Darwin Initiative Main and Post Project Annual Report

To be completed with reference to the "Writing a Darwin Report" guidance: (http://www.darwininitiative.org.uk/resources-for-projects/reporting-forms). It is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)

Submission Deadline: 30th April 2019

Darwin Project Information

Project reference	25-013
Project title	NTFP micro-enterprises for competitive forests and livelihoods in Ethiopia
Host country/ies	Ethiopia
Lead organisation	Huddersfield Business School (HBS), part of the University of Huddersfield (UoH)
Partner institution(s)	Ethio-Wetlands & Natural Resources Association (EWNRA), Ethiopian Biodiversity Institute, Apinec, Nati Spices, Ecopia and Bench Maji Zone Environmental Protection and Forest Office, in SNNPRS.
Darwin grant value	£374,420
Start/end dates of project	1st July 2018 to 31st March 2021
Reporting period (e.g., Apr 2018 – Mar 2019) and number	July 2018 to March 2019 Annual Report 1
Project Leader name	Professor Adrian Wood
Project website/blog/Twitter	https://research.hud.ac.uk/institutes-centres/surge/src/projects/environmental-sustainability-and-natural-resource/honeyspiceandjams/ @CSRC_hud
Report author(s) and date	Adrian Wood, Matthew Snell, Fiona Hesselden, Kassahun Adelo, Desyalew Fantaye

1. Project rationale

Deforestation has been identified as a major problem in the four districts in SW Ethiopia where this project is located (Figure 1). Forest loss occurs as people seek to improve livelihoods through agriculture rather than forest-based enterprises. Drivers of forest loss include lack of tenure security over forest and income from it. Additional drivers include investors' claims to forest, population growth, in-migration, cultural change and urban demands. These will increase given recent completion of a tarmac road through this area connecting Ethiopia to South Sudan.

Between 2010-2016, Huddersfield Business School (HBS) and partners implemented a project to improve forest tenure and income in these same four districts in order to maintain the natural forest and the wild coffee gene pool within it. That project had support from the Darwin Initiative for three years. Its focus was Participatory Forest Management (PFM) Agreements between communities and local government, providing security for communities and their Forest Management Groups (FMGs) managing the forests. In addition, communities generated income from forest coffee sold through cooperatives. An external assessment found annual rates of deforestation were 0.18% in community-managed forests compared to 2.6% in forests with no community management. Coffee production volumes and revenue continue to grow post-project.

However, forest-coffee primarily benefits men and is only found in 25% of 100,000ha of community managed forest. The remaining areas benefit from other Non-Timber Forest Products (NTFPs), including honey, cardamom, chillies, forest fruits, long pepper and forest mahogany seeds. These are variously harvested by men and women for domestic use and limited local sale. Studies in 2015 proposed ways to add value to these NTFPs and sell them to national and international buyers. The current project aims to build on the successes of the 2010-2016 forest-coffee work by developing value chains for these NTFPs, thereby diversifying the sources of forest-related income, engaging women more, and improving the sustainability of the cooperatives. These efforts will be supported by concurrent work strengthening tenure security through Communal Land Certificates which are stronger in Ethiopian law. Overall maintaining the forest will become more attractive through these measures

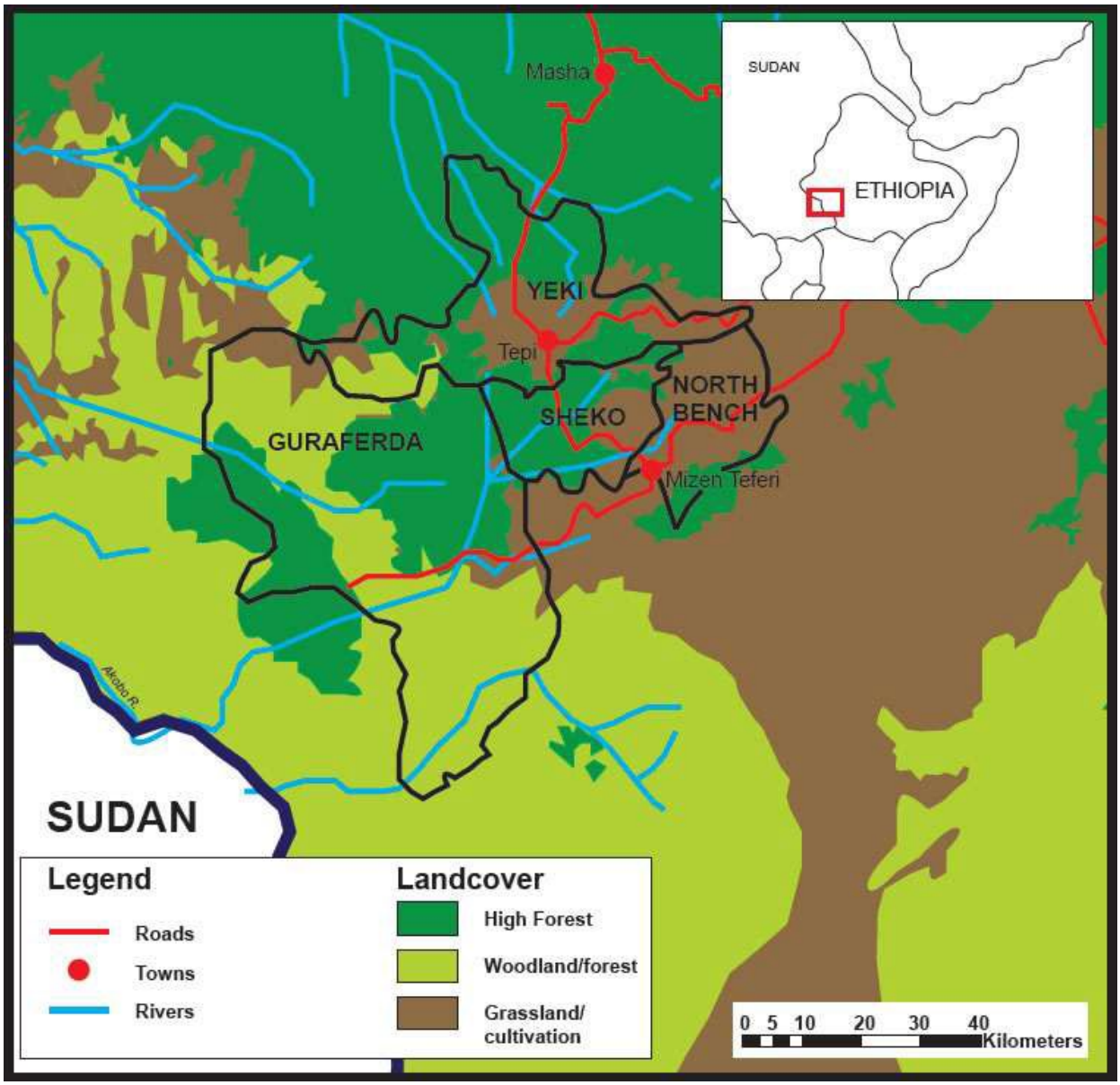

Figure 1. Map of four project districts in SW Ethiopia.

2. Project partnerships

There are six partner organisations working with HBS on this project. A brief description of each is provided below. However, several partnerships have been affected by insecurity in the region. This initially broke out in August 2018 but became more widespread and problematic between October 2018 and February 2019. For several weeks project activities in all four districts were temporarily halted. Once safe, activities were resumed in three of the four districts. The situation in the fourth district remains uncertain and the project is considering submitting a Change Request Form to move activities to a different but neighbouring district in which there is no insecurity.

University of Huddersfield has been working with the main implementing partner, EWNRA, for 20 years. This is a well-established partnership and EWNRA is responsible for the recruitment and support of staff in the project area. It is also responsible for providing logistics support and ensuring adherence to Ethiopian legislation. Evidence includes the participation of two members of EWNRA's head office in the recruitment of the NTFP-Facilitators who are funded by this project; participation of EWNRA's Addis Ababa-based Executive Director in the project launch (Annex 4.2), in project staff meetings and in the review of this report; payment of all staff costs by EWNRA's finance team; the rental by EWNRA of the primary vehicle to the project on very favourable terms.

