
DIR29S2\1050

Avoiding degradation through sustainable honey production in the miombo

Miombo woodland in Mozambique, critical for local livelihoods, biodiversity, and carbon stocks, is suffering significant degradation. Honey production is a key cause, as traditional methods involve killing important trees and overuse of fire, leading to severe biodiversity loss in hotspots of commercial demand for honey. We will train beekeepers in Mozambique to use sustainable practices and technologies, as part of community natural resource management plans. Analysis of the livelihoods and biodiversity impact will inform regional efforts to reduce woodland degradation.

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Avoiding degradation through sustainable honey production in the miombo

Section 1 - Contact Details

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Section 2 - Title, Ecosystems, Approaches & Summary

Q3. Title:

Avoiding degradation through sustainable honey production in the miombo

What was your Stage 1 reference number? e.g. DIR28S1\1123

DIR29S1\1252

Q4. Key Ecosystems, Approaches and Threats

Select up to 3 biomes that are of focus, up to 3 conservation actions that characterise your approach, and up to 3 threats to biodiversity you intend to address, from dropdown lists.

Biome 1

Savannas and grasslands

Biome 2

No Response

Biome 3

No Response

Conservation Action 1

Livelihood, economic & other incentives (incl. conservation payments)

Conservation Action 2

Species management (harvest, recovery, re-introduction, ex-situ)

Conservation Action 3

Law & policy (legislation, regulations, standards, codes, enforcement)

Threat 1

Agriculture & aquaculture (incl. plantations)

Threat 2

Natural system modifications (fires, dams)

Threat 3

No Response

Q5. Summary of project

Please provide a brief summary of your project: the problem/need it is trying to address, its aims, and the key activities you plan on undertaking. Please note that if you are successful, this wording

may be used by Defra in communications e.g. as a short description of the project on the website.

Please write this summary for a non-technical audience.

Miombo woodland in Mozambique, critical for local livelihoods, biodiversity, and carbon stocks, is suffering significant degradation. Honey production is a key cause, as traditional methods involve killing important trees and overuse of fire, leading to severe biodiversity loss in hotspots of commercial demand for honey. We will train beekeepers in Mozambique to use sustainable practices and technologies, as part of community natural resource management plans. Analysis of the livelihoods and biodiversity impact will inform regional efforts to reduce woodland degradation.

Section 3 - Title, Dates & Budget Summary

Q6. Country(ies)

Which eligible host country(ies) will your project be working in? Where there are more than 4 countries that your project will be working in, please add more boxes using the selection option below.

Country 1	Mozambique	Country 2	No Response
Country 3	No Response	Country 4	No Response

Do you require more fields?

No

Q7. Project dates

Start date:	End date:	Duration (e.g. 2 years, 3 months):
01 April 2023	31 March 2026	3 years

Q8. Budget summary

Year:	2023/24	2024/25	2025/26	2026/27	Total request
Amount:	£208,794.00	£188,191.00	£165,123.00	£0.00	£562,108.00

Q9. Proportion of Darwin Initiative budget expected to be expended in eligible countries: %



Q10a. Do you have matched funding arrangements?

Yes

What matched funding arrangements are proposed?

Micaia Foundation has long-term support for its work in the north of Manica Province from a private family foundation administered in the UK. Current grant funding continues to 2024-25. The funding is to Micaia Foundation but passes through Micaia UK, a volunteer-run charity support group. Some budget within the project, principally field support costs, can be used as match-funding particularly for work in Macossa and Maringue districts. The Mozambique Honey Company will fund the production of 120 top bar hives to be used as demonstration by Lead Beekeepers.

Q10b. Total confirmed & unconfirmed matched funding (£)

£ [REDACTED]

Q10c. If you have a significant amount of unconfirmed matched funding, please clarify how will you fund the project if you don't manage to secure this?

No Response

Section 4 - Problem statement

Q11. Problem the project is trying to address

Please describe the problem your project is trying to address in terms of biodiversity and its relationship with poverty. What is the need, challenge or opportunity?

For example, what are the drivers of biodiversity loss that the project will attempt to address? Why are they relevant, for whom? How did you identify these problems? Please cite any evidence you are using to support your assessment of the problem (references can be listed in a separate attached PDF document).

The project will address a new threat to the largest savanna in the world, the Miombo woodlands of southern Africa. The Miombo provides livelihoods for 150 million people, stores as much carbon as the Congo basin forests (1) and holds unique biodiversity (2). However, it is threatened by the recent expansion of traditional forms of honey production, which when driven by new commercial opportunities, can become key factors in degradation and biodiversity loss (3,4,5). Traditional honey production at large scale leads to overharvesting of large trees for hives and the overuse of fire. Our recent work has shown that these changes are associated with major biodiversity loss, including the loss of half the mammal species richness and loss of many endemic bird species of high conservation value (6, 7). Therefore, the problem this project addresses is how to maximise the livelihood benefits of honey production whilst avoiding degradation and conserving biodiversity.

Commercial honey production is a new, large-scale threat to the miombo, but also offers important new pathways out of poverty (8). Here we target four extremely poor districts of Mozambique where honey production in miombo woodland is increasing rapidly and is driving overharvesting and overuse of fire. Novel remote sensing by our team (9) confirms a substantial 13% woodland degradation in the last 10 years and we expect honey trade in the target areas to expand, driven by population growth and poverty (10). There is currently no support for beekeepers and honey-harvesters, so the threat to biodiversity grows while potential benefits of commercial beekeeping remain unrealised due to the weak position of producers in the value chain. More broadly, in Mozambique there is insufficient knowledge to guide sustainable commercial honey production. This project will help address this knowledge gap, providing the

basis for developing sustainable production plans throughout the country.

In the last 8 years, Micaia's work with beekeepers in Chimanimani has highlighted how equitable access to the commercial honey market can boost livelihoods, while reducing forest degradation (11). This project expands the scope and scale of this prior work to enable an estimated 600 beekeeping families, and their communities, to increase their capability to enhance livelihoods in conjunction with sustainable management of the miombo woodland. In doing so, the project helps address the key challenge of rural poverty and marginalisation which have been highlighted in national surveys and reports published in 2022 (12), demonstrating that rural spending per month in 2019-20 was just \$20 per person, down from \$29 in 2014-2015, and less than half of the median urban monthly expenditure.

This project therefore builds on our previous development work, the founding of the Mozambique Honey Company, and scientific research to address a new threat to biodiversity in this unique ecosystem. Action now will help not only at the project sites, but by informing the emerging national and regional approach to managing the honey sector. Positive examples of the "honey win-win" are needed now to improve nascent legislation and win political support for small-scale, biodiversity-friendly honey production.

Section 5 - Darwin Objectives and Conventions

Q12. Biodiversity Conventions, Treaties and Agreements

Q12a. Your project must support the commitments of one or more of the agreements listed below.

Please indicate which agreement(s) will be supported and describe which objectives your project will address.

- Convention on Biological Diversity (CBD)
- United Nations Framework Convention on Climate Change (UNFCCC)
- Global Goals for Sustainable Development (SDGs)

Q12b. National and International Policy Alignment

Using evidence where available, please detail how your project will contribute to national policy (including NBSAPs, NDCs, NAP etc.) and in turn international biodiversity and development conventions, treaties and agreements that the country is a signatory of.

Mozambique launched its updated Nationally Determined Contributions (NDC) for 2022-2025 in November 2021. The NDC, which includes adaptation commitments in areas of forestry and biodiversity, is to be underpinned by a new Monitoring, Reporting and Verification (MRV) framework. This project is fully in line with the strategic goal and sectoral ambitions of the NDC and uniquely, will provide a means to tackle forest degradation – a major challenge for this policy. Similarly, the project is in line with Mozambique's National Strategy for Adaptation and Mitigation to Climate Change (2013-2025), especially its focus on community resource management.

According to the provisions made by the new Mozambican Land Law (November, 2022), the Mozambican government will recognize communities settlement rights and provide adequate compensation for its adjudication to other uses. This provides communities with security of tenure further strengthened by government's acknowledgement of land certificates provided by recognized community structures.

A number of articles of the draft Forest Law currently under consideration calls for community involvement and active participation in the conservation and sustainable management of forests, according to approved Management Plans. The Law will also set out principles under which livelihood activities can be carried out in forests by local communities as well as third parties. These principles will need to be backed in time by regulations setting out, for instance, permit requirements and procedures. This project will be an important source of data and learning that can help shape the development of such regulations and procedures. The draft Law also stresses the need for compliance with Access and Benefit Sharing mechanisms (Nagoya Protocol, currently being finalized within the same Ministry – Ministry of Environment) that will increase communities' predisposition to engage in conservation and sustainable management principles.

Mozambique is a signatory to the United Nations Framework Convention on Climate Change (UNFCCC). This project will generate data that can be submitted to the Government to strengthen its reporting on change in miombo woodland. Mozambique has a National Adaptation Programme of Actions (NAPA) but it does not mention miombo woodland specifically. This project, by generating data on trends and change in miombo areas, can inform future NAPA development processes. Mozambique is also a signatory to the Convention on Biological Diversity (CBD). Under this, Mozambique's National Biodiversity Strategy Action Programme (NBSAP) highlights miombo as a critical ecosystem and included miombo in three Aichi targets (5, 11, 12). In describing threats to miombo woodland, Mozambique's NBSAP focuses on charcoal and firewood. Extensive studies have been undertaken in these value chains but not in honey. This project will provide new data that can contribute to a fuller understanding of drivers of degradation in miombo woodlands.

A draft regulation on honey and beekeeping has been prepared by the Ministry of Agriculture and Food Security (MITADER) and we expect that this will be out for consultation in 2023. As beekeeping in Mozambique's miombo areas is so widespread, this project will be well-placed to inform the development of the regulations.

