

Final Completion Report - GR-000012568

Organization Legal Name Oxford University

Project Title Biodiversity-Friendly Futures for Ethiopia's Afroalpine Ecosystem

Grant Number 63410

CEPF Hotspot Eastern Afromontane

Strategic Direction Mainstream biodiversity into wider development policies, plans and projects to deliver the co-benefits of biodiversity conservation, improved local livelihoods and economic development in priority corridors.

Grant Amount \$99,966.00

Project Start Date 1/1/2014

Project End Date 7/31/2017

SUMMARY QUESTIONS

Implementation Partners for this Project

Amhara Region, Forest and Wildlife Development & Protection Authority (previously Bureau of Tourism, Culture and Parks Development, BoTCPD): EWCP operates in North Ethiopia under an agreement with the regional government. Main project partner; directly involved with planning and implementation, facilitating legal letters and permits to operate across the project sites.

Zonal Governments, specifically Energy Departments and Environmental Protection Land Administration and Use Departments (EPLAUD). Zonal governments facilitated the implementation of EWCP activities and provided expertise on sustainable alternatives (fuel saving stoves and solar lanterns).

Waredas (councils), kebeles (peasant associations) and local communities: actively involved with local implementation including selection of beneficiaries, organization of committees, management of subsidises, and overall supervision; main collaborators were kebele chairmen and woreda/kebele experts from Microfinance, Mining and Energy, Animal Husbandry Natural, Environment and Women Affairs offices (examples: Farta Woreda Mining and Energy office; Gubalafto Woreda Animal Husbandry & Environment offices).

Schools, Nature Clubs and teachers: teachers and Nature Club coordinators directly involved in education and awareness activities in target schools: Kebero Meda in Gubalaftu Wareda, Gicha Beret in Delanta Wareda, and Kimir Dingay in Mt Guna.

GIZ Energy Coordination Office: GIZ works in Ethiopia on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) to improve the energy sector in Ethiopia and to increase access to modern energy technologies and/or services by low income households and small enterprises. The Regional Manager based in Bahar Dar and other staff provided general advsie about fuel- saving stove and solar lanterns (e.g. acquisition of materials), conducted initial training for stove producers, and helped developed the marketing approach.

ORDA (Organization for Rehabilitation and Development in Amhara) and Guna Highland Water (local enterprise that bottles water from springs in Mt Guna). Main partners in Mt Guna, helping with logistics, coordination of community meetings and education work, during the first stages of the project. Soon after ORDA and Guna Highland Water interrupted their operations in the area (the latter due legal issue regarding the quality of the plastic bottles). Our team maintained close connections with local communities, crucially through the local Wolf Ambassador, and worked closely with the Amhara government, and the creation of the Guna Community Conservation Area.

Summarize the overall results/impact of the project

This project focused on 3 KBAs areas to demonstrate the need for biodiversity-friendly futures and to promote local initiatives that lead to the protection of natural resources while improving local livelihoods. To do this we used the Ethiopian wolf as flagship for conservation, as they represent healthy Afroalpine ecosystems and the benefits that conservation can bring to the communities in the highlands of Ethiopia. The project promotes the protection of biodiversity components that are relevant for wolves and people alike, including grasses and bushes that provide fodder, firewood and that regulate water, and sustain populations of highland rodents, the main prey of the endemic Ethiopian wolf.

We successfully implemented project activities designed to tackle three factors limiting the potential for Afroalpine conservation in Ethiopia, namely: a) poor environmental awareness; b) lack of biodiversity-friendly alternatives and c) unsustainable use of firewood and other natural resources.

The project increased *environmental awareness* by supporting teachers and student at schools (providing education materials and training for teachers; financing local conservation projects for Nature Clubs in 3 target schools); organizing experience-sharing trips for members of the local communities to visit similar areas with successful conservation measures (e.g. Guassa Menz Community Conservation Area); involving local people in local environmental assessments, when they observed and recorded the status of natural sources in their KBAs (fodder, firewood, building materials and water).