In October 2018, Dr. Tesfaye Awas of the Ethiopian Biodiversity Institute (EBI) participated in the project launch. He has since been consulted regarding analysis of one of the key species identified for further exploration, the forest mahogany *(Tricihila dregeana)*. This continues to be an area of investigation because the two recommended laboratories in Ethiopia no longer have the ability to undertake the analysis required. One option, proposed by EBI, may be for the analysis to be conducted in the UK with the seeds being accompanied by a representative of EBI, together with a Material Transfer Agreement and an Assurance Letter, as indicated on the EBI website: http://www.ebi.gov.et/. EBI's advice in this matter is essential and evidence of the partnership working effectively. It also demonstrates UoH's commitment to the ITGRFA and CBD.

In August 2018, Wubishet Adugna, a Certified Master Beekepper and the Managing Director of Apinec, the honey partner, undertook a field visit to the project sites. Following this visit he submitted a report and designed a training programme for community members interested in the honey component of this project. Training was delivered to 39 participants at Apinec's facility in nearby Bonga town. The visit and training reports are attached (Annexes 4.3a and 4.3b respectively). It is envisaged that Apinec will visit the project sites in May or June 2019 to assess the April 2019 honey harvest.

Following approval from Darwin in September 2018, one of the partners was changed. Feed Green Ethiopia was replaced by Nati Spices. Nati Spices works closely with the Tepi National Spice Centre which was recruited to deliver a training session in March 2019 in Mizan, the capital town of Bench Maji Zone. There were 68 participants, of which 25 were women. Further training sessions are scheduled for delivery in participating communities in May and June 2019.

Ecopia is the partner responsible for helping to develop products from forest fruits. It has taken longer to develop this partnership because of a misunderstanding regarding the processing facilities envisaged and because of the significant additional requirements for processed products as compared to raw products. This has now been resolved and a scoping and training visit is scheduled for May 2019. There have also been important exchanges regarding potential storage facilities for jams, juices and other foodstuffs processed from the forest fruits.

Bench Maji Zone Environmental Protection and Forest Office, in SNNPRS is one of the key local government partners. Representatives from the office spoke at the project launch in October 2018. They are also in frequent contact with the project team in Mizan, as well as with other relevant government offices. Representatives have participated in and contributed to all the training sessions provided by the project, ensuring that government staff benefit as well as community members. This approach creates opportunities for government extension workers to help disseminate and cascade training along with project staff.

3. Project progress

3.1 Progress in carrying out project Activities

General comment 1
As outlined in the half year report submitted to LTS, there was a delay in the project being approved by the Ethiopian government. Approval was obtained in October 2018, three months after the project was due officially to start. The project launch was held the same month that official permission was obtained. The Ethiopian project team had also succeeded in running a few activities while waiting for official permission to do so.

General comment 2
Despite the insecurity mentioned in Section 2, as of March 2019 the situation has greatly improved in all but one of the districts (Yeki) and government agencies are allowing project activities to restart. Now project activities are once again underway, the project team feels confident that it can make up for lost time and implement the activities as planned. It cannot, however, make up for missed harvest seasons. These delays should be considered in relation to the following progress against outputs.

General comment 3
The first three outputs of the Log Frame are included in an assessment of the impact of the project on household income. A socio-economic survey is being used to measure this across the first three outputs. Before this project started, training had been provided to project staff and the survey questionnaire was updated in 2018 to reflect the focus on NTFP development. The project team was able to conduct a survey of 320 households in three of the four districts. The fourth district (Yeki) was already too insecure for this to be feasible. The socio-economic report is attached as Annex 4.1.

Output 1. Three honey microenterprises producing higher quality honey and generating income from sales to Apinec and/or other honey buyers
Traditional honey production was reviewed by Apinec in August 2018. Following this, tailored training was provided to 39 individuals, of which 28 were cooperative members, eight were government staff and three were project staff. Only three of the participants were women. This gender imbalance was partially redressed during the subsequent cascaded training. Training was cascaded to a further 140 community participants, of which 85 were men and 55 women. See Annexes 4.3a and 4.3b.

Two of the planned three honey micro-enterprises have been established (in Guraferda and North Bench) and the third is under development in Sheko. All three micro-enterprises are run or will be run by women only further helping to ensure female participation in this output.

Overall, this output is close to meeting the target for Year 1 of 3 micro-enterprises to be established and has exceeded the target of 75 honey producers to be trained.

Output 2. Four micro-enterprises established for production and sale of forest fruit jams/dried products
In October 2018, the Principal Investigator and project manager visited Ecopia's (the partner organisation's) office in Addis Ababa. This provided an opportunity to meet the community trainer. Following this there was considerable negotiation with the partner organisation to ensure that expectations were clear regarding their roles and responsibilities as well as ensuring that HBS understood the additional complexities associated with the production, quality assurance and sale of products that have undergone a processing or transformation process in Ethiopia (which differs from raw products such as honey and spices). This created some delays during which the project team visited several communities and undertook an analysis of the different types of forest fruits that are used by communities. Delays were exacerbated by the insecurity situation which prevented field visits from being undertaken by Ecopia or any of the partners or consultants. A fruit assessment and preliminary training visit is scheduled for May 2019. This is to be followed by a further training visit in July 2019. Establishment of the micro-enterprises should be a quick process but the delays experienced to date mean that the Year 1 harvest season for some fruits has been missed.

This output is running approximately one quarter behind target for Year 1. The target was to have four micro-enterprises established and 100 women trained.

Output 3. Four micro enterprises established for sale of spices
The change of partner (from Feed Green Ethiopia to Nati Spices) was approved by Darwin in September 2018. Several visits by Nati Spices, had to be postponed because of insecurity in the region. This was particularly prevalent in Yeki woreda, of which Tepi is the capital, and home to the Tepi National Spice Centre with which Nati Spices collaborates closely. While waiting for the security situation to improve, project staff visited Jimma Agricultural Research

Centre for discussions with their spice specialist. As the security situation began to improve, in February 2019 project staff undertook a preliminary assessment of spices in use by project communities. This assessment was shared with Nati Spices. Two micro-enterprises have been established (in Guraferda and North Bench), with the third planned for Sheko. Both micro-enterprises are managed entirely by women. In March 2019, an introductory training on key spices and their harvest and drying was organised in Mizan, the capital of Bench Maji Zone. This was attended by 68 participants. Of these, 24 (5 female) were government staff from five different offices, 41 (20 female) were members of the spice micro-enterprises that have been established, and three were project staff. Training is due to be rolled out into the communities in Quarter 1, Year 2.

This output is considered to be broadly on-track. The target was to have established four micro enterprises in four districts, assessed the spice potential and undertaken training on the harvesting, storing and drying of spices. It would have been preferable to have held further training sessions in community locations in Quarter 4 of Year 1, but these should take place in Quarter 1 of Year 2.

The socio-economic survey conducted to develop a baseline on household use of NTFPs and their relative economic value found that many people use forest originating spices at home, but very few harvest them for sale. Exploring how to market these will be addressed in Year 2.

Output 4. Analysis of chemical properties and commercial potential of Forest Mahogany (Trichilia dregeana)
Laboratory analysis is due to be conducted by the end of Quarter 1 in Year 2. In collaboration with the Ethiopian Biodiversity Institute (EBI) and with recommendations from FAO various attempts have been made to identify Ethiopian laboratories capable of undertaking analysis of both the triglyceride and saturated fat content of the Luya seed. Of the Ethiopian laboratories that have been contacted, none have the skills or equipment required for this analysis. Efforts will continue to be made to identify a capable Ethiopian laboratory as that is the preferred option expressed by EBI and the Government of Ethiopia. However, failing that, a Material Transfer Agreement and Letter of Assurance will be provided to EBI. Following this, the seeds will be brought to the University of Huddersfield for analysis. The seeds will be accompanied by an approved Ethiopian representative.