Section 6 - Method, Change Expected, Gender & Exit Strategy

Q13. Methodology

Describe the methods and approach you will use to achieve your intended Outcome and contribute towards your Impact. Provide information on:

- how you have reflected on and incorporated **evidence and lessons learnt** from past and present similar activities and projects in the design of this project.
- the specific approach you are using, supported by **evidence** that it will be effective, and **justifying why you expect it will be successful** in this context.
- how you will undertake the work (activities, materials and methods)
- what will be the **main activities** and where will these take place.
- how you will manage the work (governance, roles and responsibilities, project management tools, risks etc.).

Lessons learnt: The project reflects Mozambique's national policy framework which identifies miombo degradation as a major societal challenge given the extent to which rural and urban livelihoods depend on ecosystem services (1). We draw on 8 years of work with beekeepers in the region and scientific evidence from our six published studies of the links between traditional beekeeping, livelihoods and biodiversity loss in the region (2, 4-7, 13). The Senior Advisor recently conducted a study visit to Tanzania, learning

from companies that have invested in measures to minimize the negative impact of traditional beekeeping, while expanding their business. We have reflected on Micaia's experience in supporting beekeeping in the buffer zone of Chimanimani National Park since 2013, including (2014-17) through a Darwin project grant (14). Eco-Micaia manages the Mozambique Honey Company (the leading honey business in Mozambique, with 20 tons of sales in 2022), and we have benefited from MHC's experience of buying honey from small producers. These experiences, plus our review of other projects and literature have taught us that: a) promoting beekeeping must be accompanied by more general community engagement if it is to impact positively on ecosystem degradation. b) support for beekeepers must be based on market opportunity and quality requirements c) a system of Lead Beekeepers can be an effective way of developing skills within communities and sharing best practice; d) community-level production needs to be planned in a wider context that fits with market supply and demand, and e) solely promoting top bar hives is ineffective (due to cost barriers), and it is important to also work to minimise the impact of traditional production methods.

Methods and approach: Based on the learning above, in four miombo areas we will deliver a package of interventions and innovations to support sustainable beekeeping, including:

- a) technical improvements in the design and management of traditional bark/log hives so that biodiversity impacts are minimised;
- b) training beekeepers in apiary siting and management, colony management, and low impact/risk harvesting, including use of smokers rather than fire;
- c) developing a decentralized system of Lead Beekeepers able to offer training and support to other beekeepers – we will facilitate exchange of experience between new Lead Beekeepers in this project and experienced Lead Beekeepers in Chimanimani;
- d) facilitating the development of localized production plans linked to the overarching sustainable production plan.
- e) Encouraging the sustained adoption of top bar hives (which do not require harvesting of large trees) by establishing demonstration apiaries run by Lead Beekeepers.

Livelihood gains will be achieved by creating market linkage for beekeepers via MHC. Prior to implementing these interventions, we will assess beekeeping and honey collection practices, and their impact. Using these data, we will develop sustainable harvesting plans in each participating community following best practice (15).

Through facilitated participatory community meetings, people will gain a better understanding of the threats to the forests and the longer-term impact of those threats not being mitigated. We will support communities to identify measures to improve livelihoods while reducing threats. We will facilitate the development of local forest access and management plans, relating these to the new Forest Law when it is implemented.

As the project seeks to develop a range of innovate approaches to supporting and monitoring the impact of beekeeping in the miombo, we will engage other stakeholders in the province and nationally, including government. These opportunities will include presentation of the initial survey work; annual meetings to present biodiversity monitoring and honey production data; and meetings co-hosted with the National Apiculture Council of Mozambique (see Q14).

Monitoring and evaluation will be an ongoing process. We will co-develop an ecosystem monitoring framework (16), combining a) participatory approaches to species-level monitoring implemented by trained community technicians, b) bio-acoustic and camera trap approaches c) and an existing remote sensing approach, developed in a previous Darwin project, capable of monitoring degradation (17; see Q22). Livelihoods and social change will be monitored with household surveys and focus group discussions based on methods previously implemented by Micaia and developed in previous research projects.

Governance of the project: Strategic direction, linkages and risk management will rest with the Project Management Group consisting of the Project Leader (Micaia Foundation), the Senior Advisor (Eco-Micaia), and the two Lead Researchers (UEM and UoE). Day-to-day project management will be the responsibility of the Project Coordinator under the supervision of the Project Leader. Project Management Team meetings will be held monthly to set detailed monthly plans, review completed actions, monitor implementation progress, address any operational issues, and identify interesting learning points.

Q14. Capability and Capacity

How will you support the strengthening of capability and capacity in the project countries at organisational or individual levels, please provide details of what form this will take, who will benefit, and the post-project value to the country.

The project partners will contribute to strengthening Micaia Foundation's capacity for action research, advising senior management and board as we further develop the Foundation's Research and Policy Advocacy strategy and department in conjunction with Micaia's Research Working Group. This is timely for Micaia because the Foundation is steadily expanding its roles in research, policy advocacy and funding at a national level in Mozambique.

Related investments will be made in individual training, with key people involved in technical training being Micaia Foundation's Beekeeping technical officers, and a selection of Lead Beekeepers from the Mozambique Honey Company's existing network. They will have new skills and knowledge that will support further work in miombo areas. Micaia's GIS and Data Officers will have multiple opportunities for learning from the research and data analysis elements of the project and this will be important for Micaia as the Foundation seeks to make one GIS/Data role a permanent position.

We will build capacity to conduct research on woodland degradation and socio-ecology through the partnership with UEM and by facilitating research opportunities to their MSc and BSc students.

Data, notes on practice, and policy recommendations and briefings, will be produced for dissemination via the National Apiculture Council of Mozambique (which Micaia is helping establish) and, internationally, via IIED's forest farm facility. We expect that in Mozambique over the next 2-3 years, a combination of the new Forest Law and anticipated new regulations on beekeeping and honey production will create both challenges and opportunities particularly for traditional forms of honey harvesting and beekeeping. This project can have a lasting impact by on the one hand informing the regulatory development, and on the other, demonstrating how traditional practices in honey livelihoods can be managed in sustainable ways that should meet the expectations of the regulatory environment.

Q15. Gender equality

All applicants must consider whether and how their project will contribute to reducing inequality between persons of different gender. Explain how your understanding of gender equality within the context your project, and how is it reflected in your plans. Please summarise how your project will contribute to reducing gender inequality. Applicants should, at a minimum, ensure proposals will not increase inequality and are encouraged to design interventions that proactively contribute to increased gender equality.

We are very aware that traditional beekeeping in miombo areas is largely the domain of men. This is due to several reasons including the fact that traditional hives are placed high up trees and it is considered inappropriate for women to climb. These factors can be addressed by the introduction of top bar hives which are accessible to women. We will demonstrate the potential of such hives, but such is the scale of

traditional technology use in miombo areas that we cannot expect widespread adoption in the short-term. Therefore, our approach will be based also on a) challenging assumptions that women cannot do beekeeping; b) encouraging men and women to regard beekeeping as a whole household livelihood.

Household surveys will capture gendered causes and impacts of forest degradation. The social research will be implemented by gender balanced teams, and women and men trained in data collection techniques. Women interact with the forest in multiple ways and their role in designing and monitoring the implementation of management plans will be critical. We will endeavour to have equal and equally powerful participation by women in the processes of planning and in the committees that are established to govern resource access and use.

We have set targets for the participation of women in training, including as Lead Beekeepers. We know that women rarely take the lead in beekeeping in miombo areas, but such is the scale of the activity, that we will aim to demonstrate that it makes sense for women in beekeeping families to have the technical skills to participate. Micaia's work in Chimanimani has created opportunities for women in beekeeping, and lessons learned there will help in the design of training content and approaches, while technical innovations will make the practical aspects of beekeeping more acceptable for women.

Q16. Awareness and understanding

How will you raise awareness and understanding of biodiversity-poverty issues in your stakeholders, including who your stakeholders are, what approaches/formats/products will you use, how you will ensure open and free access to all data, and how will you know that the messages are understood?

The primary group of stakeholders in the project are practising and new beekeepers. The aim is to ensure that these key actors in the miombo have a much greater understanding of the importance of matching livelihood investments (expanding beekeeping) with the sustainable management and conservation of biodiversity in the miombo. This greater understanding will be achieved partly through training, and partly through the participatory nature of much of the research process and the downwardly accountable sharing of data gathered in the communities in which the data is sourced. The more powerful indicator of whether the messages are understood by beekeepers will be the extent to which they are individually and collectively practising beekeeping within the sustainable production plan and targets, and in line with improved low impact technologies.

Non-beekeeping members of participating communities will have access to data about the specific impact of beekeeping and honey harvesting on biodiversity, and to more general issues and trends about the miombo. Awareness and understanding will be built over time through the gathering and sharing of data from the research, and through facilitated community discussions and planning processes. In past work, Micaia has used radio shows as a means of disseminating key messages, and this will be used in the current project. Simple posters, including the use of cartoons, will also be developed for use in communities (schools, local government offices etc). The key indicator of whether the community is taking on board the messages relating to balancing beekeeping livelihoods with biodiversity management will be the extent to which plans and guidelines on beekeeping and honey harvesting are monitored and/or enforced.

To reach a wider audience, policy briefings and data sheets will be produced and shared with key networks and institutions such as the Apiculture Council and posted on Micaia and other websites.

Q17. Change expected

Detail the expected changes to both biodiversity and poverty reduction, and links between them, this work will deliver. You should identify what will change and who will benefit a) in the short-term (i.e. during the life of the project) and b) in the long-term (after the project has ended) and the potential to scale the approach.

