



## Darwin Initiative – Final Report

### Darwin project information

Project Reference	17-007
Project Title	Building natural resource monitoring capacity in Ethiopia's key Afro-montane ecosystems (CAMP- Community Afro-montane Monitoring Project)
Host country(ies)	Ethiopia
Contract Holder Institution	The James Hutton Institute (Formerly the Macaulay Land Use Research Institute)
Partner Institution(s)	Ethiopian Wildlife Conservation Authority
Darwin Grant Value	£XXX
Start/End dates of Project	1st April 2009-30 <sup>th</sup> April
Project Leader Name	Justin Irvine
Project Website	<a href="http://www.hutton.ac.uk/research/projects/camp-community-afromontane-monitoring-project">http://www.hutton.ac.uk/research/projects/camp-community-afromontane-monitoring-project</a>
Report Author(s) and date	Justin Irvine, Karen Laurenson, Dereje Tedesse Wakjira. July 2013

## 1 Project Rationale

This DI project (known in-country as Community Afro-montane Monitoring Project (CAMP)) aims to build the human and institutional capacity for natural resource monitoring and thereby contribute to community-based natural resource management (CBNRM) in Afro-montane areas in Ethiopia.

Ethiopia's Afro-montane ecosystems harbour globally significant biodiversity. These include charismatic flagship species such as the Ethiopian wolf, mountain nyala and walia ibex – all of which are listed as Endangered or Critically Endangered by IUCN – and other endemic and endangered plant, amphibian and bird species (including several Palaeartic migrants). These are some of the last intact Afro-alpine and Afro-montane forest ecosystems in Ethiopia, as well as vital water catchments supplying arid and semi-arid areas in Ethiopia, Somalia, Sudan and Egypt. Gravely, ~97% of the original habitat has been lost to human expansion, agriculture, grazing and unsustainable natural resource use. With resource-dependent local communities rapidly growing, unsustainable resource use continues to threaten conservation and human well-being in these already impoverished areas.

In the past two decades, conservation actors in Ethiopia rushed to introduce Community-Based Natural Resource Management (CBNRM) in order to abate deforestation and natural resource degradation in the country and reconcile conservation of biodiversity with sustainable use. Local authorities and communities are now working towards a legal basis for CBNRM. In some of the selected project areas a CBNRM scheme was already agreed by stakeholders and in place while in others the project supported CBNRM as pre-condition to implement community-based monitoring (CBM). Though CBM is an essential part of the CBNRM process, there are very few examples of where this has actually taken place. Since natural resource monitoring is not readily funded through applied conservation or development channels, Darwin Initiative funding added value to CBNRM development by enabling a stand-alone project that developed the capacity of management authorities and communities for monitoring natural resources in the three of the most important Afro-montane areas: (i) Bale Mountains National Park (BMNP), (ii) Guassa Community Conservation Area (GCCA), and (iii) Abuneyoseph Community

Conservation Area (ACCA). The latter two areas are community-conservation areas managed by local administrators and communities. As outlined in previous reports, the original intention was to work inside the Simien Mountains National Park (SMNP) as well as the BMNP. However, policy changes in the federal government have meant that it was not possible to work inside national parks. Instead we worked with communities bordering the BMNP, but for SMNP, there were no suitable communities to work with. Figure 1 indicates the locations of the communities CAMP has been working with.

The project aimed to build the human and institutional capacity of protected area management authorities (including CBRNM institutions) and community members. Since local people are an integral part of these ecosystems, communities should be at the forefront of monitoring CBNRM in their respective areas. This project empowers communities to develop their own approaches to monitoring resource use and its impact on the ecosystem (Community Based Monitoring or CBM). A natural resource and threat assessment, as well as overall governance monitoring plan was developed for each area through participatory stakeholder processes. Data-collection protocols were developed that help to record observations and measurements related to natural resource governance and compliance to locally agreed rules and bylaws. Capacity building included the training of local government staff in more technical approaches to ecosystem and natural resource monitoring to support and verify community-based monitoring. Empowering communities and equitably linking conservation with sustainable development in this way is central to the Ecosystem Approach (COP9 Decision IX/7). Furthermore, the project set out to strengthen links between government and local communities and further Ethiopia's ability to meet the Millennium Development Goals (as per COP9 Decision IX/15).

The specific outcomes of this project are:

1. Understanding of the ecosystem and limits of sustainable natural resource use enhanced.
2. Protected area management authorities and communities empowered and working jointly to undertake natural resource monitoring.
3. Participatory natural resource monitoring developed under CBNRM.
4. Awareness of the (i) links between conservation of biodiversity and sustainable natural resource use and (ii) role of participatory natural resource monitoring under CBNRM raised nationally in Ethiopia and internationally.

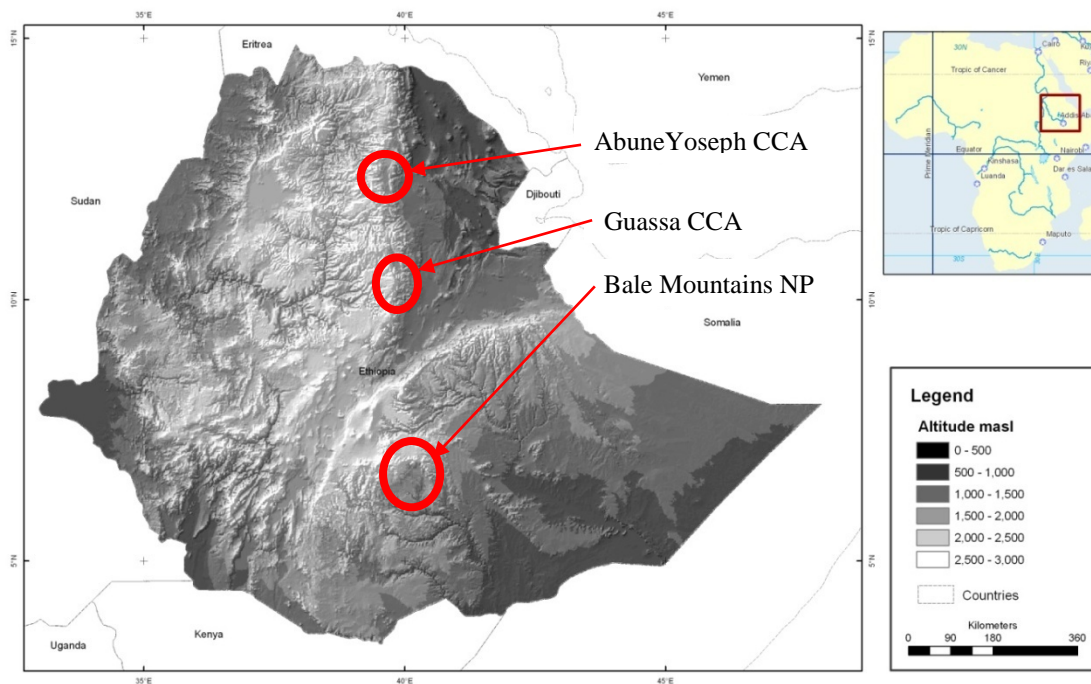


Figure 1, Afro-montane areas in Ethiopia.

## 2 Project Achievements

### 2.1 Purpose/Outcome

#### Purpose

#### **Human and institutional capacity for natural resource monitoring built and contributing to community-based natural resource management in four key Afro-montane areas in Ethiopia**

The project purpose was to develop community-based monitoring in community-based natural resource management (CBNRM) areas by developing monitoring system for the resources these communities depend on as well as, the wildlife that utilise these habitats. Crucial to this is the development of the governance systems necessary to maintain these processes into the future. The project has built the capacity of communities to collect information and develop tools and skills to enable them to manage these resources sustainably.

The overall purpose has been largely achieved: community monitoring of natural resource use in Guassa is now well institutionalised within local government system and this has safeguarded the resilience of the approach after the project formally disengages. In the communities CAMP engaged with around the Bale Mountains National Park there has also been rapid progress with nine patches of communal forests in two districts demarcated, Community Based Organisations (CBOs) established and CBM introduced during the project life-span. Progress in Abuneyoseph CCA has also been rapid in the last year but with many aspects of community monitoring for CBNRM in place. Here the community is currently working on their CBO structures and governance arrangements (see fig 2). Support through provision of field monitoring equipment for local monitors as well as computing facilities and skills training in database management for local government staff are completed in all the three sites. Overall, despite the delays experienced early in the project, there has been significant local impact in our three main areas. This has been monitored through quarterly meetings between the project officer, project staff and project partners allowing progress to be reviewed and activities planned using the reporting and planning tool. In addition, the project is a valued contributor to the participatory forest management (PFM) progress in Ethiopia, hosting visitors from other PFM and CBNRM areas and organising experience sharing and practical field visits to CBNRM sites. Related to this, the project has refined the CBNRM effectiveness tracking tool it had developed and used in Bale Mountains and Guassa CCA since January 2012. This tool, the Governance and Management Tracking Tool (GMTT) is available from the project website. It is applicable in other communities as an aid to determining the state of community conservation areas (CCAs) in order to inform the design of different intervention strategies to further strengthen community-based organizations (CBO) across the country and beyond.

A final project meeting was held in April 2013 attended by regional government representatives and NGOs with responsibilities and interest in CBNRM. Lessons learnt were presented along with the CAMP version of CBNRM effectiveness tracking tool which was evaluated by those attending. (see CAMP website to download the GMTT and other presentations from the final project meeting <http://www.hutton.ac.uk/research/projects/camp-community-afromontane-monitoring-project> )

#### **P1. By end year 3, capacity of management authorities and communities to conduct, interpret, manage and adapt natural resources monitoring is enhanced**

*Guassa:* The capacity of local institutions for (CBM) has been developed through training, experience sharing visits, provision of field equipment and computing facilities. Local project partner organisations and communities took responsibility for data entry, processing and producing feedback at four Kebeles and woreda levels. Local partner staff assigned development agents to maintain and monitoring data at village level and use. Enforcement of agreed bylaw strengthened by training members of Kebele social court and community scouts.

*Bale:* Similar to Guassa, capacity building activities including training, field visits, farmer-to-farmer experience sharing, and provision of field equipment and computing facilities conducted throughout the project life-span. Nine community CBOs were formally established to run the communal forest management in nine Kebeles of Adaba and Dinsho woreda. Community Monitoring Teams (CMTs) have been established in all the nine Kebeles and regularly collect monitoring data that supports day to day management decisions. Oromia Forest and Wildlife

Enterprise (OFWE), local partner organisation, assigned staff in Dinsho and Adaba woredas to follow up project activities in the nine Kebeles

*Abuneyoseph:* The boundary of the community conservation area has been agreed and bylaws for sustainable use of the community conservation areas (CCAs) have been prepared and ratified by community representatives. There is now a management system in place in four Kebeles neighbouring the CCA and; four CMTs regularly collect monitoring data to provide information about state of the natural resource, bylaws enforcement and CBO operation

### **P2. By end year 3, communities in target areas empowered to participate in monitoring activities under CBNRM**

Community-based monitoring system developed through active involvement of local community representatives and partner organisation staffs in nine Kebeles of Bale, four Kebeles of Guassa and four Kebeles of Abuneyoseph.

More than 100 individuals from local people were selected and trained in monitoring techniques in the three areas where CAMP was engaged. (Bale, GCCA and ACCA) and formed CMTs to support sustainable management of CCAs.

Community Monitoring of communal forests set up in all the nine communities in Bale in addition to the CBM underway in the 4 Kebeles in Guassa.

### **P3. By end year 3, national awareness of monitoring as part of adaptive management of CBNRM increased among stakeholders and policy-makers**

National PFM department housed in Ministry of Agriculture has now included CBM into its national PFM guideline as a result of workshop organized by CAMP and other partners in July 2011. Draft State forest regulations to clarify the legal basis of CBRM were prepared with the help of national workshop organized by CAMP and other partners.

Lesson and experience of Guassa adopted in developing plans and protocols for Bale and Abuneyoseph.

Project lessons and need for community-based monitoring has been disseminated within Ethiopia for CBNRM actors during annual federal and regional PFM workshops and at project final dissemination workshop hosted in April 2013.

## **2.2 Goal/ Impact: achievement of positive impact on biodiversity and poverty alleviation**

Goal: To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but constrained in resources to achieve:

- The conservation of biological diversity,
- The sustainable use of its components, and
- The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources

Since the inception of the project there have been clear improvements in the conservation of biodiversity and sustainable use in the CCAs where we have established CBM. The status of the resources has improved which is directly linked to the improvements in the functioning and enforcement of rules governing natural resource management, particularly in Bale and Guassa. Preliminary data suggest that threats to conservation goals and resource resilience in the CCAs have reduced since CBM was initiated in Abuneyoseph as well as Bale and Guassa and this is evidenced by a decline in the incidence of illegal resource use (Fig 2).