With enhanced environmental awareness, and the results of local environmental assessments and firewood consumption surveys, Phase I culminated with *participatory consultations* to identify biodiversity-friendly alternatives to the overexploitation of natural resources in the KBAs. Support and commitment for Phase II (implementation of these alternative approaches) was achieved by successful involvement of government agencies, responsible for land use planning, and local communities and governments, involved in the day to day decisions about natural resource uses, throughout the project.

Fuel-saving stoves were recognized as an important palliative for unsustainable firewood collection, with a model of local production that would improve local livelihoods and ensure long-term

sustainability. *Bee keeping* was the other selected option with direct benefits for both the producers and the conservation of natural habitats with valuable plants for honey production, crucially Erica moorlands and forests threatened by firewood extraction. The third approach, the "*Guassa gardens*", involved planting this valuable grass species around homesteads and in between fields, with positive impacts on household economy and soil conservation, and reducing the need to exploit natural grasslands.

In total, 28 families from 6 kebeles in 4 waredas are directly benefiting from the production and commercialization of fuel saving stoves; 72 households are benefiting by planting *guassa* tussocks in 4 kebeles from 4 waredas; and 49 families are keeping bees in 5 kebeles from 4 waredas. We expect Afroalpine ecosystems, and the services they provide, to be better protected as a result of the additional sources of income in the local communities, reduced harvest of wild firewood and grasses, and increased interest in protecting natural habitats for bees.

Describe the success or challenges of the project toward achieving its short-term and long-term impacts.

The long-term impacts expected are by definition outside the lifetime of the project. For example, it would take several years to demonstrate changes in the status of natural resources as a result of the livelihood initiatives implemented. This would remain a major limitation but we did identify indications of progress and evidence of short-term impacts.

Activities designed to affect people's perceptions of the consequences of environmental degradation in their local areas most likely increased their understanding of the benefits that biodiversity conservation can provide. School children increased their knowledge of environmental topics through learning (e.g. facilitated by purposely-design manual with tools for teachers) and with Nature Clubs projects (e.g. tree planting and "guassa gardens" were particularly successful in demonstrating direct benefits as the revenue was used to improve the school building). The involvement of local communities in natural resource assessments and experience-sharing trips promoted positive attitudes during the stakeholders meeting (end of Phase I) and support with the implementation of alternative livelihood options (Phase II).

The model of micro-enterprises to produce fuel-saving stoves was a success. Cooperatives (mostly formed by women) were already making profit by the end of the project. In turn, the local people that embraced this fuel-efficient alternative for cooking, lighting and heating, reported a reduced need for natural firewood (and less time collecting firewood) and health benefits due less smoke inside the houses and reduced risk of burning. People also perceived the positive effects of guassa planting in the environment, reporting enhanced soil moisture retention in and around "guassa gardens", particularly after a dry year in Delanta-Gubalaftu.

Ethiopia's socio-cultural landscape posed some challenges. An intricate traditional approach to achieving consensus required that diverse government officials and community leaders were involved at all stages, and extensive paperwork. The EWCP team was well-prepared for this challenge (due to previous work in the KBAs, good contacts and understanding of public relations), and could tuned it into an opportunity. For example, extensive consultations led to innovative approaches to implementing the alternative livelihoods, such as the creation of cooperatives and committees supervised by local leaders and government experts. We believe that these innovative

approaches are contributing to ensure continuity and increase the chances of achieving the longlasting impacts set out at the start of the project.

Were there any unexpected impacts (positive or negative)?

To some extent, we were surprised to learn that many communities and local governments were already aware and concerned about the environmental consequences of intense exploitation of natural resources in these KBAs, and already interested in sustainable alternatives. Opportunities to develop these alternatives were, on the other hand, non-existent. As a result, communities welcomed the support and guidance that the project provided, and officers from local governments embraced the opportunity to contribute with their technical knowhow.

