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)

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Project reference	25-014
Project title	Landscapes and Livelihoods: Participatory Restoration of the Mt Bamboutos Ecosystem
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Partner institution(s)	Environment and Rural Development Foundation (ERuDeF); University of Buea
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Project Leader name	Paul Laird
Project website/blog/Twitter	http://internationaltreefoundation.org/introducing-mount-bamboutos-initiative/ https://www.youtube.com/watch?v=DlMvoIyYk6E
Report author(s) and date	Paul Laird, Asabaimbi Deh Nji, 30 April 2019

1. Project rationale

The project location is shown in Annex 4: Base map for MBI and MBI project area map. Mount Bamboutos lies to the west of the town of Mbouda and straddles the point where three regions of Cameroon meet: the South West, West and North West. The large volcanic complex extends in a NE-SW direction for over 50 km, rising to 2,679 m around the rim of a large caldera with a 10km diameter. It forms part of the Cameroon volcanic line. Mt Bamboutos is one of the major water catchments of Cameroon, and its streams feed the Moungo, Wouri, Dimamba, and Sanaga river drainage basins.

In the 1960s[1] Mt Bamboutos was described as one of West and Central Africa's biodiversity hotspots; home to a wide range of primates (including Cross River gorillas (*Gorilla gorilla diehli*), and Nigeria-Cameroon chimpanzees (*Pan troglodytes ellioti*)), birds, amphibians and plants, including high numbers of endemic species. Anthropogenic pressures and poor implementation of regulations and legal protection have caused severe deforestation and degradation. Parts of Mt Bamboutos have been almost completely deforested and converted to agriculture and settlements (see diachronic maps in Annex 5). The upper slopes and caldera are largely used as pasture, and intensive horticulture is increasingly practiced. As a result of the habitat loss, biodiversity has been severely reduced, with many of the species going to local extinction. What remains of the global biodiversity today is found in piedmont sections and steep gallery forests of the mountain. Broadly, the western slopes of the massif (in SW Region) retain more forest

[1] STUART, S. N., Conservation of Cameroon Montane forests: report of the ICBP Cameroon Montane Forest Survey, November 1983-April 1984, International Council for Bird Preservation, 1986

cover. A detailed topographic map produced in the 1940s and 1950s shows that much of the land on the east side of Mt Bamboutos was covered, even then, by grasslands, with areas of lightly wooded savannah, and few areas of forest.

Today, 30,000 rural people depend directly on the Bamboutos ecosystem for their livelihoods. The degradation of the catchments has led to serious water shortages. Demographic pressure on land has resulted in encroachment of marginal sloping areas, causing ongoing soil erosion and regular landslides[2].

Intensification of agriculture and horticulture is leading to soil erosion, poor soil quality, and food and water contamination, and will result in decreasing yields and reduced incomes. Farmers are using high levels of fertilisers and pesticides for the horticultural crops, and may have a poor understanding of the real economic and environmental costs – hence the high risk of increased soil and agroecosystem degradation and declining crop yields[3].

Land use and land cover maps produced by MBI based on satellite imagery from 1980, 2000 and 2018 show rapid urbanisation on the lower slopes of the massif, reductions in forest cover and increase in Eucalyptus plantations (See Annex 5: Diachronic maps and Land use and land cover maps).

The project's baseline survey indicates that households with older heads tend to occupy lower altitudes; devote larger land surface areas for perennial crop cultivation; and keep land fallow for longer periods. Younger households occupy higher altitudes; are more recent inhabitants; and practice shorter fallow periods. This is consistent with the observed trend towards increased use of the upper slopes for intensive horticulture with irrigation during dry seasons[4].

2. Project partnerships

ITF and ERuDeF hold regular monthly minuted project management team meetings comprising the ITF Programmes Manager, Finance Manager and Communications Officer, and the ERuDeF MBI Project Manager, Chief Finance Officer and Communications Manager. The meetings review progress based on the agreed project activity plan.

ERuDeF produces quarterly narrative and financial reports. ITF has provided advice and formats for: narrative and finance reporting including tree nursery and tree planting reports; the M&E framework; project communications; the baseline survey questionnaires; and mapping of land use and land cover.

ITF has made two project visits since the start of MBI: in June 2018 (ITF Chief Executive and Programmes Manager) and in March 2019 (Programmes Manager).

ERuDeF has worked closely with members of the Cameroon Mountains University Network (CaMUN) represented by Dr Emmanuel Yenshu, Professor of Sociology and Anthropology and Vice Dean Buea University, and Dr Christopher Tankou, Professor of Crop Science at the University of Dschang, who prepared questionnaires and analysed results of the baseline survey (with inputs from ITF and ERuDeF).

ERuDeF has established partnerships with local NGO partners: Community Aid in Development (COMAID) in NW Region and Operation Green Space in SW Region and also works collaboratively with the African Centre for Renewable Energy & Sustainable Technology (ACREST) and the Groupement d'Appui pour le Développement Durable (GADD). ERuDeF has started to work collaboratively with the Mbororo Social, Cultural and Development Association (MBOSCUDA) which represents the pastoralist community of Mt Bamboutos.

[2] In 2003, 20 people were killed and in 2017 property valued at £450,000 was destroyed.

[3] Based on observations by MBI team and findings of Baseline survey

[4] Baseline survey draft report

3. Project progress

3.1 Progress in carrying out project activities

Output 1:

Farming systems diversity, soil fertility and sustainable productivity for at least 1,330 households (50% women participants) in 9 villages and the pastoralist community increased over baselines through capacity building and agroforestry establishment by 2021.

Activities

1.1 Sensitization, mobilisation and selection of 2,000 farmers drawn from 9 villages (Bafou, Bangang, Babadjou, Buchi, Menka, Pinyin, Bamumbu, Fossimondi and M'mouckmbie) and the pastoralist community on sustainable diversified farming systems, and identification of tree species to be planted

Sensitisation took place during village meetings, and where necessary due to insecurity, through door to door meetings. In the West and North-West, 1,198 farmers gained awareness on agroforestry and diversified farming systems through these sensitization meetings, 451 (38%) of whom were women. As a result of these meetings 806 farmers registered to take part in the sustainable diversified farming programme, 303 (38%) of whom were women. In the South-West 705 farmers were sensitised, 252 (36%) of whom were women. During these meetings farmers identified priority tree species for planting on farm including: *Persea americana* (avocado), *Dacryodes edulis* (safou or bush plum), *Canarium schweinfurthii*, *Kola acuminata* (cola nut), *Prunus africana* and *Mangifera indica* (mango) and expressed interest in other proposed tree beneficial species.

Through the help of the Mbororo Social, Cultural and Development Association (MBOSCUDA), 20 members of the pastoralist community took part in sensitization meetings held at pastoralist camps: they expressed interest in the practice of diversified farming systems, especially for improving pasture management.

1.2 Training of 2,000 farmers (50% women) on sustainable diversified farming systems (agroforestry, contour farming, fruits and NTFPs tree growing)

Training on sustainable diversified farming systems was provided through theoretical/practical workshops to 170 farmers in the West and 772 farmers in the South-West region. Training in North West was delayed by insecurity but is now ongoing. Gender data are still being analysed for these groups. Training sessions covered subjects identified by farmers as training needs. Under the heading of sustainable diversified farming systems, farmers requested and received training on contour farming, agroforestry techniques, nursery creation and management techniques, tree planting techniques and vegetative multiplication of NTFPs and fruit trees. Agroforestry techniques included alley cropping, live fencing, contour farming, terrace farming and NTFPs/fruit trees growing.

1.3 Training of 2,000 farmers (50% women) to establish their own small agroforestry tree nurseries, pegging, grafting, marcotting, composting, harvesting and tree treatment

In the North West and West Regions 180 farmers were trained through four workshops on propagation techniques including grafting, marcotting, cutting and layering. Gender analysis still to be carried out. In the South West 193 farmers including 58 women (30%) were trained through six theoretical and practical sessions on establishment of small agroforestry tree nurseries, including the above skills.

1.4 Collection and purchase of tree seed for agroforestry nurseries

A tree seed collection calendar was established. A total of 591,350 seeds of 14 species of trees were obtained through local seed collections for the nine tree nurseries. Among the main species collected were *Persea americana* (avocado), *Cola acuminata* (cola nut), *Leucaena glauca, Raphia vinifera* and *Maesopsis eminii.*

1.5 Conduct baseline surveys on agriculture, food and nutrition in the 9 villages and the pastoralist community

A baseline survey questionnaire was developed by project partners from the Cameroon Mountains University Network under the leadership of Professor Christopher Tankou of Dschang University, with support from ERuDeF and ITF.

Semi-structured questionnaires were administered with 230 households in West and North West regions and 120 households in the South West. Data were collected on topics including agriculture, food, nutrition, household income, livelihoods and employment, and potential new income sources and cottage industries. Professor Tankou has drafted an initial report on the data analysis. This draft is included as Annex 7. We request that this report is not published as it is still a draft.

1.6 Establishment / training of local institutions for extension and participatory M&E (Chiefs and traditional authorities, VFMCs, VANs in 9 villages and the pastoralist community)

Six Village Forest Management Committees (VFMCs) with 48 members (20 women and 28 men) were established in six villages in West and NW (Bafou, Bangang, Babadjou, Menka, Buchi and Pinyin) and the eight members of each VFMC were installed by the respective divisional delegates for forestry and wildlife (Menoua, Bamboutos and Mezam). ERuDeF has developed one new VFMC in South West Region. ERuDeF is working to support the VFMCs across the entire project area. The VFMCs are mandated by the government to take part in the management of community forests, and must have a minimum of 30% women members. They can play a key role in participatory monitoring and evaluation with MBI.

ERuDeF has held discussions to sensitise three Paramount Fons and four Chiefs, resulting in the formation of the Mount Bamboutos Fons' Association. The Articles of Association for the Association were adopted by all twelve members present and a six-man Executive Bureau for the Association was put in place.

1.7 Planting of 200,000 agroforestry trees in the fields of 1,330 farmers from 9 villages and the pastoralist community in the project site [from Y2]

1.8 Participatory monitoring of uptake of agroforestry and sustainable diversified farming systems in the 9 villages and the pastoralist community

ERuDeF has worked with and trained the Village Forest Management Committees across Mount Bamboutos. These groups which include a minimum of 30% women will form the main platform for participatory monitoring. This specific activity has not yet started. Tree planting will start in April 2019.

1.9 Participatory establishment and monitoring of agroforestry and sustainable farming crop yield plots in the 9 villages and the pastoralist community

ERuDeF has worked with and trained the Village Forest Management Committees across Mount Bamboutos. These groups will form the main platform for participatory monitoring. The specific activity has not yet started. It will take place as soon as agroforestry sites have been confirmed in Y2.

1.10 Participatory monitoring of household food security and nutrition

Data has been collected on household perception of food security and nutrition. Participatory monitoring will start with households of participating farmers early in Y2.

1.11 Preparation, publication and local sharing of a case study on agroforestry, yields, food security and nutrition [From Y2]

Output 2: Capacity building and agroforestry incorporating NTFPs enables at least 1,330 households (70% women participants) to take steps towards increased incomes and employment by 2021

Activities:

2.1 Conduct baseline socio-economic survey on HH income, livelihoods and employment in the 9 villages and the pastoralist community

Jointly carried out with Activity 1.5 above.