When talking about how people will benefit, please remember to give details of who will benefit, differences in benefits by gender or other layers of diversity within stakeholders, and the number of beneficiaries expected. The number of communities is insufficient detail – number of households should be the largest unit used.

By the end of the project, we expect that at least 600 people (25%+ women) will have changed the way in which they work with bees and sell honey. We expect that the changes will lead to increased yields of honey per hive, leading to beekeeping households increasing income from honey sales. The honey will be sold to the Mozambique Honey Company. The company offers a guaranteed market in return for beekeepers meeting quality and sustainability standards in beekeeping. To help establish and maintain these standards in the miombo woodland context, Lead Beekeepers will be in place and functioning as decentralized trainers/advisors of other local beekeepers. The involvement of MHC ensures that gains from the project will be sustained, while adding new supply chains to MHC and assisting in its development. Traditionally the domain of older men, by the end of this project, we expect to see women and younger people involved in the honey value chain.

We expect to see reduced rates of degradation and unmanaged fires in the four miombo areas compared to matched control areas. We will identify matched control areas based on a statistical procedure developed to assess the impacts of community forestry in Tanzanian miombo (15). Achieving this outcome will require community support, and we expect that at least five communities in each of the four areas will be implementing a natural resource management plan with guidelines on beekeeping.

The reduced rates of degradation are expected to translate into biodiversity benefits in the project areas. The indicators of biodiversity change will be co-developed with local communities to reflect species of particular concern (e.g., which have important uses for bee fodder or other non-honey uses). Species of local concern will be complemented with monitoring of species we expect to be good indicators of overall biodiversity and ecosystem function. These indicator species typically include woodland specialist birds and mammals, and in particular fauna associated with old large trees and deadwood (which are vulnerable to intense fire regimes). We expect to halt the decline in the number of large trees, to increase the volume of dead standing and fallen wood and increase the diversity and occupancy of the indicator species, relative to the control areas.

The various measures in the project to gather data and monitor biodiversity change as well as rates of deforestation and degradation, will prove if the core activity of the project has had the desired impact on the miombo. Data and learning materials (eg sustainability standards) from the project will be shared with other stakeholders in apiculture in Mozambique, particularly via the new National Apiculture Council of Mozambique, and with Government, and we expect that this will help scale the approach and contribute to reducing threats to the miombo across Mozambique and beyond.

Q18. Pathway to change

Please outline your project's expected pathway to change. This should be an overview of the overall project logic and outline why and how you expect your Outputs to contribute towards your overall Outcome and, longer term, your expected Impact.

Avoided degradation, with the associated biodiversity benefits, and better livelihoods for beekeepers, are our overall outcome. To achieve this, we will collect data that will provide the baseline and evidence for

demonstrating to local communities, trends and risks to the miombo. By changing beekeeping practices and encouraging wider community engagement in governing use of forest resources, we expect to see reductions in biodiversity loss and degradation. While we will encourage the adoption of top-bar hives, we know that many beekeepers have hundreds of bark hives, and they will not easily transition to 'modern' technology. Therefore, training and technological innovations will focus on improving existing practices, and broader capacity building process on raising community awareness of the threats to the miombo and their long-term impact (climate change, loss of livelihoods). Improved beekeeping practices should lead to increased yields of honey per hive, and that will mean more honey to sell, leading to increased household incomes. By involving MHC and establishing the Lead Beekeeper model, we expect that the short-term gains in the project will be sustained. Data generated throughout (and beyond) this project, will provide evidence for a range outputs (papers, policy briefs) to disseminate and widen the project's impact.

Q19. Exit Strategy

How will the project reach a sustainable point and continue to deliver benefits post-funding?

How could post-project scaling of the approach (if proven) be delivered: through new finance or through uptake by stakeholders or other mechanisms? Are there any barriers to scaling and how will these be addressed?


How will the required knowledge and skills remain available to sustain the benefits?


As we have shown, beekeeping is widespread in Mozambique's miombo, but its impact is little investigated or understood. This project will generate data and practical lessons and materials (designs, training tools etc) that can inform interventions in other miombo areas. The close relationship between Micaia and the National Apiculture Council of Mozambique will be helpful in this regard. Practical materials, as well as research findings etc, will be shared via the Council to its members.


It is true that some of the approaches taken in this project to biodiversity monitoring do require investment. However, many of the most important miombo areas of the country fall within buffer zones of national parks and reserves, concessions, and other investments. If the project can demonstrate the effectiveness and benefits of the approach, there are NGOs and other agencies engaged long-term in miombo areas that could adopt a similar approach and/or adapt their existing biodiversity monitoring or beekeeping development approaches. We will also be able to identify the extent to which community based monitoring of indicator species can substitute for more expensive high tech monitoring conducted by researchers. If, as we anticipate, we can demonstrate that community-based monitoring can indeed be utilised far more extensively than it is, there will be considerable potential for scaling this approach.


Locally, in Manica and Sofala Provinces, there is the potential to scale up the engagement between beekeepers in miombo woodland – mostly currently supplying informal traders - and the Mozambique Honey Company (MHC) that aims to steadily increase the volume of its local supply in line with anticipated market growth. The project will give beekeepers the opportunity to improve quality and increase quantity, while giving MHC (and other commercial buyers) the confidence to open up formal supply chains that are sustainable both commercially and ecologically.

If necessary, please provide supporting documentation e.g. maps, diagrams, references etc., as a PDF using the File Upload below:

 [22-12 Updated List of References for Micaia application to Darwin Initiative](#)

 12/12/2022

 20:57:34

 pdf 190.49 KB

Section 7 - Risk Management

Q20. Risk Management

Please outline the 6 key risks to achievement of your Project Outcome and how these risks will be managed and mitigated, referring to the [Risk Guidance](#). This should include at least one Fiduciary, one Safeguarding, and one Delivery Chain Risk.

Projects should also draft their initial risk register using the [Risk Assessment template](#) provided, and be prepared to submit this when requested if they are recommended for funding. Do not attach this to your application.

Risk Description	Impact	Prob.	Gross Risk	Mitigation Header	Residual Risk
Fiduciary With many small cash transactions linked to field work, there are many opportunities for petty theft (faked receipts etc). Other risks include collusion between service providers and a staff member to inflate quotations.	Insignificant	Possible	Minor	Micaia operates rigorous financial planning and monitoring processes for staff members and third parties. Staff cash advance requests are checked against budgets, weekly workplans, mileage charts, etc and signed off by managers and the finance officer before final authorisation. Procurement rules must always be followed for all goods and services.	Minor

Safeguarding

Abuse of (soft) power in communities by field workers is a recognised risk – from accepting ‘favours’ to procuring ‘services’ by implying benefits. Other risks arise from cultural misunderstanding and mishandling of disputes in the grey area between illegal actions and behaviour that is locally acceptable but externally not.

Moderate

Rare

Minor

Safeguarding is at the heart of Micaia operations and the top of every staff and board meeting agenda. An evolving policy based on international best practice is translated, summarised and discussed with all staff members. Safeguarding commitments are in all contracts. Feedback mechanisms for communities as well as staff exist.

Minor

Delivery Chain

The project requires widespread behaviour change to succeed fully. This includes changes in traditional practices (which appear to work), changes in gender relations, and changes in the nature of local natural resource governance. The risk is that resistance to change is too strong.

Major

Unlikely

Major

The participatory nature of the research elements of the project and the integration of data with planning and engagement with communities is designed to increase the likelihood of gaining local support. The technical innovations and training are designed to enable people to gain (earn) more than before from existing assets

MModerate

Risk 4

Context: The first two years of the project will coincide with elections in Mozambique. Local campaigning can be very disruptive eg of community meetings, and and awkward for local NGOs because of ‘requests’ made for resources by political parties.

Insignificant

Possible

Minor

Micaia has gone through four electoral cycles since 2008. We have developed guidelines for all staff in the field to follow in the event of ‘hijacking’ of meetings (and covering all aspects of political engagement). We communicate transparently with political parties stressing Micaia’s non-political nature and inability to fund campaigns.

Minor

Risk 5

Operational: The project is leanly staffed and will rely heavily on the effectiveness of the few people recruited and on their interaction with project partners. If one or more recruited staff member fails to meet expectations, but is allowed to stay in the role, the project can be undermined.

Minor

Unlikely

Minor

Open recruitment and rigorous interviewing (involving the Project Management Team) and follow up with references will minimize the risk. Careful and close monitoring and support, especially in the early months, will allow for support to be put in place and, if that fails, for early action to be taken.

Minor

Risk 6

Delivery chain: the project is designed with the ambition to impact more widely through engagement with policy and regulatory processes and through dissemination of learning. The risk is that this ambition is not realized because government is non-responsive and/or content with the status quo.

Minor

Unlikely

Minor

The involvement of the university partners and the quality of the biodiversity monitoring will ensure that data gathered will be convincing, whatever it shows. Micaia's central involvement in the Apiculture Council and close engagement with government on biodiversity and biotrade will create opportunities - and government is supportive.

Minor





Section 8 - Implementation Timetable

Q21. Provide a project implementation timetable that shows the key milestones in project activities

Provide a project implementation timetable that shows the key milestones in project activities. Complete the Word template as appropriate to describe the intended workplan for your project.

[Implementation Timetable Template](#)

Please add/remove columns to reflect the length of your project. For each activity (add/remove rows as appropriate) indicate the number of months it will last, and fill/shade only the quarters in which an activity will be carried out. The workplan can span multiple pages if necessary.