Due to the direct engagement of local government officers and community leaders in the formation of cooperatives and committees, there will be continued coordination and supervision of the livelihood programmes started in the KBAs. By providing opportunities for various stakeholders to become directly involved, our project cemented systems that will ensure continuity, and possibly expansion, of these sustainable models.

Another unexpected impact was the crucial role that the project played in the consolidation of a protected area in Mt Guna in 2017. ORDA had been supporting the demarcation of a community conservation area but, unintentionally, created negative feelings among local communities that perceived their access to communal land threatened. Soon after ORDA interrupted their operations in Mt Guna. The team worked hard to surpass this emerging conflict and re-gained confidence and support for the project activities. In doing, the project also contributed to the efforts led by the Amhara regional government for the creation of th Guna Community Conservation Area. This is a great achievement for EWCP, which has worked in Mt Guna for over 15 years and now promotes this as a potential site for re-introduction of Ethiopian wolves. The conservation area is already showing its fruits with improved condition of pastures and water sources. In this context, our project provided timely opportunities for sustainable uses to flourish, contributing additional evidence of the benefits of Afroalpine conservation.

Describe and submit any tools, products or methodologies that resulted from this project or contributed to the results.

From our experience with communities and local governments we developed practical protocols for the implementation of alternative livelihoods/ sustainable uses, including mechanisms for the selection of beneficiaries, the development of subsidies, supervision and control. Using these protocols EWCP is now expanding the livelihood initiative to two other Afroalpine areas: Borena-Sayint National Park in South Wollo and Arsi Montains National Park in Oromia.

We developed and tested a protocol for local communities to assess the condition of natural resources in their Afroalpine areas, using simple forms and observational methods (appended). We produced information leaflets about fuel efficient alternatives to the use of firewood (appended), a teachers' manual to support environmental conservation (appended), and leaflets about Afroalpine conservation and about diseases affecting people and wildlife (appended), targeting local communities and distributed widely during the education campaigns.

Electronic versions of these materials have been submitted alongside previous online reports.

FINAL IMPACTS

Long Term impacts

Environmental awareness increases in schools and local communities in 3 KBAs (Mt Guna, Gubalafu-Delanta and Mt Choke) and as a result communities value and protect their natural resources.

Result: Awareness reached the targeted number of school and communities. The expected long-term impacts, however, are by definition outside the lifetime of this project. We detected indications of progress towards achieving short term impacts (see Short Term impacts below).

Local communities from 6 waredas across the 3 KBAs understand environmental problems and the benefits of biodiversity conservation and seek alternative livelihoods or adapt current resources uses to make them more sustainable, with support from civil societies

Result: Awareness reached communities in all 3 KBAs; the expected number of households became involved in alternative livelihood programs. The long-term impacts are by definition outside the lifetime of this project but we detected signs of progress towards achieving short term impacts (see Short Term impacts below).

Over exploitation of sources of firewood, natural pastures and swamps averted in 6 waredas in Mt Guna, Gubalaftu-Delanta, and Mt Choke; ecosystems services are maintained and populations of key species such as endemic rodents and Ethiopian wolves stop declining.

Result: It would take several years to demonstrate changes in the status of wildlife and natural resources as a result of the livelihood initiatives implemented. These long-term impacts fall outside the lifetime of this project, but indications of progress towards achieving short term impacts were evident (see Short Term impacts below).

Short Term impacts

Alternatives for biodiversity-friendly and sustainable livelihoods are considered and consented by stakeholders

Result: By the end of Phase I the project successfully involved all relevant actors. Representatives of key stakeholders participated in the Phase I final meeting, where they expressed their support and commitment for more sustainable alternatives to the overexploitation of Afroalpine natural resources. We assume that the initial awareness work (self-assessments local of natural resources, experience -sharing trips, workshops for teachers, Wolf Ambassadors and community guards) contributed to this positive attitudes during the stakeholders meeting. The commitment and willingness to participate was further demonstrated in Phase II and with the successful implementation of the sustainable livelihoods programmes.

