

## Darwin Initiative Main and Post Project Annual Report

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

**Submission Deadline: 30<sup>th</sup> April 2020**

### Darwin Project Information

Project reference	25-019
Project title	Enabling sustainable, profitable and equitable community-based forest management in Tanzania
Host country/ies	Tanzania
Lead organisation	Royal Botanic Garden Edinburgh (RBGE)
Partner institution(s)	Mpingo Conservation and Development Initiative (MCDI) Tanzania Commission for Science and Technology (COSTECH) Kilwa Women Paralegal Unit (KIWOPAU) WWF Tanzania Country Office Allegheny College UN Environment World Conservation Monitoring Centre (WCMC)
Darwin grant value	£357,322
Start/end dates of project	1 July 2018 – 31 March 2021
Reporting period	Apr 2019 – Mar 2020 Annual Report 2
Project Leader name	Dr Antje Ahrends
Project website/blog/Twitter	<b>Dedicated project webpage:</b> <a href="https://www.rbge.org.uk/science-and-conservation/genetics-and-conservation/global-environmental-change/forest-conservation-in-tanzania/darwin/">https://www.rbge.org.uk/science-and-conservation/genetics-and-conservation/global-environmental-change/forest-conservation-in-tanzania/darwin/</a> <b>Tweets:</b> <a href="https://twitter.com/nicolegrosscamp/status/1154687427296026624">https://twitter.com/nicolegrosscamp/status/1154687427296026624</a> <a href="https://twitter.com/nicolegrosscamp/status/1152490283705262080">https://twitter.com/nicolegrosscamp/status/1152490283705262080</a> <a href="https://twitter.com/nicolegrosscamp/status/1152488355021709312">https://twitter.com/nicolegrosscamp/status/1152488355021709312</a> <a href="https://twitter.com/nicolegrosscamp/status/1151425016183119872">https://twitter.com/nicolegrosscamp/status/1151425016183119872</a> <b>Darwin Newsletter:</b> <a href="https://www.darwininitiative.org.uk/assets/uploads/Darwin-Newsletter-December-2019-Traditional-Culture-Conservation-FINAL.pdf">https://www.darwininitiative.org.uk/assets/uploads/Darwin-Newsletter-December-2019-Traditional-Culture-Conservation-FINAL.pdf</a> (pp. 11-12)
Report author(s) and date	Antje Ahrends, Nicole Gross-Camp, Jasper Makala, Glory Massao, Lasima Nzao, William Kindeketa (30 <sup>th</sup> April 2020)

## 1. Project rationale

Forests deliver significant benefits but their conservation can lead to a net cost at the local level. In sub-Saharan Africa resource-dependent communities are frequently excluded from protected forests, leading to their marginalisation, a loss of livelihood options, and conflict.

Tanzania's woodlands and forests cover 50% of the national terrestrial area. The pressure on these resources is enormous. Harvesting is often unregulated, incurring significant revenue losses needed for poverty alleviation at the national and local scale. Tanzania's National Biodiversity Strategy and Action Plan 2015-2020 (NBSAP) predicts that "the country may deplete its forest cover in the next 50-80 years". The pressures are particularly severe in Tanzania's 170,000 km<sup>2</sup> of unreserved forests, which are disappearing rapidly.

Tanzania's NBSAP recommends strengthening and up-scaling of community-based forest management (CBFM), whereby a community becomes the legal owner and manager of a previously unreserved area. Granting communities tenure and user rights over general land on the condition that it is sustainably managed holds substantial promise to generate dual benefits for biodiversity and livelihoods. However, following an initial boom in the mid-1990s, CBFM has stagnated. Limiting factors include:

1. Policy makers fear that communities may mismanage forests (and lack comprehensive surveys on CBFM impacts on biodiversity).
2. Financial profits are often small (the reserves may be small or in need of a period of regeneration, communities lack financial training and access to markets).
3. Non-financial benefits (e.g. recognition, disaster resilience) are insufficiently understood and consequently not valued by decision makers.
4. Lack of equity. For example, insufficient representation of women in committees without targeted training/improvements.
5. Insufficient appreciation and support from districts. District do not re-invest forest revenues into CBFM. Communities feel unable to navigate the bureaucracy without support.
6. Low demand for timber coming from CBFM areas as they cannot compete with illegally harvested timber in the markets.

This project aims to transform forest governance in Tanzania through a rigorous assessment of current limiting factors for CBFM and providing practical solutions for improving up-scaling CBFM practice. The longer term goal is to improve forest governance, reverse degradation and to generate benefits for communities. The project is located in the highly biodiverse Tanzanian coastal forests, which due to their vicinity to major towns and deep-sea ports (e.g. Dar es Salaam) are highly threatened by large-scale unregulated timber extraction (Map 1). The project activities are centred around villages and forests in Kilwa and Liwale Districts in Lindi Region (400 km south of Dar es Salaam) but their implications are relevant to Tanzania's entire coastal forest area and more widely.



## **2. Project partnerships**

The project is jointly implemented by the lead institution with its partners. All partners are involved in project monitoring and planning.

With respect to specific responsibilities, the Mpingo Conservation and Development Initiative (MCDI) is leading on work in CBFM villages. They are supported by Allegheny College on questions related to social science. The Kilwa Women Paralegal Unit (KIWOPAU) carries out the gender equity training with social science input from Allegheny College and assistance from MCDI. Staff from the Tanzania Commission for Science and Technology (COSTECH) are implementing the forest surveys with advice from RBGE. COSTECH together with MCDI and WWF Tanzania ensure communication with relevant national level government departments. The UN Environment World Conservation Monitoring Centre advises the project from an international policy perspective. There is good and regular communication between all project partners through physical and skype meetings. Formal collaboration agreements have been signed between RBGE and all project partners. The multi-disciplinarity of the team, excellent communication and having partners with decades of experience on the ground was a great asset to the project.

## **3. Project progress**

### **3.1 Progress in carrying out project Activities**

#### **1 Evidence based policy and management recommendations for increasing economic, environmental and social sustainability of CBFM**

##### **1.1 Application for research permit**

*Progress:* A research permit has been obtained in Y1.

##### **1.2 Survey of 21 forests (7 CBFM + 7 forests on general land + 7 forests on government land) to assess CBFM impacts on forest quality/biodiversity. Up-scale results based on remotely sensed products.**

*Progress:* There have unfortunately been some delays in surveying the forests on government land. The survey team is currently preparing to go to the field between July-August 2020, now that COVID-19 related restrictions have been lifted in Tanzania. Relevant pre-cautions to ensure health and safety have been discussed with the team. Details on the forest survey methodology are provided in Annex 4 Doc 1.

As reported previously, we have also teamed up with the University of Edinburgh (UoE), who use L-band radar to map forest biomass and degradation. The aim of this collaboration are twofold – to explore the potential of radar data for detecting degradation, and, if this is promising, to use the methodology to assess the effectiveness of different forest governance types in Tanzania – with a focus on the relative contribution of CBFM. To complete the first aim we have now compared field degradation data for >600 ha of forest in Tanzania to remotely-sensed estimates of degradation (based on both optical and radar data). Our work showed that there is good agreement between radar-based estimates of degradation and the field data (Annex 4 Doc 2). Commonly-used maps of tree cover loss based on optical data (Global Forest Watch) on the other hand were less sensitive to degradation. Thus, radar-data may indeed be suitable for upscaling degradation estimates. A PhD student based at the University of Edinburgh is currently using radar data to compare trends in harvesting and degradation in government managed and community managed reserves across the entire coastal region of Tanzania in order to test whether CBFM can indeed deliver forest protection on the ground in the same way that government reserves do.

### 1.3 Survey of 14 communities (7 CBFM + 7 non-CBFM) to

- establish baselines with respect to benefits and equity of CBFM
- compare communities with and without CBFM and to characterise the added values of CBFM
- establish what factors influence profits / economic sustainability of CBFM (the CBFM areas will vary in size and half of the surveyed CBFM communities will have access to a portable sawmill)

*Progress:* All 14 baseline village surveys have been completed (40 interviews per village = 560; including interviews with 104 female-headed households). As reported previously, a matching algorithm was used to match CBFM and non-CBFM sites to ensure maximum comparability in terms of social and environmental characteristics such as population density, land cover, and distance from major towns and roads. The forest and community surveys are targeting the same sites.

The data have now been analysed and the results have been discussed and disseminated in the form of follow-up Focus Group Discussions (in all 14 villages). The baseline survey data were also summarised in a poster (English and Kiswahili; Annex 4 Doc 3), which was made available to the respective villages and the local Government Authority. The data suggest that CBFM – in its current form - has both positive and negative impacts on villagers. For example, CBFM households have more often access to facilities such as solar electricity, less debt, a greater sense of collaboration within the village, and a higher sense of hope. However, they also experience greater problems with animal crop raiding. At the community level CBFM villages have better governance, but (gender) equity is still a major issue.

Details on the household survey methodology are provided in Annex 4 Doc 4.

### 1.4 Creation and screening of participatory videos (8 in Y2). These videos provide feedback on CBFM for managers, and they can assist in awareness raising with non-CBFM communities and decision makers.

*Progress:* Thus far five (of eight) videos have been completed. Unfortunately there have been delays caused by local elections and COVID-19. In addition to being informative, the participatory videos received positive feedback from the communities. There was a sense of pride of being involved in the production of a video, and the communities felt that this was more meaningful than simply being filmed by an outside producer.

### 1.5 Focus Group Discussions in the 14 surveyed villages to reflect findings from the survey and fine-tune recommendations for improving equity (or establishing a CBFM).