 [22-12 Micaia Foundation - Implementation Ti
metable](#)
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 21:19:42
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Section 9 - Monitoring and Evaluation

Q22. Monitoring and evaluation (M&E)

Describe how the progress of the project will be monitored and evaluated, making reference to who is responsible for the project's M&E.

Darwin Initiative projects are expected to be adaptive and you should detail how the monitoring and evaluation will feed into the delivery of the project including its management. M&E is expected to be built into the project and not an 'add' on. It is as important to measure for negative impacts as it is for positive impact. Additionally, please indicate an approximate budget and level of effort (person days) to be spent on M&E (see [Finance Guidance](#)).

The Project Coordinator will ensure that monitoring is taking place in the project in line with agreed indicators. Field Officers gather output and activity data including meeting and training records and monitor the quality and effectiveness of participation in activities. In this project there will be important annual data gathered by Lead Beekeepers – colonization rates, weight of honey harvested, purchases by MHC (and others) – and this will be verified by Field Officer monitoring.

The Project Coordinator will use monitoring data to guide monthly planning, and will contribute to emerging learning, including gathering individual stories of change. We find that field officers normally have much more knowledge about processes of change at community level than ever emerges in their formal monthly reports. We require project managers to facilitate regular project team meetings to discuss process and progress, and the evolving context in each community. The Coordinator will be expected to prepare internal reports that combine output and activity monitoring with more reflective content. Such content informs Micaia's broader strategy and activities relating to sharing experience and lessons from practice. This strategy is led by the Executive Director and guided by Micaia's Board-level Research Working Group.

The M&E work is designed not only to inform the project activities, but also to generate evidence that can be used to engage national and regional stakeholders and lobby for policy reform to facilitate small-holder sustainable honey production.

The two University partners will co-design a monitoring framework designed to understand social and environmental change in the project sites, and in matched control communities where there is no activities. Three streams of work will be delivered by local staff, coordinated by a UEM-based researcher. This will include:

- a) A biodiversity monitoring programme that uses both participatory approaches to species-level monitoring implemented by trained community technicians and bio-acoustic and camera trap approaches implemented by UEM based on our previous scientific work (6,7).
- b) A land cover change monitoring system based on radar remote sensing that was developed in a previous Darwin project, capable of monitoring degradation on an annual time scale (17). This provides a method for understanding historical and current rates of degradation in the project areas and comparing them to similar (statistically matched) areas.

c) Livelihoods and social change monitoring, based on an initial round of short household surveys of all households, combined with focus group discussions. The household surveys are followed up with a smaller, but statistically representative longer survey instrument which becomes the basis of a longitudinal panel in each community and matched areas (18,19). The survey instrument covers human well-being indicators, understandings of environmental services, degradation and biodiversity change, and the role of honey production in local economic life. This allows us to monitor for negative impacts of the project as well as the expected outcomes. The design of these instruments is based on methods previously implemented by Micaia and developed in previous research projects (13, 15, 18,19).

An end of project independent evaluation is also planned.

Total project budget for M&E in GBP (this may include Staff, Travel and Subsistence costs)	£ [REDACTED]
Percentage of total project budget set aside for M&E (%)	[REDACTED]
Number of days planned for M&E	150

Section 10 - Logical Framework





Q23. Logical Framework (logframe)

Darwin Initiative projects will be required to monitor and report against their progress towards their Outputs and Outcome. This section sets out the expected Outputs and Outcome of your project, how you expect to measure progress against these and how we can verify this.

- [Stage 2 Logframe Template](#)

The **logframe template** (N.B. there is a different template for Stage 1 and Stage 2) needs to be downloaded from Flexi-Grant, completed and uploaded as a PDF within your Flexi-Grant application – **please do not edit the logframe template structure (other than adding additional Outputs if needed) as this may make your application ineligible.**

Please upload your logframe as a PDF document.

-  [22-12 Micaia Foundation - DI Main - St2 - Logical Framework](#)
-  12/12/2022
-  21:39:22
-  pdf 149.66 KB

Impact:

Beekeeping livelihoods expand in Mozambique’s miombo forests, in ways that lead to long-term reductions in rates of forest degradation and biodiversity loss

Outcome:

Beekeeping makes an increasing financial contribution to 600+ families and is managed within the regenerative capacity of the miombo

Project Outputs

Output 1:

Data from four miombo areas on the nature, scale and impact – on people, forest trees and biodiversity - of beekeeping and honey harvesting.

Output 2:

600 people trained and supported in sustainable beekeeping

Output 3:

60 people trained and active as Lead Beekeepers and contracted to Mozambique Honey Company

Output 4:

20 communities supported in producing a natural resource management plan incorporating guidelines on beekeeping

Output 5:

Policy briefings and reports produced and used to inform national and regional approaches to sustainable beekeeping in miombo woodland

Do you require more Output fields?

It is advised to have fewer than 6 Outputs since this level of detail can be provided at the Activity level.

No

Activities

Each activity is numbered according to the Output that it will contribute towards, for example, 1.1, 1.2, 1.3 are contributing to Output 1.

Output 1

1.1 Participatory assessment of beekeeping and honey collection practices and their impact

1.2 Development of sustainable harvesting plans with each participating community, using survey data and best practice references

1.3 Development of a biodiversity and social monitoring framework incorporating participatory monitoring, bio-acoustic and camera trap approaches, household surveys and focus groups, radar remote sensing, and long term panels of households.

1.4 Implementation of social monitoring framework: Identification of control communities; baseline household survey and focus group discussions; development of a panel for long term social monitoring; annual household surveys for the panel;

1.5 Implementation of Biodiversity monitoring framework: Identification of control communities and

indicator species or taxa; indicator species/taxa and vegetation structure monitoring; remote sensing monitoring of degradation

1.6 Data analysis and ongoing community feedback

Output 2

2.1 Community mobilization, identification of existing and interested beekeepers in participating communities

2.2 Design and development of technical improvements in the design of bark hives and their use;

2.3 Training beekeepers in sustainable beekeeping including apiary siting and management, colony management, and low impact harvesting techniques

2.4 Development of individual beekeeper production plans (and financial models) linked to the overarching sustainable production plan

2.5 Facilitating meetings between MHC representatives and beekeepers – leading to formal contracts

Output 3

3.1 Identifying and training 90 beekeepers to take one of the 60 positions of Lead Beekeeper

3.2 Facilitating exchange visits for newly trained and selected Lead Beekeepers to learn from the experience of established Lead Beekeepers in MHC's Chimanimani (Sussundenga District) supply chain

3.3 Procurement of top bar hives and protective clothing

3.4 Establishing demonstration apiaries of top bar beehives run by Lead Beekeepers

Output 4

4.1 Facilitating community meetings and discussions of data collected during the initial inventories and surveys and their implications for the community and its interaction with the miombo woodland

4.2 Organising community knowledge-sharing and training sessions on the principles and practices of natural resource management and the relevant national and international legal and regulatory frameworks

4.3 Facilitating the development of a gender-balanced community natural resource management committee with representation by beekeepers

4.4 Facilitating the design and production of natural resource management plans and monitoring systems, including options (such as annual fees for beekeeping) for generating income to pay for conservation activities

Output 5

5.1 Review of data and issues arising from field research, practical work with beekeepers, and community engagement.

5.2 Drafting and review of papers, briefings, good practice guides

5.3 Consultation with relevant authorities; setting up formal presentations and meetings

5.4 Organising and facilitating events and presentations

Section 11 - Budget and Funding

Q24. Budget


Please complete the appropriate Excel spreadsheet, which provides the Budget for this application. Some of the questions earlier and below refer to the information in this spreadsheet. Note that all Darwin Main should be using the over £100,000 template. Please refer to the [Finance Guidance](#) for more information.


- [Budget form for projects over £100k](#)


Please ensure you include any co-financing figures in the Budget spreadsheet to clarify the full budget required to deliver this project.


N.B.: Please state all costs by financial year (1 April to 31 March) and in GBP. The Darwin Initiative cannot agree any increase in grants once awarded.

Please upload the Lead Partner's accounts at the certification page at the end of the application form.

 [Micaia Foundation - Darwin Stage 2 Budget](#)

 12/12/2022

 20:49:05

 xlsx 95.65 KB

Q25. Funding

Q25a. Is this a new initiative or does it build on existing work (delivered by anyone and funded through any source)?

- New Initiative

Please provide details:

This is a new initiative, though as we have demonstrated, the approach builds on experience and technical methods (particularly in biodiversity monitoring) that have been developed and tested in other contexts. It also builds on Micaia's extensive experience in developing and strengthening beekeeping and honey supply value chains.

Q25b. Are you aware of any current or future plans for similar work to the proposed project?

- No

Q26. Capital items

If you plan to purchase capital items with Darwin funding, please indicate what you anticipate will happen to the items following project end. If you are requesting more than 10% capital costs, please provide your justification here.

At the end of the project, we would ask that the capital items remain in the control of Micaia Foundation to be used to support Micaia's continuing work with communities throughout Manica Province. Micaia's long-term landscape approach means that irrespective of project funding, the Foundation tries to maintain contact with, engage and support communities in its focal areas.

The budget for capital costs is not above 10%.

Q27. Value for Money

Please demonstrate why your project is good value for money in terms of impact and cost-effectiveness of each pound spend (economy, efficiency, effectiveness and equity). Please make sure you read the guidance documents, before answering this question.

Economy: this project is leanly staffed, with just two additional full-time field officers (one joining only in Y2) plus two essential support staff, and utilizes locally recruited research assistants and community members on short-term contracts as needed. Venues for events and training will be community not city based. In research, weighting is heavily towards the Mozambican partner, UEM - contributing to the wider benefit in Mozambique, and achieving cost-savings. Micaia's salary levels are in the middle range of larger NGOs in provincial Mozambique, while per diem allowances are considered comparatively low. Micaia's financial control systems and procurement rules avoid unnecessary expenditure.