2.2 Conduct consultations in the 9 villages on identification of potential new income sources and cottage industries, constraints, opportunities & value chain development

Consultation meetings were held with farmers in all MBI villages and with the pastoralist community to identify potential new income sources. Farmers identified a range of fruits and NTFPs which could be transformed through cottage industries including Avocado, Raffia, Canarium, Cola and Prunus. Farmers also identified potential constraints for setting up cottage industries and for value chain development.

2.3 Training of 2,000 farmers (70% women) drawn from 9 villages and the pastoralist community, on cultivation of NTFP and fruit trees

So far, in the West and North West Regions, 193 farmers and in South West 186 farmers including 64 women (34.4%) took part in four different theoretical and practical training sessions to cultivate NTFPs and fruit trees, looking at specific species including *Canarium schweinfurthii, Dacryodes edulis, Persea americana, Ricinodendron heudelotii* and *Cola acuminata*. The 186 farmers in the South West pledged each to plant at least 20 fruit/NTFP trees in their farms.

2.4 Training of 2,000 farmers drawn from 9 villages and the pastoralist community, on value addition opportunities [from Y2]

2.5 Training of 2,000 farmers drawn from 9 villages and the pastoralist community in the project site, on cost benefit analysis for their priority products [from Y3]

2.6 Participatory monitoring of uptake of agroforestry in the 9 villages and the pastoralist community

ERuDeF has worked with and trained the Village Forest Management Committees across Mount Bamboutos. These groups will form the main platform for participatory monitoring. This specific activity has not yet started. Tree planting will start in April 2019.

2.7 Participatory monitoring of household income from NTFPs and fruits (based mainly on farms with existing NTFP and fruit production)

Data has been collected on household perceptions of income from NTFPs and fruits. Participatory monitoring will start with households of participating farmers early in Y2.

2.8 Preparation, publication and local sharing of a case study on income from NTFPs and fruits yields, food security and nutrition [from Y2]

Output 3. Community-led planting and regeneration of 300,000 native trees in degraded areas of Community, Riverine and Sacred Forests, and increased tree cover in farmland (200,000 agroforestry trees) launch the restoration of 3,000 ha of forests and biodiversity habitat in the degraded Mt. Bamboutos ecosystem by 2021

Activities:

3.1 Purchase of material/equipment for the construction and management of 6 nurseries/ resource centres and the Lebialem forestry centre (shading net, binding wire, wheelbarrow, trowels, iron rods, polythene bags etc.)

Materials and equipment including shading net, binding wire, wheelbarrow, trowels, iron rods, and polythene bags were procured to establish 12 main tree nurseries. It has not been possible to re-activate the Lebialem forestry centre due to insecurity in that area of South West.

3.2 Preparation of 9 nursery sites/ resource centres prior to nursery construction (clearing, tilling and levelling….)

Twelve nursery sites were allocated following discussion with the local communities and traditional leaders: three in the West, three in the North West and six in the South West. The sites are shown on the map entitled MBI Project Area map in Annex 4. Key factors in choosing the site included permanent access to water and guarantees over ownership and community accessibility, as well as the location and altitude of the sites in relation to the main identified tree planting areas. The nursery sites range in altitude from 1,040 masl at Nchingang to 2,349 masl at Mbelenka (both in South West) and this obviously affects the range of species grown at each site. One site could not be developed: ERuDeF's existing main nursery site in Lebialem (SW) which cannot be accessed due to insecurity.

3.3 Establishment of 9 nurseries for agro-forestry, fruit and NTFPs species

Twelve tree nursery sites have been developed in Mezet-Bafou, Mekoup-Bangang and Balepo-Babadjou villages (West), Pinyin, Menka and Buchi villages (North West) and Magha, Mbelenka, Formenji, Nchingang, M'mouckmbie and Mba-m'mouck (Fossimondi) villages (South West). The coordinates of the nurseries are given in the MBI project area map in Annex 4. Each tree nursery measures at least 15m x 10 m and has capacity for 20 to 25,000 seedlings. Wherever possible, local materials such as bamboo and palm fronds were used in construction.

One nursery attendant was recruited from the local community to manage each nursery and carry out weeding, watering, filling poly bags, potting and sowing seeds. They have been trained and monitored and in some cases have been replaced. Three are women and nine are men.

3.4 Construction of 6 giant mist propagators for propagating and grafting selected cultivars of NTFP and fruit trees (See also Output 2)

Four giant mist propagators and four non-mist propagators (rooting chambers) have been installed at six tree nurseries for propagating and grafting selected cultivars of NTFPs and fruit trees. The giant propagators measure 3m x 1.3m x 1.3m while the non-mist propagators are 3m x 1m x 0.8m.

3.5 Collection and purchasing of seeds of agroforestry species to be planted in 1,330 farmers' fields (Output 1 and 2)

A seed collection calendar has been established and seed collection is ongoing. There is no reliable source of seed for the project other than local collection, so tree seedling production is dependent on the local calendar. Seeds of 14 tree species have been collected so far. Of these, two species are purely for agroforestry use (Avocado and Leucaena – approximately 33% of the seed) while 12 are indigenous species – approximately 67% of the seed, which can be used both for forest restoration and agroforestry. A total of 168,650 seeds were sown in nurseries in the North West and West, while 334,250 were sown in nurseries in the South West.

3.6 Collection and purchasing of seeds of trees to be planted in community and riverine forests.

Seeds of 14 tree species have been collected. Of these, two species are purely for agroforestry use (avocado and Leucaena – and approximately 33% of the seed) while 12 are indigenous species – approximately 67% of the seed, which can be used both for forest restoration and agroforestry. The indigenous species include *Cola acuminata, Raphia vinifera* (seed and wildlings), *Polyscias fulva, Dacryodes edulis, Canarium schweinfurthii, Terminalia superba, Terminalia ivorensis, Prunus africana, Maesopsis eminii, Cordia platythyrsa* and *Croton macrostachyus.*

3.7 Support nursery management operations (weeding, watering, spraying, thinning etc.) for the nurseries to be established by the project

Management of the twelve tree nurseries is ongoing. Twelve nursery attendants have been employed across the nurseries to fulfil tasks including filling poly bags, seed preparation, sowing and transplanting, weeding and watering. They are supported by local community volunteers, the majority of whom are women. Tree nursery performance is being monitored by

ERuDeF staff and the VFMCs. By the end of Y1 the twelve nurseries held 102,501 seedlings: 59,747 in nurseries in the West and North West, and 42,754 in South West. Seed germination and transplanting of germinated seedlings are ongoing. Tree nursery summaries are in Annex 9.

3.8 Planting of 200,000 agroforestry trees in the fields of 1,330 farmers from 9 villages and the pastoralist community in the project site (see Output 1)

Tree planting will start in April and continue until August this year.

3.9 Identification of priority areas for restoration intervention through the Restoration Opportunity Assessment Methodology (ROAM) (see also Output 4)

The sub-national Restoration Opportunity Assessment Methodology (ROAM) exercise is being carried out in all villages. Priority areas for restoration so far identified include 153 ha of degraded farms (cultivated and fallowed), 1,620 ha of degraded riparian forests, 425 ha of community forest land, 94 ha of sacred forests, 150 ha of forest reserve and 0.89 ha of water catchment areas (springs). Village level maps of priority areas for intervention have so far been produced for four villages (Bangang, Babadjou, Bafou and Bamumbu see Annex 6).

The main restoration intervention approaches discussed with stakeholders were: agroforestry through tree planting for soil improvement and economic tree species; planting of timber tree species as well as medicinal tree species in degraded riparian and community lands. Key restoration intervention approaches include legal protection of community land as community forest, and formulation of local laws for protection of sacred forests.

3.10 Establishment / capacity building for the local institutions for Forest Management for Community Forests to be restored (Chiefs & traditional authorities, VFMCs)

Six Village Forest Management Committees (VFMCs) were established in six villages in West and NW (Bafou, Bangang, Babadjou, Menka, Buchi and Pinyin) and the eight members of each VFMC were installed by the respective divisional delegates for forestry and wildlife (Menoua, Bamboutos and Mezam). ERuDeF has developed one new VFMC in South West Region. ERuDeF is working to support the VFMCs across the entire project area. The VFMCs are mandated by the government to take part in the management of community forests, and must have a minimum of 30% women members. They can play a key role in participatory monitoring and evaluation with MBI.

The capacities of all the members of the six VFMCs were built during one day training sessions organized in Santa, Babadjou, Bangang and Bafou. The members were trained on sections of the Cameroon forestry law, methods of fire control and prevention, their role and other aspects concerning tree planting, monitoring and evaluation, and survival counts. The VFMCs are playing an active role in discussions with local communities on the importance of setting aside sites for forest restoration especially around water catchments (springs) and alongside streams.

ERuDeF held discussions to sensitise three Paramount Fons and four Chiefs, resulting in the formation of the Mount Bamboutos Fons' Association. The Articles of Association for the Association were adopted by all twelve members present and a six-man Executive Bureau for the Association was put in place. The Fons' Association has indicated strong support for the objectives of MBI.

3.11 Planting of 300,000 trees in priority degraded sites in community and riverine forests [From Y2]

3.12 Support community members with tools and equipment for the planting of at least 300,000 native trees in community and riverine forests. [From Y2]

3.13 Support 1,330 farmers with tools and equipment for the planting of at least 200,000 agroforestry trees in their fields. (Output 1 and 2) [From Y2]

3.14 Conduct baseline surveys on biodiversity, forest restoration and ecosystem services

A plant biodiversity survey was carried out across Mount Bamboutos using the recce method. 331 plant species were identified within the area. Of this number, 18 were identified as threatened species, with one being endemic to the Lebialem area. Over 112 plant species are

known to be used for medicinal purposes by the local communities as phytomedicine indicating the reliance of the local communities on these forest patches for traditional medicine and other uses. Patches of existing forest stands were also identified and mapped. Work is ongoing to refine the long list of tree species recommended for planting as part of forest restoration. The draft survey report is included in Annex 8 (but with request not to publish as this is still a draft).

3.15 Train Forest Management Institutions to monitor and carry out survival counts of seedlings planted in community and riverine forests in the project site (PM&E) [Mainly from Y2]

Initial training of Village Forest Management Committees has started.

3.16 Geo-referencing of surviving trees and production of maps of all planted areas [From Y2]

3.17 Preparation, publication and local sharing of a case study on community forest restoration [From Y2]

Output 4. Framework, coalition, consensus and conditions established for land use planning and sustainable management of Mt Bamboutos ecosystem, supported by shared outputs from research and ongoing M&E

Activities:

4.1 Hold a project inception workshop to sensitize all stakeholders on the restoration and sustainable management of Mount -Bamboutos Ecosystem and identify training needs

The Mount Bamboutos Initiative launch workshop took place on 2nd August 2018, at the Hotel De Malte in Dschang, Menoua Division, in West Region. The occasion was presided over by the Senior Divisional Officer for Menoua Division in the presence of a representative of the Minister of Forestry and Wildlife, His Excellency the British High Commissioner to Cameroon, mayors from Alou, Nkong-Zem, Batcham, Babadjou and Santa municipalities, conservation and development partners, local administration and related services, traditional authorities, women, youth and pastoralist groups and 90 other invited personalities. The objectives were to:

- Raise awareness of stakeholders on the need to restore the Mount Bamboutos ecosystem
- Attract stakeholders to support the Initiative
- Validate the short term (five year) and long term (15 year) objectives of the Initiative
- Identify project gaps based on local realities, and get recommendations for the attainment of the project objectives.

