Conserving Angolan Scarp Forests: a Holistic Approach for Kumbira Forest

Project ID F01245015
We aim to apply a holistic conservation approach to ensure that examples of central escarpment forest and their biota persist, by: (1) working with local government in an attempt to establish a formal protected area, (2) working with local communities to find alternative, bird-friendly land uses, such as ecotourism, carbon sales and shade-coffee farming, (3) aiming to increase the amount of forest by starting a nursery for reforestation, and (4) raising awareness and appreciation for the environment through education.

Ninda Baptista, Michael S. L. Mills and Aimy Cáceres
birdsangola@gmail.com
www.kumbira.org
June 2018
PROJECT PARTNERS & COLLABORATORS

Administration of Conda: mainly Mr. Fernando Fonseca, Administrator, although a new administrator was appointed in late 2017. Mr. Fonseca organised and held a local government workshop on the conservation of Kumbira Forest, and applied to provincial government for land for conservation, with our input. He gave permission for the work of this project to be undertaken and presented a formal invitation (see Appendixes) to form an association for the protection of Kumbira Forest to our team.

Pedro Vaz Pinto, Fundação Kissama: input into local government workshop and general advisor.

Nito Rocha: private individual. Input into local government workshop and assistance with making local connections.

The Chief and leadership of Kumbira Village: granting permissions to work in the local community and school. Provided land for initial establishment of the nursery and helped identify candidates to be employed as nursery workers.

Kostadin Luchansky: Private individual. Aerial reconnaissance of the study area by drone.

Nursery workers: Albino, Avelino Frederico and Luís Baptista. Maintenance of nursery between project visits, and work on all parts of the nursery. Also 10 other villagers employed to establish the larger/expanded nursery.

Paula Reis and Dona Kikinha: local landowners at Kumbira. Helped with the facilitation of meetings with village elders. Hosting during some field trips.

Local coffee farmers: Mr. Mario Santos and Mr. Luis Araujo provided information on local coffee farming, allowed us to visit their working farm and coffee plantation (Fazenda Rio Uiri), and provided land for the expanded nursery and establishment of community campsite.

Gabela Agricultural Department: Mr. Miranda, head of the department, has offered to assist with developing local community coffee production.

A. P. Leventis Ornithological Research Institute: co-funder of the project.

1. ESSENTIAL DETAILS

SUMMARY

Due to the high biodiversity value of the central Angolan escarpment, importance of Kumbira Forest for Endangered endemic birds, and high human pressures on the remaining forests, Kumbira Forest is a major priority for conservation in Angola. The Kumbira Forest project aims to apply a holistic approach to forest conservation. Major objectives were to support local government in the establishment of a protected area, start to alter land-use patterns of local communities, initiate reforestation and improve local respect for the environment. We supported a conservation workshop held by the local administration of Conda, and have been invited to head up a local conservation association. The provincial government has granted 50 ha of land for a conservation project, through the Conda municipal administration; however, we realise that we need to complement this by securing private land. An area for a community campsite has been identified and coffee farming viability investigated. A nursery has been established growing native forest trees. And an environmental education programme was run among school children and adults. While we have taken significant steps in the conservation process, in practice the process is unfolding slower than hoped and quantifiable change is not especially evident yet.

INTRODUCTION

The central escarpment forests of Angola are recognised as a region of high biodiversity value, forming the core of the Western Angola Endemic Bird Area and holding the entire populations of three Endangered endemic bird species, namely Gabela Akalat *Sheppardia gabela*, Gabela Bushshrike *Laniarius amboimensis* and Pulitzer’s Longbill *Macrosphenus pulitzeri*. Surveys at 13 sites along the central escarpment identified Kumbira Forest as one of only two sites to hold populations of all three these species (Mills 2010). Additionally, a new primate species has been discovered at Kumbira, and bears its name Angolan Dwarf Galago *Galagoides kumbirensis* (Svensson et al. 2017).

Despite the high biodiversity value of the area, no portion of central escarpment forest falls within a conservation area. Local communities are rapidly clearing forests for subsistence agriculture and timber extraction. Destruction and degradation of these forests is negatively impacting local bird communities, including threatened endemics (Cáceres et al. 2014). The lack of a protected area, environmentally damaging land-use practices by local communities, lack of knowledge of alternative land-uses and poor environmental awareness are the main factors contributing to the problem.

This project aims to address environmental issues at Kumbira Forest. During the past three years our aim has been to move the project into a better position to ensure the long term survival of representatives of these forests, and their birds and other fauna and flora. Work was carried out in collaboration with the local communities (village of Kumbira), local
government (administration of Conda Municipality) and with involvement from Fundação Kissama, the leading conservation NGO in Angola.

We addressed a lack of environmental awareness by running an education programme among school children and adults. Alternative land use practices, such as shade coffee farming, were investigated, and plans to stimulate community-based tourism to the area discussed and partially implemented. We developed methods for the propagation of native forest trees, and have a functioning nursery with trees ready to be planted back into the wild; this employs three villagers. A local government workshop was held with the hope of establishing a formal conservation area and 50 ha has been granted by provincial government, but we realise that private land will also be needed and are investigating options for establishing a private conservation area too. We are currently in discussion with two international NGOs regarding funding for this, and have willing sellers of land.