Efficiency: the project is designed in an efficient decentralized manner, with most actions taking place in communities driven by local participation. Ignoring wider project benefits, a cost per direct beneficiary of GBP830 over 3 years is 50% of the equivalent cost of a beekeeper support project in Chimanimani. Beekeepers will gain GBP800+ new income in 3-5 years due to the project - a good return on investment.

Effectiveness: We believe that there is a strong causality between planned actions, outputs and outcomes, and this will drive the core effectiveness of the project. The additionality of the project derives from the potential benefits and impact on beekeeping and biodiversity conservation in other miombo areas in Mozambique, and on the development of policy and regulations in the country.

Equity: The project is designed to create opportunities for women, normally excluded from beekeeping in miombo areas, to participate in significant lasting ways.

Section 12 - Safeguarding and Ethics

Q28. Safeguarding

Projects funded through the Darwin Initiative must fully protect vulnerable people all of the time, wherever they work. In order to provide assurance of this, projects are required to have appropriate safeguarding policies in place.

Please confirm the Lead Partner has the following policies in place and that these can be available on request:

Please upload the lead partner's Safeguarding Policy as a PDF on the certification page.

We have a safeguarding policy, which includes a statement of our commitment to safeguarding and a zero tolerance statement on bullying, harassment and sexual exploitation and abuse	Checked
We have attached a copy of our safeguarding policy to this application (file upload on certification page)	Checked
We keep a detailed register of safeguarding issues raised and how they were dealt with	Checked
We have clear investigation and disciplinary procedures to use when allegations and complaints are made, and have clear processes in place for when a disclosure is made	Checked
We share our safeguarding policy with all partners	Checked
We have a whistle-blowing policy which protects whistle blowers from reprisals and includes clear processes for dealing with concerns raised	Checked
We have a Code of Conduct for staff and volunteers that sets out clear expectations of behaviours - inside and outside the work place - and make clear what will happen in the event of non-compliance or breach of these standards	Checked

Please outline how you will implement and strengthen your safeguarding policies in practice and ensure that all partners apply the same standards as the Lead Partner. If any of the responses are “no”, please indicate how it is being addressed.

Micaia staff members have safeguarding clauses in their contracts, receive safeguarding training as part of their induction, are provided with a summary of Micaia's Safeguarding Policy which they are expected to be able to articulate to other partners and in communities, are encouraged to report any concerns, and take part in regular discussions about safeguarding in practice. The Micaia boards expect and receive reports on safeguarding in monthly updates and formal meetings.

Q29. Ethics

Outline your approach to meeting the key principles of good ethical practice, as outlined in the guidance.

The project is governed by the laws and regulations of Mozambique and we anticipate several developments in this regard to which the project will respond and potentially contribute (Forest Law, beekeeping regulations, regulations to implement Nagoya Protocol).

The project is led by a leading Mozambican organisation and gives a central role in the research component to Mozambique's leading university.

While recognizing and responding to the need to reduce negative impacts of traditional systems of

beekeeping and encourage adoption of new technologies, the project respects those systems and seeks to work with and adapt them and the skills and knowledge of experienced local honey harvesters. Similarly, the biodiversity monitoring framework places great emphasis on community engagement and learning from as well as with local people.

Micaia is committed to safeguarding and to ensuring the health and safety of project staff and community members who participate in project actions.

The project will also be subject to ethics review, oversight and guidance by the University of Edinburgh, which will include a detailed ethical review of all the proposed research, analysis and monitoring. This provides our team with the opportunity to build on best practice from similar University projects (including those funded by Darwin).

Section 13 - FCDO Notifications

Q30. FCDO Notifications

Please state whether there are sensitivities that the Foreign Commonwealth and Development Office will need to be aware of should they want to publicise the project’s success in the Darwin Initiative in any country.

No

Please indicate whether you have contacted FCDO Embassy or High Commission to discuss the project and attach details of any advice you have received from them.

Yes (no written advice)

Section 14 - Project Staff

Q31. Project staff

Please identify the core staff (identified in the budget), their role and what % of their time they will be working on the project.

Please provide 1-page CVs or job description, further information on who is considered core staff can be found in the [Finance Guidance](#).

Name (First name, Surname)	Role	% time on project	1 page CV or job description attached?
Milagre Nuvunga	Project Leader	15	Checked
To be confirmed	Project Coordinator	100	Checked
Casey Ryan	Senior Advisor	7	Checked
Natasha Ribeiro	Senior Advisor	10	Checked





Do you require more fields?





Yes

Name (First name, Surname)	Role	% time on project	1 page CV or job description attached?
Andrew Kingman	Senior Advisor	15	Checked
To be confirmed	Senior Field Officer: Beekeeping	100	Checked
To be confirmed	Senior Field Officer: Natural Resources Management	100	Checked
Nicson Jonisenni	Director of Finance and Administration	15	Checked
To be confirmed	Research Assistant	100	Checked
To be confirmed	Project Bookkeeper	100	Checked
To be confirmed	Project Driver	100	Checked
<i>No Response</i>	<i>No Response</i>	0	Unchecked

Please provide 1 page CVs (or job description if yet to be recruited) for the project staff listed above as a combined PDF.

Ensure the file is named clearly, consistent with the named individual and role above.

 [22-12 Combined Job Descriptions for new posts - Micaia - Stage 2 application R29](#)
 12/12/2022
 21:47:47
 pdf 142.39 KB

 [22-12 Micaia and Partner CVs for Darwin Initiative Stage 2](#)
 12/12/2022
 16:09:32
 pdf 452.24 KB

Have you attached all project staff CVs?

Yes

Section 15 - Project Partners

Q32. Project Partners

Please list all the Project Partners (including the Lead Partner - i.e. the partner who will administer the grant and coordinate the delivery of the project), clearly setting out their roles and responsibilities in the project including the extent of their engagement so far and planned.

This section should demonstrate the capability and capacity of the Project Partners to successfully

deliver the project. Please provide Letters of Support for all project partners or explain why this has not been included.

The partners listed here should correspond to the Delivery Chain Risk Map (within the Risk Register template) which you will be asked to submit if your project is recommended for funding.

Lead partner name:	Micaia Foundation
Website address:	www.micaia.org
Details (including roles and responsibilities and capacity to engage with the project):	<p>Micaia Foundation is headquartered in Chimoio at the heart of Manica Province, has a 15-year track-record of community engagement and support, and established capacity in the areas of livelihood development with beekeeping (and other non-timber forest products), community-led/managed conservation work, and policy engagement on related issues. Micaia Foundation has demonstratable capacity to manage large grant funds and has had the experience of being a local partner in previous Darwin-funded initiatives.</p> <p>Micaia Foundation will coordinate project implementation and take direct responsibility for developing and implementing training and technical support of beekeepers, and work with communities on building understanding of the drivers of change and their impacts in the miombo woodlands, and the creation of resource management plans. The Micaia team will also participate and learn from the biodiversity monitoring processes and will lead the outreach, learning dissemination and policy engagement elements of the project.</p>
Allocated budget (proportion or value):	£ [REDACTED]
Represented on the Project Board	<input checked="" type="radio"/> Yes
Have you included a Letter of Support from this organisation?	<input checked="" type="radio"/> Yes
Have you provided a cover letter to address your Stage 1 feedback?	<input checked="" type="radio"/> Yes
Do you have partners involved in the Project?	<input checked="" type="radio"/> Yes
1. Partner Name:	University of Eduardo Mondlane

Website address: <https://www.uem.mz/>

Details (including roles and responsibilities and capacity to engage with the project):

The University of Eduardo Mondlane is Mozambique's leading academic/research institution and the Lead Researcher in the project, Dr Natasha Ribeiro, is an acknowledged expert in the field of forest research, with specific experience studying miombo areas including the impact of honey harvesting on key miombo species. The involvement of UEM and Dr Ribeiro thus strengthens the research component of the project while equally importantly ensuring that data outputs and wider learning is retained in the Mozambican research community.

UEM will lead on the data collection on beekeeping and honey harvesting and provide the full-time research assistant who will work with emerging data from the biodiversity monitoring.

Allocated budget: £ [REDACTED]

Represented on the Project Board Yes

Have you included a Letter of Support from this organisation? Yes

2. Partner Name: University of Edinburgh

Website address: <https://www.ed.ac.uk/>

Details (including roles and responsibilities and capacity to engage with the project):

The University of Edinburgh, represented by Dr Casey Ryan, has extensive connections with relevant work in Mozambique, including Dr Ryan's long involvement in miombo areas, coordination of a major £1.8M project to understand livelihoods and ecosystem service impacts of the conversion of woodlands to agriculture in Mozambique, and ongoing coordination of the SEOSAW network of long-term observation of vegetation change in Africa. Dr Ryan brings great experience of applied methods in remote sensing and phenology, socio-ecology, and ecosystem ecology, and he will play a key role in the design of the project's biodiversity monitoring framework in conjunction with UEM.

UoE and Micaia have an established partnership that has included recent collaboration on research into the effects of COVID on the baobab and charcoal value chains.

Allocated budget: £ [REDACTED]

Represented on the Project Board Yes

Have you included a Letter of Support from this organisation? Yes

3. Partner Name: Eco-Micaia Ltd

Website address: www.micaia.org

Details (including roles and responsibilities and capacity to engage with the project):

Eco-Micaia is the social enterprise part of the Micaia 'family'. It has been responsible for the development of three subsidiary inclusive businesses in honey, baobab and tourism, and has enabled more than 5,000 suppliers to gain a sustained market via new commercial value chains. Eco-Micaia brings direct experience in the commercial honey value chain.