*Progress:* The Focus Group Discussions (FGD) are complete. At least two FGD were held per village (all male and all female) and they included members of the Village Councils (VC). The transcripts from the FGD and participatory videos are currently analysed formally. A few first impression to highlight are: Communities with CBFM recognized the contribution of CBFM to communal wellbeing in terms of increased infrastructure and service provision. However, a consistent theme, which emerged across all of our community related work, was the prevalence of (gender) inequality, and the need for NGOs to take a more active role in addressing this if there is a desire for genuine gender balance on committees (going beyond simple representation). One community lamented the lack of support from the District, and reported that permission to expand their Village Land Forest Reserve was being denied once it became clear that the benefits of harvesting remain with the community. The surveys also highlighted some economic shifts, with many villages emphasising the role of sesame in advancing their household level economic states

(sesame farming is emerging as a new major driver of deforestation in Tanzania). In addition, there appears to be more widespread use of pesticides and herbicides, with the FGDs suggesting that this is due to targeted promotion by the pharmaceutical industry visiting the areas. Another apparent change is an increase in chicken livestock due to greater enforcements against bush-meat collection.

- 1.6 Formulate policy and management recommendations for improved CBFM practice (e.g. focusing on increasing (gender) equity, and factors that influence sustainability). These recommendations will be shared regionally with communities and district staff (e.g. training, stakeholders forum), and more widely (e.g. final report and workshop for national level stakeholders, scientific papers).

*Progress:* We will summarise all project findings and the resulting recommendations more formally in a report to policy makers and other stakeholders (Annex 4 Doc 5). This report will be completed in Q3 Y3. The exact nature of stakeholder engagement and dissemination of the project results may need reviewing in the light of COVID-19. The current plan is to hold a stakeholder forum in Lindi in Q4 Y3 with representative ranging from communities to national government and business (plus a separate workshop in Dar es Salaam with national level decision makers).

## **2 Ten pilot CBFM villages are trained in best CBFM practice and they implement improved approaches, leading to greater (gender) equity and benefits**

- 2.1 Provide governance, financial management and gender equity training for 450 local leaders (forest management committees/village council members) from 10 pilot communities

*Progress:* The training has been completed in all ten villages. It focussed on the preparation of CBFM work plans and budgets, and addressed any relevant capacity gaps. These differed between villages and the training was tailored to the respective needs on a village-by-village basis. The exact needs were decided in discussions with village representatives and also informed by independent audits. Some villages were already seeing a very smooth implementation of CBFM, while others lacked the capacity to produce budgets, keep records of accounts, and/or struggled with governance issues such as a lack of clarity around decision making processes or low frequency of village meetings. Financial management and keeping records of accounts was the most prevalent challenge across the communities. This was an important issue to address as good accounting is a prerequisite for the Forest Stewardship Council certification, and this is also annually checked in government audits. (Examples of audit reports and the training log can be made available upon request but are not provided here to for data protection reasons). Governance was a problem in two villages and an independent audit report (produced by MJUMITA) confirmed that “between 2017 and 2019 there have been tremendous improvements in governance” in these two villages. Training materials are provided in Annex 4 Doc 6. (Gender equity training is reported on separately under 2.3.)

- 2.2 Assist the communities in implementing improved practices

*Progress:* The communities were provided with guidance and suggestions for improvements. The implementation of these will be led by the villages themselves. This is being followed up with regular visits by MCDI representatives, as well as in independent audits.

- 2.3 Outreach on gender issues in the 7 CBFM and 7 non-CBFM villages (to discuss and address as appropriate cultural and practical barriers for greater gender equity)

*Progress:* This has been completed. A change request had been submitted to reduce the gender outreach from 20 to 14 villages in order to allow us to visit each village

twice (requested by the villagers and allowing us to assess the impact of the outreach over time). The request was approved and two sets of visits to all 14 villages have been completed. (More details are provided under 3.2, 3.3 and 7.) Overall the training was well received by the communities, reaching several thousand people who participated in games, music and performances, which were used for the communication of key messages. A summary of these is provided in Annex 4 Doc 7.

### **3 Piloted and trialled approaches to increase benefits and equity of CBFM are shared between villages and with government and other stakeholders, leading to a wider change in CBFM working practices. Conditions are in place for non-CBFM communities to receive the advice and support required to set up CBFM.**

#### **3.1 Training for district officers from one district to raise awareness on the contribution of CBFM to district revenues, forest conservation and community livelihoods. In addition, training with national level stakeholders.**

In light of the recent changes in government attitudes towards CBFM and in line with the recommendations with the last project review, the project has put increased emphasis on enhancing knowledge and awareness of the benefits of CBFM. In Y2 MCDI conducted training with the Kilwa District Council Management Team (28 participants), the District Full Council (104 participants), and the District Security Committee (20 participants). Specific areas covered in the workshops included the legal and policy framework for CBFM, the CBFM implementation process, success stories, lessons learnt, the link between CBFM and central government development priorities, and the contribution of CBFM to revenue generation. MCDI has been able to secure critical support for CBFM from the Full District Council. For more details see footnote<sup>1</sup>. We had originally planned to conduct training with 40 participants in three districts. A change request had been accepted to stay within a single district to ensure critical local government level support and to clarify the exact mechanisms around harvesting and revenue collection in order to be able to communicate a jointly agreed model to national level decision makers.

Given the importance of reaching out to national level decision makers sooner rather than later (also as highlighted in the Annual Review) this aspect received more emphasis than originally planned in Y2 (and RBGE contributed an extra £3k of matched funding to this). MCDI, in collaboration with other NGOs (notably, WWF, the Tanzanian Forest Conservation Group and MJUMITA), held several meetings with representatives of the Forest and Beekeeping Division, the Tanzanian Forestry Service, the President's Office and Regional, Local Authorities to discuss the national policy landscape around CBFM.

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<sup>1</sup> A first training session was held with the Kilwa District Council Management Team, who play a key role in shaping decisions made by the District Full Council (the main decision making body at local Government Authority level). This was then followed by a full-day workshop with the Full Council, who in turn also influence decision making at the national level. The previously trained District Council Management Team acted as facilitators. Important decisions reached at this meeting included that (1) the 5% of CBFM revenues that go to local government will be reinvested into CBFM, (2) there will be greater transparency on how this money is invested (through quarterly reports produced by the District Forest Officer), (3) CBFM will be actively promoted by the District, (4) MCDI continues to collect 5% of CBFM revenues with a view on making operations less donor dependent and more financially sustainable, and (5) regular meetings will be held to update the Full District Council on CBFM progress. These recommendations are now being prepared by the Council Management Team for endorsement and signing by the Full Council. The Councils decision was submitted to relevant ministries at national level and other key stakeholders. Another meeting was held with the Kilwa District Security Committee (responsible *inter alia* for matters related to illegal logging). This committee is chaired by the District Commissioner, who also chairs the District Harvesting Committee (responsible for issuing harvesting licences to CBFM villages). These contacts are very relevant with a view on securing smooth future working procedures for CBFM. All workshops highlighted that most participants knew of CBFM but lacked understanding of its benefits, and its contribution to the National Government development agenda and revenue generation.

- 3.2 Development of a brief document (in Kiswahili) that lays out what CBFM is, the steps for setting it up, and the process of day-to-day management. The document aims to assist communities that would like CBFM but feel unable to navigate the bureaucracy. It also aims to assist the work of MCDI and district staff.

This has been completed (Annex 4 Doc 8).

- 3.3 Local stakeholder forum with representatives from at least 20 communities, government and private sector to share ideas on best CBFM practice  
[scheduled for Y3]

#### **4 Scientific outputs and policy and management recommendations developed and shared with relevant target audiences (at national and global levels)**

- 4.1 Write a report for policy makers and CBFM managers with (piloted) recommendations for increasing benefits, equity and scale of CBFM, and an evidence-based comparison of levels of degradation in CBFM reserves versus unreserved forests. The report will also provide feedback to the Wildlife Division (national implementation of CITES) on whether the recent listing of *Dalbergia* spp. impacts on economic returns of sustainable timber harvesting by local communities.)

[scheduled for Y3; see 1.6]

- 4.2 Organise workshop with major stakeholders at national level (Forest and Beekeeping Division, Tanzanian Forestry Services, Prime Minister's Office for Regional Administration and Local Government, Wildlife Division, Local Authorities, CSOs, village representatives and national media) to launch report.

[scheduled for Y3; see 1.6]

- 4.3 Write and submit a scientific paper on the potentials and limitations of CBFM in an open access journal

[scheduled for Y3]

### **3.2 Progress towards project Outputs**

#### **Output 1: Evidence based policy and management recommendations for increasing economic, environmental and social sustainability of CBFM**

Data collection and analyses to underpin evidence based recommendations for best practice are now almost complete. In 2018 (baseline) rigorous information of the impact of CBFM was patchy and/or incomprehensive, leading to stagnating support. This project uses a combination of forest and community surveys (and radar-based upscaling) to provide more rigorous evidence on CBFM, and to provide evidence-based recommendations for areas that may be in need of improvement. The output and its indicators continue to be relevant.

#### **Output 2: Ten pilot CBFM villages are trained in best CBFM practice and they implement improved approaches, leading to greater (gender) equity and benefits. Attitude barriers to female participation in committees are shrinking.**

Ten CBFM villages have received training in governance and financial management in Y2. Communities were provided with guidance on implementing improved practices such as using accounting books, and follow-up visits will assist with and informally assess change. Formal

assessments will take place in the form of independent audits (e.g. by the Forest Stewardship Council and the government), as well as MCDI led governance assessments (Annex 4 Doc 9).