**PROJECT MEMBERS**

**Aimy Cáceres** (PhD Biological Sciences, 35 years): Aimy spent several years living and studying birds in Angola, and completed her PhD in bird ecology and forest conservation at Kumbira Forest. She currently resides in Peru and works for Conservación Amazónica (ACCA) as the Director of Science. She was initially involved in all aspects of the work, but had to leave Angola due to the economic crisis.

**Kerllen Costa** (BSc Environmental Science, 32 years): Kerllen is an Angolan national with a strong interest in conservation and environmental science. He had limited prior field experience but is very experienced in working within the Angolan socio-political landscape. Kerllen came on board late in the project to help with the execution of most aspects of field work, which included assisting other participants and taking over their roles when they were no longer available to participate in the project. Kerllen has a contract working for the Okavango Wilderness Project of National Geographic in Angola and continues to work on bird conservation issues at Kumbira Forest and Mount Moco.

**Ninda Baptista** (MSc Biological Sciences, 30 years): Ninda is an Angolan national with years of field experience in Angola. She was initially involved in all facets of the project, and was the main project co-ordinator, but was offered a full time contract with the Instituto Superior de Ciências da Educação in Lubango, Angola, where she conducted field biodiversity surveys at several sites along the Angolan escarpment, including Kumbira. During the latter phase of this project she was mostly not available for field work.

**Sendi Baptista** (MSc Biological Sciences, 35 years): Sendi is an Angolan national with years of field experience in Angola. She was involved with the planning of the education programme and production of relevant materials. Sendi moved to Portugal, but continues to work with the Fundação Kissama on its environmental education projects, primarily through producing children’s environmental books on conservation issues in Angola. Her latest book, on Kumbira Forest, is currently in production.

**Michael Mills** (MSc Conservation Biology, 39 years): Michael has been working on Angolan bird conservation issues since 2005, with the support of The A. P. Leventis Ornithological Institute and in collaboration with the BirdLife Network. At the commencement of the project Michael was living in Angola and was going to be involved in all facets of the project, but had to leave for personal reasons. He is a freelance conservationist and bird tour guide who continues to work in Angola.

---

Figure 1. Location of Kumbira Forest in the Kwanza Sul province of Angola.
2. METHODS & RESULTS

AIM & OBJECTIVES

The greater Kumbira Forest Project aims to implement a holistic approach to conservation at Kumbira Forest, to ensure the long-term survival of at least part of the forest, and its fauna and flora. During this CLP-funded project we aimed to move the project forward on several fronts, specifically by (1) improving environmental awareness and trust for the project among local communities so that they are more amenable to implementing environmentally-friendly practices and more likely to alter behaviours that are detrimental to the environment, (2) investigating the suitability of, and local interest in, alternative land-use practices, such as shade-coffee farming and ecotourism, that are more environmentally friendly than current slash-and-burn practices, (3) supporting local government to hold a conservation workshop with the ultimate aim to establish and manage a formal conservation area within Kumbira Forest, and (4) establishing the means for future reforestation and habitat rehabilitation work by initiating a nursery growing native forest trees that also provides employment to members of the local community.

CHANGES TO ORIGINAL PROJECT PLAN

We adjusted project plans based on local government interest and input, and changes to team-member composition. Local government plans were adjusted based on provincial and national government interest, and we had to adjust our project accordingly. This included Conda administration wanting to establish a campsite, so we abandoned our plans for establishing a campsite to avoid a clash of interests. Later local government dropped its plans for a campsite, at which point it was too late to build a campsite as part of this project, although we have identified a location and gained permission to establish a community campsite on the land. For various reasons (outlined under team member profiles) the composition of team members changed massively during the project. We dealt with a loss of project staff by bringing on board Kerllen Costa to take most of the field work duties during the second half of the project, although he could not fully compensate for the loss of other team members. Consequently some tasks were partially completed, including a full assessment of the potential for shade coffee farming. The education programme was not as extensive as originally planned due to lack of staff.

METHODOLOGY

Objective 1. Support local government to establish a formal conservation area by holding a conservation workshop for and with local government, and raising the profile of Kumbira Forest nationally through media outputs.

We initially approached the administrator of Conda about the work, with the idea of holding a conservation workshop. The local municipality of Conda organised and held this workshop, and group members Aimy Cáceres and Ninda Baptista and colleague Pedro Vaz Pinto from the Fundação Kissama, attended the meeting and contributed with presentations. Provincial government authorities were present too. Ninda Baptista and Kerllen Costa used personal connections to publish a magazine article on Kumbira in TAAG/Angola Airline’s magazine, Austral, and give a radio interview regarding the conservation and tourism importance of Kumbira Forest on Rádio Luanda, respectively.

Objective 2. Start to alter land-use patterns to more forest-friendly alternatives, including ecotourism and shade-coffee farming, through community education, research of coffee markets and establishing a community campsite.