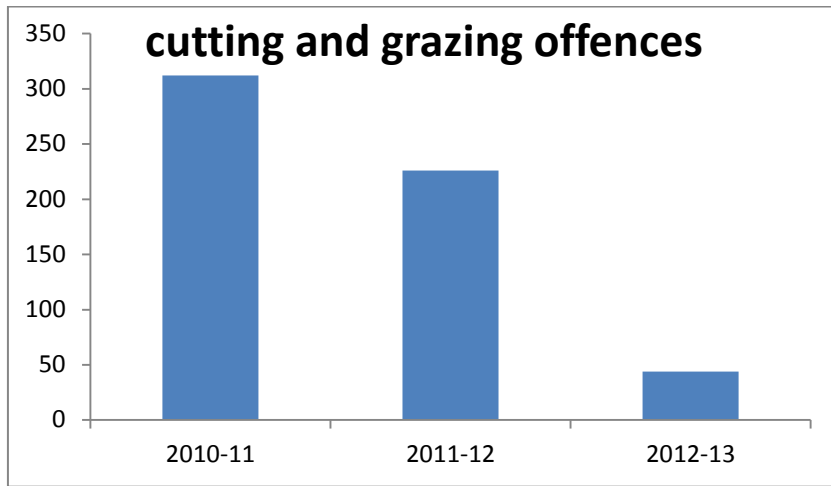


Figure 2. Incidence of illegal resource use in Guassa from 2010-2013.

For instance, since the start of PFM in Bale, firewood collecting is now limited to user-group members and harvesting days have been reduced from an unregulated free for all (some households were collecting firewood seven days a week for market) to two days per week. Similarly, pole wood collection for construction and market reduced after introduction of PFM in Bale (Fig 3).

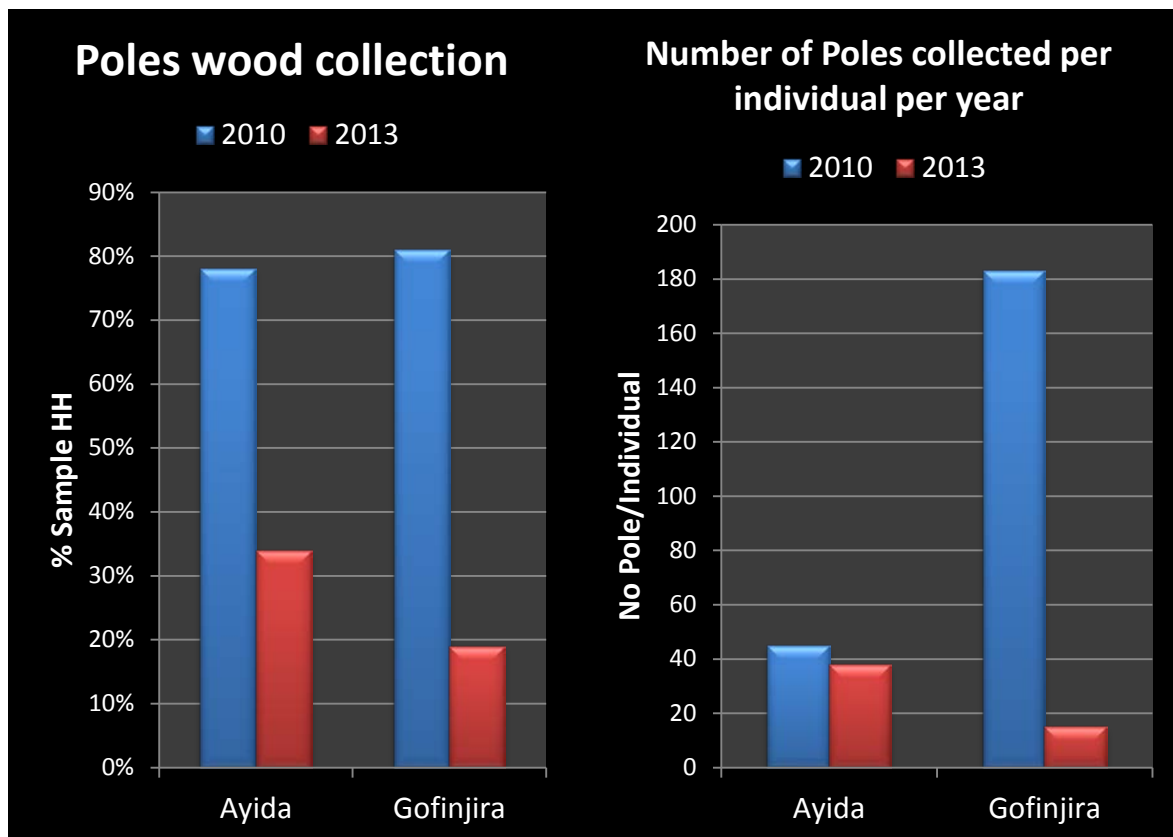


Figure 3: The decline in pole collection in Bale a) number of individuals reported collecting poles before and after project intervention; b) number of poles collected by individuals per year before and after project intervention.

Furthermore, encroachment into forest land from agricultural activities and settlements has now stopped in ten Kebeles that cover more than 2500 ha forests protected. This is clearly a significant reduction from the pre-CBNRM regime. Any live tree cutting for domestic use is now only through formal permits by CBO leaders. However, longer term data is required to examine whether the initial momentum of bylaw enforcement is maintained by the community. Coupled with this has been an increase in the incidents of wildlife sighting by Community Monitoring Teams (CMT). However, an increase in some animals such as hyena, warthog and baboon could cause potential human-wildlife conflicts in the future. Careful planning is required to prevent these trends from becoming a problem and undermining the conservation gains that



have been achieved through the establishment of the CBOs and CBM and the partnerships with local government. The baseline survey data collected before and after three years PFM interventions in Bale mountains also shows that while resource use is now better regulated, there was no evidence that livestock grazing has reduced within the communal forests (Fig 4). This has implications for the regeneration of some tree species, especially these preferred by domestic animals such as *Haygenia abyssinica* and *Hypericum revolutum*.

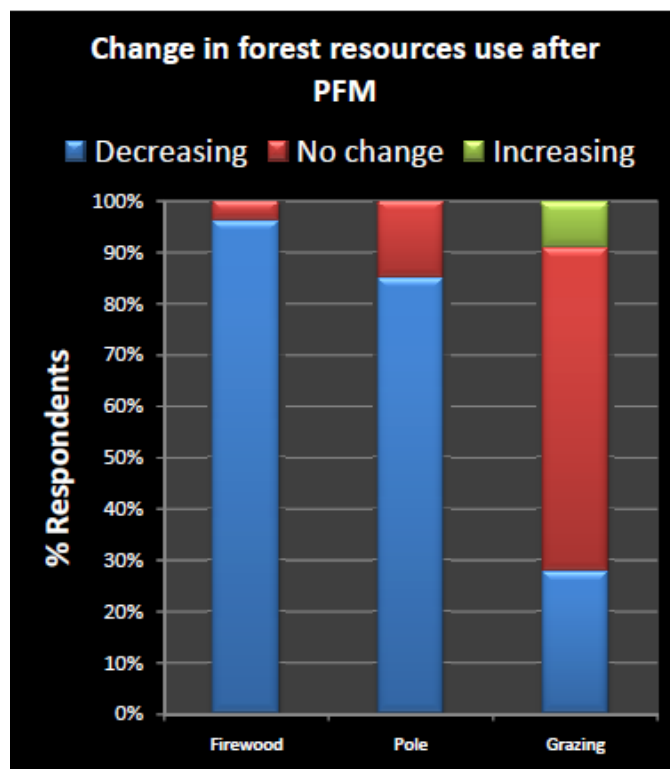


Figure 4. The change in resource use in Bale after PFM has been implemented. Note that while there has been a decrease in the perceived extraction of forest products (firewood and poles). There has, on balance, been no decline in the amount of grazing in the forest.

Central to the success of CBM is ensuring that the decision makers and the community benefit from the data collected by their representatives. In our project areas, this feedback of CBM data has built trust among user group members by providing information about the state of the natural resources in an open and transparent way as has led to an increase in the adherence by members to the agreed rules. For example, in Guassa, grazing was previously openly and frequently practiced resulting in chronic overgrazing regardless of actual demand (even when there were no fodder shortages elsewhere) because user members who lived at a distance were worried that the communities neighbouring the CCA would illegally use it if they didn't. After introduction of CM, the community council can now make the decision to open the guassa for harvesting based on evidence of the condition of this key resource giving people regular access to this key natural resource. This together with effective scouting and community courts has reduced the temptation for illegal use because of the suspicion that others were using it has been largely resolved. However, the community council needs to make sure that the guassa is opened up and available when conditions allow if trust in the newly established system is to be maintained. In the communities adjacent to the Bale Mountains National Park, more than 25,000 hectares of forest have been demarcated under PFM. Engagement of the community in the PFM process has also engendered recognition and respect for the adjoining national park boundary which should benefit the conservation goals in the park. So far there have been no incidents of farming encroachment into forest areas after establishment of PFM from these communities who were regularly establishing new farm land on communal forest in the past. On-going monitoring will reveal if PFM will really result in a reduction in the loss of forest area to agriculture and improved forest quality due to reduced grazing in the areas neighbouring these communities. These will be key indicators moving forward to assess how endangered mountain nyala, bushbuck, endemic birds and other biodiversity will benefit from the CBM process. Continued support for the communities where CAMP has engaged as well

as scaling up the approach to wider geographical areas is supported by EU funded ACE project (ENV/2008/151332 Afro-montane Conservation in Ethiopia) and FZS in the next two years.

The project also supported the potential for more equitable sharing of benefits, through the development of new arrangement for forest resource use at the household level that include women and youths and making resource use uniform across the member households. Before introduction of CBNRM in Bale and Abuneyoseph, resource use was skewed to a few individuals because harvesting for market and subsistence was unregulated. In Bale the poorest of the poor have been identified among user-group members and these have been allowed to sell a bushel of dry firewood once a week thereby sharing the benefits of resource use in a more equitable way. In the Bale Mountains, power in these strongly traditional Muslim rural communities rests, at least overtly, with men. The project built awareness among all community members on natural resource use and strongly advocated the inclusion of women on natural resource management CBOs arguing that all natural resource users must have a voice in its management. Despite initial opposition, women in these communities are now represented by constitution in the ten Bale CBOs and although initially they may only have a weak voice, we consider this is a major achievement in building community empowerment which will inevitably lead to more equitable benefit sharing.

In all the three sites, the use of resources is now regulated and sustainable use ensured. People now feel that they have secured the long-term flow of livelihood benefits, from harvesting forest produce and sustainable management of other ecosystem services such as water management which all contributes to poverty alleviation.

### **2.3 Outputs**

CAMP has achieved a number of objectives leading to a range of outcomes and outputs which are summarised below:

1. Mapping and demarcating the areas communities use for natural resources has been carried out on more than 25000 ha in Bale and 5000 ha in Abuneyoseph in addition to the 7000 ha already established in Guassa. This is an essential component for CBM because it sets out the areas where resources are to be monitored and regulated in relation to other land use types and other communities. It involves the identification of zones of ecological importance as well as identifying resources that society depends upon and the associated historical and cultural information
2. The communities in all three areas have developed and agreed monitoring plans, indicators and collection protocols in relation to the natural resources they depend on, and the overall governance of the CCA. In Guassa and Abuneyoseph, in addition to wildlife, the monitoring focus on unauthorised use of guassa grass and in the Bale communities it is the use of wood for construction and firewood. The monitoring and regulation of the natural resources is augmented by monitoring of wild animals in order to demonstrate the link between healthy resources and viable wild animal populations. Care now needs to be taken to pre-empt potential increases in human wildlife conflicts and grazing issues
3. The communities have established a partnership arrangement with the relevant local government authorities to provide support for enforcing regulations and the processing of community data. The relevant government agency in Abuneyoseph and Guassa is EPLA and in Bale is OFWE. A measure of the success is that CBM is now being taken up in an additional seven communities in Bale (over and above the original two communities) which is creating demand for these government departments to act beyond the CAMP case study communities, but resources to support this need to be allocated. Furthermore, OFWE and other PFM actors have plans to scale up CBM to more than 50 PFM sites in Bale and FZS is partnering this scaling up project.
4. A database approach to handling, storing and reporting on the community monitoring data has been established in Bale and is being used as a model for making use of community monitoring data in Guassa and Abuneyoseph.
5. As mentioned above, the project model is now being replicated in seven additional communities in the Bale area adjacent to the BMNP. Progress in setting up CM for CBNRM in these seven new areas is very fast, benefitting from lessons learnt in the original communities.

This uptake is because of the perception by the new communities that there are substantial benefits to the system developed in the original two communities and that they want these as well. It is this type of dissemination which is particularly powerful.