The gender training was done separately to the financial and governance training. A survey in Y1 (for methods see Annex 4 Doc 10) highlighted significant cultural/religious barriers to female participation in decision making processes (in both CBFM and non-CBFM villages) and a lack of hope amongst women, there was evidence for a small shift in attitudes in Y2. For instance, whilst initially only 63% of women replied that they actively participate in meetings and express their opinions, this was confirmed by 83% of female respondents in Y2. There also was an increase from 62% in Y1 to 69% in Y2 of people strongly agreeing that husbands and wives should equally attend village meetings and that this meant that housework and childcare needed to be shared. However, a more multi-dimensional analysis is required as for example the fraction of people strongly disagreeing with this statement also increased (from 1 to 11%). The data (Annex 4 Doc 11) are currently being analysed formally to enable a better understanding of the distribution of attitudes (and shifts therein) across for example gender, wealth and education. The results will be published as part of the policy maker and other stakeholders report as well as in the form of a peer-reviewed manuscript. All indicators are still valid and will continue to be used.

**Output 3: Piloted and trialled approaches to increase benefits and equity of CBFM are shared between villages and with government and other stakeholders, leading to a wider change in CBFM working practices. Conditions are in place for non-CBFM communities to receive the advice and support required to set up CBFM.**

The output is partly scheduled for Y3. Government stakeholders (both district and national level) have successfully been engaged in a series of workshops and meetings to create/maintain enabling conditions for CBFM. An indicator has been added to reflect work at the national decision maker level. All indicators are still valid and will continue to be used.

**Output 4: Scientific outputs and policy and management recommendations developed and shared with relevant target audiences (at regional, national and global levels)**

The output is scheduled for Y3. All indicators and means of verification continue to be relevant.

Additional output: RBGE, the UN Environment World Conservation Monitoring Centre and the University of Edinburgh are currently working towards a complete (or as complete as possible) GIS database for community managed forest areas in Tanzania. At present the availability of digital reserve boundaries for forests on village land is very patchy, preventing larger scale nation-wide assessments of the effectiveness of CBFM. The database will be provided to key national stakeholders (both government and non) and if permission is granted also uploaded into the World Database on Protected areas section for 'Other effective area-based conservation measures'.

### **3.3 Progress towards the project Outcome**

Progress to date suggests that the Outcome is achievable. The outcome indicators measure the percentage of female representatives on Village Natural Resource Committees (VNRCs) (with a proposed addition of measuring the proportion of women who feel empowered to actively participate), how poor or otherwise disadvantaged people in villages perceive CBFM, and the benefits of CBFM for villages (monetary and non-monetary) and forest condition. All indicators continue to be relevant.

With respect to gender representation on committees data are available for 14 villages (Annex 4 Doc 12). The percentage of females in VNRCs for 2020-2023 ranges between 12-45% (mean = 30% ± 9% SD; median and mode = 32%). This is a small increase from the representation in 2016-2019 (mean = 29% ± 8% SD; median and mode = 30%). With respect to Village Councils in 2020-2023 female representation ranges between 32-44% (mean = 35% ± 5% SD; median and mode = 32%). Again, this constitutes a small increase from 2016-2019 (mean = 34% ± 4% SD; median and mode = 32%). Thus, the baseline in 2016-2019 was already close to the target value of 35% (now achieved for Village Councils and almost achieved for VNRCs). However, as reported previously, the surveys and training suggested that formal membership of a committee



did not equate to genuine participation in decision making. This aspect has received attention by the project and a new indicator is proposed (see comments on Activity 2.3). The gender attitude data will be analysed formally and the results will be communicated to key stakeholders in order to enable (targeted) awareness raising beyond the duration of the project.

The indicator measuring the perception of CBFM of the poor and disadvantaged individuals suggests that the target value of at least 80% of people in these possibly disadvantaged wealth categories agreeing with CBFM was achieved (96%). The survey also suggested that while support was already high at the formation of the CBFM (89%) it had increased in this wealth category, whereas there was a small negative change in the 'normal' wealth group (from originally 96% to 93% agreeing with CBFM). Generally there was little difference in the level of support between the different wealth groups. However, whilst a high proportion of people in the poor and poorest wealth group knew the precise location of the CBFM, they felt less frequently sufficiently informed about its management (70% in the poor and very poor categories as opposed to 78% in the more wealthy categories). For detailed figures see Annex 4 Doc 13.

The baseline for CBFM profits established in 2018 was US\$ 0.4 per ha. This relatively low income was greatly increased by communities switching from selling round wood to selling processed sawn planks. These fetch up to 5 times more than an equivalent amount of round wood. A buyer was found (Grumeti Eco Lodge), who signed a contract with two villages in Y1, a third village in Y2, and indicated willingness to sign a contract with another nine villages in Y3. In total, since July 2018 a total of 6,767 planks (43 m<sup>3</sup>) of kiln-dried sawn timber have been sold to the lodge. The two saw mills have been upgraded and produce thinner planks (doubling the amount of planks that can be produced from a single tree, and increasing the wood recovery rate from 30% achieved with traditional pit sawing to 60%). In addition, the combination of these planks being high quality, community produced, and FSC certified enable communities to fetch a 60% higher price compared to 'standard' planks. The three villages currently selling planks (comprising 3,597 men and 3,970 women) have invested their revenues in, for example, a dispensary, new school desks, classrooms, school toilets, teacher accommodation, the provision of school lunches, a motorbike for forest patrolling, and a new house for the village chair (the latter possibly indicating equity issues in decision making). In addition, food worth ~ US\$ 5,000 was provided to households who were victims of disastrous effects of extreme weather and flooding in early 2020. The community infrastructure and service improvements created local employment (mostly short term) for approximately 400 community members (50% youth and 20% women). Overall these results suggest that the outcome is achievable (with no concomitant increase in harvest). It is now key to find other buyers and investors, following the example of Grumeti Eco Lodge, which has essentially been a 'game changer' for the communities.

### 3.4 Monitoring of assumptions

**Assumption 1:** Communities feel able to share accurate information (data strictly anonymized and no government officials will be present during surveys).

*Comments:* This is difficult to establish but MCDI is seen as a trusted partner by rural communities due to their long-term presence and support. Previously, MCDI approached communities to establish a Village Land Forest Reserve – now communities approach MCDI, implying trust into the assistance MCDI will provide.

**Assumption 2:** The private sector remains interested in sustainable timber products.

*Comments:* The positive example of Grumeti Eco Lodge (see Outcome) is a sign that may indeed be a demand for FSC certified wood produced by local communities amongst the luxury/high-standard ecotourism resorts. The key is now to come to similar arrangements with other resorts.

**Assumption 3:** Women desire greater participation in forest management issues.

*Comments:* This was indeed expressed during the gender training (a formal analysis of the data will follow).

**Assumption 4:** Marginalised members of local communities do not feel intimidated to share their perceptions.

*Comments:* This is difficult to establish. There was no indication that they feel intimidated to share their perceptions (and most interviews were at household – not at larger group level).

**Assumption 5:** Key decision makers can attend the workshop.

*Comments:* This may be impacted by COVID-19. However, key milestones in the communication with decision makers have already been achieved (see 3.1). A major stakeholder workshop is planned for the end of 2020 and it currently seems possible to undertake this.

**Assumption 6:** The Tanzanian Government continues to be supportive of CBFM and there are no changes in tenure (e.g. communities being forced to give their communally owned land back land to the government).

*Comments:* There is a strong policy and legal framework for CBFM in Tanzania, and it is reasonable to assume that this strong framework will persist.

**Assumption 7:** All necessary research permits can be obtained from COSTECH.

*Comments:* Yes, they have been obtained.

**Assumption 8:** Communities have an interest to participate in video production.

*Comments:* Yes, they had a strong interest in this activity.

**Assumption 9:** Satellite-born radar products can detect degradation (i.e. changes in forest quality that do not result in complete canopy loss) in the Tanzanian coastal forests.

*Comments:* Yes, see progress report on Activity 1.1 and Annex 4 Doc 2.

**Assumption 10:** Interest in CBFM communities to receive training remains high.

*Comments:* Yes, this is the case.

**Assumption 11:** The local demand for sawn planks remains higher than demand for round wood.

*Comments:* Yes, see comments on Outcome.

**Assumption 12:** The forest surveys in Y1 in the CBFM sites indicate that sustainable harvest is possible (as opposed to there being a need for a period of regeneration).

*Comments:* The data collection is in progress. At present it seems that the VLFRs of communities that have signed contracts for sawn timber are in a condition that allows sustainable harvest. Two other reserves may be in need of regeneration (potentially due to harvest by outsiders as the overharvested areas are situated close to roads).

**Assumption 13:** The central government remains in favour of decentralisation and CBFM.

*Comments:* See comments under Assumption 6.

**Assumption 14:** Non-CBFM communities do not feel intimidated to approach the project and/or the district council.

*Comments:* Yes, MCDI is being approached by non-CBFM communities who wish to establish VLFRs.

**Assumption 15:** We can track the distribution of the report (it may be shared from person to person instead of direct requests to us and the website).

*Comments:* Relevant for Y3.

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

The goal of the project is to reduce large-scale and often illegal depletion of Tanzanian forest resources, and to enable communities to sustainably use forest resources to supplement community incomes and to provide greater resilience to disasters. To this end the project is conducting a comprehensive assessment of the current potentials and limitations of community-based forest management. This is to provide practical solutions for any short-comings (e.g. with respect to equity) and to generate best-practice guidelines, baseline data, training manuals and attitude shifts to enable CBFM to be rolled out more widely. CBFM holds the potential to halt the

rapid and unsustainable depletion of Tanzania's c. 170,000 km<sup>2</sup> of unreserved forests on general land whilst generating sustainable benefits for deprived communities.