Following the presentations, discussions and deliberations by participants, a resolution was made that the project has been unanimously accepted, with the following recommendations:

- The project should adequately integrate the private sector in its implementation
- The support organization (ERuDeF and partners) should identify and make available all the constraints, difficulties and challenges faced in the implementation of the project
- The different Municipalities should deliberate on this initiative in their council sessions and enact into a law to ensure continuity of the project from one mandate to the other
- The Mount Bamboutos initiative should identify and established the link between the project and other existing projects in the area.
- ERuDeF should solicit collaboration with the Green Climate Fund to ensure funding for its second phase of implementation.

4.2 Training and consultation of 2,500 people from the 9 villages and the pastoralist community on the management of ecosystem and biodiversity, the links to better and more sustainable livelihoods, the challenges and how to address them

The launch event (above) formed a valuable starting point for sensitization on the on the management of ecosystem and biodiversity, the links to better and more sustainable livelihoods, the challenges and how to address them. Training and consultation of the community on these core topics continued through the sensitization meetings held with 1,903 farmers including 754 women (40%), and the ongoing work with seven VFMCs and with the Mt Bamboutos Fons Association. In March 2019, a further training programme took place with 200 people from three villages (Bafou, Bangang, and Buchi) in West Region on ecosystem and biodiversity management. They gained knowledge on ecosystem functions, importance of biodiversity to their livelihoods and the link between a healthy ecosystem and sustainable livelihoods. Management measures were proposed based on the identified causes of ecosystem degradation.

4.3 Production of 9 maps detailing the past and present land use within the project site in order to define the degree of degradation of the landscapes and facilitate land use planning.

Nine diachronic maps detailing past and present land use from 1980 to 2018 within the project area were produced, with a covering report and analysis (See Annex 5). The analysis shows that the project zone is undergoing rapid and significant change which may lead to severe degradation. Forest land is being converted to farm lands, settlement, and road infrastructure. The built-up area showed rapid increase from 99 ha in 1980 to 3,485 ha in 2018. This change was especially important in Ashong and Njen, Babadjou, Bafou-north, Bangang, Fongo-Tongo and Santa. Dense forest decreased from 20,101 ha in 1980 to 5,285 ha in 2018. This mostly took place in three villages: Bafou-North, Bangang and Santa.

4.4 Identification of internal and external stakeholders (mapping of stakeholders) involved in land use within the project area in order to involve them in land use planning, governance and decision-making stages

A stakeholder mapping exercise has been carried out across the project area. Three hundred stakeholders in different categories, with vested interest in land use in the area were identified. Most of the stakeholders deal with planting of economic trees and cash crops such as potatoes, cabbages, carrots and leeks. Those who have large scale land holdings are influential people in society and big businessmen at national level. Most of these people live outside the project area. Some 24 categories of stakeholders with vested interest in land use were further identified in Buchi, Menka and Pinyin. Major stakeholders capable of influencing land use include the pastoralists and large scale farmers.

4.5 Building a coalition of stakeholders in order to reach agreement on the process for participatory land use planning for the Mt Bamboutos ecosystem: this includes the Mt Bamboutos Chiefs' Association, a common Platform for Forest Management Institutions, and (beyond the life of this project) establishment of a Dialogue Platform

Six village forest management committees were created in six villages in West and NW (Bafou, Bangang, Babadjou, Menka, Buchi and Pinyin) and the eight members of each VFMC were installed by the respective divisional delegates for forestry and wildlife (Menoua, Bamboutos and Mezam).

ERuDeF has developed one new Village Forest Management Committee in SW region in M'muock Fossimondi in collaboration with the Divisional Delegate for Forestry and Wildlife and is working actively to support Village Forest Management Committees across West and NW regions.

In addition, three Paramount Fons and four chiefs were sensitised and this led to the creation of the Mt Bamboutos Fons' Association. The Articles of Association for the Mt. Bamboutos Fons' Association were adopted by all twelve members present and a six-man Executive Bureau for the Association was put in place.

Two regional dialogue platforms, one for SW and one for the West Region were put in place and a platform model was adopted. The regional platform for the West is made up of 25 participants, while that for Southwest is made up of 19 participants (total 44 members; 18 women and 26 men. Each platform is composed of the following category of participants: paramount chiefs, representatives of women, youths, Mbororo, municipalities, farmers,

development associations, agro-industries, economic operators, civil society organisations, and sectorial ministries.

4.6 Organisation of 9 consultation meetings with different stakeholders in order to identify and address key institutional barriers to participatory land use planning and how to address them [From Y2]

4.7 Identification of different land use systems and priority areas for restoration intervention through the Restoration Opportunity Assessment Methodology (ROAM). This will include analysis of land tenure systems and land use policies in the project area, analysis of the role of women and girls in the management of the Mt Bamboutos ecosystem and participative land use mapping.

The sub-national Restoration Opportunity Assessment Methodology (ROAM) exercise is being carried out in all villages. Datasets were collected on land parcels and analysed and land use systems were identified. Priority areas for restoration so far identified include 153 ha of degraded farms (cultivated and fallowed), 1,620 ha of degraded riparian forests, 425 ha of community forest land, 94 ha of sacred forests, 150 ha of forest reserve and 0.89 ha of water catchment areas (springs).

The main restoration intervention approaches discussed with stakeholders were: agroforestry through planting for soil improvement and economic tree species; planting of timber tree species as well as medicinal tree species in degraded riparian and community lands. Legal protection of community land as community forest, and formulation of local laws for protection of sacred forests were also discussed as a restoration intervention approaches.

Apart from the policies governing land use in Cameroon, land use policies do not exist in the project area. Ownership of land in the villages is by customary tenure system. Only a few people follow legal and administrative procedures for land ownership. Land is mostly acquired by inheritance. Land can also be acquired through lease, donation or bought. It was also observed that the role of the women in land management in the Bafou and Babadjou area is greatly undermined because of the customary tenure system that is widely respected in the area. Women are deprived from owning land when their husbands are still alive. However, women are the principal exploiters of agriculture land in the area and can play a greater role in the management of the Mt. Bamboutos ecosystem.

4.8 Draw up and refine an Agreement document on the framework and ground-rules for participatory land use planning for entire Mt Bamboutos ecosystem.

A draft document on the framework and ground rules for participatory land use planning for the entire Mt. Bamboutos is in progress. Existing participatory land use planning protocols/methodologies in Cameroon have been reviewed and relevant information combined in order to come up with a draft of the best framework document for participatory land use planning for the entire mount Bamboutos. These protocols/manuals include the Rainforest Alliance UK participatory land use planning methodology, the GIZ 2012 land use manual, the unified methodology for participatory land use planning in Cameroon used by COMAID, and the IFAD methodology for participatory land use planning. The document shall be completed and refined in year 2 during stakeholders' consultations.

4.9 Draw up and sign at least two participatory land use plans at village or Sub-division level [From Y2]

4.10 Prepare and share locally a case study on participatory land use planning [From Y2]

3.2 Progress towards project Outputs

Output 1: Farming systems diversity, soil fertility and sustainable productivity for at least 1,330 households (50% women participants) in 9 villages and the pastoralist community increased over baselines through capacity building and agroforestry establishment by 2021

200,000 agroforestry trees planted on farms by 2021

The sensitization process reached 1,903 farmers (754 women) across the nine villages. 806 farmers (303 women) have registered to take part in the programme in West and North West: 67% of those contacted. The relatively high level of interest of farmers is indicated by the percentage registering so far. Registration in the South West is still ongoing. Training in specific agricultural/ agroforestry and household tree nursery skills is still ongoing, and it will only be possible to review the effectiveness of this training as tree planting and agroforestry activities start in Year 2.

Twelve 'central' nurseries have been satisfactorily established and are beginning to achieve good standards of production. The numbers of seedlings so far produced are below target for the 2019 tree planting season: the plan is to plant 70,000 agroforestry trees and 100,000 forest restoration trees in 2019, total 170,000. The nurseries currently have 102,501 seedlings, but germination and transplanting are ongoing and the planting season continues until August. The importance of enabling households to establish their own small-scale tree nurseries has been established. The project area is vast and roads are poor, so accessibility and transport are constraints. The project team will review tree nursery policy in Y2 and expects to adopt an approach by which large-scale farmers wishing to adopt agroforestry will buy seedlings from central nurseries while tree nursery volunteers will obtain seedlings freely and small-scale farmers will be helped to raise their own seedlings in home tree nurseries. The central nurseries will be the main suppliers of seedlings for forest restoration (catchments, riverine, sacred and community forests).

Establishment and training of the Village Forest Management Committees and of the Mt Bamboutos Fons Association and the regional Dialogue Platforms are important steps for local institutional development and provide a basis for participatory monitoring and evaluation going forward.

The existing Output indicators are appropriate. Currently we are measuring progress mainly through minutes of capacity building workshops; lists of participants and registered farmers; participant surveys; and field reports from nurseries. Participatory monitoring and evaluation will be increasingly important in Y2 for monitoring of farmers practicing agroforestry, sample monitoring plots and household food and nutrition. The Output targets can realistically be achieved in the project lifetime.

Completion of the baseline survey was delayed, mainly due to the difficulty of finding time with University partners and students, but is an important step. Further work is required to complete the survey and analysis, especially with the pastoralist community, and to make use of the survey results to establish baselines for participatory monitoring and evolution. New indicator targets are to be determined for 'farming systems diversity, soil fertility and sustainable productivity', 'increase in selected crop yields per unit area' and for 'household food security and nutrition'.

Output 2: Capacity building and agroforestry incorporating NTFPs enables at least 1,330 households (70% women participants) to take steps towards increased incomes and employment by 2021

Less progress has been made towards Output 2: the timetable starts from the end of Y1 and tree planning will start in April 2019. The baseline socio-economic survey on household income, livelihoods and employment was carried out jointly with Output 1. Further work is required to establish current levels of income and employment and to define potential new income sources and cottage industries

Consultation meetings have been held with farmers in all MBI villages and with the pastoralist community to identify potential new income sources and a range of economic opportunities focused on fruits and NTFPs have been identified, and training has started on specific skills to raise high value fruit and indigenous NTFP species. There is a willingness on the part of farmers to integrate trees on their farms (e.g. 186 farmers in the South West pledged each to plant at least 20 fruit/NTFP trees in their farms.) Large scale farmers recognise that high value trees such as grafted avocadoes represent an economically interesting option.

The indicators are currently being monitored through minutes of capacity building workshops and lists of participants. More work is required to survey community perceptions on the benefits of the NTFP value chain. The Output indicators remain appropriate, but actual increases in household income lie beyond the project timeframe. Some increases in employment opportunities may be achievable. The Output targets can realistically be achieved in the project lifetime.