Eco-Micaia will be responsible in the project for work on financial modelling, business planning support with Lead Beekeepers, and establishing market access via the Mozambique Honey Company. Eco-Micaia will participate in and advise on the development of technical enhancements in beekeeping practice, and on the creation of a network of Lead Beekeepers, the design and siting of Honey Houses, and procurement of equipment.

Eco-Micaia will be represented in the project by Managing Director, Andrew Kingman.

Allocated budget: £ [REDACTED]

Represented on the Project Board Yes

Have you included a Letter of Support from this organisation? Yes

4. Partner Name: No Response

Website address: No Response

Details (including roles and responsibilities and capacity to engage with the project): No Response

Allocated budget: £0.00

Represented on the Project Board Yes
 No

Have you included a Letter of Support from this organisation? Yes
 No

5. Partner Name: *No Response*

Website address: *No Response*

Details (including roles and responsibilities and capacity to engage with the project): *No Response*

Allocated budget: £0.00

Represented on the Project Board Yes
 No

Have you included a Letter of Support from this organisation? Yes
 No

6. Partner Name: *No Response*

Website address: *No Response*

Details
(including roles
and
responsibilities *No Response*
and capacity to
engage with the
project):

**Allocated
budget:** £0.00


**Represented on
the Project
Board** Yes
 No


Have you
included a
Letter of Yes
Support from No
this
organisation?


If you require more space to enter details regarding Partners involved in the project, please use the text field below.


No Response


Please provide a cover letter responding to feedback received at Stage 1 if applicable and a combined PDF of all letters of support.


 [221212 Micaia Foundation Cover Letter for Darwin Initiative R29 Stage 2](#)


 12/12/2022


 21:09:20

 pdf 123.14 KB

 [22-12 Micaia - Letters of support for Stage 2 application](#)

 12/12/2022

 16:00:45

 pdf 659.02 KB

Section 16 - Lead Partner Capability and Capacity

Q33. Lead Partner Capability and Capacity

Has your organisation been awarded Darwin Initiative, Darwin Plus or Illegal Wildlife Trade Challenge Fund funding before (for the purposes of this question, being a partner does not count)?

No

If no, please provide the below information on the lead partner.

What year was your organisation established/ incorporated/ registered? 01 January 2009

What is the legal status of your organisation? Other (if selected, please explain below)

Other explained Micaia Foundation is registered as a foundation based on modified corporeate statutes approved by the Mozambican Council of Ministers.

How is your organisation currently funded? Micaia Foundation receives grant funding from a range of donors currently including AFD (Agence Française de Développement) and FFEM (Fonds Français pour l'Environnement Mondial), the Commonwealth Foundation, Sand Dams Worldwide, German development agency GIZ, a private foundation managed from the UK, and the Global Fund for Community Foundations. The Foundation also receives some individual donations.

Describe briefly the aims, activities and achievements of your organisation. Large organisations please note that this should describe your unit or department.

Aims Micaia's overall goal is to enable people in Mozambique to secure their wellbeing and develop their capabilities to prosper. We take a holistic approach, mirroring the fact that for most people, well-being has financial, social, emotional, and environmental dimensions.

Activities The Foundation works long-term in Manica Province on four main themes: enabling people to secure a decent basic standard of living; diversifying local economies; biodiversity conservation; active citizenship. The Foundation uses subsidy to build capacity and support community-led development and works in partnership with Eco-Micaia to build inclusive value chains.

Achievements With 14 years of experience, a wealth of learning, and more than 100,000 people supported in furthering their wellbeing (growing more/selling more/managing resources better/gaining confidence and knowledge/acting collectively), Micaia is now recognized nationally and internationally for the effectiveness and pioneering nature of its work.

Provide details of 3 contracts/projects held by the lead partner that demonstrate your credibility as an organisation and provide track record relevant to the project proposed.

These contracts/awards should have been held in the last 5 years and be of a similar size to the grant requested in your Darwin application.

Contract/Project 1 Title Biodiversity conservation and community development in Chimanimani Conservation Area

Contract Value/Project budget (include currency) € [REDACTED] (representing 3 components of a € [REDACTED] total budget)

Duration (e.g. 2 years 3 months) 4 years

Role of organisation in project Micaia Foundation is responsible for implementing the two largest components of the project: a) household land mapping and certification as part of wider land use planning, and b) further developing non-timber forest product livelihoods (beekeeping and other value chains such as essential oils) in the context of biodiversity conservation.

Brief summary of the aims, objectives and outcomes of the project (Max 100 words)
The project, funded by AFD (Agência Francesa de Desenvolvimento) and FFEM (Fonds Français pour l'Environnement Mondial), aims to promote sustainable environmental management in the Chimanimani Conservation Area. At the level of the Chimanimani National Park, the project supports conservation and enhancement of natural and cultural heritage; in the buffer zone, the project supports sustainable management of natural resources for the benefit of local communities. The outcome of the project, therefore, should be a sustainable balance between improving the socio-economic conditions of local populations on the one hand, and conservation of natural resources and biodiversity on the other.

Client/independent reference contact details (Name, e-mail) Sean Nazerali
[REDACTED]

Contract/Project 2 Title From vulnerability to resilience in Mozambique

Contract Value/Project budget (include currency) \$ [REDACTED]

Duration (e.g. 2 years, 3 months) 4 years

Role of organisation in project Micaia Foundation is the lead implementing agent. It is a project designed by Micaia and submitted to a long-term funding partner for further development in the dry northern districts of Guro and Tambara.

(Max 100 words)

Brief summary of the aims, objectives and outcomes of the project

Our goal is to help people in Guro and Tambara Districts strengthen their communities' resilience (particularly adaptability and resilience in the face of climate change) and, in so doing, to inspire and facilitate change in neighbouring Districts. The project has three outcomes: at least 40 communities in Guro and Tambara Districts will be implementing a Community Resilience Strategy incorporating sustainable land use, livelihood diversification, and human development; key features of the Community Resilience Strategy will be adopted in neighbouring districts, with buy-in at District and Province; Micaia's experience, lessons learned, and approaches will be documented and disseminated.

Client/independent reference contact details (Name, e-mail)

Jon Edwards
[REDACTED]

Contract/Project 3 Title

Enabling Young People to shape the future of Chimoio, Mozambique

Contract Value/Project budget (include currency)

GBP [REDACTED]

Duration (e.g. 2 years, 3 months)

3 years

Role of organisation in project

Micaia Foundation is the lead implementing agent. It is a project designed by Micaia to respond to identified needs and opportunities in the Chimoio landscape.

Brief summary of the aims, objectives and outcomes of the project

The aim is to have Chimoio municipal governance and Manica provincial governance function in ways that are inclusive and responsive, with young women and men able to participate in civic life knowledgeably and powerfully, helping shape local policy and development priorities. Outcomes are that 15,000+ young people will be more knowledgeable about national laws and policies, and global issues prioritised by young people in Chimoio; a youth-led organisation will be formally established and actively engaging with government; formal opportunities for youth leaders to represent to government views and policy priorities of young people in Chimoio will be established and functioning.

Client/independent reference contact details (Name, e-mail)

Malou Schueller
[REDACTED]

Have you provided the requested signed audited/independently examined accounts?

If yes, please upload these on the certification page. Note that this is not required from Government Agencies.

Yes

Section 17 - Certification

Certification

On behalf of the

Trustees

of

Micaia Foundation

I apply for a grant of

£514,247.00

I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the project schedule should this application be successful.





(This form should be signed by an individual authorised by the applicant institution to submit applications and sign contracts on their behalf.)





- I have enclosed CVs for project key project personnel, cover letter, letters of support, a budget, logframe, Safeguarding Policy and project implementation timetable (uploaded at appropriate points in application)
- Our last two sets of signed audited/independently verified accounts and annual report are also enclosed.

Checked





Name	Milagre Nuvunga
Position in the organisation	Executive Director
Signature (please upload e-signature)	 <u>Milagre Nuvunga signature</u>  12/12/2022  21:50:22  pdf 19.31 KB
Date	12 December 2022

Please attach the requested signed audited/independently examined accounts.

 [Micaia Foundation Audited Financial Statements 2021-compressed](#)
 12/12/2022
 18:30:48
 pdf 945.93 KB

 [Micaia Foundation Audited Financial Statements 2020-compressed](#)
 12/12/2022
 18:30:47
 pdf 1.48 MB

Please upload the Lead Partner's Safeguarding Policy as a PDF

 [2022 MICAIA - Safeguarding Policy](#)
 12/12/2022
 18:36:33
 pdf 364.73 KB

Section 18 - Submission Checklist

Checklist for submission

	Check
I have read the Guidance, including the "Darwin Initiative Guidance", "Monitoring Evaluation and Learning Guidance", "Risk Guidance" and "Financial Guidance".	Checked
I have read, and can meet, the current Terms and Conditions for this fund.	Checked
I have provided actual start and end dates for the project.	Checked
I have provided my budget based on UK government financial years i.e. 1 April - 31 March and in GBP.	Checked
I have checked that our budget is complete, correctly adds up and I have included the correct final total at the start of the application.	Checked
The application been signed by a suitably authorised individual (clear electronic or scanned signatures are acceptable).	Checked
I have attached the below documents to my application <ul style="list-style-type: none">• my completed logframe as a PDF using the template provided	Checked
<ul style="list-style-type: none">• my budget (which meets the requirements above)	Checked
<ul style="list-style-type: none">• my completed implementation timetable as a PDF using the template provided	Checked
I have included a 1 page CV or job description for all the Project Staff identified at Question 31, including the Project Leader, or provided an explanation of why not.	Checked
I have included a letter of support from the Lead Partner and partner(s) identified at Question 32, or an explanation of why not.	Checked
I have included a cover letter from the Lead Partner, outlining how any feedback received at Stage 1 has been addressed where relevant.	Checked

I have included a copy of the Lead Partner’s safeguarding policy, which covers the criteria listed in Question 28.	Checked
I have been in contact with the FCDO in the project country/ies and have included any evidence of this. If not, I have provided an explanation of why not.	Checked
I have included a signed copy of the last 2 annual report and accounts for the Lead Partner, or provided an explanation if not.	Checked
I have checked the Darwin Initiative website immediately prior to submission to ensure there are no late updates.	Checked
I have read and understood the Privacy Notice on the Darwin Initiative website.	Checked

We would like to keep in touch!