This output is considered to be on-track with analysis due by end of Quarter 1, Year 2, either in the UK or Ethiopia.

The socio-economic survey found that over 90% of households use the seed of the Forest Mahogany at home. While very few people harvest them for local sale, there are some notable exceptions on whose experience the project will build. The tree is also one of the most widespread species identified, suggesting that harvest of its seed could benefit people in all four districts should it be found to have commercial potential.

Output 5. Biodiversity measured by key indicator species, maintained in all micro enterprise sites
Fieldwork for the community-based monitoring of biodiversity has been repeatedly delayed as a result of the insecurity. As a result, the consultant undertook a short desk-based review of community-based biodiversity monitoring. With recent improvements in the security situation, fieldwork has been undertaken in April 2019. Biodiversity conservation experts from Hawassa University have worked with key government officials and project staff to conduct key informant interviews and forest walks. Focus Group Discussions are not yet permitted in the selected sites because gatherings are not allowed for security reasons, hence the use of key informant interviews. It is likely that the fieldwork will be used to both identify key indicator species and conduct the baseline that was due for Quarter 4 of Year 1.

This output is running approximately one quarter behind target for Year 1 but the baseline should be complete by the end of Quarter 1, Year 2.

Output 6. Policy makers made aware of role of NTFPs, micro-enterprises and women in sustainable management of forests
An official project launch was held in Mizan in October 2018 and attended by 80 people (Annex 4.2). Presentations were made by the Special Adviser to the Zonal Administrator, the Executive Director of EWNRA, a botanist and senior researcher from EBI, community representatives, project staff and the Principal Investigator. It was attended by members of the community Forest Management Groups and their Associations, as well as Cooperative leaders. There were diverse government representatives including those from Finance and Economic Development, Agricultural and Natural Resources, Cooperative Development, Women's and Children's Affairs, Environmental Protection and Forest Authority.

A project signboard has been made and erected. Posters have been developed and printed in Amharic and English and will be disseminated in Quarter 1, Year 2. Samples are included in Annex 4.4.

This output is considered to be on track.

3.2 Progress towards project Outputs

Output 1. Honey
The project has made good progress against planned activities for Year 1, exceeding targets for the number of people to be trained, and having completed the establishment of two out of three micro-enterprises, with the third in progress. Use of the socio-economic survey to assess household use of and income from honey is considered appropriate, as is use of incorporation documents to demonstrate the existence and functioning of the micro-enterprises. Use of a professional honey partner organisation to assess moisture content and honey quality is also considered appropriate and results should become available in the Year 2 harvests, the first of which is due in Quarter 1, Year 2. On current trends we expect to achieve the targets for this output.

Output 2. Forest fruits
The project is approximately one/two quarters behind target for Year 1. This is disappointing but we are confident that the training can be conducted early in Year 2 and expect that incorporation of the micro-enterprises will be quick given experiences with the honey and spice micro-enterprises. Use of the socio-economic survey to assess household consumption is good but there is need to be more precise in the types of forest fruit as these are more diverse, e.g. than honey. Identification will be undertaken during the biodiversity assessment as well as by involvement of the partner, Ecopia. Use of a professional organisation to provide training in the production of jams, juices, etc. is considered appropriate as is use of their expertise in evaluating quality and production volumes. On current trends we expect to achieve the number of micro-enterprises and trainees but it is important to acknowledge that we have lost some harvest potential in Year 1.

Output 3. Spices
The project is on track for this output, despite a change of partner at the end of Quarter 2, Year 1. Use of the socio-economic survey to assess household consumption and sale is appropriate but there is need to be more precise in the analysis of different types of indigenous forest spices. The spices are well known but the investigations will need to more carefully differentiate between the spices if they are to highlight those with greatest potential. Use of a professional spice partner organisation and its quality assessment procedures is considered appropriate. On current trends we expect to achieve the targets for this output.

Output 4. Forest Mahogany
The project is on track for this output. Use of laboratory analysis is considered essential if the properties of the seed are to be properly understood and if there is to be any chance of developing cosmetic products with commercial entities. On current trends we expect to achieve the targets for this output.

Output 5. Community biodiversity monitoring
The project is running approximately one quarter behind target for Year 1. However, we expect to make this up in the first Quarter of Year 2. Selection of key indicator species is essential if the project is to support communities to both monitor project impact on biodiversity and to build community skills in the monitoring of key species. Site selection is considered an appropriate way to assess biodiversity in a range of settings. Use of an independent consultant for the baseline and endline evaluations and reports is also considered appropriate. On current trends we expect to achieve the targets for this output.

Output 6. Policy influencing and dissemination of lessons
This output is on track. In addition to the formality of the project launch and the production of posters, etc., the project team continues to involve local government offices and to build strong relations with them. This is essential to ensuring government staff interest in the project, their contribution to it, and their willingness to consider lessons learned which can be applied in their work. On current trends we expect to achieve the targets for this output.

3.3 Progress towards the project Outcome

The first three Outcome Indicators (honey, forest fruits and spices) refer to the establishment of micro-enterprises for different NTFPs. The baseline for these micro-enterprises was zero, insofar as micro-enterprises for these NTFPs did not exist in these four woredas. As a result, their establishment can easily be measured. It is, however, the extent of participation in these micro-enterprises that will demonstrate the greatest potential impact on target households and communities. This will not really be known until Years 2 and 3 but will be monitored and demonstrated by use of micro-enterprise records, the socio-economic survey and records from the partner organisations. The baseline for Outcome Indicator four, the forest mahogany seed, is similarly zero, insofar as we are not aware of any laboratory analysis of the seed. Results from the use of this indicator are essential if any of the other outcome related indicators (e.g. commercialisation potential and evidence of commercial opportunities) are to become a reality. For Outcome Indicator five, use of key indicator species is considered appropriate as a means via which to evaluate the project's impact on biodiversity. Key indicator species could have been monitored using a rigorous, scientific methodology. However, one of the primary aims of this project is to empower communities to develop NTFP value chains and to monitor the impact of these value chains on forest biodiversity. As a result, the project's focus on community-based monitoring (as opposed to scientist-led monitoring) is considered appropriate. Finally, evidence of communications with government are considered appropriate for the last Outcome Indicator, i.e. contributions made to government policy. While this indicator could be more precise, the nature of this project and its attempts to pilot several techniques is best left open-ended.

Progress towards the Project Outcome is broadly on track, with the exception of outputs 2 and 5 which are behind schedule by approximately one quarter. Action taken to address these delays is focused primarily around ensuring that the relevant partner organisation and consultant-led team undertake fieldwork in the first quarter of Year 2, now that the security situation is significantly improved.

3.4 Monitoring of assumptions

Outcome Assumption 1.
The government has remained willing to grant access to sites and communities to HBS and its partners. However, it has only been willing to grant this access when security has been good. Given the civil unrest that broke out in August 2018 and spread between October 2018 and February 2019, access has been denied where necessary and/or restricted where appropriate. The situation has improved significantly and government has allowed this project (and others) to return to target sites. The situation will continue to be monitored and evaluated to ensure staff are not put at risk.

Outcome Assumption 2
This assumption holds true as exemplified by Ethiopia's 2018 National Forest Law. This clearly recognizes the rights of communities and acknowledges the role they play in managing natural forests without unduly compromising biodiversity.

Outcome Assumption 3.
Community interest in NTFP development continues and can be seen by the readiness with which community members have participated in training events and the establishment of the micro-enterprises. However, it should be noted that civil unrest has an impact on individuals and their desire to participate in and commit time to new initiatives. There is little that the project can do to prevent this but it will continue to be monitored and if interest wanes then it will be reported.