It appears necessary to carry out some analysis of actual levels of household income gained from the current agricultural practices and to compare these with potential incomes from tree crops. Potato production for example is seen as a high yielding activity but farmers recognise that the costs and requirements for inputs such as fertiliser and pesticides are rising and soils are gradually being degraded so net benefits may decline.

Output 3: Community-led planting and regeneration of 300,000 native trees in degraded areas of Community, Riverine and Sacred Forests, and increased tree cover in farmland (200,000 agroforestry trees) launch the restoration of 3,000 ha of forests and biodiversity habitat in the degraded Mt. Bamboutos ecosystem by 2021

Important steps have been taken to achieve this output. 12 central nurseries have been established and equipped, with significant community support both from local authorities but also from volunteers including large numbers of women. After initial delays mainly due to the need for local tree seed collection which is dependent on species calendars, these nurseries are delivering seedlings ready for planting. The aim is to plant 100,000 trees for restoration of community, riverine and sacred forests by August 2019 and the nurseries currently hold over 100,000 seedlings most of which are suitable for forest restoration. The current range of 12 indigenous species will expand. The plant biodiversity survey is a useful baseline which requires further work to refine the long list of tree species recommended for planting as part of forest restoration. In Y2 we will also carry out practical experiments to identity the feasibility of using assisted natural regeneration methods. Tree planting will start in April and continue until August this year.

The ROAM exercise has so far identified a total of 2,290 hectares as priorities for restoration (1,620 ha degraded riparian forests, 425 ha community forests, 94 ha sacred forests, 150 ha of forest reserve and 1 ha of water catchment) and village level maps of priority areas for intervention are being produced. Key restoration intervention approaches include legal protection of community land as community forest, and formulation of local laws for protection of sacred forests, as well as actual tree planting.

In this respect the ongoing work with VFMCs and the Mt Bamboutos Fons Association may prove the most important. It is critical that communities understand that rules need to be established e.g. over cultivation of crops on riverbanks, around springs and on steep slopes, and this will only come about through consultation and the influence of local authorities and institutions. It is important to note in this regard that communities within and close to the project area on the lower slopes of Bamboutos incorporate a wide range of tree species in their agroforestry systems, and that some river valley woodlands are well protected, so these are not new ideas to the project area[5]. Some of these well-established practices now need to be incorporated into land use systems further up the mountain.

The Output indicators remain appropriate and the Output targets can realistically be achieved in the project lifetime. Monitoring currently relies on minutes of capacity building workshops, lists of participants, tree nursery reports and the reports and maps produced by the ROAM exercise and the plant biodiversity survey. VFMCs will play a key role in monitoring the success of tree planting and forest restoration activities going forward.

Output 4: Framework, coalition, consensus and conditions established for land use planning and sustainable management of Mt Bamboutos ecosystem, supported by shared outputs from research and ongoing M&E

The Mount Bamboutos Initiative launch workshop in August 2018 was an essential step to build a coalition of stakeholders for restoration of Bamboutos; in the Cameroon context, it is vital that the Authorities are engaged from the start.

[5] Authors' personal observations and discussion with Joseph Nono, Ministry of Forestry and Wildlife March 2019

Further steps since then include the formation of the Mt Bamboutos Fons' Association; two regional dialogue platforms and seven VFMCs. These institutions provide platforms with which MBI can pursue the process towards building a consensus and conditions for participatory land use planning.

A draft document detailing the framework and ground rules for participatory land use planning for the entire mount Bamboutos is under preparation. The complete document will be discussed and validated with the coalition of stakeholders, paving the way for effective participatory land use planning in the project area. Training and consultation at village level has started.

The stakeholder mapping exercise has identified some key constraints and opportunities. Many key individual landowners are influential but non-resident. They can however become a resource to aid participatory land use planning. There are frictions between resident small-scale farmers, large scale absentee owners, and the pastoralist community who depend on the slopes of the mountain for pasture. There may also be frictions between upstream irrigation farmers and downstream communities dependent on water supplies. MBI aims to work with the Fons Association and the Dialogue platforms to address these frictions. A draft document on the framework and ground rules for participatory land use planning for Mt. Bamboutos is in progress.

Favourable factors include:

- Most community members are aware of the negative consequences of the degradation of the mountain to their socio-economic wellbeing and are willing to redress the situation through tree planting.
- Support from administrative authorities: The administrators in the project zone are supportive of the project and are ready to collaborate in order to make the project successful.
- Strong commitment of the village Fons and chiefs to the project: almost all of the village Fons and chiefs are supportive of the initiative. They have set aside community lands for nursery creation and are keen to monitor and evaluate the progress of the project on the ground.[6]

The nine diachronic maps produced by MBI can become an education tool to help local communities understand the rate of change in land use and cover and the risks of continuing this dynamic. The ROAM exercise also provides local communities with opportunities to look at land use within their villages and to identify sites and approaches for addressing degradation. Local community members such as VFMC members and tree nursery volunteers can see that it is essential to have some form of management over land use decisions[7], but there is a long way to go to achieve consensus. Agroforestry and replanting of degraded forests are key strategies, but legal protection of community forests, and local laws for protection of sacred forests will also be vital.

Participatory land use planning has to take place in a context where there are no existing local land use policies. Land is mostly acquired by inheritance through the customary tenure system, with relatively few people following legal and administrative procedures for land ownership. Women play key roles in managing farms and ensuring that farms provide for household food security and economic needs, but are undermined within the customary tenure system. Women are frequently deprived from owning land while their husbands are still alive. MBI is making significant efforts to recruit women staff and to work directly with women participants in the field. MBI can learn from small scale successes achieved by local NGO partners including Community Aid in Development (COMAID) and the Centre for Nursery Development and Eru Propagation (CENDEP), both of which are partners of ITF.

The Output indicators remain appropriate and the Output targets can realistically be achieved in the project lifetime. Progress is being monitored through: minutes of the launch workshop, meetings and capacity building workshops, lists of participants, statements of key stakeholders,

[6] Observations from MBI team, March 2019

[7] Authors' personal observations from discussions with community members, March 2019

reports from ROAM exercises with stakeholders. More work is required to monitor specific actions by key stakeholders and uptake of specific restoration practices, and to survey the results of the training carried out in Y1.

3.3 Progress towards the project Outcome

Outcome:

Framework established for land use planning and sustainable management of Bamboutos ecosystem, through stakeholder engagement and tangible progress towards reforestation, sustainable farming, and improved livelihoods.

The Outcome Indicators appear adequate for measuring the intended Outcome. Following the completion of the Baseline Survey, further work is required to specify the baseline conditions for each indicator and to specify the target in terms of increased farming systems diversity and sustainable productivity.

For Indicator 1, currently it appears that farming and pastoralism on the upper slopes of Mt Bamboutos have low diversity and sustainability. Farming is focused on a narrow range of irrigated horticultural crops (potatoes, carrots, cabbages, leeks). There is high reliance on fertilisers and pesticides. No soil conservation measures are practised. Eucalyptus trees have been widely planted in the past but are less frequently planted today and are in some cases being cleared. There is no other form of tree planting. For Indicator 2, both farmers and pastoralists are starting from a zero baseline with regard to generating improved livelihoods through agroforestry incorporating NTFPs. However, it should be noted that on the lower slopes of the mountain widespread examples of agroforestry practice do exist, with some production of NTFPs. For Indicator 3, community-led planting and regeneration of native trees in community and riverine forests has yet to start on the upper slopes of Bamboutos, so again we are starting from a zero baseline. Finally, on Indicator 4 no framework exists at present and no stakeholders' consensus has yet been reached on the process for participatory land-use planning and sustainable management of the Mt. Bamboutos Ecosystem. However, there are promising signs here due to favourable statements made by Fons and authorities.

We expect that the Outcomes will be achieved by the end of this period of funding. It should be noted that the indicators and targets do not refer to the extent to which training, local institutions and rules, participatory planning, individual commitment and tree planting activities in the field will actually reverse the rate of ecosystem degradation. That would not be realistic in two years and nine months. At this stage it is important to establish examples of good practice at all levels. ERuDeF and ITF have committed to continuing the MBI process for 15 years in all.

3.4 Monitoring of assumptions

Assumption 1: No major insecurity or demographic factors impact the area during the project period disrupting progress towards stakeholders' consensus

The project area spans three regions of Cameroon, two Anglophone and one Francophone. Insecurity has worsened in the Anglophone areas during 2018 and early 2019. There has been a long-term lack of a genuine political process to address grievances of the Anglophone communities in NW and SW Regions against the incumbent government. Since mid-2017, Anglophone separatists have attacked government institutions and threatened, kidnapped, and killed civilians perceived to side with the government. In 2016 and 2017, government security forces used force against largely peaceful demonstrations by Anglophones calling for increased autonomy. In October 2017, separatist leaders declared independence of the NW and SW Regions, and the formation of a new nation, Ambazonia. The pace and scale of separatists' attacks against security forces, government workers, and state institutions increased during 2018.[8]

General strikes (or 'ghost towns') are called in the NW and SW regions each Monday and on national holidays and events. Violence and travel disruption is regularly reported on these days. An extended general strike was also imposed by armed separatists in February 2019, with reports of violence and loss of life. Traffic in and out of the region was restricted. Incidents of sporadic gunfire occurred in major towns. There have been multiple clashes between the

[8] https://www.hrw.org/world-report/2019/country-chapters/cameroon

Cameroonian security forces and armed groups over the past year in many places in the NW and SW. In January and February 2019, clashes were reported in Bafut, Tubah, Ndu, and Widikum and in Lebialem division. Restrictions including night curfews and a ban on public meetings, which were imposed following violent and deadly clashes in 2017, remain in place.[9]

ERuDeF has continued to deliver MBI across the project area including NW and SW, excluding one site in Lebialem in SW where they have lost access. Operations cease in NW and SW on 'ghost town' days. Otherwise, good relations with traditional leaders and community enable work to continue. Many farmers in NW and SW have had to flee their homes to avoid violence. In some case families now reside on their farms (rather than at their normal home) and continue to cultivate. A significant constraint for MBI is that farmers fear to gather for public meetings, and this has affected the number of participants at training events. The MBI project team has relocated to a simple office in Dschang (West Region) which allows relatively good access to most of the working area. ITF has not been able to visit the SW and NW. The UK FCO now advises against all travel to NW and SW. The project site visit in March 2019 took place in Dschang and West region, avoiding insecure areas.

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

After nine months of operation it is not realistic to talk of impacts in terms of biodiversity conservation. Plans to restore riverine, sacred and community forests with indigenous trees, starting in 2019, will undoubtedly contribute to some increase in local biodiversity e.g. of plants, birds and small vertebrates and invertebrates. They will also contribute in some degree to the conservation and stabilisation of streams and rivers flowing off Bamboutos, and to reductions in the levels of pollution, siltation and flash flooding, with concomitant improvements in aquatic biodiversity.