6. The model CAMP has developed for introducing CM into CBNRM and PFM areas based on a participatory adaptive management approach that works in partnership with local government promises a significant legacy in the areas where we have worked. Success will generate its own problems and the issues over how the approach affects market prices for the resources which are now regulated and the extent to which the habitats are conserved for wildlife needs to be investigated and planned for.

7. The lessons about how to develop CM and the benefits it provides have been well received by the participants in Ethiopia's main PFM forum.

#### *Output 1.*

#### *Understanding of the ecosystem and limits of sustainable natural resource use enhanced*

##### Indicators

#### 1.1 By end year 3, four papers in peer reviewed journals on biodiversity, ecosystem function, or sustainable natural resource use.

- a) *The road to adaptive management: Lessons from Guassa:* Anke Fischer, Dereje Tadesse, Yitbarek Tibebe, and, Zelealem Tefera. This paper explores the evolution of co-management in the Guassa communities. Co-management is based on a bottom up approach to setting management planning and the governance and institutions surrounding it. For many, an essential condition for co-management is that official and state organisations are involved as little as possible in setting the terms for management. However, the evolution of co-management in Guassa provides interesting lessons in how co-management develops and the role that formal state authorities can have in supporting and even empowering a community based approach to natural resource management. In this paper we explore the interaction between governmental and community actors, and how this changes over time. (<http://www.macaulay.ac.uk/CAMP/finalmeeting.php>). A draft Manuscript is in preparation for Journal of Environmental Management for November 2013.
- b) *Review of three years community-based monitoring in Afro-montane habitats of Ethiopia: What does it add over and above CBNRM?* Dereje Tadesse & Justin Irvine. The focus of this provides an overview of process of CM introduction, data collection, analysis and feedback mechanism, lessons and recommendations from our case study areas with emphasis on the three project sites where CAMP operated. The aim of the paper is to explore the effect of community monitoring on how resources are governed in the study areas. We ask the question: How has community monitoring in PFM areas been used to make decisions over then management of the resources in question? The paper explains the process of setting up community monitoring and the processes of data collection analysis and feedback to decision makers. The CAMP approach to CBNRM through the implementation of community monitoring is discussed in the context of other approaches elsewhere (in Ethiopia or abroad) to identify the benefits and barriers to its implementation in other cases. See presentation at <http://www.macaulay.ac.uk/CAMP/finalmeeting.php> . A manuscript is under preparation for Journal of Sustainable Development by October 2013
- c) Assessment of how CBM has influenced decision making. Using existing surveys with some data from ACE it will be possible to investigate the basis for decision making over natural resource use and regulation is carried out in PFM areas and how this process has changes with the advent of community monitoring data. This is a legacy topic and demands that some time has passed to allow for the use of data to become more mainstream and therefore settled in how it is used. The decision making process will be evaluated for both CBO leaders and the local government agency staff in order to see if CBM has made a difference in this respect. Dec 2013
- d) *The who, why, and when of illegal resource use under CBNRM.* Lead: Anke Fischer & Karen Laurenson. Using data from the community courts and reports from the community scouts who monitor illegal resource use this paper describes how illegal



resource use is detected and dealt with by community courts (rule enforcement) and investigates the motivations and the typology of the offences. We explore whether there is any evidence for changes in the patterns of offending since the CBO has been established and whether the current system is providing the information that would be necessary to inform the type of management and institutional interventions that could be put in place to reduce offending. See presentation at <http://www.macauley.ac.uk/CAMP/finalmeeting.php>. Jan 2014

- e) *Community monitoring data: is it detecting trends and patterns in resource use and associated wildlife?* Lead: Justin Irvine. In this paper we are exploring the trends in the data collected by the community monitoring teams. We describe the types of data that are available from ecological monitoring and community monitoring. First we set out to explore the seasonal and annual patterns in resource status and illegal use and how this varies between communities using Guassa as a case study where we have 3 years of CM data augmented by 15 years of ecological monitoring data. Second we investigate how illegal use correlates with the observed patterns in community court data. Third we investigate how well the wildlife sightings data from the community monitors correlates with ecological monitoring data. Finally we discuss the extent to which community monitoring data is able to pick up trends and patterns and therefore how useful the protocol is. We make recommendations for simplifying the system. See presentation at <http://www.macauley.ac.uk/CAMP/finalmeeting.php> (For submission Sept 2013)
- f) *Guidelines for CBM in PFM*. Lead: Dereje Tadesse. This guide will be targeting field practitioners involved in CBNRM and it mainly focusses on the process of CBM introduction, data collection and data processing and feedback mechanisms. (in preparation for completion by Sept 2013)
- g) *Governance and management tracking tool (GMITT)* – already in use and will be improved and adapted by different users. This is rapid assessment tool used to evaluate already established CBNRM in order to evaluate how the system operates. It provides a framework to assess the need for capacity building and how to design intervention strategy for external facilitators. It was adapted from WWF METT widely used in protected areas mainly national parks in order to assess capacity and management competency levels.

### 1.2 By end year 3, limits of sustainable use identified and jointly agreed by authorities and stakeholders in target areas

Levels of resource use have been agreed in Guassa and nine Kebeles of Bale; In Guassa residents have now agreed on wording of bylaws that prescribe how often the communal land will remain open for use as well as the conditions that would force use for grazing and grass cutting. On-going monitoring will provide the evidence for the sustainability of the agreed level and whether the level is being adhered to. This evidence will form part of the adaptive management approach that is central to CBM. In Bale management objectives of the communal forests are now agreed together with operational plans that describe the processes for forest protection, development and utilization. Home garden tree planting is now included in their management strategy in order to reduce future biomass dependency on the natural forests thereby protecting the other ecosystem services provided by woodland. Although there has been a delay in getting the Kebeles in Abuneyoseph to reach this stage due mainly to political issues, the boundary of the protected area has now been agreed as have the management bylaws. In addition, the community has now established a management body and decided on the bylaws and monitoring protocols. In Bale wood extraction from the CCA is substantially regulated leading to a reduction in extraction and at the same time social learning around the impact of livestock overgrazing has been facilitated which is largely down to the continued feedback of community monitoring data. However, despite the increased awareness of the problem of livestock grazing in Bale eco-region, its resolution is difficult because of the land use planning and livestock policy. Both government and individual smallholders are expanding crop production by converting grazing land into crop land without taking off livestock number. Hence there is high pressure on the CCA and BMNP from grazing because land use planning tends to undermine the need for balancing livestock number with carrying capacity. FZS and other partners in Bale planned to take on the problem of overgrazing in to next phase of their project.

## *Output 2.*

### *Protected area management authorities and communities empowered to undertake natural resource monitoring*

#### 2.1 By end year 1, Community Monitoring Task Force established.

This was achieved in 4 communities for Guassa in year 1, in the two communities in Bale during year 2 and has now been achieved in four communities in Abuneyoseph. In year 4 a further 7 CMTs have been established in Bale, a new project is under formulation by FZS and other partners to scale up to 50 PFM sites in Bale.

#### 2.2 By end year 1, 24 Community Monitors selected and trained in simple monitoring techniques

82 community representatives (10 ACCA, 32 GCCA and 40 Bale) throughout the project life were trained over 4 days in both theoretical and practical topics of community-based monitoring

15 farmers were trained and actively involved in participatory forest resource assessment training and fieldwork in each of the nine Kebeles of Bale (total 135 farmers) and the data used for management plan preparation for respective forest sites.

Data collection protocols related to resource status, wildlife sighting, unauthorised resource use were developed and printed as booklet for GCCA, ACCA and Bale.

#### 2.3 By end year 2, on-the-job training provided for all staff assigned to the project by in-country partners

Local EPLA and OFWE staff in the woredas where the communities are based have been trained in database management by project staff who continued to support these key agencies in their capacity to support the data handling, analysis and feedback that the CBO depends on for decision making. Four project staff and 11 local government staff members participated in 7 days participatory learning and action training in August 2010.

#### 2.4 By end year 3, two experience sharing trips undertaken by park ecologists

- i) An experience sharing trip to Namibia was organised (September 2010) and the report is posted on the project website (reported in year 3).
- ii) 22 local Government Staff members from Abuneyoseph visited Guassa in December 2012 to gain experience in PFM and about community monitoring (2011); similarly government and project staff members from GCCA and ACCA visited PFM activities in Bale during August 2011; 7 government staff from Bale area visited GCCA to learn about CBM activities.
- iii) Local experience sharing was organized for 113 farmers from Bale to Guassa and 32 farmers from Abuneyoseph to Guassa and 8 CMT from Guassa to Bale during November 2010, August 2011, May and December 2012 and March 2013.

## *Output 3. Participatory natural resource monitoring developed under CBNRM.*

#### 3.1 By end year 1, monitoring plans and indicators and data collection protocols developed for key natural resources and threats.

Monitoring plans, indicators and data collection protocols have been developed for all the project areas. Examples of data collection forms are on the website

#### 3.1 By end year 2, baseline data collected.

Baseline data collected. The baseline household surveys have been conducted in Bale, Abuneyoseph and Guassa and the information used to monitor changes after project intervention. A survey was conducted at the end of the project in Bale in order to evaluate the impact of the project on regulated resource use and attitude and knowledge of local community in relation to sustainable resource use. Results were presented during final workshop of the project and are available at <http://www.macaulay.ac.uk/CAMP/finalmeeting.php>

#### 3.3 By end year 3, monitoring plan implemented.

Monitoring plans have been developed in all the three project areas and are being implemented as planned. Field data collection books containing the data entry forms were developed for each area in the local language. Copies are available on request

#### 3.4 By end year 3, adaptive management of CBNRM being undertaken in focal target communities.

Adaptive management (AM) for CBNRM is now part of the routine management process in Bale and Guassa with these communities now able to use the CM to apply adaptive management (Fig 2). Progress towards adaptive management in ACCA has developed swiftly in the last year drawing on the experiences in Bale and Guassa. The Abuneyoseph communities have now ratified the draft natural resource use bylaws and they are at the stage where participatory monitoring is starting and CBOs have been ratified (see fig 2). Overall adaptive management involving the community, project staff and local government agents will be analysed and published in a peer review paper within 6 months of the end of the project and best practice guidelines for community monitoring are in preparation (see Output 1 above). The monitoring data collected in Abuneyoseph is starting to be used for adaptive management but is behind the other two areas because of delayed processes in establishing the CBO and agreeing management plan, bylaws and resource boundary. However, these components of the CM in CBNRM are now in place (Fig 2).

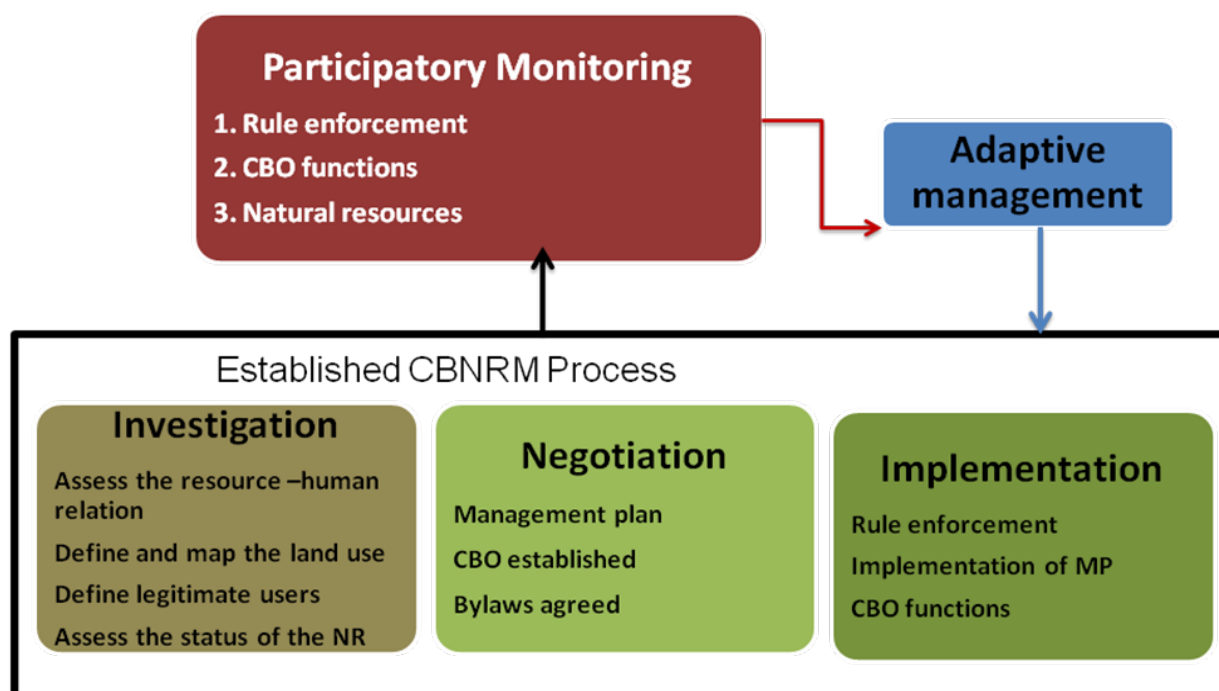


Figure 2. The three phases of Community Based Natural Resource Management process.