Local communities in 10 kebeles in Mt Guna and Delanta-Gubalaftu benefits from fuel-saving alternatives for cooking, lighting and heating, thus reducing pressure upon natural sources of firewood by the end of the project. *In Phase II a third site, the Mt Choke KBA, was added.

Result: By the end of the project 28 families from 6 kebeles in 4 woredas are directly benefiting from the production and commercialization of fuel saving stoves; 72 households are benefiting by planting guassa tussocks in 4 kebeles from 4 woredas; and 49 families are keeping bees in 5 kebeles from 4 woredas. People who started using fuel-saving stoves for cooking, lighting and heating reported a reduced need for natural firewood and spending less time collecting firewood (particularly the women) –from interviews. They also reported health benefits due less smoke inside the houses and lower risk of burning (particularly among women).

School children, local communities and local governments across 6 waredas in Mt Guna, Delanta-Gubalaftu and Mt Choke perceive the consequences of environmental degradation in their own areas and understand the potential benefits of biodiversity conservation by the end of the project.

Result: It is difficult to prove that people developed a better understanding of the consequences of environmental degradation and of the benefits of biodiversity conservation as a result of our activities, but indicators that this is the cases included: schools children gained new knowledge about Afroalpine environmental issues through learning (as tested with questionnaires) and Nature Clubs projects (e.g. financial benefits from growing guassa used to improve the school building); communities and local governments actively participated of the livelihood programme and perceived some benefits to their economies and to the environment (e.g. fuel-saving stove producers making a profit; guassa growers benefiting from soil moisture retention). In Mt Guna in particular, initially hostility towards the creation of protected areas was reverted, likely influenced by the success of other Afroalpine community conservation areas that some member of the local communities had the opportunity to visit.

*Note: the form also ask for "Key indicators" (also the Impact Report offline) but these were not stated in the original proposal, and are probably a later addition for subsequent calls.

FINAL DELIVERABLES

1.1 Community experience sharing and local environmental assessments

Summary of Results: experience-sharing trips to Guassa Menz Community Conservation Area and Aboi Gara implemented (see previous reports)

2.1 Wolf Ambassadors and other selected members of the communities in Mt Guna and Delanta-Gubalaftu (total 8) are trained on environmental assessments, including wolf monitoring, by the end of the project; reports.

Summary of Results: Wolf ambassadors in Mt Guna, Delanta and Gubalaftu selected (3 in total), trained and working in the area till today. Members of local governments and teachers were trained on environmental assessments and implemented them with the communities (see previous reports)

3.1 Children in four schools receive environmental education and materials

Summary of Results: the four target schools were visited throughout the life of the project and their teachers received manual and training (annual teacher's s workshops) (see previous reports).

4.1 Local conservation projects involving natural resources in 4 Nature Clubs in Mt Guna and Delanta-Gubalaftu by March 2015

Summary of Results: Nature Clubs in all four target schools implemented at least one local conservation project in the school compound (e.g. tree-planting, guassa planting) (see previous reports).

5.1 List of options to avoid over-exploitation ranked and agreed by stakeholders and proposals for natural resources management or alternative livelihoods by May 2015

Summary of Results: list of alternative options developed; presented and discussed during the stakeholders meeting (end of Phase I); options were debated, ranked and general agreement reached for implementation (Phase II)

6.1 Socio-economic and ecological assessment of firewood demand

Summary of Results: firewood consumptions surveys conducted and presented during the stakeholder's meeting at end of Phase I (see previous reports).

7.1 One local stove producer establish in each area by January 2015

Summary of Results: achieved (see previous reports).

8.1 People from 10 kebeles in Mt Guna and Gubalaftu-Delanta informed of fuel saving strategies by February 2015 and at least 10 households per kebele acquires fuels saving and solar lanterns stoves by the end of the project.