Please check this box if you would be happy for the lead applicant (Flexi-Grant Account Holder) and project leader (if different) to be added to our mailing list. Through our mailing list we share updates on upcoming and current application rounds under the Darwin Initiative and our sister grant scheme, the IWT Challenge Fund. We also provide occasional updates on other UK Government activities related to biodiversity conservation and share our quarterly project newsletter. You are free to unsubscribe at any time.

Checked

Data protection and use of personal data

Information supplied in the application form, including personal data, will be used by Defra as set out in the **Privacy Notice**, available from the [Forms and Guidance Portal](#).

This **Privacy Notice must be provided to all individuals** whose personal data is supplied in the application form. Some information may be used when publicising the Darwin Initiative including project details (usually title, lead partner, project leader, location, and total grant value).

Project Title: **Avoiding degradation through sustainable honey production in the miombo**

	Activity	No. of months	Year 1 (23/24)				Year 2 (24/25)				Year 3 (25/26)			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 1	Data from four miombo areas on the nature, scale and impact – on people, forest trees and biodiversity - of beekeeping and honey harvesting.													
1.1	Participatory assessment of beekeeping and honey collection practices and their impact													
1.2	Development of a biodiversity monitoring framework													
1.3	Implementation of social monitoring framework: Identification of control communities; baseline household survey and focus group discussions; development of a panel for long term social monitoring; annual household surveys for the panel													
1.4	Implementation of Biodiversity monitoring framework: Identification of control communities and indicator species or taxa; indicator species/taxa and vegetation structure monitoring; remote sensing monitoring of degradation													
1.5	Data analysis and ongoing community feedback													
Output 2	600 people trained and supported in sustainable beekeeping													
2.1	Community mobilization, identification of existing and interested beekeepers in participating communities													
2.2	Design and development of technical improvements in the design of bark hives and their use													

Project Title: **Avoiding degradation through sustainable honey production in the miombo**

	Activity	No. of months	Year 1 (23/24)				Year 2 (24/25)				Year 3 (25/26)			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
2.3	Training beekeepers in sustainable beekeeping including apiary siting and management, colony management, and low-impact harvesting techniques													
2.4	Facilitating meetings between MHC representatives and beekeepers – leading to formal contracts													
Output 3	60 people trained and active as Lead Beekeepers and contracted to Mozambique Honey Company													
3.1	Identifying and training 90 beekeepers to take one of the 60 positions of Lead Beekeeper													
3.2	Facilitating exchange visits for newly trained Lead Beekeepers to learn from the experience of established Lead Beekeepers in MHC's Chimanimani (Sussundenga District) supply chain													
3.3	Facilitating the development of localized production plans linked to the overarching sustainable production plan													
3.4	Procurement of top bar hives and protective clothing													
3.5	Establishing demonstration apiaries of top bar beehives run by Lead Beekeepers													
Output 4	20 communities supported in producing a natural resource management plan incorporating guidelines on beekeeping													
4.1	Facilitating community meetings and discussions of data collected during the initial inventories and surveys and their implications for the community and its interaction with the miombo woodland													

Project Title: **Avoiding degradation through sustainable honey production in the miombo**

	Activity	No. of months	Year 1 (23/24)				Year 2 (24/25)				Year 3 (25/26)			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
4.2	Organising community knowledge-sharing and training sessions on the principles and practices of natural resource management and the relevant national and international legal and regulatory frameworks													
4.3	Facilitating the development of a gender-balanced community natural resource management committee with representation by beekeepers													
4.4	Facilitating the design and production of natural resource management plans and monitoring systems, including options (such as annual fees for beekeeping) for generating income to pay for conservation activities													
Output 5	Policy briefings and reports produced and used to inform national and regional approaches to sustainable beekeeping in miombo woodland													
5.1	Review of data and issues arising from field research, practical work with beekeepers, and community engagement.													
5.2	Drafting and review of papers, briefings, good practice guides													
5.3	Consultation with relevant authorities; setting up formal presentations and meetings													
5.4	Organising and facilitating events and presentations													
5.5														

Project Title: **Avoiding degradation through sustainable honey production in the miombo**

Project Summary	SMART Indicators	Means of Verification	Important Assumptions
<p>Impact: (Max 30 words) Beekeeping livelihoods expand in Mozambique’s miombo forests, in ways that lead to long-term reductions in rates of forest degradation and biodiversity loss</p>			
<p>Outcome: (Max 30 words) Beekeeping makes an increasing financial contribution to 600+ families and is managed within the regenerative capacity of the miombo</p>	<p>0.1 Beekeeping families report increased income from honey sales (<i>baseline for income to be established in Y1; project target 600 families report increase of 20%+</i>)</p> <p>0.2 Beekeepers have the knowledge and practice sustainable beekeeping methods introduced in the project (<i>baseline: none; project targets: 600 beekeepers with knowledge of sustainable approaches; 70%+ putting knowledge into practice.</i>)</p> <p>0.3 Increase in the quantity (Kg per hive) of honey produced (<i>baseline to be established in Y1; project target tbc</i>)</p> <p>0.4 Participating communities create natural resource management plans incorporating beekeeping guidelines and limits (<i>baseline: no communities have</i></p>	<p>0.1 Data from long-term household panels in participant and control households 0.1 Honey buying records from MHC</p> <p>0.2 Project monitoring reports and annual surveys</p> <p>0.3 Lead Beekeeper records. MHC records</p> <p>0.4 Plans shared with the project team</p>	<p>We assume that the demand for quality honey will continue to increase nationally and internationally and that without intervention, the regenerative capacity of the miombo will be surpassed. We assume that most people currently involved in harvesting honey for sale in the informal market will be willing to switch to a more formal relationship with a commercial honey company, assuming that the price is equal to or better than that offered in the informal market.</p> <p>We assume that community leaders, larger-scale beekeepers, and local government officers will help create support for natural resource management plans that are likely to require changes in behaviour and practice by local people.</p> <p>We assume that the data produced in the project will be of a sufficient quality both to</p>

Project Title: **Avoiding degradation through sustainable honey production in the miombo**

	<p><i>a plan; project target: 100% of participating communities)</i></p> <p>0.5 Participating communities actively monitor beekeepers and honey harvesting (<i>baseline: none; project target: 70% of participating communities</i>)</p> <p>0.6.1 Habitat indicators of biodiversity (large trees and the woodland degradation rate) are higher in the project area compared to matched control communities. (<i>baseline: project areas are the same as controls; target: all communities show significantly improved metrics of controls</i>).</p> <p>0.6.2 Indicator species and taxa, known to be sensitive to the impacts of current honey production, are more abundant / diverse in project areas than control communities. (<i>baseline: no difference; target: all communities show significantly improved metrics of controls</i>).</p>	<p>0.5 Project monitoring reports; records of community groups</p> <p>0.6.1 “Difference-in-difference” analysis of radar remote sensing data and woodland structure surveys.</p> <p>0.6.2 “Difference-in-difference” analysis of indicator species / taxa surveys, camera trap and eco-acoustic data.</p>	<p>demonstrate change in the rate of degradation and biodiversity in the four focal areas and to provide a base of evidence for papers and policy briefings that can be shared with other stakeholders in Mozambique and beyond.</p> <p>We assume (from past work) that large trees and the degradation rate are proxies of biodiversity change. We also assume that both can be measured accurately enough to detect change, which we have tested in past projects.</p> <p>We assume that the selected species/taxa are impacted by current honey production and can increase in diversity / occupancy once honey production is improved. Furthermore, we assume that we can indentify suitable species that are relevant to both the academic researchers and the local communities.</p> <p>We also assume that we can estimate diversity and occupancy of the key taxa / species to the required accuracy with the</p>
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Project Title: **Avoiding degradation through sustainable honey production in the miombo**

			resources available. The combination of community-led surveys, camera traps and eco-acoustics give considerable flexibility in approach.
<p>Outputs:</p> <p>1. Data from four miombo areas on the nature, scale and impact – on people, forest trees and biodiversity - of beekeeping and honey harvesting.</p>	<p>1.1 Amount and quality of QA and QCd household survey data for both the study villages and matched controls. <i>Target: initial survey completeness >90%; panel surveys >95%).</i></p> <p>1.2 Amount and quality of tree inventory data curated according to international quality standards (SEOSAW 2021). <i>Target: number of large trees can be estimated in each community with a precision of 20% of the mean.</i></p> <p>1.3 Amount and quality of biodiversity data collected, analysed and made public. <i>Target: occupancy and richness data are accurate enough to detect a >20% change in occupancy of indicator species, and a loss of richness >25%.</i></p> <p>1.4 Availability of useful measurements of degradation from radar remote sensing for</p>	<p>1.5 HH survey data (anonymised) on open access portal along with public summary report including quality metrics</p> <p>1.2 Tree data stored on international portal (SEOSAW database) and available to researchers</p> <p>1.3. Biodiversity data (both community based and camera traps / bio acoustic) analysed and made public</p> <p>1.4 Report and data on degradation publicly available online</p>	<p>We assume that our methods developed in other parts of Mozambique and Zambia will work in the study locations and will require similar effort.</p> <p>We assume we will be able to train community technicians in hh survey, biodiversity monitoring and tree inventory work, and there will be enthusiasm to undertake this work for appropriate pay and the work will be supported by the community.</p> <p>We assume that we will be able to find key species which are good indicators of the diversity of the ecosystem and which are sensitive to the impacts of unsustainable honey production.</p> <p>We assume our method for monitoring degradation based on radar remote sensing (McNicol et al 2018; Ahrends et al 2021) will work at this site, and that the required radar data will continue</p>