We surveyed local coffee producers and buyers regarding the coffee market and prices, and made contact with the national coffee institute at nearby Gabela for advice on local coffee growing. We also informally interviewed local villagers on their interest and willingness to switch to shade coffee farming. We discussed options for stimulating tourism with local administration, including identifying and training local guides and establishing a campsite. A website on Kumbira, to promote tourism, is being developed. An education programme was run in the local school and community as a whole, with a combination of storytelling, fun activities and informal discussion.

Objective 3. Initiate reforestation and potential carbon sales by establishing a nursery of native forest trees in collaboration with local communities.

Initially land for a nursery was granted by village authorities. The local chief identified two candidates to be employed. A simple shaded area with poles and palm leaves was established from local materials to provide shade. Small saplings of target species were collected from the forest and transplanted into black planting bags in the nursery. Nursery workers were asked to maintain the shade structure and water the plants weekly. Survival rates were monitored during visits. It was clear that nursery workers were not especially reliable, so discussions were held regarding the work. An additional, more reliable, nursery worker was added to the team. To expand the nursery it was relocated to an area with more space. Some of the trees are now ready for planting.
Objective 4. Improve local respect for the environment through an education programme for adults and children.

Permission was sought from local authorities to run an education programme in the local school. Permission was granted but no teachers volunteered or were identified to work with the team, so work was carried out independently. The team used a combination of storytelling, showing videos and fun educational activities for the kids. We plan to continue the education programme and have asked the administrators office to assist with assigning/finding a local collaborator.

Discussions were held with village leaders regarding the importance of the environment. At the beginning of the project there was significant resistance to the idea of changing practices, but towards the end there seemed to be a greater willingness and openness to new ideas. Discussions were kept informal because of the resistance shown initially.

OUTPUTS & RESULTS

Objective 1. Support local government and raise national awareness

All three indicators of success were achieved. One local government workshop was held regarding the conservation of Kumbira Forest, with provincial government representation and input from our team. This resulted in a proposal to provincial government for land for conservation, and 50 ha has just been granted (see Appendixes), although the exact details have not been made clear.

A radio interview was given by Kerllen Costa (February 2018, Rádio Luanda) and a magazine article was published by Ninda Baptista (Angolan Airlines TAAG magazine, Aug 2016). At least one more magazine article will be printed in late 2018 or early 2019.

Results of the project will be disseminated once this report is approved by CLP.

Objective 2. Land use patterns

Project indicators were partially achieved. A location for the establishment of a campsite was identified and permission to develop it received, but not in time to establish the campiste. This is largely due to local government initially planning to develop a campsite, at which point our plans were put on hold.

Alternative land uses have been discussed with local communities, and a willingness to shift to coffee farming has been indicated if appropriate training and advice can be found. The potential for local coffee farming is partly understood, but not as well as we would have liked.

The idea of using existing farming plots, rather than clearing additional forest for new plots, has been presented, but has not yet been applied.

Objective 3. Reforestation

Both project indicators were achieved: a pilot nursery has been established and at least four tree species are being successfully propagated. Due to a lack of space, the pilot nursery was moved and expanded. The nursery currently holds >700 plants, some of which are ready for planting. We also started to experiment with growing trees from seeds, although the results of this are not yet available.

Three nursery workers have an understanding of the process of growing trees and are being employed on a part-time basis. Plant survival was monitored between visits, and was about 75% per year. Higher survival rates can almost certainly be achieved with better care of the nursery, which is why a third, more responsible nursery worker was added to the team towards the end of the project.

Objective 4. Education

This was partly achieved; environmental education material was prepared and circulated through the local school. Several education sessions were run in the school, using a combination of storytelling, audiovisual aids and fun activities. However, no local collaborators for the education project could be found (none volunteered and local representatives were not willing to nominate any) and this may only happen if collaborators can be employed full-time. The administration of Conda has been approached regarding finding suitable candidates to work with the education team, and the administrator’s office has agreed to assist.

COMMUNICATION & APPLICATION OF RESULTS

Project results and progress have been reported to local administration through regular meetings during all field trips. A short summary has also been included into the Annual Report of the Angolan Association for Birds and Nature/Fundação Kissama, which has been disseminated through an Angolan Environmental Facebook group, and various email groups (including that of the African Bird Club) and online forums.

We plan to continue this work, and build on the successes achieved thus far. We have initiated discussions with potential donors for further funding, with the main aim of establishing and running a private conservation area within Kumbira Forest, and managing a community-based project around this. All aspects of this work will be further pursued, as opportunities present themselves.
MONITORING & EVALUATION

Beyond a list of Outputs and Results, detailed above, we did not specifically carry out monitoring or evaluation work. Most aspects of the work did not lend themselves to this, although admittedly some form of pre- and post-education campaign evaluation of attitudes could have been useful to measure the impact of the education campaign.

ACHIEVEMENTS & IMPACTS

1. We have greatly improved trust of the local community in the project. This will make all aspects of future work involving the community easier and more effective, including getting people to adopt alternative land use practices such as shifting to shade coffee farming and farming preferentially on previously-farmed areas rather than clearing new areas for farming.

2. We have greater buy-in from local government and interested local parties, including land owners. This will open up future opportunities, including the possibility of purchasing land for conservation, and being granted access to land on which to further expand the nursery and establish a community campsite.

