

Title: Achieving sustainable forest management through community managed protected areas in Madagascar

Project Purpose:

This project aims to reduce deforestation and forest degradation within Madagascar’s national park network (SAPM) by building the capacity of community and regional authorities to manage and monitor natural resources more effectively. It also seeks to transform the way in which communities use the forest, from short-term extraction to long-term conservation support, by investing in sustainable farming practices and alternative livelihoods. This will include activities such as bee keeping, fish farming and eco-tourism that create new sources of income. It also seeks to scale up and integrate successful community protected area management into payment for ecosystem and carbon credit schemes that will generate long-term benefits.

By demonstrating proof of concept for community-based forest management, this project seeks to help communities to attract new investment and access market-based opportunities that guarantee the long-term financial sustainability of the protected area network. The project aims to create a successful model that could be replicated across the protected area network.

Programme Value: £ 10.2m (from Defra’s current ICF allocation)

Country/Region: Madagascar

Project Code: PO010

Start Date: 2020

End Date: 2027

Overall programme risk rating:

Major

INTERVENTION SUMMARY

What support will the UK provide?

Defra is seeking approval to provide £10.2 million of official development assistance (ODA) and International Climate Finance (ICF) funding. As outlined in the appraisal case, Option 3, an investment of £10.2m, was identified as being the best investment option to deliver optimum results and impact but reduce the risk of working in a complex and high-risk environment. The project will run for 7 years, starting in FY20/21 and finishing in FY26/27. A delivery partner will be procured through a competitive grant process. Applicants will be required to submit project proposals which will be evaluated against a set of criteria, including value for money and proven experience of delivering similar projects. The successful delivery partner/proposal will be awarded the full £10.2 million. This investment is in line with Defra’s ICF Investment Plan (to meet its £210 million ICF spend target for Spending Review 15), which was approved by Ministers in June 2018.

What are the main project activities?

This project seeks to build on, expand or scale up the work of a local or international Non-Governmental Organisation (NGO) to work with regional government and communities in and around protected areas. Envisaged activities could include:

- Reducing deforestation and degradation and increasing land under sustainable forest management;
- Strengthening community capacity to respond to forest fires and illegal natural resource extraction;
- Increasing community participation in sustainable resource management and land use planning;
- Restoring degraded forest habitats for biodiversity/providing sustainable wood fuel;

- Providing training, equipment or micro finance to create alternative livelihood opportunities (e.g. bee keeping, eco-tourism)
- Training communities in sustainable farming practices to increase productivity and yields;
- Linking successful sustainable forest management with payments for ecosystem services schemes, including carbon markets; and
- Developing and promoting family planning, education and health care services.

Why is UK support required?

The UK's Official Development Assistance (ODA) aims to support the world's poorest people. Defra's International Climate Finance (ICF) forms a large proportion of its ODA spend helping vulnerable developing countries adapt to climate change and encouraging take up of sustainable, low carbon, resilient and inclusive development. With 75% of the population living on less than \$2 day, Madagascar's human capital index ranking is among the lowest worldwide. Its contribution to global biodiversity is immense but under threat with some of the highest deforestation rates in the tropics. Neither Madagascar's government nor communities have the resources needed to protect its forests, so external financing is required. Investment in Madagascar is in line with Defra's ICF objectives and programming strategy to protect, restore and sustainably manage over 550,000 hectares of some of the world's most vulnerable and biodiverse forest.

Why deliver through an NGO?

Defra already has a successful ICF project in Madagascar ('Blue Forests'), which is delivered by the UK INGO Blue Ventures and supports sustainable livelihoods for the communities that depend on coastal mangrove swamps. This project demonstrates that NGOs can successfully support communities to more sustainably manage the habitats on which they depend. Many NGOs in Madagascar have the authority to manage and enforce protected areas on behalf on the government. NGOs have demonstrated that they have the skills and expertise to manage large areas of forest in Madagascar, and are particularly well placed to reach the poorest and most marginalised forest communities.

How does the programme align with our strategic objectives?