*Output 4 Awareness of the (i) links between conservation of biodiversity and sustainable natural resource use and (ii) role of participatory natural resource monitoring under CBNRM raised nationally in Ethiopia and internationally*

#### 4.1 By end quarter 1, project initiation workshop held with all project partners to develop MoUs

A project initiation meeting was held 23 March 2009 in Addis Ababa and attended by all the project partners to overview the project goals and discuss project implementation plans MoUs were drawn up between MI and FZS and MI and UoA in Aug 2009. The next official PSC meeting was held on 28 August 2009 and attended by most of the project partners (Annex 10) A local planning workshop was held from 29-30 August 2009 in the Guassa Community Conservation Area attended by EWCA, FZS, MI, ACCA and GCCA to discuss the way forward in these two case studies areas (see 1<sup>st</sup> Annual Report). Further MoU signed with OFWE to provide legal basis for project operation in Bale Mountains, outside the national park

#### 4.2 By end year 1, Project Steering Committee (PSC) established and meeting twice yearly

Because of other meetings such as the National PFM Working Group, it was felt that twice yearly PSC was not necessary to keep the broader national and regional stakeholders involved. Therefore annual PSC meetings have been held instead. The last one was held in Feb 2011. The final PSC meeting was held in April 2013. The focus here was to disseminate lessons learned and discuss with appropriate regional government representatives and relevant NGOs how to make CM sustainable, how to support communities in maintaining this type of adaptive management and to identify barriers to implementing it in other areas with other natural resource issues. [http://www.macauley.ac.uk/CAMP/Annex5\\_ForestRegulationWorkshop.pdf](http://www.macauley.ac.uk/CAMP/Annex5_ForestRegulationWorkshop.pdf)

#### 4.3 By end year 1, project webpage developed and linked with in-country and international partner websites (updated in year 2 and year 3)

Web page was developed at the outset of the project includes presentations and reports for download from links within <http://www.hutton.ac.uk/research/projects/camp-community-afromontane-monitoring-project>. It will be updated as new outputs appear

#### 4.4 All years, technical reports and publications distributed to communities, government, university libraries, and partners and internationally via websites (above) and scientific literature (papers as per Output 1)

Reports on meetings, training events and the experience sharing visits as well as the documentary film and have been completed and circulated among project partners (see Appendix 5). Some have been posted on the website. For example, training manuals and agreed monitoring plans and indicators have been developed in GCCA and are being used to provide best practice guidance for the other target areas. This approach of learning by doing in one area of Bale has facilitated a rapid development of CBNRM capacity in the other areas and has enabled the scaling up of involvement in Bale from two kebeles to an additional five.

#### 4.5 In year 2 and year 3, six public meetings held by FfE to raise national profile of the project

FfE has been instrumental in 3 regional public meetings to raise awareness of PFM and the CBNRM promoted by CAMP. In addition the national PFM WG workshop and national forest regulation workshop have been facilitated by FfE. Since then, it was decided that greater potential impact and dissemination of project lessons to wider society in Ethiopia could be achieved with a documentary film production that illustrates the CM process with testimonials from those involved. The film was completed in 2012 and early 2013. Its premier was at the final project meeting in April 2013 and was well received. 300 copies were purchased and distributed to relevant regional government departments and to NGOs involved in PFM. A copy is available on request.

#### 4.6 By end year 3, presentation of project outputs at international conference (e.g. SCB) and final project workshop held.

A final project workshop was held in April 2013 and is reported above and the presentations are available from <http://www.macaulay.ac.uk/CAMP/finalmeeting.php>. Lessons from the project will be presented at a conference in South Africa at the end of 2013

### **3 Project support to the Conventions (CBD, CMS and/or CITES)**

One of the main features of the CBD is the promotion of the Ecosystem Approach. The features of a community monitoring based approach to natural resource management are consistent with the Ecosystem Approach principles (<http://www.cbd.int/ecosystem/principles.shtml>). We engaged with communities at a scale relevant to the resources being used to develop knowledge and management actions based on evidence supplied through participatory monitoring. Thus the communities are in a better position to understand their ecosystem, the services it provides so as to implement adaptive management and ensure resilience to environmental change and equity of resource distribution and use. These communities now have a baseline set of indicators and data for monitoring and decision making consistent with conservation of the biodiversity in the area.

Although the project has not worked in the more formal protected areas in Ethiopia due to the political status of communities in national parks, it has been working with communities in the co-management of areas adjacent to the Bale Mountains National Park and in community conservation areas. This is important for COP Decision VII/28 which sets out the principle of ensuring participation of indigenous and local communities in the co-management of protected areas. This project focused on enhancing the capacity of communities to manage the natural resources they depend upon recognising the biodiversity importance of the associated habitats and the value that biodiversity can bring in terms of additional income through ecotourism and in some cases, hunting. Communities have taken control of their resources through mapping, setting up monitoring to assess resource status and use and using the data to inform resource management policy. Critical to this is the engagement with state authorities regarding natural resource management. Building capacity through training community members to develop community based organisation, monitoring protocols, mapping/demarcation skills and data handling proved critical in building the confidence of communities to engage with local

government agencies in taking control of the resources they depend on and moving towards a sustainable form of management.

The project has also contributed to achieving CBD goals for forest biological diversity in Bale. The communities now actively monitor and regulate the extraction of wood for fuel and construction where there was a free for all before. This has reduced the amount of wood leaving the woodland and also facilitated a spatial understanding of wood extraction in order to detect where wood is being extracted in relation to the range use by wildlife. CM has therefore been instrumental in reducing the conversion of woodland into cropping and pasture land which has helped to maintain habitat for iconic endemics such as the mountain nyala safeguarding future nature-based tourism opportunities. A notable outcome is that there remains significant grazing of livestock in woodlands with implications for regeneration. Without the community monitoring, the extent of this and the spatial patterns were not well documented. It is now possible to use the data to help plan actions to address this issue.

The project supported the CBD implementation in Ethiopia in the following ways:

- 1) Identification and monitoring (Article 7). Local community members were involved in designing and developing what should be monitored and training was provided for community monitoring teams in carrying out the monitoring protocols, storing and analysing the data and making it available for use by the community based organisations to inform decision making. This data is an important component for assessing the impacts of resource use on biological diversity
- 2) In-situ conservation (Article 8). The community monitoring of natural resources has included sightings of wildlife in order to make the link between managing the habitats sustainable use and the biodiversity benefits. This biodiversity is a source of alternative or additional income and alternative livelihoods through the potential for ecotourism which is in its infancy in most areas but is developing strongly in in Guassa
- 3) National biodiversity conservation initiatives in protected areas were strengthened substantially. This was achieved through the successful implementation of community monitoring for CBNRM in communities on the edge of the BMNP. The outcome has been reduced number of incidents of conversion of habitat to cropping and pasture maintaining the range for Mountain Nyala in the area.
- 4) Sustainable use of natural resources (Article 10) was promoted within communities particularly exemplified by the Guassa communities where the community monitoring has been established for three years now. This model is being emulated in Abuneyoseph and Bale with an additional seven communities developing community monitoring in the last year of the project.
- 5) Biodiversity conservation education (Article 13). The success here was documented in a film commissioned in Ethiopia by CAMP called “Guassa – people and nature” which is in Amharic with English subtitles. This is being distributed to government agencies and NGOs involved in PFM so that it can be shown to other communities in order to help communicate the value of community based natural resource management and the important role community monitoring of the natural resources and wildlife can have in sustaining the resource and maintaining and developing traditional as well as new forms of livelihoods such as ecotourism
- 6) Training of Young Conservation Professionals (Article 12). The project provided the opportunity for FZS to employ and train local junior technical officers to administer the project locally which involved them understanding the need for conservation and the dependence of achieving conservation on developing sustainable resource use strategies of the sort promoted by CAMP. In addition the project allowed more para-ecologists to be trained in each community building local capacity for collecting and collating monitoring data according to rigorous protocols designed to address local issues.

CBD focal point in Ethiopia is the Environmental Protection Authority. We have been unable to work with them directly but perhaps more appropriately we felt we could raise awareness and impact on biodiversity conservation more effectively by working directly with the Ethiopian Wildlife Conservation Authority (EWCA) as well as regional authorities such as OFWE and EPLA. This collaboration took place in the following ways:

- 1) By sharing annual reports with EWCA and involving EWCA staff in the annual PSC meetings in order to promote the lessons learned for implementing community monitoring;



- 2) Taking a lead in organising the National PFM forum and promoting community monitoring of natural resources in biodiversity hot spots to this sector;
- 3) Hosting a workshop at the end of the project meeting for regional government and related NGOs working on natural resource management PFM and the conservation of biodiversity.

The project has developed a sustainable data collection system that allows the monitoring of illegal resource use, status of the natural resources that need to be regulated and associated wildlife and conservation status. The protocols and institutions surrounding this system facilitate the link between regulated resource use and conservation of biodiversity in these hotspots.

## 4 Project Partnerships

The James Hutton Institute (JHI) (formerly the Macaulay Institute) has a Memorandum of Understanding (MoU) with Frankfurt Zoological Society (FZS). FZS facilitates the formal and legal arrangements for operating and implementing the project in Ethiopia and does this through a MoU with the Ethiopian Wildlife Conservation Authority (EWCA) and the Disaster Management and Food Security Sector (DMFSS). The JHI has a MoU with The University of Aberdeen (UA). UA's involvement since April 2010 has been mainly in guiding the project coordination officer and providing advice on monitoring indicators and data analysis and provision of background papers. A PhD studentship was secured from the University to work on the community monitoring data. The original project officer took this opportunity allowing FZS to employ a junior technical officer in each of the three study areas with oversight from senior FZS staff and the PhD student.

FZS has provided a designated office in their Addis Ababa office as well as providing the institutional and legal basis for hiring and managing staff and financial management in Ethiopia. Currently two junior technical advisors are employed with project funding. Karen Laurensen, the programme manager for Ethiopia has overview of financial and administrative issues for operations in Ethiopia, as well as providing technical advice. FZS also has an EU-funded sister project (ACE) working in the same areas as CAMP to support effective conservation management, which provides a base and additional equipment, administrative and human resources at each site as necessary.

Forum for the Environment (FfE) are principally involved in the dissemination of technical reports and papers nationally and internationally as well as convening public meetings from Year 2 onwards. FfE is leading preparation of documentary film about Guassa community conservation area and activities and outcomes of community monitoring in order to help project lesson dissemination at wider scale in the country.

Oromia Region. Represented by the Oromia Forest and Wildlife Enterprise (OFWE) since the responsibility for national parks became the remit of EWCA and the target forest areas in Bale are outside the NP. Oromia are included as a partner on the in-country project registration documents and agreements. Seven communities in Bale Mountains, where the project is operating, are administratively supported in order to give a legal basis for the community to be involved in regulating the management of communal forests. Furthermore staff of OFWE at district level (both in Dinsho and Adaba) are actively involved in whole process of CBNRM and monitoring activities in order to institutionalise the system within local government system. The involvement of government staff is expected to help dissemination of CM in other areas where PFM is implemented around Bale Mountains.

Amhara Region is represented by the Amhara Bureau of Culture and Tourism (ABCT). ABCT is responsible for the GCCA and ACCA with active involvement of Environmental Protection and Land Administration (EPLA) at the Woreda level and along with Woreda administrations. Personnel have actively supported and participated in project activities and are taking a lead role in the ACCA and GCCA.

Partnership relationships are generally managed through email and phone conversations, but meetings have also taken place during visits of the project leader (JI) to Ethiopia in Feb 2011, March 2012 and for the final meeting in April 2013. The national project coordinator also visited UK 4 times during the project, which greatly assisted with communication and agreement on project activities.



Other Collaborations: CAMP has also collaborated with an EU-funded project developing Participatory Forest Management (PFM) in Ethiopia (ACE). A workshop in July 2011 was held under the Ethiopia PFM Working Groups auspices, of which CAMP is now a member, to review and develop harmonized participatory forest management guideline for the country. Two project staff participated in the workshop and contributed by sharing their experience about the role of community monitoring in effective management of CCA. This was followed up at the end of the project with a meeting (Apr 2013) attended by relevant regional and federal government agencies as well as NGOs to disseminate and discuss lessons learned.