3. We have improved the national profile of Kumbira through raising awareness. Future project work is more likely to be taken seriously, and be supported, and tourism to the area should increase, especially with further promotion.

4. We have established a pilot nursery and successfully tested basic means for growing trees. This has put us in a better position to create a larger, fully functional nursery.

5. We expanded the nursery based on previously tested means of growing trees. This has put us in a good position to start reforestation in the near future.

6. Three nursery workers have an understanding of the process of growing trees, and are being employed on a part-time basis. Having these skills available on site will help future reforestation initiatives.

7. Environmental awareness of local communities has been improved. This will make future work with communities easier to justify to them, and more successful.

8. Provincial government has granted, based on a proposal with our input, 50 hectares for the establishment of a conservation area at Kumbira. This demonstrates that local and regional government is interested in the initiative, and gives us a firm platform from which to take this work further.

CAPACITY & LEADERSHIP DEVELOPMENT

The CLP project allowed Ninda Baptista the opportunity to develop leadership, planning and decision-making skills, through first-hand experience. The project has also allowed her to develop skills in working with local communities and interacting with people from other fields/backgrounds (e.g. tourism, agronomy, press), and has provided her with a more complete picture of what it means to work in applied conservation in Angola. All this was enriched by Ninda’s attendance of the Managing and Leading Conservation Projects Training Course (7-11 December 2015), which provided here with tools to use when approaching issues with the community, dealing with funders, authorities, disclosing results and achievements, among other topics. Other participants of the course worked in Asia, South America, Africa, and provided a perspective on the challenges of working in applied conservation all over the world.

Kerllen Costa, too, has developed skills on a similarly broad range of fields through first-hand experience, especially with working with local communities. He has developed rapidly into a very capable field worker and promoter of the project.
3. CONCLUSIONS & LESSONS

CONCLUSION

The CLP-funded project has helped move forward the central conservation aim of ensuring the long-term protection of part of Kumbira Forest, and its fauna and flora, largely by creating firm base to continue to work from. Buy-in from local government, communities and landholders has been greatly improved and will make future work much easier. We have made practical strides in our ability to undertake restoration and reforestation work by establishing a nursery and training nursery staff. Land has been identified for the establishment of a community campsite and the national profile of Kumbira Forest has been raised through media outputs, which will help attract more visitors with the aim of offering local communities the opportunity to earn revenue from tourism. The capacity of the team has been enhanced to take this work forward.

PROBLEMS ENCOUNTERED & LESSONS LEARNT

• Establishing a nursery went well because we had previous experience from the Mount Moco project and local subsistence farmers are already familiar with caring for plants.

• Work with local government went well because the administrator was interested in the work, although at the same time some planned tasks were affected due to uncertainty over local government plans.

• Initially education work within the local community was problematic, probably because we did not have the complete trust of the local community. Using local connections and spending time with the community in a more informal manner improved trust relationships and allowed the work to proceed.

• The education project could have worked better if we had a local collaborator. Offering full-time employment may have been the only way to involve a local educator, but we did not have the funds or the on-site management capability to oversee this.

• Several aspects of the work were negatively affected by loss of team members. An unexpected lesson learned was that the economic climate of a country can have a significant impact on a conservation project, which together with changes in personal circumstances of team members can impact a project greatly. During the project Aimy Cáceres and Sendi Baptista left the country because of the financial crisis. Michael Mills left for personal reasons and Ninda Baptista found full time employment and thus could not dedicate her time to the project. Thus all four team members could no longer contribute as planned in the original project proposal. This was partly remedied by the inclusion of Kerllen Costa on the team, although he could not fill all the gaps left. The implementation of a reduced education campaign was a result of this.

• The project involved a lot of diplomacy, for which is hard to evaluate the effectiveness. It also involved various unforeseen local circumstances that were partly beyond our control, including changing of local government plans based on feedback from provincial government.

• The biggest problem during the project was a lack of project staff, which can probably only be remedied by employing people to work full time on the project.

IN THE FUTURE

We plan to continue this work with the ongoing support of the A. P. Leventis Ornithological Institute. BirdLife South Africa is also being involved to support bird conservation work in Angola, and all work may soon formally fall under Fundação Kissama, the leading conservation NGO in the country. We have already made contact with the Rainforest Trust and World Land Trust regarding securing private land for conservation and further funding for the project, and have started to make enquiries about the possibility of purchasing private land with three interested sellers already identified. In the next year we will be presenting a project proposal for further funding to The Rainforest Trust, with the project work planned to fall under the direct management of Fundação Kissama. Fundação Kissama will publish its children’s environmental book on Kumbira Forest, to raise awareness of the conservation plight of the area. We will continue to manage and expand the nursery at Kumbira Forest with funding from APLORI, and will continue to maintain our local links through regular visits.
FINANCIAL REPORT

Exchange rates used: 1 USD = 110 Kwanza; 1 USD = 0.91 EURO. Funds received: 95% of USD 19 950 = 18 952.50 USD = 17 253.07 EURO.