The programme is fully aligned with the UK's International Climate Finance commitments to help vulnerable developing countries adapt to climate change and take up sustainable, low carbon, resilient and inclusive development. The proposed investment is also aligned to the commitments made in the 25 Year Environment Plan to help developing nations protect international forests and sustainable agriculture;

- builds on the £15.2m invested since 2001 in 31 projects in Madagascar through the Darwin Initiative;
- contributes to the delivery of the Sustainable Development Goals (SDGs);
- supports implementation of the National Security Capability Review, as avoiding the worst impacts of climate change is crucial to tackling instability and avoiding 200 million climate refugees by 2050.

What are the expected results?

The expected impact of the project is sustainable forest management through community managed protected areas in Madagascar to support climate change adaption and mitigation and to reduce poverty.

We expect the impact to be achieved through the following outcomes (which will be quantified in the project inception phase):

- ***Increased carbon storage (climate change mitigation)*** by reducing carbon emissions caused by deforestation.

- **Biodiversity protected** by supporting Madagascar to achieve Aichi Biodiversity Targets 11 and 7 of the Convention on Biological Diversity, and the UN Sustainable Development Goals 2 (sustainable agriculture) and 15 (Life on Land) to sustainably manage the protected area network.
- **Livelihoods improved** through alternative sustainable livelihoods that increase productivity and reduce poverty.

In line with ICF objectives, grant applicants will be asked to meet some, if not all, of the following Key Performance Indicators (KPIs):

- KPI6: Change in Greenhouse Gas (GHG) emissions as a result of ICF support. (tCO₂e)
- KPI 8: Number of hectares where deforestation and degradation have been avoided through ICF support. (Hectares)
- KPI 11: Public climate finance mobilized (GBP)
- KPI12: Private climate finance mobilized (GBP)
- KPI 10: Value of ecosystem services generated or protected as a result of ICF support (£ value).
- KPI 15: the extent to which the ICF intervention is likely to have a transformational impact.

We also recommend the use of an indicator to report “the number of forest dependent people whose livelihood has been improved or protected”. This was formerly Key Performance Indicator 13 and an official methodology is available to support reporting.

STRATEGIC CASE

1. GLOBAL CONTEXT

Climate change is one of the greatest challenges of our time. According to the World Bank 100 million people are at risk of being pushed into extreme poverty by rising temperatures and increasing floods alongside associated political instability and mass migration by 2030. As part of the Paris Agreement the UK, alongside 195 other countries, committed to act together to keep global temperature rise to below 2 degrees and to mobilise \$100bn of climate finance a year by 2020 to help developing countries mitigate and adapt to climate change. However, greater action is needed in the land use sector which makes up 25% of global emissions (including crop production and fertilisation).¹ The evidence suggests that land-related measures across forests, wetlands, grasslands and agricultural lands could yield an estimated one third of the cost-effective CO₂ mitigation needed by 2030 for a greater than 66% chance of staying below 2°C.² Moreover, these land-related responses could contribute positively to sustainable development and deliver multiple co-benefits such as reducing biodiversity loss. Last autumn’s Intergovernmental Panel on Climate Change (IPCC) report highlights the largely untapped role of nature-based solutions to address climate change cost effectively and at scale.³

Forest preservation is crucial to keeping the global temperature rise increase below 2 degrees of pre-industrial levels. Acting as carbon sinks, forests absorb the equivalent of roughly 2.9 billion tonnes of carbon dioxide each year. They are also important for adaptation, reducing flood risk and exposure to soil erosion and landslides.⁴ They are critical to poverty reduction and environmental sustainability⁵ providing wider ecosystem services such as water, food, fuel and

fibre, air purification, climate regulation and a repository for up to 80% of the world's terrestrial biodiversity. Sadly, deforestation, driven mainly by agriculture, is the second leading cause of climate change globally (after burning fossil fuels) and accounts for around 6.7 Gt CO₂e of GHG emissions per year. The devastating COVID19 pandemic has also highlighted that forest loss is likely to increase the risk of people catching infectious animal-to-human diseases, potentially pushing people further into poverty due to health and economic impacts.

According to the IPCC and the Intergovernmental Panel on Biodiversity and Ecosystem Services (IPBES) we have just 10 years left to avert climate change's most dangerous impacts. By 2050 the UN estimates that there will be 9.8 billion people on the planet with demand for food increasing by 70%. Agriculture already uses 70% of global fresh water and 30% of global energy (including the food sector). With the current COVID19 pandemic likely to have long-lasting economic and social impacts, there is a need to ensure that protecting and restoring the world's forests is at the heart of climate change and green recovery efforts.