## **5 Contribution to Darwin Initiative Programme Outputs**

### **5.1 Technical and Scientific achievements and co-operation**

The main achievement is the development of an adaptive management process for managing the natural resources sustainably and to monitor the effects of this management on important conservation species in these biodiversity hot-spots. This is based on both biological and socio-economic datasets that not only represent a baseline but continue to be collected so that trends and patterns can be detected and used to inform the co-management of these habitats. This has generated a greater understanding of the ecosystems both within the communities that depend upon them and more widely for the regional land use and conservation authorities.

To date the following outputs have been produced or are underway:

1. Abstracts of papers (See Output 1 under Section 2.3)
2. Report from final workshop meeting (Appendix z and website)
3. GMTT. In order to help quick evaluation of already established CBNRM areas CAMP produced governance and management tracking tool (GMTT) which is adapted from the WWF METT widely used for national parks and other state managed protected areas (See website).
4. Project impact evaluation household survey was conducted before and after project implementation in sample Kebeles of the Bale Mountains, results were presented during project final workshop and are available on the website.
5. Documentary Film about natural resources regulation and the role of community monitoring called "Guassa - People and Nature" available to view on the project website.
6. Mapping and demarcation of areas for CBO management of natural resources (see Fig 5 for an example from Abuneyospeh).
7. Development of guidelines for developing community monitoring in PFM areas. (In preparation)

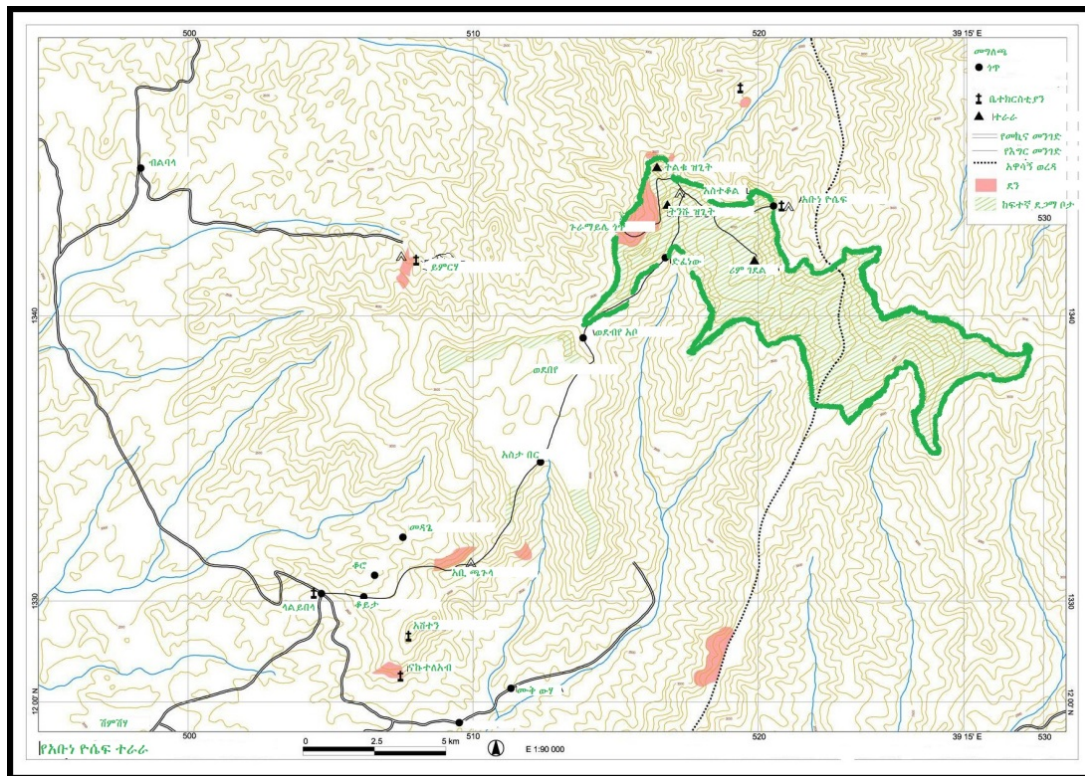


Figure 5. Communal land demarcation in Abuneyoseph CCA.

## 5.2 Transfer of knowledge

Knowledge Transfer in CAMP has taken two main forms:

First there has been a focus on communicating the lessons learned from the project to other organisations that are involved in developing sustainable natural resource management.

Second, we have focussed on communicating the approach both within the communities we have engaged with and between these communities as well as providing the opportunities for those engaged in community monitoring to take part in experience sharing trips to visit other projects in Ethiopia and in other African countries.

The lessons learned from the project and its approach have been disseminated in a number of formats including the film “Guassa – People and Nature” A useful overview of the project is the CAMP fact sheet which is available from the website.

## 5.3 Capacity building

The communities have been empowered to run community monitoring as a mechanism for the monitoring and setting the limits of sustainable use of the natural resources they depend and which species of conservation concern depend upon. As well as indicators that inform on the status of the resource (firewood, regeneration, guassa height etc.) community monitors have also collected data on wildlife sightings associated with these habitats. The data is collated locally and with the assistance of local government departments (EPLA and OFWE) has been analysed and fed back to the communities in order that it can be used to inform management decisions that are based on evidence. This process relies on developing the capacity of the communities to design and modify their data collection protocols as well as operate effectively the governance arrangement necessary to administer the system such as local community courts, running scouts and training community monitoring teams.

At the local level the project has developed the capacity of communities to manage their natural resources sustainably through:

- 1) Training of 25 community scouts in GCCA and 17 community scouts in ACCA to spread the workload and provide continuity in monitoring illegal use and resource
- 2) Creation of seven community-based organisations (CBOs) in Bale, strengthen one CBO in GCCA and established one CBO in AYCCA to organise the resource management and

monitoring and use the subsequent data to inform management response when resource issues arise.

3) Partnerships with regional government officials at the Woreda level to support the communities in reporting and feedback and supporting the legitimacy of the community courts in adjudicating on illegal use incidents

The CAMP project brought issues of community-based monitoring to the attention of national level organisations as an important instrument for adaptive management of CBNRM. This was achieved by organising national workshops in partner with other actors in the country. CBM is now included into national PFM guideline and scaling up projects are on pipe line especially in 50 PFM sites in Bale.

#### **5.4 Sustainability and Legacy**

The project is gaining profile within Ethiopia through its membership and involvement in the Ethiopian PFM working group and links with local government. As such, the project's concept and approach have been adopted by key stakeholders principally other conservation and development actors, including federal and local government. The commitment by local government to institutionalise the approach will be a key component in building sustainability. Institutional, financial and environmental sustainability are integral parts of the project, being key outcomes from successful implementation of CBNRM, of which CBM is a component. Communities in the GCCA and Seven Kebeles in Bale are already empowered and have greater capacity to manage and monitor their own resources. Progress towards this has been slow overall in Abuneyoseph but has moved more quickly in recent months (See Section 7). The project exit strategy is already started in Bale and Guassa where the system has built in strong linkages between the community and local government systems. Particularly the community are responsible for CM data collection (to provide evidence of resource condition and unauthorised use) by administering a system of scouts, CMTs and Kebele Judiciary. In parallel, the processing and interpretation of data to provide quarterly feedback to community and Kebele level decision makers is provided by the local government staff. The same process is on-going two Kebeles of the Bale Mountains and is rapidly reaching operational capacity in newly established five Kebeles. The district (woreda) level government staff are actively engaged in the process to fill the gap as the project withdraws. It is clear that the approach and capacity building that is being developed through this Darwin project has great potential to be utilised in other areas dealing with conflicts over the use of natural resources including socio-ecological systems based on forests, wildlife and grazing. There is no doubt that this model has applicability in other countries where there are human pressures on the sustainability of natural resource exploitation. An exit strategy has been devised that forms the basis for the community to continue achieving the project aims and objectives. This involves the CBOs which are well established and active. The benefits of the CM process have been clearly demonstrated and this has created the demand and respect for the CBO as a body working for the community. The regulation of illegal use has generated income for community that can be invested back in the community monitoring work rewarding scouts for services to the community. Secondly, the communities, using Guassa as an example, are seeing the benefits of protecting their resources, the habitats associated with it and the wildlife it contains because of the potential this has for additional income from ecotourism, which again can benefit the community and could be used to help reward CMT members for services to the community.

##### **b) Staff and Resources**

At the end of the project, project partners, local government agency staff and communities were left with equipment and resources to continue their work. This includes a 4x4 vehicle, 4 motorbikes, 4 desktop computers, 3 laptops, external back-up drives, hand-held GPS units, digital cameras, and camping equipment. .

## **6 Lessons learned**

Project management structure. Management of the project worked well. The project officer (employed by FZS) was particularly effective and brought a great deal of knowledge and experience. He was supported by line managers in FZS that had long associations and good relationships with key people in the communities and regional governments in the project

areas. On the strength of the project, we secured additional funding which covered a PhD stipend and fees for the project officer starting one year after the project initiation. Whilst this meant the project officer having to focus on their PhD it also allowed us to employ a dedicated staff member at FZS for each of the three areas. The project officer divided his time between his PhD and coordinating their activities.

Expertise. The project had a broad range of expertise which was boosted with the inclusion of an experienced social scientist from the James Hutton Institute (Anke Fischer) who a) provided joint supervision for the project officer's PhD and b) guided the research associated with the understanding the typology of resource users and patterns of illegal use.

Planning. The project was well planned but perhaps ambitious for the three year timescale. A no-cost extension for 12 months allowed the project to achieve its goals in Guassa and Bale (even adding in five extra communities). Progress in Abuneyoseph was slower due to difficulties in establishing responsibilities in local government and the demarcation of community resource boundaries, but this is now well on track. Perhaps the biggest factor in relation to progress early on was the unforeseen change in government policy relating to communities in national parks. This effectively meant we were unable to work in Simien and had to work with communities adjacent to the park in Bale. However this has been a benefit in Bale allowing us to engage with a broader range of communities. In addition, the Ethiopian elections in 2010 resulted in new policies which placed a great deal of time demands on the local government officials that we needed to work with. Thus they were unable to work with the communities on this project until later on. However, these issues only delayed the project rather than causing any failures.

Resources. Sufficient resources were allocated. The no-cost extension meant that resources were reallocated to cover the extra 12 months but there was no need for additional funding to cover this period. Availability of FZS sister projects in all the three areas means that staff and transportation facilities were used collaboratively for efficient resource mobilisation.

Other lessons. One of the main lessons is that community participation in the process of developing community monitoring of natural resources is as important as the data and what that tells the decision makers. The act of mapping and demarcating boundaries and designing what to monitor as well as where to monitor allows community members to bring their own knowledge of the resource base into the process and therefore feel that the system that is created is relevant to their experience and needs. This helps develop widespread agreement within the community over the need to use the approach to achieve sustainable use of the resource to safeguard it for future generations as well as achieving conservation goals. For example, the establishment of the community scout patrols and the creation of CBOs have engendered a sense of trust in the system and this has led to reductions in illegal resource exploitation. i.e. there is no longer a free for all and therefore the system has mitigated against the classic over exploitation of common pool resources such as timber and guassa grass that are prone to the "tragedy of the commons"

There are a number of lessons emerging from the CAMP projects approach to implementing community monitoring. The main ones are outlined below:

*a. Balancing between keeping institutional memory and replacing long serving committee members:* In Guassa the role of traditional management rests with men and all the Kebele and Woreda conservation committee members are male. This happened before the introduction of the project to the area. The project is waiting for the next election to work towards inclusion of women to the committee and to replace long serving committee members. The election processes principally depend on the local bylaws. However the project learnt that there is need to balance between keeping institutional memories, by retaining some of the long-serving committee members and bringing in new energy and ideas through new committee members.

*b. Community natural resource monitoring can improve transparency and trust:* In Guassa, the project has found that trust within local communities and between communities and local government has improved since the inception of CBM. Communication has improved and information is now available in a transparent way for all community members regarding resource status, sanctions on unauthorised users, member's activity and actions taken by committee members. The availability of information has allowed more objective discussions, reduced unsubstantiated rumour, improved trust among members and commitment to the

management of the area based on an adaptive approach that relies on CM. It also gives credit to active committee members by recognising the number of days they were involved in CCA work.

*c. Community monitoring improves the commitment of CBO leaders and enforcement of rules:* Especially in newly established CBNRM areas, the challenge is when to start actual implementation of the agreed bylaws. These will initially disappoint everybody because of the upheaval caused by a shift from free access to regulation and permit-based use. Early implementation can be detrimental for the process unless the elected CBO leaders are fully committed to the process. Essential to the process is local feedback and reporting based on the monitoring data as well as recognising the time and effort of the CBO leaders, scouts and CMT because this ensures transparency and builds trust in the system. Such an open, evidence-based discussion will give credit for committed members and encourage others to exercise their role. As a result early agreement and enforcement of bylaws need to take place quickly in parallel with the feedback process in order to build on negotiations and move towards the implementation phase.