To date the project has shown that CBFM can be profitable and self-sustaining and provide added income for communities. CBFM projects are often hampered by low income because communities sell unprocessed round wood, which is hard to trade locally and in small quantities. Communities with access to a portable sawmill were able to sell sawn wood for up to five times the price (see report on progress towards Outcome). The project is also providing communities with training in financial accounting and governance. Pre-training surveys have highlighted some significant gaps, which need to be addressed to avoid poor financial planning, misuse of funds and/or conflict.

CBFM is also likely to make a range of non-monetary contributions to wellbeing such as pride, recognition, and greater security in times of disaster (e.g. in the past communities have used communal CBFM funds to purchase extra food in times of drought). The project aims to characterise and maximise the wider contributions of CBFM towards empowering communities and building resilience.

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

The project is directly relevant to Goal 15 (Life on Land), and it builds "capacity on climate change mitigation" by facilitating better management of forests/carbon sinks (Goal 13). Further, it contributes to targets under Goal 1 (Poverty) by promoting access to forest resources to "build the resilience of the poor and reduce their exposure and vulnerability to extreme events", and by contributing to the creation of "sound policy frameworks based on pro-poor and gender-sensitive development strategies". The project will promote gender equality through targeted community training (Goal 5) and address inequalities more widely (Goal 10), e.g. by developing strategies with villages to ensure equitable benefit sharing from CBFM. Finally, by empowering local communities to protect, harvest and trade forest resources (which are often exploited by city based companies) the project contributes to "positive links between urban and rural areas", and helps to "reduce the adverse environmental impact of cities" (Goal 11).

In Y1 and Y2 the project showed that CBFM can contribute to Goal 1 by generating revenue for communal use and reducing their exposure to disastrous events such as the floods in early 2020 (see preliminary results of the household surveys Annex 4 Doc 3, and progress towards Outcome). The project itself contributed to Goal 5 but also highlighted that gender balance needs to be given targeted attention in CBFM projects if it is desired. With some of the forest surveys still outstanding the project's contribution to Goals 13 and 15 still need to be backed up. However, an analysis of data collected from 86 forests between 1996 and 2010 (Annex 4 Doc 2) does suggest that Village Land Forest Reserves do prevent forest clearance and unsustainable harvesting in the same way that government managed reserves do.

#### **5. Project support to the Conventions, Treaties or Agreements**

The project directly contributes to the implementation of Tanzania's National Biodiversity Strategy and Action Plan (NBSAP 2015-2020), which recommends strengthening and up-scaling of CBFM to reduce large-scale unregulated harvesting on currently unreserved forest land. Forest loss is one of the main drivers of biodiversity loss in Tanzania. Despite the promise of CBFM, knowledge, capacity and awareness gaps currently limit its implementation and potential. By addressing these issues (Output 1) the project supports the national implementation of CBD Articles 6 and 10 (cross-sectoral national plans and policies for the conservation and sustainable use of biodiversity, support to local populations in implementing action to prevent degradation and unsustainable use of biodiversity). It also promotes public education and awareness (Article 13), contributes to Monitoring (Article 7), and improves the evidence base for effective in-situ conservation measures (Article 8). In terms of the Aichi targets the project is directly relevant to targets 5 (reducing the rate of deforestation and degradation), 7 (sustainable management), and 11 (conservation through effectively and **equitably** managed protected areas). It also contributes to Strategic Goals A (addressing underlying causes of biodiversity loss), D (enhancing benefits to all), and E (participatory planning and management).

The project has not yet liaised with the national CBD focal point directly, but one of the project partners (COSTECH) is the principal advisory body to the Government on all matters related to scientific research and its application for biodiversity conservation and socio-economic development. COSTECH works in close contact with the Division of Environment at the Vice President's Office (CBD focal point) and the project has a strong focus on engagement with national level stakeholders (Outputs 3 and 4).

Specifically - with respect to the project's contribution to biodiversity monitoring and related training components: The project uses a forest survey methodology that is rapid, quantitative, and in its simplest form consists of simple counts of trees and stems, i.e. can be implemented cost-effectively and without any specific training. The method will be published as an open access manual, along with a peer-reviewed publication (Annex 4 Doc 2) to enable future monitoring. The suggested field method, strictly speaking, mainly assesses forest structure (number of trees per ha, number of timber trees per ha, basal area, above-ground carbon, stem diameter distribution). An assessment of tree species composition (species richness, presence of threatened and/or endemic species, presence of highly valuable timber species with a healthy size class distribution) can be added (and is done in this project) but requires botanical expertise. Amongst other things we will assess the added value of botanical identifications, and whether surveys without this level of detail can still be informative.

Another question addressed by this project is the feasibility of monitoring forest loss and degradation using remotely-sensed data. A comparison of field data previously collected with the above rapid field method (from 86 forests) with remotely-sensed data has shown that commonly-used optical data (Global Forest Watch) do not routinely detect forest degradation. Radar data on the other hand do appear to be sensitive to degradation. The project will recommend a combination of field-based and radar-based assessment for future monitoring (as part of the policy maker and stakeholder report, Annex 4 Doc 5).

The surveys done as part of this project will allow (careful) conclusions on the likely impacts of harvesting on tree level biodiversity – for example, by comparing the tree species composition between sites that have been intensively harvested over a number of years to those that have experienced less harvesting (space-for-time substitution). However, generally it is extremely difficult to monitor harvesting impacts on biodiversity, going beyond the direct and instant impacts (trees being lost). There is a long lag in downstream impacts (with species richness often initially increasing in response to the gaps created by harvesting), and the impacts are initially often only 'visible' at the molecular level (reduced genetic connectivity and diversity, possibly leading to reduced adaptation potential). On the other hand simple structural assessments can already be informative, and given the rapid decline of the forests in the region, a key consideration going forward is to use a method that is simple, fast and repeatable.

## **6. Project support to poverty alleviation**

The project directly contributes to poverty alleviation by helping communities to generate and equitably manage income from sustainable timber sales. The direct beneficiaries of this work include at least 5 communities who profit from access to a portable saw mill, as well as communities more widely if CBFM is rolled out to them. For details see comments on Outcome.

## **7. Project support to gender equality issues**

The project is working with communities to discuss and address as appropriate cultural and practical barriers for greater gender equality (Activity 2.3, Output 2). This work has highlighted the presence of significant cultural and religious barriers to female participation in decision making (despite a c. 35% representation of females on committees). The interviews confirmed the general presence of "mfumo dume" (patriarchy), i.e. there is a widespread perception that the voice of a woman is less important and that major decisions ought to be taken by men. This is very likely reinforced by unequal opportunities for education. Statements such as "A husband can have sex with his wife whenever he pleases" were often affirmed. The training provided by the project constitutes a step on the way towards greater awareness and gradual change. It was well received and the follow up surveys suggest that it engendered a moderate shift in attitudes

(for more details see report on Output 2). A more formal analysis of the data and recommendations for how to address these issues will follow in Y3.

## **8. Monitoring and evaluation**

All project partners are involved in monitoring and evaluation. Overall progress is evaluated by a steering committee consisting of representatives of all project partners (specifically, the named PIs and Co-Is in the grant application). Responsibility for individual indicators have been assigned to individual partners or groups, for example, MCDI, Allegheny College and KIWO PAU are monitoring progress for socio-economic and gender indicators, and RBGE and COSTECH for forest level indicators. There is communication between most partners at least once a month (using conference calls and email). Minutes, relevant documents and data are shared on a joint Google drive. Overall responsibility for M&E rests with the PI (Antje Ahrends), the leading implementing partner (Jasper Makala and Glory Massao), and the lead social scientist (Nicole Gross-Camp).

## **9. Lessons learnt**

A general strong point was the multi-disciplinarity of the team. The combination of social science and biodiversity experts, practitioners and scientists, representatives of NGO and government sector, and national and international partners meant that the team covers a wide breadth of expertise. Another strong point is the fact that the local partners are very well connected to major stakeholders and the government, and that they have an intimate knowledge of the policy environment the project is operating within. The project also benefits from the decades of experience of MCDI of working with local communities and the relationships and trust they have established.

In terms of lessons learned leading to future changes: CBFM was perceived as positive by a larger proportion of people in the poor and very poor wealth categories than anticipated (96%), suggesting that benefits of CBFM do reach people in these wealth groups. The practical examples of how revenues were used (see Outcome) also suggest this. The positive support for CBFM across all wealth group did not differ between villages with and without access to the mobile saw mill, suggesting that while the mobile saw mill is a game changer with respect to income, there are other benefits associated with CBFM that do not necessarily take a monetary form (more detailed analyses to follow). However, there are greater issues than anticipated associated with gender equity and balance in decision making. Whilst more women were represented on committees than anticipated, many of these were not actively participating in decision making. In addition, a larger proportion of people in the poor wealth categories felt insufficiently informed about the management of CBFM than in other wealth categories. Overall this suggests that NGOs need to take a more active role if (gender) balance is desired, and that simple representation metrics are insufficient to capture fairness.

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

*When will the remaining forest surveys and socio-economic surveys be completed; when will the project have finalised all its baseline data collection work?*

The socio-economic surveys are complete. Unfortunately there has been a delay in the forest surveys. The team is currently preparing to go to the field and to complete the last set of surveys (7 forests) by August 2020. In the worst case, should this be impacted by renewed COVID-19 related restrictions, we will need to fall back on the use of radar-based assessments.