We propose using remaining funds as follows: 1. USD 1513 for purchasing of copies of Kumbira Story book, to be donated to intersted Angolans. 2. USD 500 for website production. 3. USD 1000 to build a campsite (as originally planned). 4. USD 400 to pay nursery workers for the next 15 months.

<table>
<thead>
<tr>
<th>Itemized expenses</th>
<th>Total requested (CLP - USD)*</th>
<th>Total used (CLP - USD)</th>
<th>% Diff</th>
<th>Explanation &amp; Proposed Spending**</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PHASE I - PROJECT PREPARATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field guide books, etc</td>
<td>150</td>
<td>0</td>
<td>-100%</td>
<td>We purchased all our own books. Funds re-allocated to cover costs of the stipend for new team member.</td>
</tr>
<tr>
<td>Insurance</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Visas and permits</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Team training</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Medical supplies/First Aid</td>
<td>0</td>
<td>44</td>
<td>n/a</td>
<td>We needed some additional medical stuff that our kit box didn’t have. Pay for from contingency.</td>
</tr>
<tr>
<td>Other</td>
<td>180</td>
<td>90</td>
<td>-50%</td>
<td>We didn’t make as many phone calls as expected. Re-allocate 90 USD to stipend for new team member.</td>
</tr>
<tr>
<td><strong>EQUIPMENT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scientific/field equipment and supplies</td>
<td>1 010</td>
<td>500</td>
<td>-50%</td>
<td>We constructed a nursery from local materials so didn’t need items such as shade cloth.</td>
</tr>
<tr>
<td>Photographic equipment</td>
<td>0</td>
<td>628</td>
<td>n/a</td>
<td>We didn’t think about this requirement in our budget, which can be covered from contingency</td>
</tr>
<tr>
<td>Camping equipment</td>
<td>200</td>
<td>100</td>
<td>-50%</td>
<td>We managed to buy a suitable tent on 50% sale. Re-allocate additional funds to stipend for new team member</td>
</tr>
<tr>
<td>Vehicle Hire (E.g. Boat/Truck/Engine)</td>
<td>5 250</td>
<td>5 415</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td><strong>PHASE II - IMPLEMENTATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accommodation</td>
<td>2 240</td>
<td>759</td>
<td>-66%</td>
<td>We were able to secure discounted accommodation, and towards the end of the project were hosted free of charge by local supporters of the project. Extra funds were used towards a stipend for additional team member.</td>
</tr>
<tr>
<td>Food</td>
<td>2 480</td>
<td>1 536</td>
<td>-38%</td>
<td>We did more of our own cooking and stuck to basic foods, so food was much cheaper than expected. Re-allocate extra funds to stipend for new team member</td>
</tr>
<tr>
<td>Travel (Including fuel costs)</td>
<td>1 860</td>
<td>1 860</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Outreach/education activities and materials</td>
<td>1 625</td>
<td>633</td>
<td>-61%</td>
<td>We ran a much reduced education project due to loss of key project members, so this money was not spent.</td>
</tr>
<tr>
<td>Workshops</td>
<td>350</td>
<td>0</td>
<td>-100%</td>
<td>Local government ended up covering all workshop costs. Re-allocate funds to cover stipend of new team member</td>
</tr>
<tr>
<td>Other</td>
<td>3 120</td>
<td>4 820</td>
<td>55%</td>
<td>We could not find a local collaborator for the environmental campaign, so saved 600 USD there. We ended up not paying for local guides - time was donated by the village. Community campsite was not built (USD 1000) for reasons explained in the report. To cover the stipend of a new team member we spent an extra USD 3365, in addition to the USD 3600 covered by funds from APLORI according to the original budget.</td>
</tr>
<tr>
<td><strong>PHASE III - POST-PROJECT EXPENSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Report production and dissemination</td>
<td>200</td>
<td>0</td>
<td>-100%</td>
<td>We decided to only provide the report in electronic format.</td>
</tr>
<tr>
<td>Other</td>
<td>1 285</td>
<td>44.18 to medical. 628.42 to photographic equipment. An extra 350 USD to cover shortfall of stipend of new team member. Actual contingency thus USD 1022.60, but accounted for in other columns as appropriate</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>19 950.00</td>
<td>16 386.82</td>
<td>3 563.18</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Itemized expenses</th>
<th>Total requested (CLP - USD)*</th>
<th>Total used (CLP - USD)</th>
<th>% Diff</th>
<th>Explanation &amp; Proposed Spending**</th>
</tr>
</thead>
</table>

We propose using remaining funds as follows: 1. USD 1513 for purchasing of copies of Kumbira Story book, to be donated to intersted Angolans. 2. USD 500 for website production. 3. USD 1000 to build a campsite (as originally planned). 4. USD 400 to pay nursery workers for the next 15 months.
4. SUPPLEMENTS