*d. Success history and peer influence:* In Bale, it took the project staff two years to establish functioning CBNRM in the first two kebeles. In the five newly included Kebeles, the project staff achieved in six months, what had previously taken at least two years. This was partly a result of the increased experience of the project staff. However, even more importantly, people in these kebeles had become aware of the existing CBNRM and recognised the benefits so that they were eager to develop similar institutions and governance in their own communities. In addition, the local government agencies were also quicker to get involved and support the process because they already understood the rationale and objectives of CBNRM due to their involvement with the original kebeles.

*e. Members of community-based monitoring need to document observations and measurements during fieldwork.* However the level of literacy is too low in most project operating areas and therefore excludes those who can't read and write. Further work is needed in order design monitoring technique that are allow people who can't read and write to be included in the process and secure wider acceptance.

*f. Community-based monitoring teams should visit the CCA on an at least weekly basis* to monitor the resource and adherence to agreed rules. This would help them to support and complement the patrolling and protection teams by giving more coverage for patrolling effort and increase the likelihood of detecting unauthorised users.

## **6.1 Monitoring and evaluation**

*Project evaluation.* The project has baseline data for indicators that will determine the strength/sustainability of CBNRM and CBM in the project sites (Guassa, Bale & Abuneyoseph). Other indicators for monitoring attitudes, buy-in, and cooperation at local level have been developed and baseline data has been collected. For example, in Bale, forest user-group members' trust in the CBO executives has increased substantially compared to the situation before CBNRM (Fig 6)

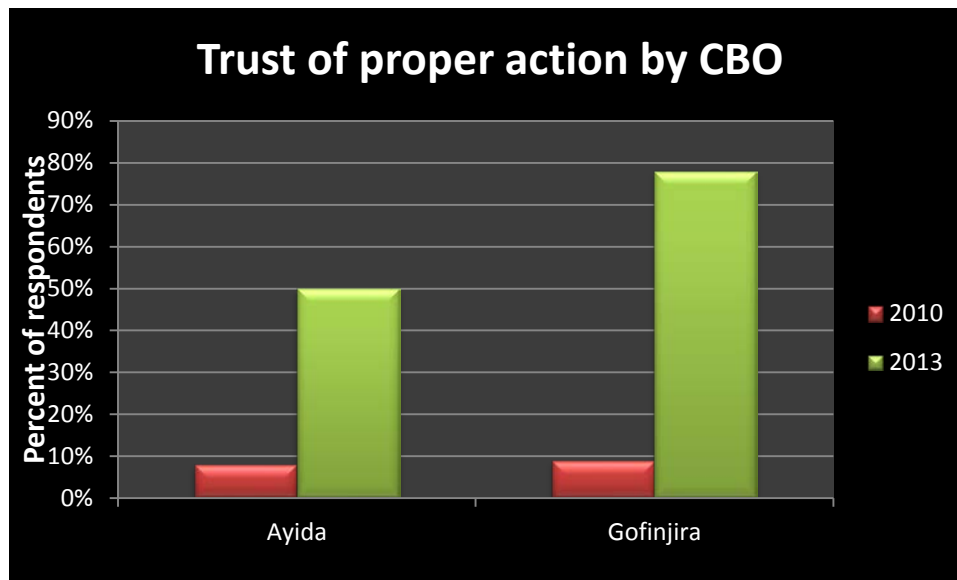


Figure 6: Affirmative response for question 'do you think action will be taken if you report illegal forest use'

CBM is now included in national PFM guidelines and scaling up is in progress around Bale by FZS and other partners as a result of the lessons and evidence provided through this projects activities.

*CBNRM Evaluation.* Indicators set by the communities are designed to track the state of natural resources and the sustainability of their use. These data are being held at the local level and longer term analysis will provide information on trends. In addition, more 'scientific' data are being collected to verify and compare with the community data in the medium term. (Analysis of this for Guassa is described in section 2.2 and in 2.3 output 1e above and was presented in the final meeting (<http://www.macauley.ac.uk/CAMP/finalmeeting.php>))

*Management Effectiveness Tracking Tool (METT).* Baseline scores using METT for protected areas, developed by IUCN/WFF, but specifically adapted to CBNRM by the project have been conducted for Bale and Guassa in January and February 2012. The project team altered and extended the format and questions to be more appropriate for community managed areas, and included scores for other important CBNRM aspects, such as community empowerment and the transparency and capacity of CBOs. The CAMP Tool (GMTT) was presented to the government and NGO stakeholders at the final project meeting In April 2013 where it was evaluated for more widespread use by the participants

Systems and databases for monitoring and evaluation were set up with the assistance of the FZS sister project (ACE), principally for the BMNP, but are also housing information for the PFM areas outside the park. These will also be integrated with the systems at OFWE, the organisation responsible for the PFM areas. The database structures is adapted and integrated into community and local government management systems in the Guassa and Abuneyoseph CCAs

## 6.2 Actions taken in response to annual report reviews

N/A

## 7 Darwin identity

The project used publicised the Darwin Initiative (DI) using the DI logo on all reports and fieldwork protocols, in all presentations within and outside Ethiopia.

Project staff were mainly seconded from Frankfurt Zoological society and their uniforms included the DI logo.

At workshops, those attending were provided with either a DI pen or a DI lapel badge

The project vehicle was fitted with DI log on the doors and bonnet.

The film "Guassa – People and Nature" features the DI logo and acknowledges the DI funding



Water bottles with the Darwin logo were provided for sale to tourists in Guassa to promote the development of the ecotourism livelihood potential.

CAMP was a distinct project but worked closely with EU funded ACE in delivering the community monitoring aspects of the latter. ACE continues beyond CAMP which helps fund on-going engagement with the communities CAMP engaged with to monitor the legacy and also potentially facilitate the adoption of the CAMP approach in other PFM communities.

## 8 Finance and administration

### 8.1 Project expenditure

Project spend since last annual report	2012/13 Grant (£)	2012/13 Total actual Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)	XXX	XXX		
Consultancy costs		XXX		
Overhead Costs	XXX	XXX		
Travel and subsistence	XXX	XXX		
Operating Costs	XXX	XXX		
Capital items (see below)	XXX	XXX		
Others (see below)	XXX	XXX		
<b>TOTAL</b>	XXX	XXX		

Staff employed (Name and position)	Cost (£)
Justin Irvine (JHI) Ecological Epidemiologist Anke Fischer (JHI) Researcher	XXX
Michelle Pinard (UoA) David Burslem (UoA)	XXX
Dereje Tadesse (FZS) Mohammednur Jemal (BMNP) Derebe Deksiyos (SMNP)	XXX
	XXX
	XXX
<b>TOTAL</b>	XXX

Capital items – description	Capital items – cost (£)
<b>TOTAL</b>	

Other items – description	Other items – cost (£)
<b>TOTAL</b>	

## 8.2 Additional funds or in-kind contributions secured

Source of funding for project lifetime	Total (£)
Macaulay Development Trust (confirmed)	7874.82
<b>TOTAL</b>	<b>7874.82</b>

Source of funding for additional work after project lifetime	Total (£)
<b>TOTAL</b>	

The project levered a University of Aberdeen PhD stipend which covered the salary and fees for the project officer to enrol for a PhD from 2010 to 2013,

## 8.3 Value for Money

The DI money has been well spent in developing and establishing community monitoring in three areas with different natural resource management contexts. The process has highlighted the key issues that need to be addressed in relation to the relationships and roles of community members and local/regional government in developing an adaptive management process that is supported by the statutory authorities. In addition it has developed guidelines for the practical implementation of community monitoring. The project has demonstrated that there is added value for resource sustainability and conservation goals from community monitoring to support decision making in PFM areas and this is being disseminated to other regions, communities and NGOs to promote its uptake. Without CM, it is difficult to evaluate the effectiveness of PFM. We have shown that CM can be a tool for evaluating PFM effectiveness as well as developing community engagement in managing their resources sustainably for the future and at the same time engendering value to wildlife of conservation concern through recognition of the potential for ecotourism revenue benefits.

# Annex 1 Report of progress and achievements against final project logframe for the life of the project

**Note: For projects that commenced after 2012 the terminology used for the logframe was changed to reflect DFID's terminology.**

Project summary	Measurable Indicators	Progress and Achievements to April 2013)	Actions required/planned for next period
<p><b>Goal:</b> <i>To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but constrained in resources to achieve</i></p> <p><i>The conservation of biological diversity,</i></p> <p><i>The sustainable use of its components, and</i></p> <p><i>The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources</i></p>		<p><i>NB. A no cost extension to end Mar 2013 was approved (Sept 2011). This allows the activities and outputs to be re-timetabled to the end of year 4. A further no cost extension (Jan 2013) moved the end date to end April 2013 in order to hold final stakeholder dissemination event.</i></p>	<p>N/A</p>
<p>Purpose</p> <p>Human and institutional capacity for natural resource monitoring built and contributing to community-based natural resource management in four key Afro-montane areas in Ethiopia</p>	<p>P1. By end year 3, capacity of management authorities and communities to conduct, interpret, manage and adapt natural resources monitoring is enhanced</p>	<p>The project made significant progress in training and capacity building of communities and local government partners for CBNRM based on CMT</p> <p>Guassa: Local project partners have taken responsibility of data entry, processing and producing feedback at Kebele and woreda levels. Local partner staff assigned development agents to maintain and monitoring data at village level and use</p> <p>Bale: The project staff continued to support and strengthen data processing and interpretation at Kebele level in Bale. Seven community based organization (CBO) were formally established to run the communal forest management in Bale. Monitoring of communal forests set up in two old and the five new communities in Bale. The project has strengthened the newly established CBOs in Bale by building their capacity through training, material support, and local experience sharing visits. OFWE assigned staff to follow up project activities in three Kebeles of Dinsho Woreda and four Kebeles of Adaba woreda. Their capacity was strengthened for two different Bale districts to support institutionalization of CM and database management by providing computer and other field equipment.</p> <p>Experience sharing: Project staff from Bale participated in experience sharing visit to Guassa. Different groups of 113 local people from seven Kebeles of Bale representing CMTs and CBOs participated in experience sharing visit to Guassa and other PFM sites in the country throughout project lifespan.</p> <p>Abuneyoseph: Support the continued development of CBNRM in ACCA</p> <p>Two project staff and two government staff from Guassa and Abuneyoseph participated in an international experience sharing visit to Namibia to look at community-based monitoring. The participants utilised lesson from the visit in their project sites.</p> <p>One FZS staff field staff supporting CAMP project implementation attended summer school for four years to upgrade from certificate to BSc degree in natural resource management</p>	

Project summary	Measurable Indicators	Progress and Achievements to April 2013)	Actions required/planned for next period
	P2. By end year 3, communities in target areas empowered to participate in monitoring activities under CBNRM	By the end of year 4 the communities in Bale and Guassa recognised the importance of CMT by continuing with monthly participatory monitoring. This is on-going and is also now underway in Abuneyoseph CCA. In the latter case there is now support for legal recognition of Abuneyoseph community conservation area with an agreed demarcation of the spatial extent of the area to be subject to community monitoring. In Bale, there is formal support for the legal recognition of seven CBOs and these seven CBOs have formally taken responsibility for communal forest management in their respective Kebele.	
	P3. By end year 3, national awareness of monitoring as part of adaptive management of CBNRM increased among stakeholders and policy-makers	National PFM housed in Ministry of Agriculture included CM into its national PFM guideline during drafting workshop organized in July 2011. Lesson and experience from Guassa adopted in developing plans and protocols for Bale and Abuneyoseph CAMP supported the organization of a regional workshop on topic of 'law enforcement and legal support for PFM' to encourage efforts and protect from external pressure and deal with issues over non-member compliance to local resource use regulation and the legal basis for the regulations and enforcement.  CBM scaling up projects are in the pipeline with funding from grant European Union in order to implement in 50 PFM sites around Bale.  GMTT which was adapted by project is now taken up in other projects in southwest Ethiopia and used to monitor development and changes in PFM implementation.  The final project meeting involved communicating lessons learned from the project to federal, regional government representatives as well as relevant NGOs. The benefits of community monitoring, its governance structure and the relevance to other communities with different systems of natural resource use was discussed.	
Output 1. Understanding of the ecosystem and limits of sustainable natural resource use enhanced	1.1 By end year 3, four papers in peer reviewed journals on biodiversity, ecosystem function, or sustainable natural resource use  1.2 By end year 3, limits of sustainable use identified and jointly agreed by authorities and stakeholders in target areas	Summaries of draft papers are described in section 2.3.  Project community monitoring experience presented and shared with wider stakeholders during National workshop held in April 2013.  Participatory management plan prepared by nine communities in Bale for communal forest management (available on request) and resource use regulated (resource use limited from open access of (7 days/wk. to 2 days/wk.) wood collection regulated.  Similarly, in Abuneyoseph, boundary of 5000 ha protected area demarcated and management system put in place by actively involving local community representatives.	
Activity 1.1 Liaise with partner organisations and CBNRM projects to obtain information on natural resource use and resource users		Project activity plan prepared ever quarter in collaboration with local partners in the three the project areas. Project annual operation plan agreed with field staff in all the three sites. CAMP liaised with related EU project ACE. Annual project meetings of the project steering committee were held once a year supplemented by informal regular meetings in case study areas held throughout the project timeframe as necessary.	