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

In section 4 we discuss specific contributions to poverty alleviation via the SDGs and to biodiversity conservation via the various treaties. In general terms, however, by adding value to the forest for local communities the project seeks to make PFM managed forestry sustainable. This recognises that coffee does not benefit communities equally in all four project districts and that it does not benefit men and women equally. The current Darwin-funded project therefore seeks to complement coffee work by developing a diverse basket of NTFP goods to help redress this imbalance. In terms of contributing to poverty alleviation, it seeks to increase by 10% household income from three different types of NTFP. Furthermore, it seeks to help conserve biodiversity by training communities to monitor key indicator species that can readily be identified during regular forest patrols and work. Year 1 sees the recording of baseline information only so it is too early to show evidence of the project's achievements to either of these higher impact targets.

4. Contribution to the Global Goals for Sustainable Development (SDGs)

SDG1.2 Reduce number living in poverty
No contribution to SDG 1.2 as yet; activities to date have focussed on setting up micro-enterprises and training. It is too early in the project to have had an impact on income received. However, the baseline socio-economic survey that has been undertaken will facilitate assessment of the project's contribution to poverty alleviation.

SDG5.5 Women's full and effective participation; equal opportunities for leadership
Honey enterprises: training provided to 63 women, one third of the total number of community members and government staff trained. Two women-only honey micro-enterprises formed with a further one planned. Community members will decide whether this is also women only or mixed gender.

Spice enterprises: training delivered to 41 community members, of which 21 (51%) were women and 20 men and to 23 government officials (four women and 19 men). Two women-only spice micro-enterprises established. Another micro-enterprise is planned; community members will decide whether or not this will be women only or mixed gender.

SDG15.2/5/6 Sustainably manage forests; halt biodiversity loss; access and benefit sharing
Forest Management Groups (FMGs) were established through a participatory forest management process undertaken in an earlier EU and Darwin funded project (2010-2016). FMG plans (agreed between the FMG and the local government and stipulating the amount of NTFPs that can be sustainably harvested by the community), are reviewed every three years.

Forest management plans of existing FMGs have been updated for fifteen out of 55 forest management groups established under the earlier project (6 FMGs in Sheko, 4 in Gurafada, 4 in North Bench and 1 in Yeki). The remaining 40 FMG plans are due to be updated in 2019.

SDG 16 Peace and Justice; effective, accountable and transparent institutions
The micro-enterprises are linked to the existing cooperatives which operate under member generated bylaws guided by criteria established by the Trade & Industry Office. These state that organisations have to be open to everyone irrespective of gender, race/ethnicity or religion. Elections are held and cooperative management committees have to have at least one woman and one ethnic minority member on them.

5. Project support to the Conventions, Treaties or Agreements

Convention on Biological Diversity (CBD)
8(c) manage biological resources/sustainable use.
8(f) rehabilitate/restore degraded ecosystems.
8(j) Respect, preserve and maintain indigenous knowledge.
A desk based review on community based biodiversity assessment has been started and a process established for fieldwork (undertaken in April 2019). Fieldwork is taking place in selected woredas (districts) in which the project operates. Forestry inventory specialists from Hawassa University, working with community members, will draw on members' indigenous knowledge of forest biodiversity to identify the plots and the 25 key indicator species to be used for the community based biodiversity inventory. Forest Management Group (FMG) members will be trained in the inventory process with an annual inventory instituted as part of their monitoring responsibilities within the terms of the FMGs forest management plan. This plan is agreed with local government. The inventory and associated process will be used as a management tool for the community and government to jointly assess sustainability of NTFP harvesting and monitor forest biodiversity.

Achi Target Contribution
AT1 Biodiversity Awareness.
AT4 Sustainable production and Consumption.
Trainings provided to local government and community members and four micro enterprises developed (two honey, two spice). Micro-enterprises promote the value of forest spices and their related ecosystems. The micro enterprises are linked to larger coops. The FMGs all have sustainable forest management plans which detail the harvest volumes for NTFPs. Plans are agreed with local government.

One training of trainers' session and one round of cascaded training has taken place for honey and for spices. Total of 168 community participants and 20 government staff trained so far in honey. 23 government staff and 41 community participants trained to date in spices.

AT5 & AT15 Reduce habitat loss/carbon stocks.
Earlier project work (funded by the EU and Darwin) demonstrated that carbon stocks can be maintained and increased under participatory forest management with the support of FMGs. FMGs have been supported in updating their forest management plans (15 out of 55 FMGs have done this in year 1; the remaining 40 will do this in year 2). This work is in line with one of the Ethiopian Government's strategies to achieve AT5, namely the adoption of participatory forest management, which was confirmed in the 2017 federal forest legislation.

Diversifying the range of forest products for which there are markets will contribute to communities' perceived value of the forest compared to clearance for agricultural land.

AT13 Genetic diversity.
The wider the range of products with added market value the higher the incentive for local FMGs to patrol and monitor the forest to prevent deforestation and degradation. Sustainable use of forest spices (timiz, korerima, chillies), fruits and honey in addition to wild coffee helps maintain forest genetic diversity. Sustainable harvesting of NTFPs is managed through the forest management plans agreed between the local government and the FMG. These are updated every three years. In 2018 forest management plans were updated for fifteen out of 55 existing forest management groups (6 FMGs in Sheko, 4 in Gurafada, 4 in North Bench and 1 in Yeki). The remaining 40 FMG plans are due to be updated in 2019.

AT14 Benefits to all.
Membership of cooperatives and associated micro enterprise membership is governed by criteria set by the Trade & Industry Office. These state that organisations have to be open to everyone irrespective of gender, race/ethnicity or religion. Elections are held and existing cooperative management committees have to have at least one woman and one ethnic minority member on them.

Micro enterprise membership is facilitated by project staff in discussion with community members. Participatory methods are used to identify micro enterprise participants based on interest, income levels and gender.

Nagoya Protocol
9: Sustainable Use.
See response to Achi Target AT4 on sustainable production and consumption.

22.5(j) Women's Access.
See response to SDG5.5 'Women's full and effective participation; equal opportunities for leadership'.

ITGRFA
5.i (b): Conservation...characterisation/evaluation/documentation.
6.2(e) expanded use of underutilised species;
Project partner Ethiopian Biodiversity Institute (EBI) is currently supporting the project in identifying an Ethiopian laboratory to undertake chemical analysis of Luya seeds (Trichilia dregeana). Failing this, a member of the EBI will accompany Luya seeds for analysis in the UK. Trichilia dregeana is an Ethiopian genetic resource protected under the ITGRFA. Luya seed characteristics will be analysed and documented. It will be compared with Trichilia emetica to see if it contains similar properties; the latter has already been successfully commercialised in South Africa for skin and hair care products.

Socio-economic household survey report has identified Luya as present across all four project woredas (Annex 4.1). It also revealed that at present Luya seeds are primarily used within the household with minimal trading in local markets (approximately 10% of survey participants sold seeds locally). Should laboratory analysis demonstrate useful properties, the project will seek to expand the market for Luya.

6. Project support to poverty alleviation

We expect there to be direct impacts on poverty by this project. However, this will not be evident until years 2 or 3 of the project, once trainings have been concluded and micro enterprises have started to trade. Once this has happened we would expect to see income levels from selected NTFPs increase.

A socio-economic baseline survey of 320 households was conducted in 2018 and will be used to monitor subsequent improvements in livelihood incomes.

7. Project support to gender equality issues

Socio-economic baseline survey for year 1 has been completed with 320 households participating. Data is disaggregated by gender. Sampling method stipulated that if a male head of household was interviewed, at the next house the woman should be interviewed if the household head was a man. In practice, approximately one third of survey participants were women as some female spouses did not want to take part in the survey. Participants include female headed households and the spouse of male headed households.

Early analysis of the survey has revealed that luya is one of the most widespread NTFPs, available in all four districts in which the project works. As expected, women collect luya for use in the household, primarily as oil for cooking and for medicinal purposes. Few people,

either men or women, are currently selling it. Further development of this value chain (once chemical analysis has been completed) could provide a useful livelihood income stream for women. This finding supports previous anecdotal evidence regarding women's use of luya.