APPENDIX 1. CLP M&E MEASURES

<table>
<thead>
<tr>
<th>Output</th>
<th>No</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of CLP Partner Staff involved in mentoring the Project</td>
<td>0</td>
<td>Michael Mills and Aïmy Cáceres contribute to species assessments of Gabela Akalat <em>Sheppardia gabela</em>, Pulitzer’s Longbill <em>Macrosphenus pulitzeri</em> and Gabela Bushshrike <em>Laniarius amboimensis</em>, on an ongoing basis, although not data was specifically gathered during this project.</td>
</tr>
<tr>
<td>Number of species assessments contributed to (E.g. IUCN assessments)</td>
<td>1-3</td>
<td>Examples of stakeholder behaviour change brought about by the project.</td>
</tr>
<tr>
<td>Number of site assessments contributed to (E.g. IBA assessments)</td>
<td>0</td>
<td>Field work would enable us to contribute to the IBA assessment of the Gabela IBA when the information is revised.</td>
</tr>
<tr>
<td>Number of NGOs established</td>
<td>0</td>
<td>Several parties have indicated an interest at being involved and are supporting the work (such as land for nursery expansion), but active management of the site is not yet happening.</td>
</tr>
<tr>
<td>Number of stakeholders reached</td>
<td>20-30</td>
<td>Examples of policy change brought about by the project.</td>
</tr>
<tr>
<td>Number of species/sites legally protected for biodiversity</td>
<td>1</td>
<td>Examples of stakeholder behaviour change brought about by the project.</td>
</tr>
<tr>
<td>Number of stakeholders actively engaged in species/site conservation management</td>
<td>0</td>
<td>None as yet</td>
</tr>
<tr>
<td>Number of species/sites management plans/strategies developed</td>
<td>0</td>
<td>None as yet</td>
</tr>
<tr>
<td>Number of stakeholders reached</td>
<td>20-30</td>
<td>Examples of policy change brought about by the project.</td>
</tr>
<tr>
<td>Number of NGOs established</td>
<td>0</td>
<td>None as yet</td>
</tr>
<tr>
<td>Number of academic papers published</td>
<td>0</td>
<td>No formal management plan has yet been drawn up.</td>
</tr>
<tr>
<td>Number of conferences where project results have been presented</td>
<td>0</td>
<td>No formal management plan has yet been drawn up.</td>
</tr>
<tr>
<td>Amount of extra funding leveraged ($)</td>
<td>0</td>
<td>None as yet</td>
</tr>
<tr>
<td>Number of conferences where project results have been presented</td>
<td>0</td>
<td>None as yet</td>
</tr>
<tr>
<td>Number of NGOs established</td>
<td>0</td>
<td>None as yet</td>
</tr>
<tr>
<td>Number of academic papers published</td>
<td>0</td>
<td>None as yet</td>
</tr>
<tr>
<td>Number of stakeholders reached</td>
<td>20-30</td>
<td>Examples of policy change brought about by the project.</td>
</tr>
<tr>
<td>Number of stakeholders reached</td>
<td>20-30</td>
<td>Examples of policy change brought about by the project.</td>
</tr>
<tr>
<td>Number of NGOs established</td>
<td>0</td>
<td>None as yet</td>
</tr>
<tr>
<td>Number of academic papers published</td>
<td>0</td>
<td>None as yet</td>
</tr>
<tr>
<td>Number of conferences where project results have been presented</td>
<td>0</td>
<td>None as yet</td>
</tr>
</tbody>
</table>

Number of species/sites legally protected for biodiversity: 1

50 hectares have been granted by provincial government for the establishment of a reserve, but the exact details have not yet been provided.

Number of stakeholders actively engaged in species/site conservation management: 0

Several parties have indicated an interest at being involved and are supporting the work (such as land for nursery expansion), but active management of the site is not yet happening.

Number of species/sites management plans/strategies developed: 0

No formal management plan has yet been drawn up.

Number of stakeholders reached: 20-30

Local villagers were initially resistant to aspects of work within the community, but once we got to know them better allowed the work to proceed.

Number of NGOs established: 0

Several parties have indicated an interest at being involved and are supporting the work (such as land for nursery expansion), but active management of the site is not yet happening.

Number of academic papers published: 0

None specifically from the project, but several by project members related to Kumbira. See the references.

Number of conferences where project results have been presented: 0

None as yet
Um paraíso desconhecido

A floresta da Kumbira – o lugar “onde o Sol se esconde” – é um paraíso escondido para névoa, de beleza ímpar e inestimável potencial económico, turístico e natural. Apesar de todo o seu valor, é uma região pouco conhecida, e bastante ameaçada e carete de protecção. É urgente protegemos a natureza e, com ela, a nossa identidade.

The Kumbira Forest - the place “where the sun hides” - is a paradise concealed by fog, nurturing unrivalled beauty and priceless economic, touristic and natural potential. Despite all its worth, it remains an uncharted region, considerably threatened and in need of protection. It is urgent to protect nature and with it, our identity.
LAR DE ESPÉCIES ÚNICAS NO MUNDO

As singularidades do clima, da vegetação e o isolamento desta região levaram ao surgimento de espécies endémicas – plantas e animais que existem apenas naquela área e em nenhuma outra parte do mundo. Alguns exemplos de aves endémicas são o belo picanço-da-Gabela ou picanço-do-Abomib, o pardo-bico-longo-de-Angola, e o pequeno picso-da-Gabela, todas elas ameaçadas de extinção. A anduba de Angola, ave carismática pela sua aparência deslumbrante e canto conspícuo, também existe ali. A Escarpa de Angola é considerada como uma das principais áreas para a conservação de aves em África, e a mais importante de Angola. É reconhecida internacionalmente, constitui a Área de Aves Endémicas do Angola Ocidental (Western Angola Endemic Bird Area), e é uma Área Importante para as Aves e Biodiversidade (IBA – Important Bird and Biodiversity Area). Todavia, esta região está pouco estudada e não está formalmente reconhecida por nenhum estatuto de proteção a nível nacional.