Project summary	Measurable Indicators	Progress and Achievements to April 2013)	Actions required/planned for next period
Activity 1.2. Conduct PRA of the limits of sustainable use for key resources in each target area		PRA assessments supported in seven Kebeles around BMNP to understand the people-resource relationship and the findings displayed to residents of the Kebele to facilitate social learning about the state of their natural resource and develop a plan of action.  Area for resource monitoring demarcated in Abuneyoseph and was ratified legally.	
Activity 1.3 Undertake participatory mapping of key resources in each area by communities and relevant authorities		Participatory mapping supported and completed in the seven Kebeles of around BMNP and demarcated more than 24,000 ha; completed demarcation of 7000 ha in Guassa; and facilitated participatory demarcation of 5000 ha in ACCA.  Boundary demarcation of Abuneyoseph CCA completed with the information disseminated among community in Abuneyoseph.	
Output 2. Protected area management authorities and communities empowered to undertake natural resource monitoring	2.1 By end year 1, Community Monitoring Task Force established  2.2 By end year 1, 24 Community Monitors selected and trained in simple monitoring techniques  2.3 By end year 2, on-the-job training provided for all staff assigned to the project by in-country partners  2.4 By end year 3, two experience sharing trips undertaken by park ecologists	16 community monitoring team(CMT) members in Guassa from four Kebeles selected and trained; 8 CMT regularly involved in data collection;  In ACCA, 16 CMT selected and trained from 4 Kebeles bordering the CCA.  50Community Monitors selected, trained in community monitoring in Bale and 30 are regularly involved in monitoring data collection in seven Kebeles. Further support and capacity building will continue for CMT in five kebeles of Bale  Two staff from Bale and one from Abuneyoseph visited Guassa to share experience of CM  Experience sharing visit was organized for CMT from Abuneyoseph to Guassa and Bale to different project sites	
Activity 2.1 Establish structures for communities to monitor their own natural resources.		Seven CBOs established in Bale to lead the management of communal forest; GCCA CBO strengthened and CBO establishment supported in ACCA. The project continued to strengthen the three newly established CBOs in Bale  Monitoring and information sharing mechanism at Kebele level developed in GCCA  Computer donated to Abuneyoseph and Bale district government staff for CM database with continued development of data collection and sharing mechanisms in Bale and ACCA	
Activity 2.2. Provide training opportunities to project staff and partners		One CLO provided with support continued training at the summer school  Three staff trained in database management to support local government staff and organize CM data	
Activity 2.3 Organise experience sharing trip to other participatory and community-based natural resource monitoring projects		One experience sharing visit organized for a team of four 28 community members and 2 project staff from Bale to Guassa and Chilimo CBNRM.  One visits to Guassa from newly established PFM areas of Bale and Abuneyoseph community representatives.	

Project summary	Measurable Indicators	Progress and Achievements to April 2013)	Actions required/planned for next period
Output 3. Participatory natural resource monitoring developed under CBNRM.	<p>3.1 By end year 1, monitoring plans and indicators and data collection protocols developed for key natural resources and threats.</p> <p>3.1 By end year 2, baseline data collected.</p> <p>3.3 By end year 3, monitoring plan implemented.</p> <p>3.4 By end year 3, adaptive management of CBNRM being undertaken in focal target communities.</p>	<p>In GCCA:</p> <ul style="list-style-type: none"> <li>- CMT has been collecting data for two years.</li> <li>- Monitoring database developed.</li> <li>- The data has been processed and used to inform management decision making at village and district level.</li> </ul> <p>In Bale, monitoring data collection is now underway.</p> <ul style="list-style-type: none"> <li>- CMT has been collecting data for a year and half in two Kebeles and now underway in the other five new Kebeles.</li> <li>- Monitoring database developed.</li> <li>- The CM data processing started in two of the three Kebeles by Kebele level development agents.</li> <li>- Data has been used to facilitate learning and day to day management decisions</li> </ul> <p>In ACCA</p> <ul style="list-style-type: none"> <li>- CMT has been collecting data for a year.</li> <li>- Monitoring database developed.</li> </ul>	
Activity 3.1. Identify appropriate community-based monitoring approaches to NR monitoring in target areas		Monitoring protocol developed for community managed alpine grassland and montane dry forest in Bale	
Activity 3.2 Develop monitoring plan for community-based natural resource monitoring systems for target areas		In Bale, GCCA and ACCA data collection protocols printed in to books and donated to CBO offices after revisions and edits that were agreed with communities have been included.	
Activity 3.3 Implement monitoring plan		Monitoring is on-going and continues in all project areas with systems for processing and interpreting the data for feedback now in place at community level in Bale and Guassa	
Activity 3.4 Create feedback mechanisms for incorporating monitoring into adaptive management of CBNRM		<p>In GCCA, the results from data analysis presented to the communities using an appropriate display mechanism every quarter.</p> <p>In Bale the feedback and display of data is organized at Woreda level and quarterly reporting at Kebele level decision makers.</p> <p>CBOs offices and day to day forest management operations have been set up and are now implemented</p>	
Output 4 Awareness of the (i) links between conservation of biodiversity and sustainable natural resource use and (ii) role of participatory natural resource monitoring under CBNRM raised nationally in Ethiopia and internationally	<p>4.1 By end quarter 1, project initiation workshop held with all project partners to develop MoUs</p> <p>4.2 By end year 1, Project Steering Committee (PSC) established and meeting twice yearly</p> <p>4.3 By end year 1, project webpage developed and linked with in-country</p>	<p>MoU signed between the project and Oromia Forest and Wildlife Enterprise to support project operation in Bale</p> <p>Project launch workshop, two PSC meetings and final workshop organised during the project life time. Webpage hosted at Macaulay Institute, <a href="http://www.macaulay.ac.uk/CAMP">http://www.macaulay.ac.uk/CAMP</a>. The website will be upgraded by end of June 2011 and progress reports added as appropriate</p> <p>Internal reports available</p> <p>Documentary film about GCCA and CBM produced and disseminated</p>	



Project summary	Measurable Indicators	Progress and Achievements to April 2013)	Actions required/planned for next period
	<p>and international partner websites (updated in year 2 and year 3)</p> <p>4.4 All years, technical reports and publications distributed to communities, government, university libraries, and partners (also local exhibits as per Output 1) and internationally via websites (above) and scientific literature (papers as per Output 1)</p> <p>4.5 In year 2 and year 3, six public meetings held by FfE to raise national profile of the project</p> <p>4.6 By end year 3, presentation of project outputs at international conference (e.g. SCB) and final project workshop held</p>	<p>Three manuscript under preparation to publish in peer reviewed international Journal for wider dissemination</p> <p>The project co-hosted three national workshops and three regional workshops related to PFM/CBNRM, successfully disseminating project lessons</p>	
<p>Activity 4.1 Organise and run project initiation workshop to agree project monitoring indicators and monitoring and evaluation plan, work plans and to develop MoUs with project partners</p>		<p>See previous reports</p>	
<p>Activity 4.2 Organise and hold twice yearly PSC meetings</p>		<p>Four PSC held throughout project life time including initial and final workshop</p>	
<p>Activity 4.3 Promote awareness of the project and its goals locally, nationally and internationally</p>		<p>Community level meetings held in all sites to introduce project and goals</p> <p>Initial project webpage developed on Macaulay website. <a href="http://www.hutton.ac.uk/research/projects/camp-community-afromontane-monitoring-project">http://www.hutton.ac.uk/research/projects/camp-community-afromontane-monitoring-project</a> .</p> <p>The project presented experience of CM at regional workshop in April 2011.</p> <p>Project staff participated in national PFM guideline preparation in July 2011</p> <p>Poster about participatory natural resource management depicting CM prepared for Bale in local language</p> <p>Website updated and technical reports uploaded</p> <p>Final project meeting with Ethiopian PFM stakeholders (govt and NGO) disseminating lessons learned, demonstrating GMMT and premiere of film (Guassa: Land and people)</p>	

Project summary	Measurable Indicators	Progress and Achievements to April 2013)	Actions required/planned for next period
Activity 4.4 Disseminate project results and lessons learnt		Documentary film about CCA and CM in Guassa prepared and disseminated. Further PFM WG meetings held	

## Annex 2 Project's full logframe, including indicators, means of verification and assumptions

This is the logframe as included in the 3<sup>rd</sup> Annual Report.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<b>Goal:</b> Effective contribution in support of the implementation of the objectives of the Convention on Biological Diversity (CBD), the Convention on Trade in Endangered Species (CITES), and the Convention on the Conservation of Migratory Species (CMS), as well as related targets set by countries rich in biodiversity but constrained in resources.			
<b>Sub-Goal:</b> Ethiopia's natural resources conserved, sustainably utilized and contributing to the social and economic well-being of present and future generations	G1. Five years after project completion, natural resource and socio-economic indicators show positive trends towards attaining and maintaining their desired states in target areas, as set out by the project and on-going monitoring and evaluation	Target area ecosystem monitoring databases and reports	
<b>Purpose:</b> Human and institutional capacity for natural resource monitoring built and contributing to community-based natural resource management (CBNRM) in four key Afro-montane areas in Ethiopia	P1. By end year 3, capacity of management authorities and communities to conduct, interpret, manage and adapt natural resources monitoring is enhanced  P2. By end year 3, communities in target areas empowered to participate in monitoring activities under CBNRM  P3. By end year 3, national awareness of monitoring as part of adaptive management of CBNRM increased among stakeholders and policy-makers	Capacity assessment measures in year 1 (baseline) and year 3  M&E reports from GMP and CBNRM implementation  Awareness surveys in year 1 (baseline) and year 3  Final evaluation report	Management authorities and communities remain supportive of participatory CBNRM  Sustainable natural resource use is tractable in Ethiopia

<b>Project summary</b>	<b>Measurable Indicators</b>	<b>Means of verification</b>	<b>Important Assumptions</b>
<p>Outputs (add or delete rows as necessary)</p> <p>1. Understanding of the ecosystem and limits of sustainable natural resource use enhanced</p>	<p>1.1 By end year 3, four papers in peer reviewed journals on biodiversity, ecosystem function, or sustainable natural resource use</p> <p>1.2 By end year 3, limits of sustainable use identified and jointly agreed by authorities and stakeholders in target areas</p>	<p>Web-based journal databases</p> <p>Technical reports</p> <p>Mid-term and final evaluation reports</p>	<p>Communities are willing to share information on resource use</p> <p>Sustainable levels of use can be identified and agreed by stakeholders</p>
<p>2. Protected area management authorities and communities empowered to undertake natural resource monitoring</p>	<p>2.1 By end year 1, Community Monitoring Task Force established</p> <p>2.2 By end year 1, 24 community monitors selected and trained in simple monitoring techniques</p> <p>2.3 By end year 2, on-the-job training provided for all staff assigned to the project by in-country partners</p> <p>2.4 By end year 3, two experience sharing trips undertaken by park ecologists</p>	<p>Meeting minutes and Terms of Reference for Task Force and CMTs</p> <p>Annual progress reports</p> <p>Trip reports</p> <p>Mid-term and final evaluation reports</p>	<p>International and national technical expertise and knowledge applicable to local context in target areas</p> <p>Community staff have sufficient level of knowledge to participate in training</p>
<p>3. Participatory natural resource monitoring developed under CBNRM</p>	<p>3.1 By end year 1, monitoring plans and indicators and data collection protocols developed for key natural resources and threats</p> <p>3.1 By end year 2, baseline data collected</p> <p>3.3 By end year 3, monitoring plan implemented</p> <p>3.4 By end year 3, adaptive management of</p>	<p>Stakeholder workshop reports</p> <p>Monitoring programme manual, reports and databases</p> <p>Mid-term and final evaluation reports</p>	<p>Simple indicators can be developed for community-based monitoring</p> <p>CBNRM agreement(s) signed between communities and authorities as per GMPs</p> <p>Communities are willing to engage in self-monitoring activities</p>