The forest biodiversity inventory baseline process has been agreed, with the inventory work to take place in April 2019. This is led by a professional consultant and involves three Forest Management Group (FMG) community members from each got surveyed assisting on the ground. Of the three FMG members involved in each got, at least one will be a woman to reflect the gendered nature of forest knowledge.

A number of indirect gender impacts have been achieved by the project to date. Two out of three planned honey micro-enterprises have been established to date, both of which are women only. In addition, the training of trainers for honey quality has taken place, involving a total of 24 participants, of which 4 were female. Subsequent training has been cascaded to a further 140 community participants of which 55 (39%) were female. (The indicator for honey training was 75 participants in total by mid-year 2). Honey has traditionally been a male dominated activity in the area. The female participation rate in the cascaded training is a notable achievement.

Two women-only spice micro-enterprises have been established to date (the indicator was four micro-enterprises in year 1, none of which were specified as women-only). A third micro-enterprise is planned for Q1 Year 2. Training of trainers in harvesting and drying of spices has been given to 23 government staff (including four women) and 41 community members (21 or 51% of whom were women). Indicator target for spice training was 100 people in total by middle of year 2.

8. Monitoring and evaluation

This project builds upon previous work in the four target woredas (districts). Project staff have records of all the Participatory Forest Management Agreements, the Forest Management Group members and the areas of forest from which the NTFPs can be harvested. These records provide a background against which participation in project activities can be monitored. Although the Forest Management Groups are not unique to the Darwin-funded project, their participation in non-coffee NTFP micro-enterprise development is unique to this project.

Participation in project training sessions, launch events, meetings, etc. is recorded by ensuring that all participants (community, government and project staff) record their names on attendance lists.

In addition, each woreda (district) facilitator provides a monthly report to the Team Leader, as do the NTFP Facilitators and the Income Generating and Marketing Facilitator. These reports summarise activities and allow monitoring against plans. The Team Leader summarises these reports in monthly reports to HBS as well as more substantial quarterly reports. The project team in Ethiopia meets monthly to monitor programme and financial matters and discuss both challenges and successes. The NTFP Facilitators work solely on the Darwin-funded project whereas the wider team works across both this project and a complementary one whose focus is upon coffee. Both the Darwin-funded project and the complementary one seek to build the capacity of communities and government in Participatory Forest Management.

The HBS team meets monthly and quarterly to monitor progress. These meetings are further supported by visits to the project sites. These are undertaken by HBS staff whose input is named in the original application. Terms of Reference explain the purpose of each visits and visit reports are used to summarise HBS inputs and findings, differentiating between projects as appropriate.

Monthly financial reports are sent from the Ethiopian project team to HBS finance as well as to EWNRA's head office in Addis Ababa. This provides a double validation of expenditure. Separate reports are submitted for this project as compared to the other complementary project allowing for project-specific monitoring.

The partner organisations (Apinec, Nati Spices and Ecopia) provide and/or will provide reports outlining their activities, be these training, quality assurance, quantity assessment, or observations on, e.g. price fluctuations within Ethiopian markets. This facilitates the capture of quantitative indicators (e.g. production volumes and numbers of trainees) as well as qualitative indicators (e.g. quality, commitment to production and community capacity). Some of these reports have yet to be produced given delays to two outputs, so it is too early to say whether they enable capture of the indicators, but this will be monitored and reported upon in Year 2. These reports are all unique to the Darwin project.

The socio-economic survey of 320 households provides a comprehensive and broad baseline against which to assess project progress across the woredas (districts). This survey covers both quantitative indicators (such as household income and expenditure) and qualitative indicators (e.g. the perceived value of forest management, changes to forest related disturbances, such as fire and aspirations for future forest condition and management). These measures are relevant to the Darwin-funded project as well as complementary projects. However, as noted in the consultant's report (Annex 4.1), particular effort has been made to include additional questions aimed at non-coffee NTFP collection, its use in the home and for trade. This is in response to the specific aims of this Darwin-funded project.

Finally, the community-based biodiversity monitoring system is being designed to try to capture biodiversity using key indicator species. This is a work in progress so it is too early to say whether it will be adequate. However, evidence from similar work in other countries suggests that similar approaches have yielded good quality research and provided evidence of biodiversity monitoring that is of comparable quality to that provided by more traditional methods such as scientific monitoring. No similar work has been done by HBS or its partners in SW Ethiopia so this is unique to the Darwin project. It is hoped that, if successful, it will be rolled out to other projects and may help influence government policy in Ethiopia.

There have not been any changes made to the M&E plan during the first nine months to which this report relates.

9. Lessons learnt

Identification of different partner organisations working with a range of NTFPs was a good idea and has enabled the spreading of some risk. However, a thorough assessment of potential partner organisations and their strengths and weaknesses is recommended. This can be a time consuming process especially as it can be difficult to identify competent and truly interested organisations.

It is important to learn the different types of regulation that apply to raw products as compared to processed products. The latter seems to be subject to considerably greater legislation in Ethiopia. This is something that HBS is still learning and will be further reported upon in Year 2.

The single biggest factor affecting the project has been insecurity. There is little that the project could have done to predict the insecurity that has arisen given that it seems primarily to relate to the country's new Prime Minister introducing a more open and transparent style of government, but which has, in turn, allowed the airing of longstanding socio-cultural and ethnic grievances and divisions.

It took longer than anticipated to get the project document signed by the relevant authorities in Ethiopia. It is recommended that any other projects seeking to do similar work allow 3-4 months for this process.

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

This is the first annual report. As a result we have not previously received any reviews upon which we have acted.

11. Other comments on progress not covered elsewhere

12. Sustainability and legacy

As this report relates only to the first nine months of the project the focus has been upon the set up and implementation of project activities. Establishment of micro-enterprises that are linked to existing cooperatives is intended to facilitate the long-term sustainability of project initiatives but it is too early to say if these will succeed. Similarly, adoption of three established partner organisations working in the private sector of relevant NTFPs and familiar with the technological requirements, Ethiopia's operating conditions and national price trends is also intended to help ensure long-term sustainability, the idea being that these organisations will provide training and act as potential buyers, subject to community commitment to harvesting and production standards. Finally, Dr. Walter Mswaka from Huddersfield Business School will be providing training to support the sustainable management of the micro-enterprises, which should help to improve the long term sustainability of the project.

13. Darwin identity

The Darwin identity has been recognised and used on a number of occasions in Year 1. The official project launch to over 80 people included recognition of Darwin support in speeches by the Executive Director of EWNRA and UoH staff present and on the banner produced for the occasion.

A project signboard has been made and erected and 100 posters outlining the project purpose and partners, including Darwin, have been produced in English and Amharic (see samples in Annex 4.4). Posters will be distributed to Woreda (District) and kebele level government offices that the project interfaces with as well as the new project micro-enterprises and existing coops.

The project has a distinct identity. It is outlined on the UoH website with Darwin support recognised and a link provided for people to go to the Darwin website and find out more about Darwin as a funder. https://research.hud.ac.uk/institutes-centres/surge/src/projects/environmental-sustainability-and-natural-resource/honeyspiceandjams/

The project has also been promoted on the University web news site, with the project award from the Darwin Initiative promoted in June 2019.
https://www.hud.ac.uk/news/2018/june/374kgranttoextendunisethiopiannaturalresourcesprojects/
In addition, the project and associated Darwin was featured in the Huddersfield Business School Monthly newsletter (Word on the Street) on 5th June 2018. "HBS Researchers Win Major Government Contract (Darwin Grant)".

The Sustainable & Resilient Communities research cluster within UoH manages its own twitter account (@CSRC_hud) and follows Darwin, tweeting directly about the project and re-tweeting relevant Darwin posts.

