over time in non-project areas.

The M&E Plan will be reviewed when we receive the Ecological Survey commissioned by EBI.

The review is planned for April-June 2022.

Tree Aid leads on the project M&E. A Tree Aid M&E officer has been recruited and is stationed full time in the local partner, regional office.

Tree Aid share M&E files and folders through Microsoft Sharepoint, and we store M&E survey templates and collected data on the ONA website.

Tree Aid are in the process of commissioning an M&E Information Management System (IMS), to automate the collection and tracking of Key Performance Indicators. This will have interactive dashboards accessible by all in-country teams.

8. Lessons learnt

We have experienced delays finalising partner contracts and agreements. It is important to understand and to agree in advance the role of each partner and contractor before the contracting stage.

The multiple partners involved in this project has advantages in terms of exchange of skills, experience and collaboration, but it also provides a level of complexity in terms of bringing them together and actioning next steps within a given timeframe. We need to ensure coordination and communication is strengthened between the partners going forwards through regular meetings and shared/online working spaces.

Security concerns have resulted in uncertainty of travel both in country and from UK to Ethiopia. We have kept in close contact with both SUNARMA and Tree Aid Ethiopia team on the security concerns, but this needs to continue.

The high rates of inflation have been a real challenge. As reported in 3.1, for recruitment this has taken more time that anticipated as work was needed to analyse budgets to see if underspend could be utilised to increase salaries, and we still have some appointments to make. This requires a collaborative approach between programmes and finance teams to understand the situation and make decisions for the benefit of the project.

SUNARMA are proving to be a good partner – they are well engaged, responsive and have a good team in place to lead implementation.

The orientation training on the baseline survey was critical for the enhanced commitment of the project team and expediting the baseline survey without compromising the quality of the required information.

The good rapport SUNARMA has with the regional and local governments enabled the project agreement signing despite some back-and-forth discussions to finalise.

9. Actions taken in response to previous reviews (if applicable)

N/A

10. Other comments on progress not covered elsewhere

N/A

11. Sustainability and legacy

The exit strategy as presented in the proposal is still valid. The project is built around an in-depth understanding of community needs, and based on a bottom-up approach, ensuring sustainability of outcomes. The project design will strengthen capacity of stakeholders to continue with improved practices without further support. The 8 PFMCs, are set-up to take on the stewardship role assigned to them through the enabling national policy environment. Training in inclusive governance, biodiversity conservation, NRM legal texts and enclosure area management will provide the necessary skills for rehabilitation of the Combretum-Terminalia ecosystem beyond the project. The training will start in the next quarter. PFM members will be financially incentivised to continue with their activities through involvement in forest-based enterprise development activities. Collaboration with relevant stakeholders (EBI, EEFRI, various departments of the Woreda and Kebele administration) has been key to the design process and will ensure long-term impact and create the necessary momentum for replication. Tree Aid signed partnership agreement with the different partners on this project and their activities will start next quarter. Training in CSA and agroforestry will empower communities to restore and regenerate land after project end. Increases in agricultural productivity and B.Papyrifera availability will incentivise continuation of improved practices. The VTE model provides farmers with skills to run a profitable business without further support, whilst emphasising sustainable use of natural resources. Facilitating market linkages will empower VTEs to continue their income-generating activities in the long-term.

12. Darwin identity

To date, we have not publicised the project or Darwin Initiative. However, the Tree Aid communications team will plan to do this in the next quarter and over the course of the project. There will be coverage on social media as well as dedicated pages on the Tree Aid website.

13. Impact of COVID-19 on project delivery

Thus far, Covid-19 has had little to no impact on the project.

14. Safeguarding

Please tick this box if any safeguarding or human rights violations have occurred during this financial year. ☐

If you have ticked the box, please ensure these are reported to ODA.safeguarding@defra.gov.uk as indicated in the T&Cs.

Tree Aid assesses each partner at the proposal stage of projects, develops partner capacity development plans, and monitors these actions throughout the collaboration.

Tree Aid has policies covering safeguarding, anti-corruption and anti-fraud. These constitute part of the contract with the partner, SUNARMA, and training is conducted with each partner regularly to ensure that their capacity is the same as Tree Aid staff.

For safeguarding and other incidents, an incident report template has been shared with the partner along with a poster for denouncing any issues associated with safeguarding and other misdemeanours. This is displayed in the project offices.

15. Project expenditure

Table 1: Project expenditure during the reporting period (1 April 2021 – 31 March 2022)

Project spend (indicative) since last Annual Report	2021/22 Grant (£)	2021/22 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)	[redacted]	[redacted]	[redacted]	
Consultancy costs	[redacted]	[redacted]	[redacted]	Baseline has not yet taken place - delayed as a result of contracting
Overhead Costs	[redacted]	[redacted]	[redacted]	
Travel and subsistence	[redacted]	[redacted]	[redacted]	Limited travel due to slow inception of project to date.
Operating Costs	[redacted]	[redacted]	[redacted]	Activity completion limited due to slow contracting with partners and on-the-ground delivery. New kebele being sought after one kebele has been deemed too risky to work in (security).
Capital items (see below)	[redacted]	[redacted]	[redacted]	Partner laptops bought early 22/23. The delay was caused by delay in recruitment and inflationary pressure on the price of laptops, which led to prolonged discussion on purchase.
Monitoring & Evaluation (M&E)	[redacted]	[redacted]	[redacted]	

Others (see below)	[redacted]	[redacted]	[redacted]	Underspend largely on bee-hives that are not yet purchased, but also tapping tools, seedlings and forage cuttings. These activities have all been pushed back to Q1 22/23.
Partner Advance	[redacted]	[redacted]	[redacted]	Payments to partner as yet unspent.
TOTAL	[redacted]	[redacted]		

16. OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum). This section may be used for publicity purposes

Checklist for submission

	Check
Different reporting templates have different questions, and it is important you use the correct one. Have you checked you have used the **correct template** (checking fund, type of report (i.e. Annual or Final), and year) and **deleted the blue guidance text** before submission?	X
Is the report less than 10MB? If so, please email to Darwin-Projects@ltsi.co.uk putting the project number in the Subject line.	X
Is your report more than 10MB? If so, please discuss with Darwin-Projects@ltsi.co.uk about the best way to deliver the report, putting the project number in the Subject line.	
Have you included means of verification? You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	N/A
Do you have hard copies of material you need to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	N/A
Have you involved your partners in preparation of the report and named the main contributors	X
Have you completed the Project Expenditure table fully?	
Do not include claim forms or other communications with this report.	