Communities from nine villages and the pastoralist community are gaining a better understanding of the environmental/livelihood trade-offs, and are willing to take ownership for the protection and restoration of Mt Bamboutos. It is envisaged that:

- The degradation of the Bamboutos ecosystem will slow in the project areas, with 500,000 trees planted and regenerated on degraded land and on farms.
- The will be an increased wildlife habitat through protection and tree planting. This will in the long run lead to increase in key biodiversity taxa.
- The project will limit flash floods, erosions and landslides known to be occurring in the mountain ecosystem through tree planting.
- Communities within the project area will begin to see improvements in water quality, and water availability during the dry season, as a result of better management of land and water resources.

Likewise it is too early to talk of impacts in terms of poverty alleviation. We need to do more work, using the baseline survey as a starting point, to understand poverty issues in the area. Most respondents in the Baseline Survey identified hunger and malnutrition as the major problem faced in the area. This is a surprising finding. The Baseline Survey also indicates that concerns over food security are reported strongly in certain villages only. It is likely that there is a high level of inequality in terms of access to land and resources within the project area, and that women are likely to form a large proportion of the poorest. We also need to do more work to understand poverty in relation to the pastoralist community. At this stage it is clear that small scale farmers are interested in the prospect of diversifying their farming practices and income sources and that women are particularly interested in getting actively involved in the project. Small scale projects led by partners COMAID and CENDEP in neighbouring areas suggest that agroforestry can make useful contributions to the sustainability, productivity and resilience of small-scale farming and to household economic resilience.

[9] https://www.gov.uk/foreign-travel-advice/cameroon

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

MBI contributes to the following SDGs:

1. No poverty: We are working to identify vulnerable groups within the community and ensure that they have access to more diverse, sustainable and resilient farming systems including agroforestry which can contribute to improved household income.

2. Zero hunger: Likewise these systems should contribute to reducing food insecurity for vulnerable households

3. Good health and wellbeing: We are working to reduce the reliance on crops that require high levels of pesticides, which are currently applied without awareness of health and safety issues, and with careless disposal of hazardous materials around water courses

5. Gender equality: We are working to increase the participation and empowerment of worn in all levels of project activities. Progress has been relatively slow in Y1, and we are determined to identify better ways of working going forward.

6. Clean water and sanitation: We are working to identify springs and riverine sites in need of protection and restoration. On the upper slopes of Bamboutos farmers frequently cultivate land and irrigate crops right up to the banks of springs and streams. Water extraction results in streams running dry, and water is often polluted through careless deposal of wastes, with negative effects for the health of downstream users. Agreement on planting of indigenous tree species such as Raphia alongside watercourses will be a step towards protection and conservation of water sources.

8. Decent work and economic growth: Through identification of potential income generating activities with fruit and NTFP trees.

13. Climate action: Mainly with regard to mitigation of climate change impacts. Bamboutos can expect increasing extremes of heat and drought, and communities on the lower slopes of Bamboutos already report drying up of water sources. Large scale tree planting can have significant effects in terms of cooling local temperatures and increasing local rainfall.

15. Life on land: Through restoration of native forest cover.

16. Peace justice and strong institutions: The location of the project straddling three Regions of Cameroon and the francophone Anglophone divide, and the reality that all communities around the mountain share a common interest in it conservation and restoration, as well as many common aspects of culture, provides a unique opportunity to contribute to peace. Strong local institutions such as the Fons Association and the VFMCs are key to the MBI approach.

5. Project support to the Conventions, Treaties or Agreements

The project is contributing to the Convention on Biological Diversity (CBD). It is working towards achieving Article 8: In-situ conservation. Specifically it is contributing to: establish protected areas and community forests within the Mt Bamboutos landscape. This will lead to the conservation of forest trees and associated undergrowth, above and below ground invertebrates and insects, providing better functioning food chains and life cycles for birds and small mammals. The project seeks to create a consensus amongst local and regional stakeholders for the management of community, riverine and sacred forests to ensure sustainable use of forest products and restoration of land. This will lead to the creation of protected areas in the future. The project has raised and will continue to raise the awareness of local communities about the importance of ecosystem restoration and conservation, including the planting and regeneration of indigenous tree species. The project is working with communities living on the slopes of Mt Bamboutos to improve farming techniques through agroforestry and tree-based value chain development. We intend to restore 3,000 hectares of land through tree planting on farms and on degraded land across the mountain, which will contribute to restore habitat for threatened species. Degraded forest lands to be restored, has been identified together with the local communities through the IUCN restoration opportunity assessment methodology (ROAM).

We are addressing the causes of biodiversity degradation/loss by reducing the direct and indirect pressures on biodiversity. Activities to diversify cropping systems with useful/marketable and culturally important perennial plant species to improve the sustainability of farming systems has been conducted. This will reduce the pressures on biodiversity (for example deforestation for cultivation on steep slopes) through improving the 'total factor' productivity of farms.

We have also made progress to promote the sustainable utilization of biodiversity for wealth creation and contributing to poverty alleviation, by training farmers on income generating activities such as NTFPs cultivation and diversified farming systems. Tree planting on farms will increase habitat for pollinators, critical to livelihoods in the landscape.

6. Project support to poverty alleviation

The evidence is limited so far. Following the completion of the baseline survey it will be important to identify which community groups are affected by poverty and to ensure that the opportunities in Outputs 1 and 2 are specifically targeted to meet the needs of these groups. The expected beneficiaries of this work are small-scale farmers within the project area who have limited access to land and may be reliant on labouring for others, and particularly women headed households. We do expect direct impacts from this project. It is envisaged that the following changes to people's lives will be achieved:

- Beneficiaries' living standards will increase, as agroforestry improves soil quality and crop yields increase. 1,330 households will have improved marketing and business models as they gain skills on value addition and cost benefit analysis.
- The project will lead to an increase in economic resilience for over 1,330 households as 200,000 agroforestry trees, NTFPs and fruit trees will be planted, providing diversified crops and a basis for cottage industries in the future.
- Women and young people will gain economic empowerment through diversified farming systems, NTFPs and training in market analysis.
- The project will help improve the quality and quantity of water reaching the communities to help people meet their needs.

7. Project support to gender equality issues

Gender is a vital issue in the project. We are working to ensure that all project activities are targeted for women (and men) and we are recording the participation of women in all activities. Clearly the results in Y1 are not up to the levels that we require. Project staff have identified a number of constraints including the patriarchal nature of traditional institutions and the lack of access of women to land ownership and lack of recognition of their role in managing farms.

Staff comment that 'Getting women participants is a big challenge in the project area. Most women are shying away. This is being tackled by targeting women groups in the different villages. Sharing information about project activities equitably to women and men, sensitizing women on the importance of the project to their livelihoods and building their capacities.'

Evidence from local partners such as COMAID and CENDEP indicates that these issues can at least be addressed by targeting certain activities specifically to women and by asking women how barriers to participation can be overcome. The very fact of having local woman staff and representatives can begin to change perceptions. ERuDeF has a gender officer working on the project and we will develop and document a stronger gender approach early in Y2. It is important that the project should work with women's groups or associations in the field who can play an active role in project M&E.

8. Monitoring and evaluation

We are developing the detailed M&E framework for the project and will share the revised document early in Y2.

The Outputs and activities of the project are well designed to contribute to the Outcome. The aim of these activities and outputs is to generate tangible examples of diversified, sustainable and resilient farming using agroforestry; tangible examples of improved income generation through agroforestry products and NTFPs; tangible improvements in ecosystem services (such as water) through forest restoration and examples of negotiated agreements for land use planning accepted and adopted by local communities. These are all realistic steps towards the Outcome.

Indicators of achievement at this early stage include agreements and local support for tree nurseries; interest of local farmers in on-farm tree planting; interest in taking part in VFMCs, and overall support expressed by the Fons' Association and other local authorities. These are measured through records of the number of participants and by documented statements. More tangible indicators of achievement will be documented as tree planting and practical activities start in the field from April 2019.

Activities are monitored by the M&E officer, project manager and/or other project staff who carry out field investigations through observation and interview of project participants in order to measure change.

Outcomes are evaluated by the project manager and team through monthly meetings with focus on project targets and indicators in the project action plan and logframe. We know the project is successful when the targets and indicators are met and the project outcome are attained in time, quantity and quality. Participatory M&E is vital as the project moves forward, and some progress has been made in developing the local institutions (VFMCs and Fons Association) that will be involved in this process.

9. Lessons learnt

Considering the difficult conditions of insecurity under which the project has worked in North West and South West Regions, it is good to be able to report that MBI has delivered most planned activities and is broadly on track. Some farmers have been displaced from their villages to other safe zones. This has reduced the number of expected participant farmers in the project especially in meetings. This is tackled by increased door-to-door sensitization of the remaining farmers in the community in order to meet the target. It is important to recognise the support of traditional authorities and local community members towards the approach of the project.

Some areas clearly require more attention. The project needs to:

- Develop a stronger approach on gender issues
- Find ways to work more closely with the pastoralist community and integrate them in the overall approach
- Ensure that poorer small scale farmers are identified and assisted to benefit especially from activities in Outputs 1 and 2

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

Responses to feedback received on the application were included I the amended application document submitted in November 2018.

11. Other comments on progress not covered elsewhere

The main risk to the project would be any further worsening of the security situation.

12. Sustainability and legacy

The following progress has been made towards the sustainability of the project:

- The capacity of the farmers has been built so that they are able to carry on with activities after the project ends.
- Local governance institutions including the Mt Bamboutos Fons' Association and the Village Forest Management Committees have been put in place and their institutional capacities have been built for ongoing action beyond this project period.
- The project built the capacity of 48 members (20 women and 28 men) of six VFMCs on Cameroon forestry policies, forest protection and the fight against illegal activities around forest lands.
- The capacity of the twelve members (all men) of the Mount Bamboutos Fons' Association were strengthened on effective land use governance, during a one day workshop.
- The project is strengthening and will continue to strengthen the capacities of 4 local CBO partners implementing the project, women and youth associations and traditional leaders to carry the work forward when funding ceases.
- The capacity of five ERuDeF staff, two staff of Operation Green Space (OGS) and three staff of Groupement pour l'Appui au Développement Durable (GADD) was strengthened on the IUCN Restoration Opportunity Assessment Methodology (ROAM) during field work. Staff are now apt to identify priority areas for restoration, determine restoration interventions, estimate cost and benefit for restoration interventions.
- The capacity of tree planting technicians were built on nursery management techniques through hands-on and on-the ground training.
- A funding plan for the 15 year initiative is has been developed with other potential donors identified.

13. Darwin identity

The Darwin Initiative logo is used in all project publications and communications. These include the ERuDeF and ITF websites and the ITF Trees Journal 2018 (two page article).

The key role of the Darwin Initiative funding for the project was recognised during the project launch and in all discussions with Cameroon government agencies. This is likely to be recognised by senior and regional staff of the Ministry of Forests and Wildlife (MINFOF) in particular.