*Please include brief summaries (such as in Annex 5) for all products/documents listed in Annex Done.*

*The essence of Outcomes 1 and 3 is similar. Please explain the essential differences of these Outcomes.*

Do you mean Outputs? Output 1 is centred around the scientific assessment of CBFM (collection of evidence and formulation of recommendations in the light of the evidence). Output 3 is centred on the dissemination of that evidence at village, district and national levels (and Output 4 at national and beyond national level).

*Output 1 indicators do not specify who the project see as “policy makers”, nor how many “policy makers” the project intends to target or lobby.*

This has been fixed by formulating the indicators under Output 3 more clearly (3.1 and 3.5).

*Please comment on the model for CBFM. What form is its envisaged to take?*

The best practice model will be communicated in the form of a report to policy makers and other stakeholders. In many respects the current model of CBFM (as implemented by MCDI) appears to be successful. Main areas of suggested improvement will be around ensuring greater gender balance in decision making, more transparent governance, regular financial training, and increased use of remote sensing in independent monitoring of harvesting to strengthen the evidence base for CBFM.

*Indicator 0.1 appears to be in need of revision, can you propose a new indicator to capture the positive impact the project is trying to achieve?*

Done – we proposed an addition to the indicator. (Admittedly, we struggled setting a ‘pre-project’ target value now that we are already informed by the data collection. We are happy to revise the value.)

*As a response to the changes in Assumption 6, is the project liaising with other projects or organisations? Would there be a need to start the policy influencing work earlier than planned?*

Yes, this was a very good and important point (Assumption 6 holds).

*Please include more detail about how the project’s forest surveys are monitoring biodiversity impacts.*

We have added more detail to Annex 4 Doc 1 and to 5. This is a very good. Ideally one might use more expensive and complex methods for assessing biodiversity impacts (for example repeated e-DNA assessments) but the goal was to devise and communicate a method that is cost-effective, simple and can be rolled out widely.

*Please specify who the members of the Steering Committee and provide more information about the SC’s M&E systems and activities, and who ultimately is responsible for the overall project M&E.*

We have provided more detail in the relevant section of the report. Does this answer the question?

*Organising one stakeholder forum and disseminating the project’s final report alone may not bring about the desired effect on influencing policy. Has the project thought about for example producing information leaflets, information emails, or other outreach material to disseminate to policy makers. Has the project identified key “policy makers” to lobby, and how many “policy makers” is the project targeting?*

A very good point. The project will produce a report and disseminate this via email, webpage, the forum and a workshop. Key policy makers have been identified (3.1 and 3.5). In total the project is targeting around 200 policy makers from district to national level.

Other comments and queries made in the AR not specifically listed in the summary and/or reported on in other sections of this report:

*Page 4: How was the training needs assessment conducted and how is 'best practice' defined. There is a tension between this project aiming for a rigorous scientific assessment and 'best practice' on the other hand being pre-defined.*

This is a very valid point. 'Best practice' is to some extent pre-defined by aims of CBFM, to a large extent set or strongly influenced by international donors, NGOs, universities and Western thinking. The project is to some extent caught in that tension. Some of the 'best practice' aspects were clearly pre-defined – for example the need for sound financial management and transparent and inclusive decision making. This was established using e.g. governance assessments (Annex 4 Doc 9) and independent audit reports (e.g. by the Forest Stewardship Council). The need to manage forests in a way that does not reduce their potential to supply goods and services also is a pre-defined aspect of best practice. However, we also try to approach 'best practice' objectively wherever possible. One example is the notion that there should be increased female participation in committees and greater gender balance. The project did set targets around this, but also attempted to objectively explore whether there is actually a desire for this within the communities. We also explored the nature and importance of non-monetary benefits of CBFM – being open to the possibility that CBFM may not need to generate an income to still be of benefit to communities. Likewise, our data showed that micro-elitist benefit capture may be less of an issue than previously thought, but micro-elitist governance/decision making possibly is an issue.

*Page 7: Would the mobile saw mill have been used regardless of the project?*

Yes, the mobile saw was not paid for by Darwin funding, i.e. it would have very likely been purchased regardless of whether the grant was awarded or not. The project is however critical for assessing the impact of the mobile saw mill. The saw mill has the potential to substantially increase income for communities, but it could also substantially contribute to inequalities, micro-elitist benefit capture, an increased marginalisation of women in decision making ("men's work") and an increase in harvesting. With its detailed forest and community surveys the project provides reassurance that the mobile saw mill does not lead to unintended consequences. In addition, the project also operates in villages that do not have access to saw mill in order to assess whether CBFM is regarded positive even in the absence of larger monetary benefits. This is important for two reasons: firstly, there are still questions around the scalability of the mobile saw mill, the use of which requires a large amount of capital, training, monitoring and market connections. Secondly, there has been a recent expansion of sesame farming in the region and tension arises between conserving forest (essentially a long-term but not necessarily highly profitable investment) versus clearing forest for a short-term profitable cash crop. Understanding community perceptions around these issues is very important for CBFM going forward.

*Page 7: Did the project consider other marginalised groups?*

The household surveys were stratified by wealth, i.e. another marginalised group that was considered were the very poor.

*Page 8: What is the added value of the project?*

We agree that the added value lies in the better informed model for CBFM and how it can be monitored - thoroughly backed up by evidence generated in collaboration with many expert partners. Many of the issues such as the marginal role of women and poor community members have indeed been extensively discussed before. However, they are rarely backed up by rigorous evidence and/or they are studied in isolation (with social and biophysical science collaborations still not being the norm). Similarly, the perceived impacts of CBFM on forests range from CBFM communities being blamed for driving major forest loss, to CBFM being regarded as a silver bullet strategy to conserve forests. Rigorous and independent assessments of forest cover/quality are rare and/or often based on a single data source (e.g. remotely-sensed data calibrated with

relatively few ground data). The project aims to comprehensively look at a multitude of issues simultaneously, and at scales ranging from the micro level to the macro level.

#### *Page 9: Balance of addressing micro versus macro level problems*

A very important comment, which led to a shift in the focus of the project in Y2.

### **11. Other comments on progress not covered elsewhere**

The project had to temporarily suspend all work in villages due to local elections.

### **12. Sustainability and legacy**

The project will deliver an evidence-based assessment of the potentials and limitations of CBFM from a wide range of angles. This information is important nationally and internationally. Nationally MCDI is working closely with decision makers to inform possibly policy changes. Internationally, Tanzania is one of the few countries with decades of experience in implementing CBFM and the lessons learnt will be fed into negotiations on the post 2020 agenda through WCMC.

Exit strategy: A stable and sustainable endpoint is reached when (1) rigorous analyses of all available evidence (forest, community, gender and governance surveys) are complete; (2) best practiced recommendations have been formulated in the light of this evidence and communicated to key stakeholders; and (3) there is (renewed) support for rolling out CBFM from district and national government. Beyond the project, MCDI will continue to work with CBFM villages and those wishing to participate in CBFM. The project identified some key issues in the pilot villages (such as cultural barriers to women participating in decision making even when they are part of a committee, and capacity gaps in financial accounting and/or governance). The training developed by this project for the pilot villages will continue to be implemented more widely to address similar issues in other villages. The project also identified avenues for CBFM to be financially more sustainable without this leading to unintended consequences (e.g. through selling sawn wood rather than round wood and thereby increasing income and maximising wood recovery without needing to harvest more). The other project partners will continue to influence relevant policy processes and to provide underpinning knowledge through research (the project leader and the lead social scientist will jointly supervise a PhD project from September 2020 onwards, which is envisaged to continue the research of this project).

### **13. Darwin identity**

The project is stand-alone with the Darwin Initiative being the sole major funder. The project has not yet published any materials, but the Darwin Initiative funding and the role of the UK Government will be clearly acknowledged in all printed and online materials that will be produced. The project has linked up with the Political, Press and Public Affairs department of the British High Commission in Tanzania, who offered to help promoting the project and the Darwin Initiative through their (social) media channels. The Darwin Initiative has been clearly acknowledged on a dedicated webpage and in Twitter feeds related to the project.

### **14. Safeguarding**

RBGE has recently reviewed and updated its safeguarding, bullying and harassment, and whistle-blowing policies, as well as the code of conduct. It also has drawn up an ethics policy and a procedure for ethical clearance. Combined the policies and processes meet all of Defra's safeguarding expectations and DFID's Enhanced Due Diligence. This policy review has also been informed by the Global Code of Conduct, and recommendations made in a briefing paper commissioned by the UK Collaborative on Development Research (UKCDR) on Safeguarding in International Development Research.



All work in communities conducted as part of this project was subject to ethical clearance (Allegheny College). In addition, all research was subject to national research clearance by COSTECH.

RBGE, MCDI and the lead social scientist from Allegheny College have exchanged thoughts on safeguarding policies and jointly discussed standards for the project with all other partners. The standards across all partner organisations are very similar and meet Defra's expectations.

## 15. Project expenditure

**Table 1: Project expenditure during the reporting period (1 April 2019 – 31 March 2020)**

Project spend (indicative) since last annual report	2019/20 Grant (£)	2019/20 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)				
<b>TOTAL</b>				

\* Changes have already been communicated to LTS International and a change request has been accepted.

The lead organisation contributed additional matched funding over £3,000 for policy engagement.

## Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2019-2020

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
<p><b>Impact</b> CBFM is scaled up in Tanzania's high-biodiversity forests, reducing large-scale illegal extraction/clearance. Communities have access to forest resources, contributing to a sustainable and equitable income and greater resilience to disasters.</p>		<p>To date the project enabled three pilot villages to sustainably harvest timber for the generation of community funds. Training is provided to communities to help them to draw up business plans, manage funds and to achieve greater (gender) equity in decision making processes. Forest surveys are ongoing to establish to contribution of CBFM to reversing forest degradation and to develop methods and protocols for effective measurement of forest quality. Community surveys establish the contribution of CBFM to improved governance and wellbeing. The lessons learnt in this project will be summarised to enable up-scaling of CBFM in Tanzania.</p>	
<p><b>Outcome</b> Evidence-based assessment of limiting factors for CBFM and targeted improvements, leading to increased equity and benefits in 10 CBFM villages and providing a model for rolling out to non-CBFM communities.</p>	<p>0.1 By end of Y2 at least 35% of representatives in forest management committees in the 10 pilot villages will be women [<i>suggested addition: and at least 80% of them actively participate and express their opinions</i>].</p> <p>0.2 By end of Y2 at least 80% of respondents in the poor and poorest group perceive CBFM as good / something they agree with</p>	<p>0.1 Female representation in Village Councils for 2020-2023 is 35% (as opposed to 34% for 2016-2019) and in Village Natural Resources Management Committees 30% (as opposed to 29%). Thus, the baselines were already close to the target values and the increase was only small. However, the proportion of females agreeing that they actively participate and express their opinions increased from 63% to 83% (see 2.3).</p> <p>0.2 A total of 96% of the respondents in the poor and poorest group stated that they agree with CBFM (and 89% stated that they had already done so since the formation of the CBFM). For more</p>	<p>Formally analyse the results of the gender surveys to better understand the distribution of attitudes (and shifts therein) across gender, education and income and to enable (targeted) awareness raising beyond the duration of the project.</p> <p>Communicate these results to stakeholders.</p>

	<p>0.3 By end of Y2 CBFM profits in 5 villages with access to a portable sawmill increased by US\$2 per ha per year relative to the baseline established in Y1, with no concomitant increase in timber harvest</p> <p>0.4 By end of Y3 improved CBFM practices are benefitting at least 5 out of the 10 CBFM pilot communities (benefits can take the form of development/social projects financed through CBFM income or non-monetary benefits such as pride and a sense of recognition; see problem the project is trying to address, footnote 7)</p>	<p>details see Annex 4 Doc 13 and comments on Outcome.</p> <p>0.3 Profits in 3 villages have substantially increased (at least up to five-fold from a baseline value of US\$ 0.4 per ha). A more effective sawing technology facilitates the production of thinner planks, higher wood recovery rates (doubling the number of planks per tree), and allow communities to charge up to 60% higher prices per m<sup>3</sup> than they could with 'standard' (standard size, not certified).</p> <p>0.4 The three communities have invested the CBFM revenue for example into a dispensary, school infrastructure, and food for households affected by the extreme floods in early 2020. The data continue to be analysed formally.</p>	<p>0.3 Provide more villages with access to the portable sawmill.</p> <p>0.4 Complete data analyses and provide results to key stakeholders.</p>
<p><b>Output 1.</b> Evidence based policy and management recommendations for increasing economic, environmental and social sustainability of CBFM</p>	<p>1.1 By end of Y3 policy makers/CBFM managers have access to information of the monetary and non-monetary benefits of CBFM and the prerequisites for achieving these</p> <p>1.2 By end of Y2 policy makers/CBFM managers have access to information on the impact of CBFM on forest condition relative to unreserved and/or government managed land (forest condition is measured in terms of the available stock of natural capital using standardised protocols; see Ahrends et al. 2010 PNAS 107:14556)</p> <p>1.3 Sites under CBFM do not experience degradation, and are at</p>	<p>1.1 The data are now being formally analysed and will be summarised in the form of a report for policy makers and other stakeholders (see Annex 4 Doc 5) [scheduled for Q3 Y3]</p> <p>1.2 Some data collection is still ongoing (see Activity 1.2). In addition to field data, radar-based estimates are being used for upscaling. The results will be summarised in a report (1.1).</p> <p>1.3 (see 1.2)</p>	

	<p>least as well managed as sites under government ownership</p> <p>1.4 By end of Y3 a prioritised list of at least 5 best-practice recommendations has been produced (with a clear articulation of the evidence base supporting these conclusions and associated confidence levels)</p>	<p>1.4 The best-practice recommendation will be based on the evidence/data currently being analysed. The prioritised list will form part of a policy maker report (1.1).</p>	
<b>Activity 1.1</b> Application for research permit		Complete. Research permit has been obtained.	No further action required.
<b>Activity 1.2</b> Survey of 21 forests (7 CBFM + 7 forests on general land + 7 forests on government land) to assess CBFM impacts on forest quality/biodiversity. Upscale results based on remotely sensed products.		Due to delays 7 sites on government land still need to be surveyed. The team estimates that this will be completed in August 2020. The survey methodology is provided in Annex 4 Doc1. We have also successfully explored methods for upscaling field data (Annex 4 Doc 2).	Survey the remaining 7 sites and upscale the results based on radar.
<b>Activity 1.3</b> Survey of 14 communities (7 CBFM + 7 non-CBFM) to a) establish baselines with respect to benefits and equity of CBFM b) compare communities with and without CBFM and to characterise the added values of CBFM c) establish what factors influence profits / economic sustainability of CBFM (the CBFM areas will vary in size and half of the surveyed CBFM communities will have access to a portable sawmill)		The surveys are complete. Preliminary results are summarised in Annex 4 Doc 3, and details on the methodology are presented in Annex 4 Doc 4.	Summarise the results in a report to policy makers and a scientific paper
<b>Activity 1.4</b> Creation and screening of participatory videos (8 in Y2). These videos provide feedback on CBFM for managers, and they can assist in awareness raising with non-CBFM communities and decision makers.		To date 5 videos have been created (delays due to local elections and COVID-19).	Finalise the remaining participatory videos, and formally analyse the transcripts to feed into policy recommendations
<b>Activity 1.5</b> Focus Group Discussions in the 14 surveyed villages to reflect findings from the survey and fine-tune recommendations for improving equity (or establishing a CBFM).		Complete	Formally analyse the transcripts to feed into policy recommendations
<b>Activity 1.6</b> Formulate policy and management recommendations for improved CBFM practice (e.g. focusing on increasing (gender) equity, and factors that influence sustainability). These recommendations will be shared regionally with communities and district staff (e.g. training, stakeholder forum), and more widely (e.g. final report and workshop for national level stakeholders, scientific papers).		See Annex 4 Doc 5 [scheduled for Y3]	Deliver activity as planned
<b>Output 2.</b> Ten pilot CBFM villages are trained in best CBFM practice and they implement improved approaches, leading to greater (gender) equity and	<p>2.1 By end of Y2 450 local leaders representing 10 CBFM communities have successfully completed financial/governance training, and at</p>	<p>2.1 The training is complete. A change request will be submitted to measure the impact of the training on a community by community basis (rather than individual) in the form of MCDI led governance assessments and independent audit reports</p>	

<p>benefits. Attitude barriers to female participation in committees are shrinking.</p>	<p>least half have increased capacity in managing CBFM</p> <p>2.2 By end of Y2 5 pilot villages are trained in the use of a portable sawmill for increasing market access and profits</p> <p>2.3 By end of Y2 at least 25% of the participants of training on gender issues in 7 CBFM and 7 non-CBFM villages, who previously stated attitudes that would limit female participation in decision making processes (women should be charge of households, etc.) change their attitudes at the end of the training</p>	<p>(e.g. conducted by the Forest Stewardship Council and on the government (annually)). For training materials see Annex 4 Doc 6.</p> <p>2.2. Complete.</p> <p>2.3 The data are currently being formally analysed (for survey template see Annex 4 Doc 10 and for anonymised data see Annex 4 Doc 11). A preliminary analysis suggests a positive trend: whilst initially only 63% of women replied that they actively participate in meetings and express their opinions, this was confirmed by 83% of female respondents in Y2 (= reduction of 39% in women stating attitudes limiting female participation); and there was an increase from 62% in Y1 to 69% in Y2 of people strongly agreeing that husbands and wives should equally attend village meetings and that this meant that housework and childcare needed to be shared. However, a more multi-dimensional analysis is required as for example the fraction of people strongly disagreeing with this statement also increased (from 1 to 11%).</p>	
<p><b>Activity 2.1</b> Provide governance, financial management and gender equity training for 450 local leaders (forest management committees/village council members) from 10 pilot communities</p>		<p>Complete (for materials see Annex 4 Doc 6)</p>	<p>Monitor change using independent audits and the MCDI governance assessment tool</p>
<p><b>Activity 2.2</b> Assist the communities in implementing improved practice</p>		<p>Communities were provided with guidance on improved practices, the implantation of which is led on by the communities</p>	<p>Monitor change using independent audits and the MCDI governance assessment tool</p>
<p><b>Activity 2.3</b> Outreach on gender issues in the 7 CBFM and 7 non-CBFM villages (to discuss and address as appropriate cultural and practical barriers for greater gender equality)</p>		<p>Complete (for materials see Annex Doc 7).</p>	<p>Analyse and communicate the results of the gender survey to stakeholders to raise awareness on this issue</p>
<p><b>Output 3.</b> Piloted and trialled approaches to increase benefits and equity of CBFM are shared between villages and with government and other stakeholders, leading to a wider change in CBFM working practices. Conditions are in place for non-CBFM communities to receive the advice and support required to set up CBFM.</p>	<p>3.1 By end of Y2 152 Kilwa district staff will have been trained and made aware of the contribution of CBFM to district revenue and people's livelihoods, and the District Full Council will formally state its willingness to support CBFM</p> <p>3.2 By end of Y3 local authorities (in at least one district) re-invest the 5% revenue share from CBFM communities back into districts into villages CBFM</p>	<p>3.1 Complete. The project will seek a formal support statement from the District Full Council in the form of a letter.</p> <p>3.2 See 3.1.</p> <p>3.3 Scheduled for Y3.</p>	