2. NEED FOR INTERVENTION

2.1. Madagascar

Madagascar is an ideal environment for a nature-based solution to climate change which also contributes to biodiversity, forest protection and poverty reduction.

Madagascar's biodiversity is unique. It is home to 250,000 species. 98% of its mammals, 91% of its reptiles, and 80% of its flowering plants are found nowhere else on earth. There are 11,000 endemic plant species, including hundreds of threatened rosewood and other hard wood trees. Between 1999 and 2010, 615 new species were discovered, including 385 plants, 69 amphibians and 41 mammals. This exceptional biodiversity is found in multiple distinct habitats ranging from coastal wetlands and mangroves to dry and wet terrestrial forests through to arid plateaus and scrub deserts.

Madagascar's forests lock in millions of tonnes of carbon that could contribute to climate change. The UNFCCC estimates that high carbon densities per unit coupled with high deforestation rates mean that emissions from the degradation of Madagascar's forests could be between 15 -20 million tonnes of carbon per year. According to USAID, in 2011, emissions from land use change and forestry (LUCF) and agriculture, contributed to 98% of total greenhouse gas emissions in Madagascar.

Madagascar's forests play an integral role in rural livelihoods, food security and development. Over 90% of Madagascar's population live on less than \$2 per day⁶ and 80% of the poor are found in rural areas. These people are heavily dependent on forests for the collection of non-timber forest products, fuel wood and construction materials. Forests also provide important ecosystem services to the wider rural landscape, including water supply and purification.⁷ As agriculture is mostly poorly developed and inefficient, many rural Malagasy at the forest frontier depend on unsustainable slash and burn agriculture to survive.⁸⁻⁹ With the population expected to grow from 26 million today¹⁰ to 35 million by 2030¹¹ widespread poverty is likely to increase pressure on forests. It is estimated that environmental degradation (forest and soil loss, the need to rebuild infrastructures due to erosion, diminished agricultural productivity etc.) costs the country between 9 and 10% of GNP annually, further hampering development¹².

Madagascar's forests and biodiversity are disappearing fast. Madagascar has approximately 8.9 million hectares of forest left, with deforestation rates increasing progressively from 2005 and more than doubling in the period 2010-2014, resulting in 100,000 hectares lost each year.¹³ Recent evidence suggests that in 2018 Madagascar lost a higher proportion of its forest than any other tropical country.¹⁴ Deforestation rates in the dry and moist forests have remained consistently high. Major threats include clearing for subsistence agriculture, charcoal, timber and mining. Of the 105 lemur species, 93 are now listed as endangered or vulnerable by the IUCN.¹⁵ Certain high-value resources (e.g.

rosewood, tortoises, sea cucumber, and shark fin) are also increasingly threatened by the exotic pet industry, the illegal wildlife trade and Chinese demand for luxury furniture.

Madagascar's forests are part of their unique selling point internationally. Madagascar's incredible natural wealth (representing 49 percent of the country's total wealth (not including mineral assets)) is a source of national pride and has the potential to generate substantial economic benefits. It is also the country's unique selling point internationally.¹⁶ Tourism is a vital source of revenue, contributing to 16.6% of gross domestic product in 2017.¹⁷ However, the potential to use natural resources to contribute to poverty reduction and economic development has yet to be fully realised. It is estimated that ecotourism could generate over US\$28 million/year,¹⁸ yet only US\$ 1 million/year is currently captured through national park entry fees.¹⁹ Political instability has also impeded private investment in developing tourism-based markets and infrastructure. It has also been estimated that since January the COVID19 crisis has led to the loss of half a billion dollars in expected tourism revenues which could further undermine progress in the sector.

There are promising opportunities to engage with the Government of Madagascar, which has made protecting Madagascar's environment a key priority. This presents the opportunity to consolidate and build on existing cross-government interventions and to bring new opportunities and investment to the country.