14. Project expenditure

Table 1: Project expenditure <u>during the reporting period</u> (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 Mountain-wide consensus-building, community-led reforestation and agroforestry, and improved livelihoods lead to sustainable and participatory management of the entire Bamboutos ecosystem.			[redacted]
Outcome Framework established for land use planning and sustainable management of Bamboutos ecosystem, through stakeholder engagement and tangible progress towards reforestation, sustainable farming, and improved livelihoods.	0.1 Farming systems diversity and sustainable productivity for at least 1,330 households (50% women participants) increased over baselines through capacity building and agroforestry establishment by 2021 0.2 Capacity building and agroforestry incorporating NTFPs enables at least 1,330 households (70% women participants) to take steps towards increased incomes by 2021 0.3 Community-led planting and regeneration of 300,000 native trees in Community and Riverine Forests, and increased tree cover in farmland (200,000 agroforestry trees) launch the restoration of 3,000 ha of forests and biodiversity habitat in the degraded Mt. Bamboutos ecosystem by 2021 0.4 Framework agreed and stakeholders' consensus	A training programme has been developed and is being delivered with more than 800 farmers (more than 300 women) on farming systems and agroforestry: tree seedling are being raised. Options for NTFP and income development have been identified and training programmes have started. More than 2,200 hectares of degraded forest and riverine land have been participatorily identified for restoration. 12 tree nurseries have been developed with community support and more than 100,000 seedlings raised. Local institutions have been established and capacity has been built for participatory land use planning: the Fons' Association and	A gender mainstreaming action plan is to be developed and implemented by the project team. The project will work more closely with the pastoralist community and integrate them in the overall approach. The project will ensure that poorer small scale farmers are identified and assisted to benefit especially from activities in Outputs 1 and 2. The tree planting programme (agroforestry and forest restoration) will run from April to August 2019.

	reached on the process for participatory land-use planning and sustainable management of the Mt. Bamboutos Ecosystem with decision making informed by published and shared research and M&E results.	7 VFMCs. Key stakeholders have been identified. Some progress has been made towards a consensus on the approach for participatory land use planning	
Output 1. Farming systems diversity, soil fertility and sustainable productivity for at least 1,330 households (50% women participants) in 9 villages and the pastoralist community increased over baselines through capacity building and agroforestry establishment by 2021	1.1 Baseline survey on crop yields, trees, food security and nutrition completed by end 2018 1.2 2,000 farmers (50% women) gain knowledge and skills in sustainable diversified farming systems (e.g. agroforestry, contour farming) by 2019 (1,000 trained by 2018, 2,000 by 2019)2,000 farmers (50% women) are trained on agroforestry nursery establishment, pegging, grafting, marcotting, propagators, composting, planting, harvesting and treatment by 2020 (1,000 trained by 2019, 2,000 by 2020) 1.3 At least 1,330 farmers (50% women) establish small tree nurseries (700 by 2019 and 1,330 by 2020) 1.4 At least 1,330 farmers (50% women) adopt sustainable diversified farming systems by 2020 1.5 At least 1,330 farmers plant at least 200,000 agroforestry trees on farms by 2021 (70,000 trees	1.1 Baseline survey completed and draft report produced (see Annex) 1.2 More than 900 farmers (more than 300 women) trained in sustainable diversified farming and agroforestry. 1.3 More than 900 farmers (more than 300 women) have been identified with interest in this activity, which will take place in 2019. 1.4 More than 900 farmers (more than 300 women) registered for this activity in 2019.	

	by 2019; 150,000 trees by 2020 and 200,000 trees by 2021) 1.6 increase in selected crop yields per unit area for 1,330 farms by 2021 (target to be determined after baseline surveys) 1.7 Food security and nutrition increased for 1,330 households by 2021 (target to be determined after baseline surveys)	1.5 Agroforestry seedlings are being raised in 12 central nurseries for planting during 2019. 1.6 This activity to be developed in 2019 1.7 This activity to be developed in 2019	
1.1 Sensitization, mobilisation and selection of 2,000 farmers drawn from 9 villages (Bafou, Bangang, Babadjou, Buchi, Menka, Pinyin, Bamumbu, Fossimondi and M'mouckmbie) and the pastoralist community on sustainable diversified farming systems, and identification of tree species to be planted		Over 1,900 farmers (700 women) reached through sensitisation campaign. Initial selection of favoured tree species carried out.	Further work to be carried out especially with the pastoralist community.
1.2 Training of 2,000 farmers (50% women) on sustainable diversified farming systems (agroforestry, contour farming, fruits and NTFPs tree growing)		More than 900 farmers (more than 300 women) trained in sustainable diversified farming and agroforestry.	Practical training continues as farmers start to implement activities in the field
1.3 Training of 2,000 farmers (50% women) to establish their own small agroforestry tree nurseries, pegging, grafting, marcotting, composting, harvesting and tree treatment		More than 370 farmers trained (gender analysis to be completed)	2019 is the main year for development of small tree nurseries at homes.
1.4 Collection and purchase of tree seed for agroforestry nurseries		Seed calendar established and seed of 14 species collected.	The species range will be widened in line with recommendations from the plan survey.
1.5 Conduct baseline surveys on agriculture, food and nutrition in the 9 villages and the pastoralist community		Largely completed.	Further interviews to be implemented with pastoralist community. Survey to be used to establish baselines for all relevant indicators
1.6 Establishment / training of local institutions for extension and participatory M&E (Chiefs and traditional authorities, VFMCs, VANs in 9 villages and the pastoralist community)		The Fons' association and 7 VFMCs have been established	Further capacity building required as they take on roles in participatory M&E
1.7 Planting of 200,000 agroforestry trees in the fields of 1,330 farmers from 9 villages and the pastoralist community in the project site		Seedlings have been raised.	Agroforestry tree seedlings to be planted and cared for by farmers.

1.8 Participatory monitoring of uptake of agroforestry and sustainable diversified farming systems in the 9 villages and the pastoralist community		To start in 2019 with the planting programme.
1.9 Participatory establishment and monitoring of agroforestry and sustainable farming crop yield plots in the 9 villages and the pastoralist community		To start in 2019 with the planting programme.
1.10 Participatory monitoring of household food security and nutrition		To start in 2019 with a sample of households

Output 2. Capacity building and agroforestry incorporating NTFPs enables at least 1,330 households (70% women participants) to take steps towards increased incomes and employment by 2021	2.1 Baseline socio-economic survey on HH income and employment completed by end of 2018 2.2 Consultation on preliminary identification of potential new income sources and cottage industries completed by 2018 2.3 2,000 farmers (70% women) gain knowledge on Non-Timber Forest Products (NTFP) and fruit trees cultivation by 2020	2.1 The baseline survey has provided new information on the level of HH income and employment which will inform HH targeting. 2.2 Preliminary consultations have been carried out with communities on potential new income sources and potential options have been identified. There is scope for further work in this respect 2.3 380 farmers have had initial training on NTFPs and fruit tree cultivation	
Activity 2.1. 2.1 Conduct baseline socio-economic survey on HH income, livelihoods and employment in the 9 villages and the pastoralist community		The baseline survey has provided new information on the level of HH income and employment which will inform HH targeting.	Information from the survey will be used as a basis for developing sample HH M&E.
2.2 Conduct consultations in the 9 villages on identification of potential new income sources and cottage industries, constraints, opportunities & value chain development		Initial consultations completed	Further work required to identify economically viable options.
2.3 Training of 2,000 farmers (70% women) drawn from 9 villages and the pastoralist community, on cultivation of NTFP and fruit trees		380 farmers have had initial training on NTFPs and fruit tree cultivation	Further practical training to be carried out during the planting season with special focus on women groups.
2.4 Training of 2,000 farmers drawn from 9 villages and the pastoralist community, on value addition opportunities			This work will start in 2019.

2.5 Participatory monitoring of uptake of agroforestry in the 9 villages and the pastoralist community		This work will run alongside the tree planting programme in 2019 and continue through the dry season.
2.6 Participatory monitoring of household income from NTFPs and fruits (based mainly on farms with existing NTFP and fruit production)		This work will start in 2019, and will provide a basis for comparison with non-agroforestry systems

Output 3. Community-led planting and regeneration of 300,000 native trees in degraded areas of Community, Riverine and Sacred Forests, and increased tree cover in farmland (200,000 agroforestry trees) launch the restoration of 3,000 ha of forests and biodiversity habitat in the degraded Mt. Bamboutos ecosystem by 2021	3.1 At least 2,665 farmers (at least 50% women) are trained on tree planting and regeneration by 2019 3.2 At least 6 main nurseries established by 2019 3.3 (At least 200,000 agroforestry trees are planted in farmers' fields by the end of 2021 see Outputs 1 and 2) 3.4 Priority sites for tree planting and regeneration (community/ catchment/ riverine/ sacred) identified through ROAM by 2019 3.5 At least 300,000 trees are planted in degraded forest lands by 2021 (100,000 trees by 2019; 225,000 trees by 2020 and 300,000 trees by 2021) 3.6 3,000 ha of community and riverine forest planted / enriched with trees for restoration and conservation purposes by 2021 (500 ha by 2019; 1,500 ha by 2020 and 3,000 ha by 2021) 3.7 Key biodiversity (primates, birds, amphibians, reptiles and	3.1 More than 900 farmers (more than 300 women) trained in sustainable diversified farming and agroforestry and 380 farmers have been trained on NTFPs and fruits. In addition volunteers have gained practical training at tree nurseries – numbers to be defined. 3.2 12 main nurseries have been established and are focal points for community involvement. 3.3 (see Output 1 and 2) 3.4 More than 2,000 ha of priority sites have been identified and mapped. This is a key step towards defining the needs and opportunities in the Bamboutos landscape. 3.5 More than 100,000 seedlings have been raised and are ready for planting in 2019

	butterflies) habitats identified and to be secured across the 3,000 ha by 2021 3.8 Baseline and final sample biodiversity surveys completed by 2018 and 2021 for key sites. 3.9 Case study on tree planting, land restoration and biodiversity published and shared (by 2021)	3.8 The initial plant biodiversity survey has been carried out.	
3.1 Purchase of material/equipment for the construction and management of 6 nurseries/ resource centres and the Lebialem forestry centre (shading net, binding wire, wheelbarrow, trowels, iron rods, polythene bags etc.)		Completed for 12 nurseries	We will strive to reopen the Lebialem forestry centre in 2019
3.2 Preparation of 9 nursery sites/ resource centres prior to nursery construction (clearing, tilling and levelling….)		Completed for 12 nurseries	
3.3 Establishment of 9 nurseries for agro-forestry, fruit and NTFPs species		Completed for 12 nurseries	
3.4 (Construction of 6 giant mist propagators for propagating and grafting selected cultivars of NTFP and fruit trees (See also Output 2))10		Completed at 6 nurseries	
3.5 (Collection and purchasing of seeds of agroforestry species to be planted in 1,330 farmers' fields (Output 1 and 2))		Ongoing	
3.6 Collection and purchasing of seeds of trees to be planted in community and riverine forests.		Ongoing: 14 species collected and raised so far.	We aim to increase the range of species available for planting
3.7 Support nursery management operations (weeding, watering, spraying, thinning etc.) for the nurseries to be established by the project		Ongoing	We aim to establish a clearer strategy for tree nurseries including income generation for sustainability, and targeting of seedlings to where they are most needed.
3.8 (Planting of 200,000 agroforestry trees in the fields of 1,330 farmers from 9 villages and the pastoralist community in the project site – Output 1)			This will start from April 2019.