	<p>3.3 By end of Y3 at least 8 of the 10 non-CBFM communities visited in Y1 submit an application for CBFM (therewith brining a minimum of 4,000 ha more forest into sustainable management if their applications are successful)</p> <p>3.4 A stakeholder forum in Y3 brings together representatives from at last 20 CBFM communities, government representatives, and private sector</p> <p>3.5 By end of Y3 the project will have engaged with at least 25 Members of the Parliamentary standing Committee on Natural Resources, 3 Ministers (Minister for Natural Resources &amp; Tourism, Minister for Environment and Minister for Local Government Authorities), and 3 Senior Directors and/or Permanent Secretaries from these Ministries.</p>	<p>3.4 Scheduled for Y3.</p> <p>3.5 Scheduled for Y3. The project had the opportunity to communicate the importance of CBFM and its benefits to the national development agenda to national level policy makers.</p>
<b>Activity 3.1.</b> Training for district officers from one district to raise awareness on the contribution of CBFM to district revenues, forest conservation and community livelihoods.	Complete	Continue liaising with district officers
<b>Activity 3.2.</b> Update and distribute to interested communities a brief document (in Kiswahili) that lays out what CBFM is, the steps for setting it up, and the process of day-to-day management. The document aims to assist communities that would like CBFM feel but feel unable to navigate the bureaucracy. It also aims to assist the work of MCDI and district staff. (Such a document has already developed by Tanzania's Ministry for Natural Resources and Tourism but it may require some changes to make it fit for purpose).	Document is complete (Annex 4 Doc 8)	Ensure distribution to interested communities and stakeholders
<b>Activity 3.3.</b> Local stakeholder forum with representatives from at least 20 communities, government and private sector to share ideas on best CBFM practice.	Scheduled for Y3	Deliver activity as planned (subject to COVID-19 related health and safety considerations)
<b>Output 4.</b> Scientific outputs and policy and management recommendations developed and shared with relevant target audiences (at regional, national and global levels)	4.1 By end of Y3 at least 5 high-level representatives of the Ministry of Natural Resources and Tourism confirm that the project report/workshop provided them with increased appreciation of the benefits of CBFM	All scheduled for Y3

	<p>4.2 In the 3 months following the launch of the final project report at least 100 copies of the report are requested or downloaded from the project website</p> <p>4.3 By Y3 the local partner has been invited to discuss the project's findings with the Chief Executive of Tanzanian Forestry on least one occasion</p> <p>4.4 By Y3 at least two major Tanzanian newspapers report on the project's findings</p> <p>4.5 By Y3 a scientific paper on the potentials and limitations of CBFM is prepared for submission to an open access journal</p>		
<p><b>Activity 4.1</b> Write a report for policy makers and CBFM managers with (piloted) recommendations for increasing benefits, equity and scale of CBFM, and an evidence-based comparison of levels of degradation in CBFM reserves versus unreserved forests. The report will also provide feedback to the Wildlife Division (national implementation of CITES) on whether the recent listing of <i>Dalbergia</i> spp. impacts on economic returns of sustainable timber harvesting by local communities.)</p>	<p>Scheduled for Y3 (for draft outline see Annex 4 Doc 5)</p>	<p>Complete data analyses and writing</p>	
<p><b>Activity 4.2</b> Organise workshop with major stakeholders at national level (Forest and Beekeeping Division, Tanzanian Forestry Services, Prime Minister's Office for Regional Administration and Local Government, Wildlife Division, Local Authorities, CSOs, village representatives and national media) to launch report.</p>	<p>Scheduled for Y3</p>	<p>(MCDI is in continuous contact with major stakeholders)</p>	
<p><b>Activity 4.3</b> Write and submit a scientific paper on the potentials and limitations of CBFM in an open access journal</p>	<p>Scheduled for Y3</p>	<p>Complete analyses and writing</p>	



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

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p><b>Impact:</b> (Max 30 words) CBFM is scaled up in Tanzania's high-biodiversity forests, reducing large-scale illegal extraction/clearance. Communities have access to forest resources, contributing to a sustainable and equitable income and greater resilience to disasters.</p>			
<p><b>Outcome:</b> (Max 30 words) Evidence-based assessment of limiting factors for CBFM and targeted improvements, leading to increased equity and benefits in 10 CBFM villages and providing a model for rolling out to non-CBFM communities.</p>	<p>0.1 By end of Y2 at least 35% of representatives in forest management committees in the 10 pilot villages will be women.</p> <p>0.2 By end of Y2 at least 80% of respondents in the poor and poorest groups perceive CBFM as good / something they agree with</p> <p>0.3 By end of Y2 CBFM profits in 5 villages with access to a portable sawmill increased by US\$2 per ha per year relative to the baseline established in Y1, with no concomitant increase in timber harvest</p> <p>0.4 By end of Y3 improved CBFM practices are benefitting at least 5 out of the 10 CBFM pilot communities (benefits can take the form of development/social projects financed through CBFM income or non-monetary benefits such as pride and a sense of recognition; see problem the project is trying to address, footnote 7)</p>	<p>0.1 Annual community reports to MCDI, community feedback at the stakeholder forum</p> <p>0.2 This is measured in seven CBFM villages. Community surveys in Y1 establish a baseline. MoV for change: FGD in Y2.</p> <p>0.3 Community reports to MCDI in Y1 establish baseline. MoV for change: FGD in Y2 and community reports to MCDI</p> <p>0.4 Annual community reports to MCDI, community feedback at the stakeholder forum. In addition, detailed surveys on the perception of non-monetary benefits (in Y1 and Y2) in seven communities.</p>	<ul style="list-style-type: none"> <li>• Communities feel able to share accurate information (data strictly anonymized and no government officials will be present during surveys)</li> <li>• The private sector remains interested in sustainable timber products</li> <li>• Women desire greater participation in forest management issues</li> <li>• Marginalised members of local communities do not feel intimidated to share their perceptions</li> <li>• Key decision makers can attend the workshop</li> <li>• The Tanzanian Government continues to be supportive of CBFM and there are no changes in tenure (e.g. communities being forced to give their communally owned land back land to the government). While drastic changes in ownership seem unlikely the current Tanzanian Government aspires for greater management control over forests (due to a fear that communities lack capacity to manage forests), making the project even more relevant.</li> </ul>
<p><b>Outputs:</b> 1. Evidence based policy and management recommendations for</p>	<p>1.1 By end of Y3 policy makers/CBFM managers have access to information of the monetary and non-monetary</p>	<p>1.1 Emails/photos/workshop minutes to evidence that the final project report and a baseline database have been</p>	<ul style="list-style-type: none"> <li>• All necessary research permits can be obtained from COSTECH</li> </ul>

<p>increasing economic, environmental and social sustainability of CBFM</p>	<p>benefits of CBFM and the prerequisites for achieving these</p> <p>1.2 By end of Y2 policy makers/CBFM managers have access to information on the impact of CBFM on forest condition relative to unreserved and/or government managed land (forest condition is measured in terms of the available stock of natural capital using standardised protocols; see Ahrends et al. 2010 PNAS 107:14556)</p> <p>1.3 Sites under CBFM do not experience degradation, and are at least as well managed as sites under government ownership</p> <p>1.4 By end of Y3 a prioritised list of at least 5 best-practice recommendations has been produced (with a clear articulation of the evidence base supporting these conclusions and associated confidence levels)</p>	<p>launched in the presence of policy makers</p> <p>1.2 As 1.1. + a manual for future forest assessments (including code for assessing degradation from radar data for Government GIS specialists)</p> <p>1.3 Comparison between data collected for this project from CBFM sites and data collected in 2016 from government managed sites; radar data</p> <p>1.4 Final project report, including list of recommendations</p>	<ul style="list-style-type: none"> <li>• Communities have an interest to participate in video production</li> <li>• Satellite-born radar products can detect degradation (i.e. changes in forest quality that do not result in complete canopy loss) in the Tanzanian coastal forests. These technologies are at the forefront of research. However, even if this component proved difficult this would be a relevant result for Tanzanian forest authorities. As a fall-back existing remotely sensed forest maps can be used to measure forest loss.</li> </ul>
<p><b>2.</b>Ten pilot CBFM villages are trained in best CBFM practice and they implement improved approaches, leading to greater (gender) equity and benefits. Attitude barriers to female participation in committees are shrinking.</p>	<p>2.1 By end of Y2 450 local leaders representing 10 CBFM communities have successfully completed financial/governance training, and at least half have increased capacity in managing CBFM</p> <p>2.2 By end of Y2 5 pilot villages are trained in the use of a portable sawmill for increasing market access and profits</p> <p>2.3 By end of Y2 at least 25% of the participants of training on gender issues in 7 CBFM and 7 non-CBFM villages, who previously stated attitudes that</p>	<p>2.1 Training materials; results from a governance assessment tool; field reports from visits to the villages</p> <p>2.2 Community reports to MCDI</p> <p>2.3 Attitude surveys before and after the training (surveys disaggregated by</p>	<ul style="list-style-type: none"> <li>• Interest in CBFM communities to receive training remains high</li> <li>• The local demand for sawn planks remains higher than demand for round wood</li> <li>• The forest surveys in Y1 in the CBFM sites indicate that sustainable harvest is possible (as opposed to there being a need for a period of regeneration)</li> </ul>