14. Project expenditure

Table 1: Project expenditure during the reporting period (1 April 2018 – 31 March 2019)

Project spend (indicative) since last annual report	2018/19 Grant (£)	2018/19 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (see below)				
Monitoring & Evaluation (M&E)				
Others (see below)				
TOTAL				

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2018-2019

Project summary	Measurable Indicators	Progress and Achievements April 2018 - March 2019	Actions required/planned for next period
Impact Rates of deforestation in SW Ethiopia are reduced as communities increasingly value forests and benefit economically from national and international trade in sustainably sourced Non-Timber-Forest-Products (NTFPs).		It is too early to report any positive contribution to either biodiversity or human community interaction with biodiversity. However, progress has been made in establishing organisations that could help human communities to sustainably manage and benefit from biodiversity.	
Outcome Forest becomes more economically competitive through development of community level micro-enterprises collecting, processing and selling Non-Timber-Forest-Products which improve income for 5,000 people whose engagement in coffee harvesting is limited.	0.1 Three (3) honey micro-enterprises supported in Y1 and selling to Apinec by Y2, generating additional income for 980 producers in Guarferda, Sheko and North Bench. 0.2 Four (4) women-led forest-fruit micro-enterprises established in Y1 and selling jams and dried produce to Ecopia by Y2, generating income for 1,120 households. 0.3 Four (4) spice micro-enterprises established in Y1 and trading with FGE exports by Y2, benefitting 1,120 households. 0.4 Laboratory analysis and commercialisation potential of Trichilia dregeana completed and shared with communities, businesses and government by Y2. 0.5 Biodiversity of key indicator species maintained in all sites. 0.6 Contributions made to government policy.	0.1 Two honey micro-enterprises established, with two more under development. Central and cascaded training has been provided by Apinec. 0.2 No forest fruit micro-enterprises have yet been established. Communities have worked with staff to identify forest fruits. Partner due to undertake assessment in Q1, Y2. 0.3 Two spice micro-enterprises have been established with two more under development. Training has been delivered to 52 people thus far. Partner has been changed with approval. 0.4 Identification of Ethiopian laboratories with capacity to conduct analysis continues to be prioritised. 0.5 Biodiversity key indicator species have been identified and baseline has been conducted but report is not yet available given late start to this work. 0.6 Contributions will be made once project is more established. Good relations continue to be maintained with government approving project,	0.1 Assessment of first honey harvest of 2019 is due in April/May 2019. 0.2 Assessment by partner and subsequent establishment of micro-enterprises. 0.3 Establishment of two remaining spice micro-enterprises and roll-out of training at district level. 0.4 Laboratory analysis in Q1, Y2 by Ethiopian laboratory or agreement with EBI to use UK-based laboratory with official agreement and accompaniment by Ethiopian representatives. 0.5 Review of report and findings from fieldwork to inform design of community monitoring. 0.6 Maintenance of good relations and sharing of project experiences with government.

		participating in launch and undertaking field work and training with project staff.	
Output 1. Three honey micro-enterprises producing higher quality honey and generating income from sales to Apinec and/or other honey buyers	1.1 Establishment of three honey micro-enterprises in Y1. 1.2 75 honey producers in 3 districts trained to reduce moisture content and improve honey quality (by mid-Y2). 1.3 Apinec buying honey from micro-enterprises in Bench Maji Zone (Year 2). 1.4 By end Y2 a 10% increase in contribution of honey to household income of 980 producers.	Output is close to achieving plans for Year 1, with honey production assessed, training delivered and cascading, and micro-enterprises formed or under formation. Evidence of assessment and training are provided in Annex 4, reports 4.3a and 4.3b, respectively. Socio-economic survey of 320 households undertaken in 2018 reveals levels of income and expenditure on different NTFPs. No improvements expected in Y1 but report can be found in Annex 4, report 4.1.	
Activity 1.1 Traditional honey production reviewed by Apinec and project staff		Assessment undertaken in September 2018 by Managing Director of Apinec and Certified Master Beekeeper	Report submitted and tailored training programme duly developed
Activity 1.2 Honey producers trained to improve quality		Training delivered in Bonga by Apinec to 39 participants, including 8 government staff. Number of female participants was low – 4 in total. Training cascaded to a further 140 community participants (of which 85 men, 55 women) plus a further 14 government staff, of which 4 women.	Honey production now underway and quantity and quality to be reviewed in Year 2, with first harvest due in April 2019.
Activity 1.3 Honey producer micro-enterprises created and linked to coops		2 honey micro-enterprises established, both of which are female only, one in each of Guraferda and North Bench.	A third honey micro-enterprise is under establishment in Guraferda, and a fourth planned for Sheko. Training for all four micro-enterprises is due to be delivered in May 2019 by HBS.
Output 2. Four micro-enterprises established for production and sale of forest fruit jams/dried products. Specifically the fruits of Manilkara Butuji, Pouteria Altisima, Morus Mesozygia and Ch'atu (scientific name	2.1 Establishment of four forest fruit micro-enterprises in four districts in Y1. 2.2 Forest fruits harvested, seasonal availability and volumes established, jam/dried fruit production training delivered to 100 women in four districts	Work with local partner organisation has been delayed but progress is now being made and partner is due to undertake field visits beginning in May 2019. Project staff have worked with communities to identify different forest and backyard fruits.	

unknown) previously identified and discussed with Ecopia	(mid-Year 2), and trial samples produced. 2.3 By Y1 four samples reviewed for taste and quality, production feedback provided, orders for Y2 placed, led by Ecopia. 2.4 Market analysis and jam-manufacture potential for four fruits assessed with Ecopia (mid Y2). 2.5 Jam-related/dried fruit production underway in four micro-enterprises by Y2. 2.6 By end Y2 a 10% increase in contribution of forest fruit related income to 1,120 households.	Socio-economic survey of 320 households undertaken in 2018 reveals levels of income and expenditure on different NTFPs (see Annex 4, report 4.1).	
Activity 2.1 Traditional forest fruit harvests assessed for taste and texture		Working with communities, project staff have identified different forest fruits (and backyard fruits) currently harvested and used for personal consumption	Partner organisation due to undertake visit in May 2019 to meet communities and assess different fruits
Activity 2.2 Women trained to produce forest fruit jams and dried fruits		Not yet conducted	To be conducted once partner organisation has undertaken first field visit
Activity 2.3 Forest fruit micro-enterprises created and linked to coops		Not yet created	To be created using same model as for honey and spices, once partner organisation has undertaken visits
Output 3. Micro-enterprises established for sale of long pepper, cardamom and other spices within national and potentially international markets.	3.1 Establishment of four spice micro-enterprises in four districts in Y1. 3.2 100 men and women in four micro-enterprises trained in harvest, drying and storage of spices found within their localities. Training provided by Nati Spices by mid-Y2. 3.3 Y1 harvest assessed by Nati Spices exports for quality, including moisture content, and volume.	Original spice partner had to be changed. Change Request was approved in September 2018. New spice partner has not yet been able to visit community sites but has facilitated training by Tepi National Spice Research Centre, with which it works. 50% of spice micro-enterprises have been established with the remainder under development. Socio-economic survey of 320 households undertaken in 2018 reveals levels of income and expenditure on different NTFPs, including spices (Annex 4.1).	