Summary of Results: Fuel-saving approaches discussed alongside environmental education with schools and communities in all 3KBAs (see previous reports). By the end of the project, 510 households purchased a fuel-saving stove from the six cooperatives of producers established by this project.

9.1 One additional local stove producer establish in Delanta/Gubalaftu by July 2016 One additional local stove producer establish in Mt Guna by July 2016. Two stoves producer establish in Mt Choke by January 2017

Summary of Results: By the end of the project 28 individuals organized in 6 cooperatives were producing and commercializing fuel-saving stoves across the 3 KBAs.

10.1 Demonstrations at local markets, expected to reach to people from 6 kebeles in Mt Guna and Gubalaftu-Delanta; 3 kebeles in two waredas in Mt Guna, and 4 kebeles in two waredas in Mt Choke (throughout the project).

Summary of Results: demonstrations were conducted in local markets strategically located across the 3 KBAs, thus reaching people from at least 10 kebeles in each area (see previous reports)

11.1 Honey production brings supplementary revenue to 50 households, and renewed interest on the protection of remnant Erica forests among local communities (potentially reaching forests in 4 kebeles).

Summary of Results: 49 families received training, bee hives and founding bee colonies in 5 kebeles from 4 woredas (first honey harvest not before next year).

12.1 50 households in Delanta/Gubalaftu and 20 in Mt Guna harvest 'guassa' from their own homestead plots by the end of the project.

Summary of Results: 72 households had planted guassa tussocks in their homesteads or agriculture fields in 4 kebeles from 4 woredas.

BENEFITS TO COMMUNITIES

Name of Community			Characteristics	Type of benefit
Area	Woreda	Kebele		
Gubalaftu	Gubalaftu	Key-Amba	local community	Wolf Ambassador
Gubalaftu	Gubalaftu	Sokolo	local community	Wolf Ambassador
Delanta	Wogeltena	Kembeh	local community	Wolf Ambassador
Mt Guna	Farata	Moksgi	local community	Wolf Ambassador
Mt Choke	Sinan	Abezashe	local community	fuel-saving stove production
Delanta	Delanta	Kembeh	local community	fuel-saving stove production
Mt Guna	Farata	Sorase	local community	fuel-saving stove production
Gubalafto	Gubalafto	Kay Amba	local community	fuel-saving stove production
Gubalafu	Gubalafto	Key Amba	local community	guassa gardens
Delanta	Delanta	Kembeh	local community	guassa gardens
Mt Guna	Farta	Soras	local community	guassa gardens
Delanta	Delanta/ Angot	Sokolo	local community	guassa gardens
Delanta	Delanta/ Angot	Kembeh	local community	bee keeping
Mt Guna	Guna	Mokesh	local community	bee keeping
Mt Guna	Guna	Soras	local community	bee keeping
Mt Guna	Guna	Arga	local community	bee keeping
Mt Guna	Guna	Mokesh	local community	bee keeping
Gubalaftu	Gubalafto	Key Amba	local community	bee keeping
Delanta	Delanta/Angot	Sokolo	local community	bee keeping

OTHER FUNDING

Total Amount of Additional Funding (\$USD): 90,247

Type of Funding

A Project Co-financing (other donors or your organization contribute to the direct costs of the project)

AWF (African Wildlife Foundation): \$USD 15,116 *

PTES (People's Trust for Endangered Species): \$USD 11,024 *

St Louis Zoo: \$USD 2,050 * **EWCP in-kind:** \$USD 62,057

*Details below

B Grantee and Partner Leveraging (other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF funded project)

After CEPF project EWCP obtained funds from Fondation Segre to expand the livelihoods programme to Borena-Sayint National Park (South Wollo, Amhara) and Arsi Mountains National Park (Arsi, Oromia), as part of a 3-years project to support these two new protected areas (total budget ~ Euros 460,000)