Project Title: **Avoiding degradation through sustainable honey production in the miombo**

	<p>relevant years and locations (control and study communities). <i>Target: control communities are statistically well matched so that we can detect meaningful changes in degradation i.e 20% difference in rates.</i></p> <p>1.5 No. of data sets used in high quality peer-reviewed publications and no. of presentations at appropriate meetings / conferences. <i>Target: we expect one publication on the biodiversity data in a journal such as Conservation Biology and one publication of the social impacts in e.g. Ecological Economics.</i></p> <p>1.6 No. of events where the results of the data collection are shared with and discussed with the community. <i>Target – one meeting per quarter.</i></p>	<p>1.5 Presence of data in peer review literature and conference proceedings</p> <p>1.6 Records of community meetings and evidence of community input in reports and analysis.</p>	<p>to be available free of charge from the Japanese Space Agency (as it is at the moment).</p> <p>We assume we will be able to hire a capable researcher in Mozambique to conduct the day-to-day work.</p>
<p>2. 600 people trained and supported in sustainable beekeeping</p>	<p>2.1 Package of improved technologies and practices designed to make miombo beekeeping sustainable developed following community surveys and review of good practices in other miombo beekeeping (<i>Project milestone: package designed and integrated</i>)</p>	<p>2.1 Designs and manuals available; research reports</p>	<p>We know that the target areas are significant local honey production zones, so we assume that people involved in honey harvesting and beekeeping will be keen to learn how to increase their yields and incomes. We assume that this incentive will be sufficient to engage people in</p>

Project Title: **Avoiding degradation through sustainable honey production in the miombo**

	<p><i>into training programme by Q3 in Year 1)</i></p> <p>2.2 Beekeepers capable of sustainable beekeeping following completion of training, <i>(Project milestones: 300 [min 100 women] in Year 1; 300 [min 100 women] in Year 2)</i></p> <p>2.3 Beekeepers working with and seeking support from their Lead Beekeeper <i>(Project milestones: 200 in Year 1; 400 in Year 2; 600 in Year 3)</i></p> <p>2.4 Beekeepers committing to the quality and sustainable beekeeping standards set in individual production plans and confirmed in contracts with MHC. <i>(Project milestones: 200 in Year 1; 400 in Year 2; 600 in Year 3)</i></p>	<p>2.2 Attendance records for training workshops; training workshop reports; monitoring reports</p> <p>2.3 Lead Beekeeper records; monitoring visit reports</p> <p>2.4 Lead Beekeeper records; MHC records; Beekeeper production plans</p>	<p>learning about the long-term impact of degradation and deforestation on their lives and livelihoods, and to convince them to adopt new techniques and practices that can allow for regeneration and maintenance of biodiversity</p>
<p>3. 60 people trained and active as Lead Beekeepers and contracted to Mozambique Honey Company</p>	<p>3.1 60 people (20 women) capable of playing the role of Lead Beekeeper following completion of training. <i>(Project milestones: Year 1 – 30 [10 women]; Year 2 – 30 [10 women])</i></p> <p>3.2 60 people (20 women) sign a contract with MHC to serve as a</p>	<p>3.1 Attendance records for training workshops; training workshop reports</p> <p>3.2 MHC contracts</p>	<p>We assume that the Lead Beekeeper model, working well in other areas where top bar hives predominate, can transfer to a context in which traditional beekeeping is the norm. We assume that women will be interested in getting more involved, especially if changes in technology and/or approach</p>

Project Title: **Avoiding degradation through sustainable honey production in the miombo**

	<p>Lead Beekeeper (<i>Project milestones: Year 1 – 30 [10 women]; Year 2 – 30 [10 women]</i>)</p> <p>3.3 Demonstration apiaries of top bar hives set up and operated by Lead Beekeepers (<i>Baseline – none. Project milestone 60 apiaries established in Y2; Lead Beekeepers organizing training in top-bar hive use in Y2 and Y3</i>)</p>	3.3 Site visit reports	<p>make it more feasible to do so. We also assume that beekeepers will accept to sell comb honey and not process themselves (MHC prefers to buy in comb for quality control reasons).</p>
<p>4. 20 communities supported in producing a natural resource management plan incorporating guidelines on beekeeping</p>	<p>4.1 Communities with a natural resource management plan (<i>Project milestones: Year 2 – 10; Year 3 – 10</i>)</p> <p>4.2 Community plans have a specific set of guidelines on beekeeping and honey harvesting (<i>Project milestones: Year 2 – 10; Year 3 – 10</i>)</p> <p>4.3 Community members actively engaged in the development of the plan (<i>Targets: average of 100 members; 50% women</i>)</p>	<p>4.1 Plans shared with the project team</p> <p>4.2 As above</p> <p>4.3 Project reports</p>	<p>We assume that there will be a willingness in the targeted communities (chosen because of the high number of people involved in beekeeping in the area) to engage in learning about change in the miombo and its implications, and to discuss ways in which to better manage the resource. We assume that local government will be supportive.</p>
<p>5. Policy briefings and reports produced and used to inform national and regional approaches to sustainable beekeeping in miombo woodland</p>	<p>5.1 Policy briefings, data sheets guidelines and case-studies produced (<i>Milestones: Data sheets produced at the end of each year; Policy briefings produced by the end of Y2;</i></p>	<p>5.1 Documents produced. Internal reports and data analysis.</p>	<p>We assume that the data gathered in the project, and the innovations developed and tested, will be sufficiently interesting and new to warrant publication. We assume that</p>

Project Title: **Avoiding degradation through sustainable honey production in the miombo**

	<p><i>Evidence-backed case-studies and guidelines produced in Y3)</i></p> <p>5.2 Meetings held with policy makers and stakeholders in the apiculture industry (<i>Targets: in Y1 hold 2 meetings with National Directorate developing regulations for beekeeping and one presentation with members of Apiculture Council;</i></p> <p>5.3 Technical innovations and processes adopted (<i>Milestones: By end Y2, Mozambican training manuals for beekeeping include good practice guidelines developed in the project)</i></p>	<p>5.2 Meeting reports. Communications with authorities. Internal project reports. Press coverage.</p> <p>5.3 Beekeeping manuals and training course documents.</p>	<p>there will be interest among other stakeholders.</p> <p>We assume that there will be interest in government and among other stakeholders to engage with the project.</p>
<p>Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1. Each activity should start on a new line and be no more than approximately 25 words.)</p> <p>Output 1</p> <p>1.1 Participatory assessment of beekeeping and honey collection practices and their impact</p> <p>1.2 Development of sustainable harvesting plans with each participating community, using survey data and best practice references</p> <p>1.3 Development of a biodiversity and social monitoring framework incorporating participatory monitoring, bio-acoustic and camera trap approaches, household surveys and focus groups, radar remote sensing, and long term panels of households.</p> <p>1.4 Implementation of social monitoring framework: Identification of control communities; baseline household survey and focus group discussions; development of a panel for long term social monitoring; annual household surveys for the panel;</p>			

Project Title: Avoiding degradation through sustainable honey production in the miombo

1.5 Implementation of Biodiversity monitoring framework: Identification of control communities and indicator species or taxa; indicator species/taxa and vegetation structure monitoring; remote sensing monitoring of degradation

1.6 Data analysis and ongoing community feedback

Output 2

2.1 Community mobilization, identification of existing and interested beekeepers in participating communities

2.2 Design and development of technical improvements in the design of bark hives and their use;

2.3 Training beekeepers in sustainable beekeeping including apiary siting and management, colony management, and low impact harvesting techniques

2.4 Development of individual beekeeper production plans (and financial models) linked to the overarching sustainable production plan

2.5 Facilitating meetings between MHC representatives and beekeepers – leading to formal contracts

Output 3

3.1 Identifying and training 90 beekeepers to take one of the 60 positions of Lead Beekeeper

3.2 Facilitating exchange visits for newly trained and selected Lead Beekeepers to learn from the experience of established Lead Beekeepers in MHC's Chimanimani (Sussundenga District) supply chain

3.3 Procurement of top bar hives and protective clothing

3.4 Establishing demonstration apiaries of top bar beehives run by Lead Beekeepers

Output 4

4.1 Facilitating community meetings and discussions of data collected during the initial inventories and surveys and their implications for the community and its interaction with the miombo woodland

Project Title: Avoiding degradation through sustainable honey production in the miombo

4.2 Organising community knowledge-sharing and training sessions on the principles and practices of natural resource management and the relevant national and international legal and regulatory frameworks

4.3 Facilitating the development of a gender-balanced community natural resource management committee with representation by beekeepers

4.4 Facilitating the design and production of natural resource management plans and monitoring systems, including options (such as annual fees for beekeeping) for generating income to pay for conservation activities

Output 5

5.1 Review of data and issues arising from field research, practical work with beekeepers, and community engagement.

5.2 Drafting and review of papers, briefings, good practice guides

5.3 Consultation with relevant authorities; setting up formal presentations and meetings

5.4 Organising and facilitating events and presentations