	3.4 Nati Spices exports buy and sell spices produced by new micro-enterprises in Y2 and Y3. 3.5 By end Y2 a 10% increase in contribution of spice related income to 1,120 households.		
Activity 3.1 Nati Spices assess Y1 samples of spices		Working with communities, project staff have identified different spices currently harvested and used for personal consumption. Project staff have met with partner staff and colleagues at Jimma Agricultural Research Centre and Tepi National Spice Research Centre.	Assessment of spices by partner organisation
Activity 3.2 Training in harvest, drying and storage of spices		First phase of training delivered by Tepi National Spice Research Centre to community representatives (23 women, 17 men) and government staff (4 women, 8 men).	Follow up training to be delivered to community micro-enterprises at district level.
Activity 3.3 Spice micro-enterprises created and linked to cooperatives		2 spice micro-enterprises established, both of which are female only, one in each of Guraferda and North Bench.	A third micro-enterprise is planned for Sheko.
Output 4. Analysis of chemical properties and commercial potential of Forest Mahogany (Trichilia dregeana) undertaken and shared with businesses and communities.	4.1 Undertake chemical analysis of characteristics of Trichilia dregeana and compare against Trichilia emetic which has already been successfully commercialised in skin-care and hair-care products. 4.2 Explore potential product uses, trade options and value chain development with companies post-laboratory analysis. 4.3 Share findings with communities and local government and undertake assessment of distribution and potential quantities for harvest.	The socio-economic report (Annex 4.1) identifies Luya as one of the most widespread NTFPs in all four districts which is encouraging. Finalising laboratories able to undertake suitable analysis will be one of the focus points for the project in Q1, Y2, which is in keeping with the planned timetable.	

	4.4 Subject to positive laboratory analysis, develop potential business plans for coops with Trichilia dregeana.		
Activity 4.1 Conduct laboratory analysis of *Trichilia dregeana*		Laboratories researched by EBI report no longer having the ability to conduct the required analysis in Ethiopia. With support from contacts at FAO, the BLES Food Laboratory, Legetafo, has been identified as a potential for analysis of the non-saponifiable matter. It is unable to conduct tri-glyceride content so alternatives are currently being explored in Ethiopia.	Further work with Ethiopian laboratories to conduct analysis. If this proves impossible HBS will transport the seed in keeping with Ethiopian law and have it analysed in the UK.
Output 5. Biodiversity measured by key indicator species, maintained in all micro enterprise sites.	5.1 Biodiversity of species identified in Importance Value Index is maintained to a greater degree in NTFP micro-enterprise sites than in non-NTFP micro enterprise sites of similar context.	Fieldwork was repeatedly delayed but has now been undertaken in the first three weeks of April 2019. The named consultant, Dr. Motuma Tolera, and his team of researchers from Hawassa University undertook community consultation, species identification and site selection with input from local government to ensure that all necessary permissions were granted. A report is due to be submitted in May 2019 following return from the field visit and the end of Ethiopian Easter.	
Activity 5.1 Select local species for inclusion in Importance Value Index (IVI)		Desk based review has been started while waiting for fieldwork to become feasible. Fieldwork with communities, including selection of local species has been undertaken in first three weeks of April 2019.	Report to be produced.
Activity 5.2 Select IVI biodiversity monitoring sites in micro-enterprise areas		IVI biodiversity monitoring sites were selected in consultation with project staff and local government in order to ensure that permission was granted.	Report to be produced.
Activity 5.3 Select IVI biodiversity monitoring sites in non-micro-enterprise sites		IVI biodiversity monitoring sites for non-micro enterprise locations were selected in consultation with project staff and local government in order to ensure that permission was granted.	Report to be produced.
Activity 5.4 Conduct Y1 baseline		In order to make up time lost in Y1 the baseline was conducted concurrent to site selection.	Report to be produced.

Output 6. Policy makers made aware of role of NTFPs, micro-enterprises and women in sustainable management of forests	6.1 Number of exchanges between project, Ethiopian Biodiversity Institute and relevant government agencies at regional and national levels. 6.2 Number of training sessions held by project, Ethiopian Biodiversity Institute and policy specialists for government agencies.	Evidence of project launch is provided in Annex 4, report 4.2, and of production of flyers in report 4.4. Further evidence of the role of NTFPs, micro-enterprises and the importance of including women in these initiatives will become available as the project progresses into years 2 and 3.	
Activity 6.1 Launch project with local government		Project launched in October 2018 after a delay in signing of document. Senior researcher from EBI, Executive Director of EWNRA, and several senior staff from district and regional government attended and participated in the launch, as did key community spokesmen and women.	Build on initial launch by implementing project and continuing to liaise with key partners.
Activity 6.2 Produce materials (flyers, posters, reports) and share with government		Posters produced in Amharic and English and being disseminated.	Continue to liaise with government and share lessons from project.

Annex 2: Project's full current logframe as presented in the application form (unless changes have been agreed)

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Impact: **(26/30 words)** Rates of deforestation in SW Ethiopia are reduced as communities increasingly value forests and benefit economically from national and international trade in sustainably sourced Non-Timber-Forest-Products (NTFPs).			
Outcome: **(29/30 words)** Forest becomes more economically competitive through development of community level micro-enterprises collecting, processing and selling Non-Timber-Forest-Products which improve income for 5,000 people whose engagement in coffee harvesting is limited.	0.1 Three (3) honey micro-enterprises supported in Y1 and selling to Apinec by Y2, generating additional income for 980 producers in Guarferda, Sheko and North Bench. 0.2 Four (4) women-led forest-fruit micro-enterprises established in Y1 and selling jams and dried produce to Ecopia by Y2, generating income for 1,120 households. 0.3 Four (4) spice micro-enterprises established in Y1 and trading with FGE exports by Y2, benefitting 1,120 households. 0.4 Laboratory analysis and commercialisation potential of *Trichilia dregeana* completed and shared with communities, businesses and government by Y2. 0.5 Biodiversity of key indicator species maintained in all sites. 0.6 Contributions made to government policy.	0.1 Honey micro-enterprise documentation, sales and income reports, business plans and household surveys. 0.2 Fruit micro-enterprise documentation, sales and income reports, business plans and household surveys. 0.3 Spice micro-enterprise documentation, sales and income reports, business plans and household surveys. 0.4 Laboratory results and correspondence with businesses, communities and government. 0.5 Biodiversity monitoring reports in Y1 and Y3. 0.6 Evidence of communications sent to government departments	Government continues to grant access to UOH and partners to work in the area. Government biodiversity conservation and forest policy continues to support sustainable use and community management to conserve natural forest, with harvesting of Non-Timber-Forest-Products (NTFPs). Continued community interest in NTFP development.
Outputs: 1. Three honey micro-enterprises producing higher quality honey and generating income from sales to Apinec and/or other honey buyers	1.1 Establishment of three honey micro-enterprises in Y1. 1.2 75 honey producers in 3 districts trained to reduce moisture content and improve honey quality (by mid-Y2). 1.3 Apinec buying honey from micro-enterprises in Bench Maji Zone (Year 2).	1.1 Micro-enterprise incorporation documents. 1.2 Participant training list and honey moisture test results. 1.3 Apinec purchasing records and micro-enterprise sales records.	National honey prices remain stable enough to generate income. Producers are willing to sell to Apinec.

	1.4 By end Y2 a 10% increase in contribution of honey to household income of 980 producers.	1.4 Household socio-economic survey records and independent household interview results	
2. Four micro-enterprises established for production and sale of forest fruit jams/dried products. Specifically the fruits of *Manilkara Butuji, Pouteria Altisima, Morus Mesozygia* and Ch'atu (scientific name unknown) previously identified and discussed with Ecopia	2.1 Establishment of four forest fruit micro-enterprises in four districts in Y1. 2.2 Forest fruits harvested, seasonal availability and volumes established, jam/dried fruit production training delivered to 100 women in four districts (mid-Year 2), and trial samples produced. 2.3 By Y1 four samples reviewed for taste and quality, production feedback provided, orders for Y2 placed, led by Ecopia. 2.4 Market analysis and jam-manufacture potential for four fruits assessed with Ecopia (mid Y2). 2.5 Jam-related/dried fruit production underway in four micro-enterprises by Y2. 2.6 By end Y2 a 10% increase in contribution of forest fruit related income to 1,120 households.	2.1 Micro-enterprise incorporation documents. 2.2 Fruit assessment and harvest reports, samples from Y1 for review, female participant lists. 2.3 Ecopia quality and taste reports, production reports, order forms. 2.4 Ecopia market analysis report. 2.5 Production records from all jam/fruit micro-enterprises. 2.6 Household socio-economic survey records and independent household interview results.	Consumer demand remains for at least one of the forest fruit related products. Producers are willing to sell to Ecopia.
3. Micro-enterprises established for sale of long pepper, cardamom and other spices within national and potentially international markets.	3.1 Establishment of four spice micro-enterprises in four districts in Y1. 3.2 100 men and women in four micro-enterprises trained in harvest, drying and storage of spices found within their localities. Training provided by Feed Green Ethiopia by mid-Y2. 3.3 Y1 harvest assessed by Feed Green Ethiopia exports for quality, including moisture content, and volume. 3.4 Feed Green Ethiopia exports buy and sell spices produced by new micro-enterprises in Y2 and Y3.	3.1 Micro-enterprise incorporation documents. 3.2 Participant training lists and training content records. Lists of spices identified by location. 3.3 Y1 harvest analysis records and reports. 3.4 Y2 order and purchase records from Feed Green Ethiopia exports and micro-enterprises.	Continued community interest in harvesting spices. Producers are willing to sell to Feed Green Ethiopia.