	would limit female participation in decision making processes (women should be charge of households, etc.) change their attitudes at the end of the training	wealth; post conducted several months to one year after the training)	
<p><b>3. Piloted and trialled approaches to increase benefits and equity of CBFM are shared between villages and with government and other stakeholders, leading to a wider change in CBFM working practices. Conditions are in place for non-CBFM communities to receive the advice and support required to set up CBFM.</b></p>	<p>3.1 By end of Y2 152 Kilwa district staff will have been trained and made aware of the contribution of CBFM to district revenue and people's livelihoods, and the District Full Council will formally state its willingness to support CBFM</p> <p>3.2 By end of Y3 local authorities (in at least 1 district) re-invest the 5% revenue share from CBFM communities back into districts into villages CBFM</p> <p>3.3 By end of Y3 at least 5 of the 7 non-CBFM communities visited in Y1 submit an application for CBFM (therewith brining a minimum of 2,500 ha more forest into sustainable management if their applications are successful)</p> <p>3.4 A stakeholder forum in Y3 brings together representatives from at last 20 CBFM communities, government representatives, and private sector</p> <p>3.5 By end of Y3 the project will have engaged with at least 25 Members of the Parliamentary standing Committee on Natural Resources, 3 Ministers (Minister for Natural Resources &amp; Tourism, Minister for Environment and Minister for Local Government Authorities), and 3 Senior Directors and/or Permanent Secretaries from these Ministries</p>	<p>3.1 Workshop summary report; a letter or other documentation from the Disrict Council reflecting the Council's decision to provide greater support to CBFM</p> <p>3.2 Annual district plans and budgets – or a District Council letter (as above)</p> <p>3.3 MCDI annual reports and information requested from district office</p> <p>3.4 Attendance list of stakeholder forum and a document summarising discussions, stakeholder perspectives and major recommendations</p> <p>3.5 Reports on these meetings (where possible with photos and/or follow up emails)</p>	<ul style="list-style-type: none"> <li>• The national forest policy environment remains positive for CBFM.</li> <li>• Non-CBFM communities do not feel intimated to approach the project and/or the district council</li> </ul>

<p>4. Scientific outputs and policy and management recommendations developed and shared with relevant target audiences (at regional, national and global levels)</p>	<p>4.1 By end of Y3 at least 5 high-level representatives of the Ministry of Natural Resources and Tourism confirm that the project report/workshop provided them with increased appreciation of the benefits of CBFM</p> <p>4.2 In the 3 months following the launch of the final project report at least 100 copies of the report are requested or downloaded from the project website</p> <p>4.3 By Y3 the local partner has been invited to discuss the project's findings with the Chief Executive of Tanzanian Forestry on least one occasion</p> <p>4.4 By Y3 at least two major Tanzanian newspapers report on the project's findings</p> <p>4.5 By Y3 a scientific paper on the potentials and limitations of CBFM is prepared for submission to an open access journal</p>	<p>4.1 Questionnaires (anonymous) at the start and end of the final project workshop</p> <p>4.2 Emails requesting report, website download statistics</p> <p>4.3 Photos and report from that meeting</p> <p>4.4 Newspaper clippings</p> <p>4.5 Manuscript</p>	<ul style="list-style-type: none"> <li>We can track the distribution of the report (it may be shared from person to person instead of direct requests to us and the website)</li> </ul>
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**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)

**Output 1: Evidence based policy and management recommendations for increasing economic, environmental and social sustainability of CBFM**

- 1.1 Application for research permit
- 1.2 Survey of 21 forests (7 CBFM + 7 forests on general land + 7 forests on government land) to assess CBFM impacts on forest quality/biodiversity. Up-scale results based on remotely sensed products.
- 1.3 Survey of 14 communities (7 CBFM + 7 non-CBFM) to
  - a) establish baselines with respect to benefits and equity of CBFM (for 4 communities there is already data from 2014)
  - b) compare communities with and without CBFM and to characterise the added values of CBFM
  - c) establish what factors influence profits / economic sustainability of CBFM (the CBFM areas will vary in size and half of the surveyed CBFM communities will have access to a portable sawmill)

- 1.4 Creation and screening of participatory videos (8 in Y2). These videos provide feedback on CBFM for managers, and they can assist in awareness raising with non-CBFM communities and decision makers.
- 1.5 Focus Group Discussions in the 14 surveyed villages to reflect findings from the survey and fine-tune recommendations for improving equity (or establishing a CBFM).
- 1.6 Formulate policy and management recommendations for improved CBFM practice (e.g. focusing on increasing (gender) equity, and factors that influence sustainability). These recommendations will be shared regionally with communities and district staff (e.g. training, stakeholder forum), and more widely (e.g. final report and workshop for national level stakeholders, scientific papers).

**Output 2: Ten pilot CBFM villages are trained in best CBFM practice and they implement improved approaches, leading to greater (gender) equity and benefits**

- 2.1 Provide governance, financial management and gender equity training for 450 local leaders (forest management committees/village council members) from 10 pilot communities
- 2.2 Assist the communities in implementing improved practices
- 2.3 Outreach on gender issues in the 7 CBFM and 7 non-CBFM villages (to discuss and address as appropriate cultural and practical barriers for greater gender equality)

**Output 3: Piloted and trialled approaches to increase benefits and equity of CBFM are shared between villages and with government and other stakeholders, leading to a wider change in CBFM working practices. Conditions are in place for non-CBFM communities to receive the advice and support required to set up CBFM**

- 3.1 Training for district officers from one district to raise awareness on the contribution of CBFM to district revenues, forest conservation and community livelihoods. In addition, training with national level stakeholders.
- 3.2 Update and distribute to interested communities a brief document (in Kiswahili) that lays out what CBFM is, the steps for setting it up, and the process of day-to-day management. The document aims to assist communities that would like CBFM but feel unable to navigate the bureaucracy. It also aims to assist the work of MCDI and district staff. (Such a document has already developed by Tanzania's Ministry for Natural Resources and Tourism but it may require some changes to make it fit for purpose).
- 3.3 Local stakeholder forum with representatives from at least 20 communities, government and private sector to share ideas on best CBFM practice.

**Output 4: Scientific outputs and policy and management recommendations developed and shared with relevant target audiences (at national and global levels)**

- 4.1 Write a report for policy makers and CBFM managers with (piloted) recommendations for increasing benefits, equity and scale of CBFM, and an evidence-based comparison of levels of degradation in CBFM reserves versus unreserved forests. The report will also provide feedback to the Wildlife Division (national implementation of CITES) on whether the recent listing of *Dalbergia* spp. impacts on economic returns of sustainable timber harvesting by local communities.)
- 4.2 Organise workshop with major stakeholders at national level (Forest and Beekeeping Division, Tanzanian Forestry Services, Prime Minister's Office for Regional Administration and Local Government, Wildlife Division, Local Authorities, CSOs, village representatives and national media) to launch report.
- 4.3 Write and submit a scientific paper on the potentials and limitations of CBFM in an open access journal

## Annex 3: Standard Measures

**Table 1 Project Standard Output Measures**

Code No.	Description	Gender of people (if relevant)	Nationality of people (if relevant)	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
2	MSc thesis	F	UK	1				2
11B	CBFM potentials and pitfalls paper; forest degradation paper				1		1	2
9	Final project report on potentials and limitations of CBFM and best practice guidelines (Engl with summary in Kiswahili)							1
9/10	Assessing forest degradation manual (potentially as an Annex to final project report)				1			1
9/10	Community manual on CBFM (Kiswahili)				1			1
12A	Forest degradation							1
14A	Final project report launch (national – to be held in Dar es Salaam) and regional stakeholder forum (in Kilwa)							2
14B	TBC – potentially IUCN WWC and/or ATBC							1

**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)
Detecting and predicting forest degradation: A comparison of ground surveys and two remote sensing datasets in high-biodiversity forests in Tanzania	Journal	Antje Ahrends, Mark Bulling, Philip Platts, Ruth Swetnam, Casey Ryan, Nike Doggart, Pete Hollingsworth, Robert Marchant, Dave Harris, Nicole Gross-Camp, Peter Sumbi, Pantaleo Munishi, Seif Madoffe, Boniface Mhoro, Charles Leonard, Victoria Wilkins, Nisha Owen, Marije Schaafsma, Kerstin Pfliegner, Andrew Marshall, Trevor Jones, Elmer Topp Jorgensen & Neil Burgess	female	German	To be submitted to <i>Plants, People, Planet</i>	[not yet accepted for publication]

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

### Checklist for submission

	Check
<b>Is the report less than 10MB?</b> If so, please email to <a href="mailto:Darwin-Projects@itsi.co.uk">Darwin-Projects@itsi.co.uk</a> putting the project number in the Subject line.	✓
<b>Is your report more than 10MB?</b> If so, please discuss with <a href="mailto:Darwin-Projects@itsi.co.uk">Darwin-Projects@itsi.co.uk</a> about the best way to deliver the report, putting the project number in the Subject line.	✓ (Annex)
<b>Have you included means of verification?</b> You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	✓
<b>Do you have hard copies of material you want to submit with the report?</b> 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.	
Have you involved your partners in preparation of the report and named the main contributors	✓
Have you completed the Project Expenditure table fully?	✓
Do not include claim forms or other communications with this report.	