C Regional/Portfolio Leveraging (other donors make large investments in a region because of successes related to the project)

The project indirectly contributed to the creation of the Guna Community Conservation Area, with support from the Amhara Region; ongoing plans to develop a Community Conservation Area in Mt Choke

AWF:

North Ethiopia Education Officer	\$4,797
North Ethiopia Monitoring Officer	\$4,399
Wolf Ambassadors stipend x 10	\$1,200
Field clothing for counterparts x 10	\$1,000
Field clothing for Wolf Ambassadors x 10	\$1,000
Stationery/Office equipment	\$100
Postage	\$100
Local travel/accommodation	\$320
Field visits - North Wollo	\$2,200

PTES:

Staff costs	Wolf Ambassadors monthly stipend x 6	\$ 2,869.71
	Data coordinator and analyst monthly stipend	\$ 1,195.71
	camp guards perdiems, 3 field seasons, 30 field days	\$ 199.29
Field equipment	Rodent traps	\$ 620.00
	Binoculars	\$ 248.00
	GPS hand-held units	\$ 124.00
Travel	PI international flights, 3 visits, incl travel insurance	\$ 1,581.00
Subsistence	field perdiems EWCP Monitoring and Education Officers	\$ 494.23
	town perdiems EWCP Monitoring and Education Officers	\$ 245.79
	field per diems 2 Field Assistant field seasons	\$ 329.49
	town (travelling) per diems 2 Field Assistants town perdiems communities and government	\$ 163.86
	representatives meetings x 8	\$ 553.02
Consumables	Various	\$ 553.57
Reports		
	printing, 3 different reports, 50 copies	\$ 431.79
	printing threat report forms	\$ 221.43
Administration	internet access Data coordinator (50% time)	\$ 1,195.71

St Louis:

^{*}Details project Co-financing

OTHER INFORMATION

Describe any lessons learned during the design and implementation of the project, including any related to organizational development and capacity building.

Lessons learned throughout the life of the project were extensively discussed at various stages of project reporting (view previous reports). Among the main ones, of interest to CEPF, was that the most effective collaborations to promote conservation in Ethiopia were those involving communities and local governments (rather than civil organizations); these took advantage of existing expertise within local governments (woredas and kebeles) and helped articulating the roles of the various players. We also learnt the value interacting with GIZ staff at the early stages of the project, to acquire crucial knowledge particularly fuel-saving stoves and their production. The EWCP team also benefits from CEPF training courses on fundraising and project planning, with excellent results.

Summarize successes or challenges in ensuring the project will be sustained or replicated, including any unplanned activities that are likely to result in increased sustainability or replicability.

Examples of activities and best practices developed throughout the project have been presented in various previous reports. Among the steps towards achieving sustainability and replicability we can mention: participatory mechanisms to select, organize and supervise livelihood beneficiaries; livelihood committees that will supersede the life of the project; continued presence of EWCP staff Wolf Ambassadors in the KBAs in the future.

The micro-enterprises are becoming self-sustainable (the women's cooperative in Gubalaftu-Delanta produced and sold locally 200 stoves and received orders from another 150 people, not relying on subsidies anymore).

EWCP will continue the work started with CEPF funding, expanding the livelihoods programme in two other Afroalpine areas in Ethiopia with support from Fondation Segre.

Use this space to provide any further comments or recommendations in relation to the project or CEPF

Give your full contact details (name, organization, mailing address, telephone number, email address) below

Jorgelina Marino, DPhil

Research Fellow
Wildlife Conservation Research Unit, Zoology Department, University of Oxford
The Recanati-Kaplan Centre, Tubney House, Tubney, OX13 5QL, UK
+44 1865 611120
jorgelina.marino@zoo.ox.ac.uk
www.wildcru.org, www.ethiopianwolf.org

Upload any additional files that support the information provided here: Find attached a sample of activity reports (internal), meeting minutes, information materials and photos.