	3.5 By end Y2 a 10% increase in contribution of spice related income to 1,120 households.	3.5 Household socio-economic survey records and independent household interview results.	
4. Analysis of chemical properties and commercial potential of Forest Mahogany (*Trichilia dregeana*) undertaken and shared with businesses and communities.	4.1 Undertake chemical analysis of characteristics of *Trichilia dregeana* and compare against *Trichilia emetic* which has already been successfully commercialised in skin-care and hair-care products. 4.2 Explore potential product uses, trade options and value chain development with companies post-laboratory analysis. 4.3 Share findings with communities and local government and undertake assessment of distribution and potential quantities for harvest. 4.4 Subject to positive laboratory analysis, develop potential business plans for coops with *Trichilia dregeana*.	4.1 Chemical analysis reports. 4.2 Technical and commercial reports, Emails, meeting minutes and other correspondence between companies and University of Huddersfield. 4.3 Minutes of meetings, copies of correspondence and forest assessment reports. 4.4 Copies of business plans.	Government is willing to allow scientific analysis of the chemical and biological characteristics of *Trichilia dregeana* *Trichilia dregeana* has no underlying negative qualities which prevent its potential commercialisation. Communities are willing to harvest the seed if commercial potential is established
5. Biodiversity measured by key indicator species, maintained in all micro enterprise sites.	5.1 Biodiversity of species identified in Importance Value Index is maintained to a greater degree in NTFP micro-enterprise sites than in non-NTFP micro enterprise sites of similar context.	5.1 Importance Value Index, NTFP micro-enterprise site selection and control site selection. 5.2 Biodiversity report from independent consultant.	Access to NTFP and non-NTFP sites is permitted in order to conduct controls.
6. Policy makers made aware of role of NTFPs, micro-enterprises and women in sustainable management of forests	6.1 Number of exchanges between project, Ethiopian Biodiversity Institute and relevant government agencies at regional and national levels. 6.2 Number of training sessions held by project, Ethiopian Biodiversity Institute and policy specialists for government agencies.	6.1 Records of discussions, workshops and training sessions between project, Ethiopian Biodiversity Institute and other government agencies. 6.2 Records and reports from training sessions held for government agencies.	Government policy remains in favour of community ownership and use of forest for conservation and livelihood development

	Activity	No. of months	Year 1			Year 2				Year 3			
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 1	Honey												
1.1	Traditional honey production reviewed by Apinec and project staff	3											
1.2	Honey producers trained to improve quality	1											
1.3	Honey producer micro-enterprises created and linked to coops	2											
1.4	Y2 honey harvests assessed by Apinec and sales negotiated	5											
1.5	Training and improvements to Y1 honey production by Apinec	1											
1.6	Y3 honey harvests assessed by Apinec and sales negotiated	5											
Output 2	Forest fruits												
2.1	Traditional forest fruit harvests assessed for taste and texture	3											
2.2	Women trained to produce forest fruit jams and dried fruits	1											
2.3	Forest fruit micro-enterprises created and linked to coops	2											
2.4	Y1 forest fruit jams and dried produce assessed by Ecopia	1											
2.5	Improvements to Y1 production agreed with women & Y2 orders placed	1											
2.6	Y2 production	4											
2.7	Y2 production assessed by Ecopia and sales negotiated	2											
2.8	Training and improvements on Y2 production	1											
2.9	Y3 orders placed	1											
2.10	Y3 production	4											
2.11	Y3 production assessed by Ecopia and sales negotiated	2											
Output 3	Spices												
3.1	Feed Green Ethiopia exports (FGEE) assess Y1 samples of spices	1											
3.2	Training in harvest, drying and storage of spices	1											

3.3	Spice micro-enterprises created and linked to cooperatives	2												
3.4	Spices harvested, dried and stored in Y2													
3.5	FGEE assess spice qualities and sales negotiated													
	FGEE provide feedback to improve spice quality													
	Spices harvested, dried and stored in Y3													
3.3	FGEE assess spice qualities and sales negotiated													
3.4	FGEE provide feedback to improve spice quality													
Output 4	Luya													
4.1	Conduct laboratory analysis of *Trichilia dregeana*													
4.2	Compare properties of *Trichilia dregeana* with *T. emetica* properties													
4.3	Share findings with communities, government and cosmetic companies													
4.4	Develop cosmetic products with commercial input dependent on results													
Output 5	Biodiversity													
5.1	Select local species for inclusion in Importance Value Index													
5.2	Select IVI biodiversity monitoring sites in micro-enterprise areas													
5.3	Select IVI biodiversity monitoring sites in non-micro-enterprise areas													
5.4	Conduct Y1 baseline													
5.5	Conduct Y3 endline													
5.6	Compare results and report													
5.7	Continue standard forest monitoring patrols and report findings													
Output 6	Policy influencing, project progress, lessons learned and best practise													
6.1	Launch project with local government													

6.2	Produce materials (flyers, posters, reports) and share with government												
6.3	Participate in appropriate national discussion platforms												
6.4	Generate information for dissemination via web and social media												

Annex 3: Standard Measures

Table 1 Project Standard Output Measures

Code No.	Description	Gender of people (if relevant)	Nationality of people (if relevant)	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
6A	Training of Trainers on beekeeping	28 communities (27-male & 1-female) 11 governmental & project staff (9-male & 2-female)	Ethiopian	39 from the planned 40	0	0	39	Not specified
6A	Beekeeping Training cascaded for wider community	140 communities (85-male & 55-female), 14 governmental staffs (10-male & 4-female)	Ethiopian	154 from the planned 75	0	0	154	75
6A	Training on spice harvesting & post-harvest management	40 communities (17-male & 23-female) governmental staffs 12 (8-male & 4-female)	Ethiopian	52	48	0	52	100
14A	Project launch with explanation of aims and importance for biodiversity and sustainable community management	45 Governmental staff (42-male & 3-female) 28 community members (27-male &1-female)	Ethiopian	73 from the planned 73	0	0	73	Not specified
17	5-Micro-enterprise established (3-honey & 2-spice)	Mixed (13-male & 14-female on honey) and (10-male & 10-female on spice)	Ethiopian	5	6	0	5	11
20								
23								

Table 2 Publications

Title	Type (e.g. journals, manual, CDs)	Detail (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. weblink or publisher if not available online)
Promotional posters	Printed poster	EWNRA & HBS, 2019	1 woman, 1 man	British and Ethiopian	University of Huddersfield	Will be made available online

Annex 4 Onwards – supplementary material (optional but encouraged as evidence of project achievement)

Checklist for submission

	Check
Is the report less than 10MB? If so, please email to Darwin-Projects@ltsi.co.uk putting the project number in the Subject line.	Y
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 need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Y
Do you have hard copies of material you want 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
Have you involved your partners in preparation of the report and named the main contributors	Y
Have you completed the Project Expenditure table fully?	Y
Do not include claim forms or other communications with this report.	