A PRODUÇÃO DE CAFÉ NO PASSADO E A SITUAÇÃO ACTUAL

No passado, a Conda foi, à semelhança de outras áreas da região, uma bem-sucedida produtora de café Robusta, de uma variedade denominada “café Amboim”. Para tal, grande parte do território foi transformado em “cafe-forests” – a vegetação arbustiva foi substituída por plantações de café, e as árvores de maior porte foram conservadas para sombrear os campos. Durante o conflito bélico, muitas destas plantações foram abandonadas por décadas, o que permitiu uma notória regeneração da vegetação e fauna naturais. Mais recentemente, o aumento da população e a floresta tem sido progressivamente convertida em lavras de subsistência (plantações de mandioca, milho, entre outras culturas). A agricultura prática da colheita e a exploração do solo é pouco sustentável, pois implica a destruição contínua de novas áreas da floresta. O abate de árvores para lenha e produção de carvão, e mais recentemente para madeira, são também práticas frequentes. Dado este panorama, a floresta está a desaparecer a uma velocidade alarmante.

HOME OF ENDEMIC SPECIES IN THE WORLD

The climate’s singularities, the vegetation and isolation of this region led to the appearance of endemic species – plants and animals that exist in that area only and nowhere else in the world. Some examples of endemic birds are the beautiful Gabela Bush-shrike, the brown Angola Slaty Flycatcher, and the tiny Gabela Akalat, all of them endangered. The forest is also the habitat of the charismatic andua de Angola, a bird known for its stunning plumage and conspicuous singing. The Angolan Scarp is considered one of Africa’s and Angola’s most important bird conservation areas. It is internationally recognized as the Western Angola Endemic Bird Area, and it is an Important Bird and Biodiversity Area (IBA). However, this is an understudied region and is not formally recognized by any protective law at the national level.

COFFEE PRODUCTION IN THE PAST AND THE CURRENT SITUATION

In the past, like other areas of Kwanza Sul, Conda was a successful producer of Robusta coffee, a variety also known as “Amboim coffee”. In order to produce the desired cash crop, much of the forest was converted into so-called “coffee forests” – the shrubby vegetation was replaced by coffee plantations and the bigger trees were preserved to give shade to the crops. During the civil war, many of these plantations were abandoned for decades, allowing a remarkable regeneration of the natural flora and fauna. After the war, the population increase in the region led to the gradual conversion of the forest into subsistence farms (manioc
As singularidades do clima, da vegetação e o isolamento desta região levaram ao surgimento de espécies endémicas – plantas e animais que existem apenas naquela área e em nenhuma outra parte do mundo.

The climate’s singularities, the vegetation and isolation of this region led to the appearance of endemic species – plants and animals that exist in that area only and nowhere else in the world.

The livelihood of the local population
One of the most critical points for the preservation of the Kumbira Forest is meeting the population’s subsistence needs. To this end, the local people should have alternative sources of income, such as agricultural practices that do not require the cutting and burning of trees, as well as an environmental awareness of the importance of the forest.

Back to coffee cultivation
Sustainable coffee farming is presented as another option for the preservation of the forest. Coffee plantations need shade, usually provided by larger trees, and it can be an economically viable way of maintaining the native biodiversity. Nowadays, small farmers in Kwanza Sul harvest and sell coffee beans that grow arborically in the old plantations. If produced correctly, the ecologically certified “Ambuí coffee” would have all the potential to fill an international market niche where the “gourmet” food industry is clearly on the rise. This portrait of Kumbira is a reflection of what is happening in other regions of Angola; despite its value, it is little known and therefore the result is a weak recovery and protection. It is up to us to take care of our natural heritage, in order to take advantage of its existence. It is urgent that the preservation of nature becomes an essential part of our culture, identity and our priorities.

The climate’s singularities, the vegetation and isolation of this region led to the appearance of endemic species – plants and animals that exist in that area only and nowhere else in the world.

The livelihood of the local population
One of the most critical points for the preservation of the Kumbira Forest is meeting the population’s subsistence needs. To this end, the local people should have alternative sources of income, such as agricultural practices that do not require the cutting and burning of trees, as well as an environmental awareness of the importance of the forest.

Back to coffee cultivation
Sustainable coffee farming is presented as another option for the preservation of the forest. Coffee plantations need shade, usually provided by larger trees, and it can be an economically viable way of maintaining the native biodiversity. Nowadays, small farmers in Kwanza Sul harvest and sell coffee beans that grow arborically in the old plantations. If produced correctly, the ecologically certified “Ambuí coffee” would have all the potential to fill an international market niche where the “gourmet” food industry is clearly on the rise. This portrait of Kumbira is a reflection of what is happening in other regions of Angola; despite its value, it is little known and therefore the result is a weak recovery and protection. It is up to us to take care of our natural heritage, in order to take advantage of its existence. It is urgent that the preservation of nature becomes an essential part of our culture, identity and our priorities.