3.9 Identification of priority areas for restoration intervention through the Restoration Opportunity Assessment Methodology (ROAM) (see also Output 4)	Completed for 4 villages	To continue in remaining villages
3.10 Establishment / capacity building for the local institutions for Forest Management for Community Forests to be restored (Chiefs & traditional authorities, VFMCs)	VFMCs have been established and given initial training	Further training in participatory M&E and forest protection
3.11 Planting of 300,000 trees in priority degraded sites in community and riverine forests		This will start from April 2019.
3.12 Support community members with tools and equipment for the planting of at least 300,000 native trees in community and riverine forests.		This will start from April 2019.
3.13 (Support 1,330 farmers with tools and equipment for the planting of at least 200,000 agroforestry trees in their fields. (Output 1 and 2))		This will start from April 2019.
3.14 Conduct baseline surveys on biodiversity, forest restoration and ecosystem services	Baseline survey on plant biodiversity completed	
3.15 Train Forest Management Institutions to monitor and carry out survival counts of seedlings planted in community and riverine forests in the project site (PM&E)		To be carried out in 2019.
3.16 Geo-referencing of surviving trees and production of maps of all planted areas		To be carried out in 2019.

Output 4. Framework, coalition, consensus and conditions established for land use planning and sustainable management of Mt Bamboutos ecosystem, supported by shared outputs from research and ongoing M&E	4.1 Project inception workshop held to sensitise all stakeholders on the restoration and sustainable management of Mt. Bamboutos 4.2 2,500 people (at least 50% women) are trained on restoration and management of ecosystems and biodiversity by 2019 4.3 Leaders and key stakeholders (at least 50% women) in the 9 villages and the pastoralist	4.1 The Launch workshop was successful in gaining commitment from key authorities and stakeholders Significant progress has been made on indicators 4.2 to 4.6, but work is ongoing on all these aspects. Important steps have been taken with the formation of the Mt Bamboutos Fons' Association, and the establishment of 7 VFMCs and two Dialogue platforms.

	community are committed to restoring and managing ecosystems and biodiversity by 2020 4.4 At least 1,330 people actively engaged in ecosystem restoration activities by 2020 4.5 Commitment of key stakeholders including government agencies is reached through signing of respective stakeholder agreements by 2020 4.6 Key institutional barriers to participatory land use planning are identified (by 2019) and addressed by 2021 4.7 Best places for restoration and priority areas of intervention are identified through the restoration opportunity assessment methodology (ROAM) by 2019 4.8 Consultations held on participatory land use planning process by 2020 4.9 Agreement reached and signed on the framework and ground-rules for participatory land use planning for entire Mt Bamboutos ecosystem by 2021 4.10 At least two participatory land use plans agreed and signed at village or sub-division level by 2021	4.7 The ROAM process has proved satisfactory so far as a means for participatory identification of priority sites for restoration and has increased our understanding of needs and opportunities. Production of the diachronic and land use/ land cover maps have also been valuable steps in understanding the Bamboutos landscape.

	4.11 Case study on participatory land use planning published and shared (2021)		
4.1 Hold a project inception workshop to sensitize all stakeholders on the restoration and sustainable management of Mount -Bamboutos Ecosystem and identify training needs		Completed.	Training needs identification has also been carried out but further work is required.
4.2 Training and consultation of 2,500 people from the 9 villages and the pastoralist community on the management of ecosystem and biodiversity, the links to better and more sustainable livelihoods, the challenges and how to address them		200 farmers have been trained. Larger numbers have gained some experience through volunteering at tree nurseries.	There will be training programmes at the outset at all forest restoration sites.
4.3 Production of 9 maps detailing the past and present land use within the project site in order to define the degree of degradation of the landscapes and facilitate land use planning.		Completed.	Maps to be used in trainings and consultations with communities.
4.4 Identification of internal and external stakeholders (mapping of stakeholders) involved in land use within the project area in order to involve them in land use planning, governance and decision-making stages		Completed.	
4.5 Building a coalition of stakeholders in order to reach agreement on the process for participatory land use planning for the Mt Bamboutos ecosystem: this includes the Mt Bamboutos Chiefs' Association, a common Platform for Forest Management Institutions, and (beyond the life of this project) establishment of a Dialogue Platform			This is a key aspect of the 2019 programme.
4.6 Organisation of 9 consultation meetings with different stakeholders in order to identify and address key institutional barriers to participatory land use planning and how to address them			This is a key aspect of the 2019 programme.
4.7 Identification of different land use systems and priority areas for restoration intervention through the Restoration Opportunity Assessment Methodology (ROAM). This will include analysis of land tenure systems and land use policies in the project area, analysis of the role of women and girls in the management of the Mt Bamboutos ecosystem and participative land use mapping.		Completed in 4 villages. More sites have already been identified than can be restored in one year.	To continue in remaining villages. The challenge in 2019 is to convert identified site into actual restoration sites with adequate protection.
4.8 Draw up and refine an Agreement document on the framework and ground-rules for participatory land use planning for entire Mt Bamboutos ecosystem		Initial work has started	This is a key aspect of the 2019 programme.

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

As agreed in amended application submitted November 2018

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Impact: Mountain-wide consensus-building, community-led reforestation and agroforestry, and improved livelihoods lead to sustainable and participatory management of the entire Bamboutos ecosystem. (Max 30 words)			
Outcome: (Max 30 words) **Framework established for land use planning and sustainable management of Bamboutos ecosystem, through stakeholder engagement and tangible progress towards reforestation, sustainable farming, and improved livelihoods.**	0.5 Farming systems diversity and sustainable productivity for at least 1,330 households (50% women participants) increased over baselines through capacity building and agroforestry establishment by 2021 0.6 Capacity building and agroforestry incorporating NTFPs enables at least 1,330 households (70% women participants) to take steps towards increased incomes by 2021 0.7 Community-led planting and regeneration of 300,000 native trees in Community and Riverine Forests, and increased tree cover in farmland (200,000 agroforestry trees) launch the restoration of 3,000 ha of forests and biodiversity habitat in the degraded Mt. Bamboutos ecosystem by 2021 0.8 Framework agreed and stakeholders' consensus reached on the process for participatory land-use planning and sustainable management of the Mt. Bamboutos Ecosystem with decision making	0.1 Baseline and final HH farm, tree, food and nutrition survey reports; training reports; field monitoring; database of farmers practicing agroforestry; annual measurements of sample monitoring plots; case study 0.2 Baseline and final HH socio-economic survey reports; Report on identification of new income sources; training reports; participant perception surveys; database of farmers practicing agroforestry; case study 0.3 Baseline and final biodiversity and habitat sample surveys; training reports; field reports from nurseries; survival counts of trees planted; tree database; farmer database; geo-referencing of surviving trees; maps of planted areas; case study 0.4 Participant surveys; minutes of meetings; training reports; records of statements and actions of key stakeholders; signed agreement on framework for participatory land use planning at ecosystem level;	There is no major change in the approach of the Government of Cameroon, and Ministerial Departments and agencies continue to support the project No major insecurity or demographic factors impact the area during the project period disrupting progress towards stakeholders' consensus Farmers targeted for all interventions are well selected and largely self-motivated, hence adoption rates will be high.

	informed by published and shared research and M&E results.	signed and agreed land-use plans at local level; ROAM report; case study	
Outputs: **1. Farming systems diversity, soil fertility and sustainable productivity for at least 1,330 households (50% women participants) in 9 villages and the pastoralist community increased over baselines through capacity building and agroforestry establishment by 2021** **200,000 agroforestry trees planted on farms by 2021**	1.8 Baseline survey on crop yields, trees, food security and nutrition completed by end 2018 1.9 1.10 2,000 farmers (50% women) gain knowledge and skills in sustainable diversified farming systems (e.g. agroforestry, contour farming) by 2019 (1,000 trained by 2018, 2,000 by 2019)2,000 farmers (50% women) are trained on agroforestry nursery establishment, pegging, grafting, marcotting, propagators, composting, planting, harvesting and treatment by 2020 (1,000 trained by 2019, 2,000 by 2020) 1.11 At least 1,330 farmers (50% women) establish small tree nurseries (700 by 2019 and 1,330 by 2020) 1.12 At least 1,330 farmers (50% women) adopt sustainable diversified farming systems by 2020 1.13 At least 1,330 farmers plant at least 200,000 agroforestry trees on farms by 2021 (70,000 trees by 2019; 150,000 trees by 2020 and 200,000 trees by 2021) 1.14 increase in selected crop yields per unit area for 1,330 farms by	1.1 Baseline survey report 1.2 Minutes of capacity building workshops: list of participants; participant survey 1.3 Minutes of capacity building workshops: list of participants; participant survey 1.4 Field reports from nurseries – participatory monitoring and evaluation of nurseries 1.5 Participatory field monitoring: database of farmers practicing agroforestry 1.6 Database of farmers practicing agroforestry 1.7 Annual measurements from sample monitoring plots 1.8 Baseline and final household food and nutrition surveys 1.9 Case study based on surveys and participatory M&E	At least 67% of those trained adopt new practices as a result of the training Farmers will plant up to 150 trees on average per farm: tree planting will be copied by other farmers based on example of neighbours and improved availability of seedlings from nurseries. Increased crop yields and diversity result in improved HH food security and nutrition

	2021 (target to be determined after baseline surveys) 1.15 Food security and nutrition increased for 1,330 households by 2021 (target to be determined after baseline surveys) 1.16 Case study on yields, food security and nutrition published and shared (2021)		

2. **Capacity building and agroforestry incorporating NTFPs enables at least 1,330 households (70% women participants) to take steps towards increased incomes and employment by 2021**	2.1 Baseline socio-economic survey on HH income and employment completed by end of 2018 2.2 Consultation on preliminary identification of potential new income sources and cottage industries completed by 2018 2.3 2,000 farmers (70% women) gain knowledge on Non-Timber Forest Products (NTFP) and fruit trees cultivation by 2020 2.4 2,000 farmers trained on value addition opportunities by 2021 2.5 2,000 farmers trained on cost benefit analysis for their priority products by 2021 2.6 1,330 farmers (70% women) adopt NTFPs and fruit trees cultivation by 2020 2.7 Income generating opportunities from NTFPs and fruit trees identified by 1,330 farmers (70% women) by 2021 (with actual income increases to follow)	2.1 Baseline socio-economic survey report 2.2 Report on identification of new income sources and potential cottage industries 2.3 Minutes of capacity building workshops: list of participants; participant survey 2.4 Minutes of capacity building workshops: list of participants - community perception survey on benefit of NTFP value chain 2.5 Minutes of capacity building workshops: list of participants; participant survey 2.6 Baseline and final household farm surveys; database of farmers practicing agroforestry 2.7 Baseline and final household socio-economic surveys 2.8 Participant survey 2.9 Baseline and final household farm surveys; participatory field	At least 67% of those trained adopt new practices as a result of the training On-farm and NTFP economic opportunities help to reduce pressure to expand farming area on Mt Bamboutos