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	CBNRM being undertaken in focal target communities		
<p>4. Awareness of the (i) links between conservation of biodiversity and sustainable natural resource use and (ii) role of participatory natural resource monitoring under CBNRM raised nationally in Ethiopia and internationally</p>	<p>4.1 By end quarter 1, project initiation workshop held with all project partners to develop MoUs</p> <p>4.2 By end year 1, Project Steering Committee (PSC) established and meeting twice yearly</p> <p>4.3 By end year 1, project webpage developed and linked with in-country and international partner websites (updated in year 2 and year 3)</p> <p>4.4 All years, technical reports and publications distributed to communities, government, university libraries, and partners (also local exhibits as per Output 1) and internationally via websites (above) and scientific literature (papers as per Output 1)</p> <p>4.5 In year 2 and year 3, six public meetings held by FfE to raise national profile of the project (Changed to production of documentary film at the end of year four)</p> <p>4.6 By end year 3, presentation of project outputs at international conference (e.g. SCB) and final project workshop held</p>	<p>Workshop report and MoUs</p> <p>Annual progress reports</p> <p>PSC meeting minutes</p> <p>Internet / websites (e.g. <a href="http://www.balemountains.org">www.balemountains.org</a>)</p> <p>Technical reports, publications, presentations</p> <p>Seminar proceedings</p> <p>Conference proceedings</p>	<p>Partners and other stakeholders remain engaged in PSC and other project activities</p> <p>FfE can engage a sufficiently wide range of stakeholders</p> <p>Abstract accepted by SCB</p>

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>Activities (details in work plan)</p> <ol style="list-style-type: none"> <li>1.1. Liaise with partner organisations and CBRNM projects to obtain information on natural resource use and resource users</li> <li>1.2. Conduct participatory rapid assessment of the limits of sustainable use for key resources in each target area</li> <li>1.3. Undertake participatory mapping of key resources in each area by communities and relevant authorities</li>   <li>2.1. Establish structures for communities to monitor their own natural resources</li> <li>2.2. Provide training opportunities to project staff and partner</li> <li>2.3. Organise experience sharing trip for park ecologists to other participatory and community-based natural resource monitoring projects (in ET or internationally as appropriate)</li>   <li>3.1. Identify appropriate community-based monitoring approaches (protocols) to natural resource monitoring in target areas</li> <li>3.2. Develop monitoring plan for community-based natural resource monitoring systems for target areas</li> <li>3.3. Implement monitoring plan</li> <li>3.4. Create feedback mechanisms for incorporating monitoring into adaptive management of CBRNM</li>   <li>4.1. Organise and run project initiation workshop to agree project monitoring indicators and monitoring and evaluation plan, work plans and to develop MOUs with project partners</li> <li>4.2. Organise and hold twice yearly Project Steering Committee (PSC) meetings</li> <li>4.3. Promote awareness of the project and its goals locally, nationally, and internationally</li> <li>4.4. Disseminate project results and lessons learnt</li> </ol>			

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>Monitoring activities:</p> <p><b>Indicator G1a:</b> Baseline and on-going field data collected on ecological and natural resource 'targets'- as per The Nature Conservancy's Conservation Action Planning (<i>TNC CAP</i>) terminology. Targets to be identified under A3.1 and specific methodology and timeframes to be developed under 3.2.</p> <p><b>Indicator G1b:</b> Household surveys, key information interviews, and focus group discussions to monitor socio-economic 'targets' (Targets, methods, and timeframes to be determined as above)</p> <p><b>Indicator P1 and P2:</b> Capacity and effectiveness assessments in Year 1 (baseline) and Year 3 as per METT CCA Management Effectiveness Tracking Tool) scores</p> <p><b>Indicator P3:</b> Community awareness and attitude surveys in Year 1 (baseline) and Year 3</p> <p><b>Indicator 1.1:</b> Database of relevant publications updated regularly</p> <p><b>Indicator 1.2:</b> Data from all studies and copies of papers, reports filed in EWCA library and local park or government offices/libraries.</p> <p><b>Indicator 2.1:</b> Minutes from all meetings taken and filed in park and government offices/libraries.</p> <p><b>Indicator 2.2, 2.3, 2.4:</b> Reports from all training courses and experience sharing trips written and filed in park and government offices/libraries.</p> <p><b>Indicator 3.1:</b> Workshop reports written and filed in park and government offices/libraries.</p> <p><b>Indicator 3.2 and 3.3:</b> as per G1a and G1b</p> <p><b>Indicator 3.4:</b> Meeting minutes from CMTF and CNRMF (or other community NR management forum as appropriate) filed in park and government offices</p> <p><b>Indicator 4.1:</b> Workshop reports written and filed in park and government offices/libraries.</p> <p><b>Indicator 4.2:</b> Minutes from all meetings taken and filed in park and government offices/libraries.</p> <p><b>Indicator 4.3:</b> Website updated regularly</p> <p><b>Indicator 4.4:</b> Database of reports, publications and recipients updated regularly</p> <p><b>Indicator 4.5:</b> Minutes from all meetings taken and reported on FfE and project websites as well as in park and government offices.</p> <p><b>Indicator 4.6:</b> Conference proceedings obtained and workshop report written and filed in park and government offices/libraries.</p>			



## Annex 3 Project contribution to Articles under the CBD

### Project Contribution to Articles under the Convention on Biological Diversity

Article No./Title	Project %	Article Description
6. General Measures for Conservation & Sustainable Use		Develop national strategies that integrate conservation and sustainable use.
7. Identification and Monitoring	15	Identify and monitor components of biological diversity, particularly those requiring urgent conservation; identify processes and activities that have adverse effects; maintain and organise relevant data.
8. In-situ Conservation	10	Establish systems of protected areas with guidelines for selection and management; regulate biological resources, promote protection of habitats; manage areas adjacent to protected areas; restore degraded ecosystems and recovery of threatened species; control risks associated with organisms modified by biotechnology; control spread of alien species; ensure compatibility between sustainable use of resources and their conservation; protect traditional lifestyles and knowledge on biological resources.
9. Ex-situ Conservation		Adopt ex-situ measures to conserve and research components of biological diversity, preferably in country of origin; facilitate recovery of threatened species; regulate and manage collection of biological resources.
10. Sustainable Use of Components of Biological Diversity	50	Integrate conservation and sustainable use in national decisions; protect sustainable customary uses; support local populations to implement remedial actions; encourage co-operation between governments and the private sector.
11. Incentive Measures	15	Establish economically and socially sound incentives to conserve and promote sustainable use of biological diversity.
12. Research and Training	W	Establish programmes for scientific and technical education in identification, conservation and sustainable use of biodiversity components; promote research contributing to the conservation and sustainable use of biological diversity, particularly in developing countries (in accordance with SBSTTA recommendations).
13. Public Education and Awareness	10	Promote understanding of the importance of measures to conserve biological diversity and propagate these measures through the media; cooperate with other states and organisations in developing awareness programmes.
14. Impact Assessment and Minimizing Adverse Impacts		Introduce EIAs of appropriate projects and allow public participation; take into account environmental consequences of policies; exchange information on impacts beyond State boundaries and work to reduce hazards; promote emergency responses to hazards; examine mechanisms for re-dress of international damage.
15. Access to Genetic Resources	U	Whilst governments control access to their genetic resources they should also facilitate access of environmentally sound uses on mutually agreed terms; scientific research based on a country's genetic resources should ensure sharing in a fair and equitable way of results and benefits.

<b>Article No./Title</b>	<b>Project %</b>	<b>Article Description</b>
16. Access to and Transfer of Technology		Countries shall ensure access to technologies relevant to conservation and sustainable use of biodiversity under fair and most favourable terms to the source countries (subject to patents and intellectual property rights) and ensure the private sector facilitates such assess and joint development of technologies.
17. Exchange of Information		Countries shall facilitate information exchange and repatriation including technical scientific and socio-economic research, information on training and surveying programmes and local knowledge
19. Bio-safety Protocol		Countries shall take legislative, administrative or policy measures to provide for the effective participation in biotechnological research activities and to ensure all practicable measures to promote and advance priority access on a fair and equitable basis, especially where they provide the genetic resources for such research.
Other Contribution		Smaller contributions (e.g. of 5%) or less should be summed and included here.
Total %	100%	Check % = total 100

## Annex 4 Standard Measures

Code	Description	Totals (plus additional detail as required)
<b>Training Measures</b>		
1a	Number of people to submit PhD thesis	1
1b	Number of PhD qualifications obtained	
2	Number of Masters qualifications obtained	
3	Number of other qualifications obtained	
4a	Number of undergraduate students receiving training	1
4b	Number of training weeks provided to undergraduate students	
4c	Number of postgraduate students receiving training (not 1-3 above)	
4d	Number of training weeks for postgraduate students	
5	Number of people receiving other forms of long-term (>1yr) training not leading to formal qualification( i.e. not categories 1-4 above)	
6a	Number of people receiving other forms of short-term education/training (i.e. not categories 1-5 above)	
6b	Number of training weeks not leading to formal qualification	
7	Number of types of training materials produced for use by host country(s)	
<b>Research Measures</b>		
8	Number of weeks spent by UK project staff on project work in host country(s)	8
9	Number of species/habitat management plans (or action plans) produced for Governments, public authorities or other implementing agencies in the host country (s)	
10	Number of formal documents produced to assist work related to species identification, classification and recording.	
11a	Number of papers published or accepted for publication in peer reviewed journals	
11b	Number of papers published or accepted for publication elsewhere	
12a	Number of computer-based databases established (containing species/generic information) and handed over to host country	
12b	Number of computer-based databases enhanced (containing species/genetic information) and handed over to host country	
13a	Number of species reference collections established and handed over to host country(s)	
13b	Number of species reference collections enhanced and handed over to host country(s)	
<b>Dissemination Measures</b>		

14a	Number of conferences/seminars/workshops organised to present/disseminate findings from Darwin project work	4
14b	Number of conferences/seminars/ workshops attended at which findings from Darwin project work will be presented/ disseminated.	1
15a	Number of national press releases or publicity articles in host country(s)	
15b	Number of local press releases or publicity articles in host country(s)	
15c	Number of national press releases or publicity articles in UK	
15d	Number of local press releases or publicity articles in UK	
16a	Number of issues of newsletters produced in the host country(s)	
16b	Estimated circulation of each newsletter in the host country(s)	
16c	Estimated circulation of each newsletter in the UK	
17a	Number of dissemination networks established	2 (National and Regional PFM)
17b	Number of dissemination networks enhanced or extended	
18a	Number of national TV programmes/features in host country(s)	
18b	Number of national TV programme/features in the UK	
18c	Number of local TV programme/features in host country	
18d	Number of local TV programme features in the UK	
19a	Number of national radio interviews/features in host country(s)	
19b	Number of national radio interviews/features in the UK	
19c	Number of local radio interviews/features in host country (s)	
19d	Number of local radio interviews/features in the UK	
<b>Physical Measures</b>		
20	Estimated value (£s) of physical assets handed over to host country(s)	
21	Number of permanent educational/training/research facilities or organisation established	
22	Number of permanent field plots established	
23	Value of additional resources raised for project ( <i>See Section 8.2 above</i> )	
<b>Other Measures used by the project and not currently including in DI standard measures</b>		
	Produced GMTT for CBNRM	
	Developed CBM techniques	

## Annex 5 Publications

Type	Title	Author	Year	Publisher	Available from
Documentary film	Guassa - People and Nature	Rohbot promotion (production)	March 2013	FZS, Darwin Initiative and EU	FZS Ethiopia P. O. Box 100003, Addis Ababa, Ethiopia Tele +251 116518760 fzsethiopia@fzs.org
Experience sharing Report	Namibia Community-based Wildlife Monitoring Experience sharing	Dereje Tadesse	Sep 2010	Darwin Initiative, EU and FZS	FZS Ethiopia
Training report	Participatory Rural Appraisal Methods and Tools:	Legesse Tafa	May 2010	FZS, EU and DARWIN Initiative	FZS Ethiopia
Workshop Proceeding	Annual National Participatory Forest Management (PFM) Working Group Meeting Theme: Participatory Resource Monitoring: Practices and Experiences	Zealelem Temesgen	Feb 2010	FZS, Darwin Initiative, EU and Ministry of Agriculture	FZS Ethiopia
Workshop Proceeding	National Consultation Workshop on the Draft Forest Regulation	Legesse Tafa	Feb 2010	Ministry of Agriculture, GIZ, Farm Africa, SOS Sahel, NTFP-PFM, FZS, Darwin Initiative,	FZS Ethiopia
Report	Project Mid-term Review	Robert Malpas & Abebe Haile	June 2011	EU, FZS and DI	FZS Ethiopia
Technical Tool	CBNRM governance and management tracking tool	Dereje Tadesse	Jan 2013	FZS, DI and EU	FZS Ethiopia
Annual and half-year report			2009, 2010, 2011, 2012		

## Annex 6 Darwin Contacts

<b>Ref No</b>	17-007
<b>Project Title</b>	Building natural resource monitoring capacity in Ethiopia's key Afro-montane ecosystems (CAMP- Community Afro-montane Monitoring Project)
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