The climate’s singularities, the vegetation and isolation of this region led to the appearance of endemic species – plants and animals that exist in that area only and nowhere else in the world.
APPENDIX 3. INVITATION FROM LOCAL GOVERNMENT TO FORM A CONSERVATION ASSOCIATION.

REPUBLICA DE ANGOLA
PROVINCIA DO CUANZA-SUL
ADMINISTRACAO MUNICIPAL DA CONDA
GABINETE DO ADMINISTRADOR MUNICIPAL

CREDENCIAL

HAVENDO NECESSIDADE DE SE IMPRIMIR MAIOR E MELHOR ORGANIZAÇÃO NOS TRABALHOS NA RESERVA NATURAL E DEMARCADA DA CUMBIRA 1.º,

TENDO EM CONTA A EXISTENCIA DE MUITOS CIDADÃOS INTERESSADOS NO DESENVOLVIMENTO AMBIENTAL, ORNITOLOGICO, ECO-TURISTICO E EM PROGRAMAS DE BIODIVERSIDADE, NESTA REGIÃO,

ATENDENDO AO FACTO DE QUE É URGENTE ORGANIZAR TODO O ACERVO À VOLTA DA PROTECÇÃO AMBIENTAL DA RESERVA DA CUMBIRA 1.º.

É CREDECIAO O SENHOR KERLEN DA SILVA FREITAS COSTA, PORTADOR DO BILHETE DE IDENTIDADE N.º 000028344LA023, EM ANEXO, PARA PROCEDER A Criação DO NUCLEO ORGANIZADOR DA ASSOCIAÇAO DOS AMIGOS DA RESERVA NATURAL E DEMARCADA DA CUMBIRA 1.º.


O ADMINISTRADOR MUNICIPAL,
FERNANDO BARBOSA FONSECA

APPENDIX 4. GRANTING OF 50 HA BY PROVINCIAL GOVERNMENT FOR A RESERVE AT KUMBIRA.

REPUBLICA DE ANGOLA
PROVINCIA DO CUANZA-SUL
ADMINISTRACAO MUNICIPAL DA CONDA

AO
GABINETE DE SUA EXª SENHOR
GOVERNADOR PROVINCIAL DO
CUANZA-SUL

SUMBE

218/ADM.M/2017
15.07.2017

ASSUNTO: CEDÊNCIA DE TERRENO

Em referência v/nota nº775/GGPCS/2017, datada de 26 de Junho de 2017, vimos pela presente informar que está localizada e identificada na área do bairro Chilumbo uma parcela de terra com a dimensão de 50 (Cinquenta) hectares para a implementação dos projectos em vista.

Sendo tudo quanto se nos oferece de momento, queiram aceitar Exª os nossos respeitosos cumprimentos.


O ADMINISTRADOR MUNICIPAL,
FERNANDO BARBOSA FONSECA
APPENDIX 5. SAMPLES OF THE STORY BOOK WRITTEN ABOUT KUMBIRA BY CLP PROJECT TEAM MEMBERS.
De imediato, foi tomada por uma espécie de arrepio, uma sensação de estar perante algo grandioso e mágico. Observou com atenção Gungo e Cat, que se mantinham em silêncio. Logo de seguida, uma voz souu das profundezas, baixa e suave, porém forte.

- Que bom receber visitas! Há muito que não vos via! — disse a misteriosa voz. Depois de uma pausa, continuou: — Hoje temos aqui alguém novo... Quem és tu? — perguntou.

Confusa, a Crista olhou para todos os ramos. Não viu mais ninguém para além dela e das aves que seguira. Percebendo que a pergunta era para ela, revelou-se, saindo de detrás da ramagem, surpreendendo Gungo e Cat, e disse:

- Eu sou a Crista, vim de Malanje. — respondeu, desconfiada, sem saber a quem se dirigia.
BIBLIOGRAPHY

*author names for key refereces are bolded.


Mills MSL. In prep. Call playbacks enhance detectability of key Angolan Central Escarpment birds.

Mills MSL. Accepted. The avifauna of Kumbira Forest and surrounds, western Angola. Malimbus.


ADDRESS LIST & WEB LINKS

• Fundação Kissama <fundacao.kissama@gmail.com>, leading conservation NGO in Angola
• Mario Santos, coffee grower and buyer and land owner at Kumbira, Fazenda Rio Uiri, Conda Municipality, Gabela District, Kwanza Sul Province.
• Kumbira Project Website: http://www.kumbira.org (still in production).
• Fernando Fonseca, previous administrator of Conda, Chinalandia Farm, Conda Municipality, Gabela District, Kwanza Sul Province.
• Kumbira Forest Blog, no longer updated, http://kumbiraforest.blogspot.com/

DISTRIBUTION LIST

• Administration of Conda
• Fundação Kissama
• Ministry of the Environment
• Kwanza Sul Governor’s Office
• Various interested local parties
• Interested parties via the Angola Ambiente facebook group