	2.8 90% of 1,330 beneficiaries are able to determine the cost of the value chain of their priority products and the respective benefits 2.9 1,330 farmers grow 200,000 agroforestry trees including fruit and NTFP trees (e.g. Dacryodes edulis 'plum', avocado, red cola, raffia and rattan) as a basis for the establishment of new cottage industries and incomes by 2021 (70,000 trees by 2019; 150,000 trees by 2020 and 200,000 trees by 2021) 2.10 Case study on income generation and employment opportunities published and shared 2021	monitoring; database of farmers practicing agroforestry 2.10 Case study based on surveys and participatory M&E	

3. Community-led planting and regeneration of 300,000 native trees in degraded areas of Community, Riverine and Sacred Forests, and increased tree cover in farmland (200,000 agroforestry trees) launch the restoration of 3,000 ha of forests and biodiversity habitat in the degraded Mt. Bamboutos ecosystem by 2021	3.1 At least 2,665 farmers (at least 50% women) are trained on tree planting and regeneration by 2019 3.2 At least 6 main nurseries established by 2019 3.3 (At least 200,000 agroforestry trees are planted in farmers' fields by the end of 2021 see Outputs 1 and 2) 3.4 Priority sites for tree planting and regeneration (community/ catchment/ riverine/ sacred) identified through ROAM by 2019 3.5 At least 300,000 trees are planted in degraded forest lands by 2021 (100,000 trees by 2019; 225,000	3.1 Minutes of capacity building workshops: list of participants; participant surveys; tree nursery reports; database of farmers practicing agroforestry 3.2 Field reports from nurseries 3.3 (Field reports on trees planted – participatory monitoring and evaluation of trees planted; database of farmers practicing agroforestry) 3.4 Baseline survey using the ROAM approach identifies key sites for planting/ protection/ restoration	Degraded sites in need of forest restoration can be identified at local level during development of local and mountain-wide land use plans Planting/ regeneration of trees on degraded land will take place only with agreement on permanent conservation

	trees by 2020 and 300,000 trees by 2021) 3.6 3,000 ha of community and riverine forest planted / enriched with trees for restoration and conservation purposes by 2021 (500 ha by 2019; 1,500 ha by 2020 and 3,000 ha by 2021) 3.7 Key biodiversity (primates, birds, amphibians, reptiles and butterflies) habitats identified and to be secured across the 3,000 ha by 2021 3.8 Baseline and final sample biodiversity surveys completed by 2018 and 2021 for key sites. 3.9 Case study on tree planting, land restoration and biodiversity published and shared (by 2021)	3.5 Database of trees planted and surviving 3.6 Geo-referencing of surviving trees and production of maps of all planted/ enriched areas 3.7 Baseline and final sample biodiversity survey reports for key sites 3.8 and 3.9 Case study based on surveys and participatory M&E	

4. Framework, coalition, consensus and conditions established for land use planning and sustainable management of Mt Bamboutos ecosystem, supported by shared outputs from research and ongoing M&E	4.1 Project inception workshop held to sensitise all stakeholders on the restoration and sustainable management of Mt. Bamboutos 4.2 2,500 people (at least 50% women) are trained on restoration and management of ecosystems and biodiversity by 2019 4.3 Leaders and key stakeholders (at least 50% women) in the 9 villages and the pastoralist community are committed to restoring and managing ecosystems and biodiversity by 2020	4.1 Minutes of inception workshop and capacity building workshops: lists of participants 4.2 Surveys of participants before and after training 4.3 Minutes of meetings and statements of key stakeholders; monitoring of specific actions by key stakeholders 4.4 Participatory monitoring of uptake of specific restoration practices 4.5 Signed stakeholder agreements 4.6 Minutes of consultation meetings on key institutional barriers	Due to the adoption of a genuinely participatory process and engagement with all stakeholder groups challenges and barriers can be addressed and overcome Government agencies deliver consistent support.

	4.4 At least 1,330 people actively engaged in ecosystem restoration activities by 2020 4.5 Commitment of key stakeholders including government agencies is reached through signing of respective stakeholder agreements by 2020 4.6 Key institutional barriers to participatory land use planning are identified (by 2019) and addressed by 2021 4.7 Best places for restoration and priority areas of intervention are identified through the restoration opportunity assessment methodology (ROAM) by 2019 4.8 Consultations held on participatory land use planning process by 2020 4.9 Agreement reached and signed on the framework and ground-rules for participatory land use planning for entire Mt Bamboutos ecosystem by 2021 4.10 At least two participatory land use plans agreed and signed at village or sub-division level by 2021 4.11 Case study on participatory land use planning published and shared (2021)	4.7 Report from the ROAM exercise with stakeholders identifies key biodiversity sites for protection/ restoration 4.8 Minutes of consultation meetings – and actions taken as a result 4.9 Signed framework agreement on participatory land use planning at ecosystem level 4.10 A least two signed participatory land use plans at local level 4.11 Case study on participatory land use planning	

Activities (each activity is numbered according to the Output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)
1.1 Sensitization, mobilisation and selection of 2,000 farmers drawn from 9 villages (Bafou, Bangang, Babadjou, Buchi, Menka, Pinyin, Bamumbu, Fossimondi and M'mouckmbie) and the pastoralist community on sustainable diversified farming systems, and identification of tree species to be planted
1.2 Training of 2,000 farmers (50% women) on sustainable diversified farming systems (agroforestry, contour farming, fruits and NTFPs tree growing)
1.3 Training of 2,000 farmers (50% women) to establish their own small agroforestry tree nurseries, pegging, grafting, marcotting, composting, harvesting and tree treatment
1.4 Collection and purchase of tree seed for agroforestry nurseries
1.5 Conduct baseline surveys on agriculture, food and nutrition in the 9 villages and the pastoralist community
1.6 Establishment / training of local institutions for extension and participatory M&E (Chiefs and traditional authorities, VFMCs, VANs in 9 villages and the pastoralist community)
1.7 Planting of 200,000 agroforestry trees in the fields of 1,330 farmers from 9 villages and the pastoralist community in the project site
1.8 Participatory monitoring of uptake of agroforestry and sustainable diversified farming systems in the 9 villages and the pastoralist community
1.9 Participatory establishment and monitoring of agroforestry and sustainable farming crop yield plots in the 9 villages and the pastoralist community
1.10 Participatory monitoring of household food security and nutrition
1.11 Preparation, publication and local sharing of a case study on agroforestry, yields, food security and nutrition
2.8 Conduct baseline socio-economic survey on HH income, livelihoods and employment in the 9 villages and the pastoralist community
2.9 Conduct consultations in the 9 villages on identification of potential new income sources and cottage industries, constraints, opportunities & value chain development
2.10 Training of 2,000 farmers (70% women) drawn from 9 villages and the pastoralist community, on cultivation of NTFP and fruit trees
2.11 Training of 2,000 farmers drawn from 9 villages and the pastoralist community, on value addition opportunities
2.12 Training of 2,000 farmers drawn from 9 villages and the pastoralist community in the project site, on cost benefit analysis for their priority products
2.13 Participatory monitoring of uptake of agroforestry in the 9 villages and the pastoralist community
2.14 Participatory monitoring of household income from NTFPs and fruits (based mainly on farms with existing NTFP and fruit production)
2.15 Preparation, publication and local sharing of a case study on income from NTFPs and fruits yields, food security and nutrition
3.1 Purchase of material/equipment for the construction and management of 6 nurseries/ resource centres and the Lebialem forestry centre (shading net, binding wire, wheelbarrow, trowels, iron rods, polythene bags etc.)
3.2 Preparation of 9 nursery sites/ resource centres prior to nursery construction (clearing, tilling and levelling….)
3.3 Establishment of 9 nurseries for agro-forestry, fruit and NTFPs species

3.4 (Construction of 6 giant mist propagators for propagating and grafting selected cultivars of NTFP and fruit trees (See also Output 2))[11]
3.5 (Collection and purchasing of seeds of agroforestry species to be planted in 1,330 farmers' fields (Output 1 and 2))
3.6 Collection and purchasing of seeds of trees to be planted in community and riverine forests.
3.7 Support nursery management operations (weeding, watering, spraying, thinning etc.) for the nurseries to be established by the project
3.8 (Planting of 200,000 agroforestry trees in the fields of 1,330 farmers from 9 villages and the pastoralist community in the project site – Output 1)
3.9 Identification of priority areas for restoration intervention through the Restoration Opportunity Assessment Methodology (ROAM) (see also Output 4)
3.10 Establishment / capacity building for the local institutions for Forest Management for Community Forests to be restored (Chiefs & traditional authorities, VFMCs)
3.11 Planting of 300,000 trees in priority degraded sites in community and riverine forests
3.12 Support community members with tools and equipment for the planting of at least 300,000 native trees in community and riverine forests.
3.13 (Support 1,330 farmers with tools and equipment for the planting of at least 200,000 agroforestry trees in their fields. (Output 1 and 2))
3.14 Conduct baseline surveys on biodiversity, forest restoration and ecosystem services
3.15 Train Forest Management Institutions to monitor and carry out survival counts of seedlings planted in community and riverine forests in the project site (PM&E)
3.16 Geo-referencing of surviving trees and production of maps of all planted areas
3.17 Preparation, publication and local sharing of a case study on community forest restoration
4.1 Hold a project inception workshop to sensitize all stakeholders on the restoration and sustainable management of Mount -Bamboutos Ecosystem and identify training needs
4.2 Training and consultation of 2,500 people from the 9 villages and the pastoralist community on the management of ecosystem and biodiversity, the links to better and more sustainable livelihoods, the challenges and how to address them
4.3 Production of 9 maps detailing the past and present land use within the project site in order to define the degree of degradation of the landscapes and facilitate land use planning.
4.4 Identification of internal and external stakeholders (mapping of stakeholders) involved in land use within the project area in order to involve them in land use planning, governance and decision-making stages
4.5 Building a coalition of stakeholders in order to reach agreement on the process for participatory land use planning for the Mt Bamboutos ecosystem: this includes the Mt Bamboutos Chiefs' Association, a common Platform for Forest Management Institutions, and (beyond the life of this project) establishment of a Dialogue Platform

[11] N.B: Some activities are linked to more than one output.

4.6 Organisation of 9 consultation meetings with different stakeholders in order to identify and address key institutional barriers to participatory land use planning and how to address them

4.7 Identification of different land use systems and priority areas for restoration intervention through the Restoration Opportunity Assessment Methodology (ROAM). This will include analysis of land tenure systems and land use policies in the project area, analysis of the role of women and girls in the management of the Mt Bamboutos ecosystem and participative land use mapping.

4.9 Draw up and refine an Agreement document on the framework and ground-rules for participatory land use planning for entire Mt Bamboutos ecosystem

4.9 Draw up and sign at least two participatory land use plans at village or Sub-division level

4.10 Prepare and share locally a case study on participatory land use planning

Annex 3: Standard Measures

Annex 3 has not yet been completed for MBI. We apologise for the delay and will forward this information as soon as possible.

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
Established codes								

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)

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.	yes
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.	yes
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.	no
Have you involved your partners in preparation of the report and named the main contributors	yes
Have you completed the Project Expenditure table fully?	yes
Do not include claim forms or other communications with this report.	