2.2. What are the problems we are trying to address?

2.2.1. Deforestation and wider drivers

Forests in Madagascar are under increasing pressure from subsistence agriculture, timber harvesting, extraction for fuelwood or charcoal, small scale mining, and general encroachment due to population increases, poor agricultural productivity, and a rising global demand for forest products. The key drivers are:

- i) the **lack of value attached to the many social and environmental benefits** which forests provide, which disincentivises forest conservation.
- ii) **A vicious cycle of slash and burn agriculture**, with ever shorter fallow periods, meaning that the land fertility quickly diminishes and more forests are slashed and burnt, with the added risk of uncontrolled bush fires.
- iii) **Felling trees for energy** in a country in which 92% of energy needs are met by wood or charcoal, which then also opens up previously remote forest areas for further exploitation.
- iv) **Illegal logging**, driven by international demand for precious woods such as rosewood and ebony, has increased, which can also open up the forest to mining and is linked to corruption and insecure land tenure.
- v) Commercial and small-scale mining, though currently a relatively small cause of deforestation, is increasing and often leads to irreparable forest damage and degradation.

These activities are exacerbated by insecure rights over forests and forest resources, which allow third parties to exploit the forests without any legal consequences, leading to **conflict** with local communities.

2.3. Overview of environmental governance in Madagascar

2.3.1. Conservation through International Conventions

Madagascar has ratified a number of international environmental conventions. In 2015, as part of the Paris Agreement under the UN Framework for the Convention on Climate Change, Madagascar submitted an ambitious Nationally Determined Contribution (NDC) which aims to reduce GHG emissions by at least 14% and increase the absorption of carbon through the forestry and land-use sector by 32% by 2030.²⁰ As part of the Bonn Challenge, Madagascar has committed to protect 4 million hectares of forest by 2030 which is expected to bring \$1,256 million of economic benefits and sequester 0.38 Gt of CO₂.²¹ This included a new commitment in February 2019 by the Malagasy government to 'green Madagascar' with an aim of restoring 50,000 hectares of forest per year.

Reducing Emission from Deforestation and Degradation (REDD)+ is a core component of the country's 2010 National Climate Change Policy and global mitigation efforts under the UNFCCC²². The government's REDD+ Readiness proposal was received and approved in July 2014 by the Forest Carbon Partnership Facility (FCPF) with the first emissions reductions payments expected in 2019.²³ There are currently five REDD+ projects in Madagascar, covering 16 sites, over 1,762,400 hectares. In terms of biodiversity, Madagascar's National Strategy for Sustainable Management of Biodiversity (NSSMB) was established in 1996 under the Convention of Biological Diversity. As a result, biodiversity management and its adoption into planning frameworks is now considered a national priority. The country's current National Biodiversity Strategy Action Plan (NBSAP) will run from 2015 to 2025.

2.3.2. Conservation through international organisations

Since the mid-1980s global donors, such as the USA, France and Germany, working with the World Bank, assisted Madagascar in implementing the NSSB through the National Environment Action Plan (NEAP). The NEAP was hailed as a landmark example of integration of environmental concerns in national policy frameworks and donor coordination. Notable successes include the creation of the Malagasy Office of the Environment (ONE), the Association Nationale pour la Gestion des Aires Protégées (now Madagascar National Parks), followed by the creation of the Madagascar Biodiversity Fund (FAPBM) to help fund the national park network.

Today, the World Bank has significantly scaled back its conservation activities and is largely focused on supporting large scale infrastructure and development projects. However, the French Development Agency (AFD) and the German finance Cooperation (KfW) continue to support the FAPBM, with KfW particularly focused on supporting infrastructure development linked to ecotourism in MNP protected areas. The AFD also supports projects aimed at increasing the resilience of farmers through uptake of climate-resilient production systems and agroecological techniques. The Global Environment Facility (GEF) also provides direct support to the FAPBM, while also working directly with the government to strengthen policy and legislative frameworks for protected management as well as projects on watershed protection and preserving plant genetic diversity.

Since the introduction of the NEAP several INGOs are focused on protected area management. The Wildlife Conservation Society and Conservation International, for example, support three subnational REDD+ projects in protected areas in the central and eastern rainforests (Makira, Corridor Ankeniheny-Zahamena and Corridor FandrianaVondrozo), while the World Wide Fund for Nature and FANAMBY are concentrated on supporting protected areas in the spiny and dry forests. Other organisations, such as Durrell and SEED, support a range of small scale community conservation, healthcare and education schemes in and around protected areas.

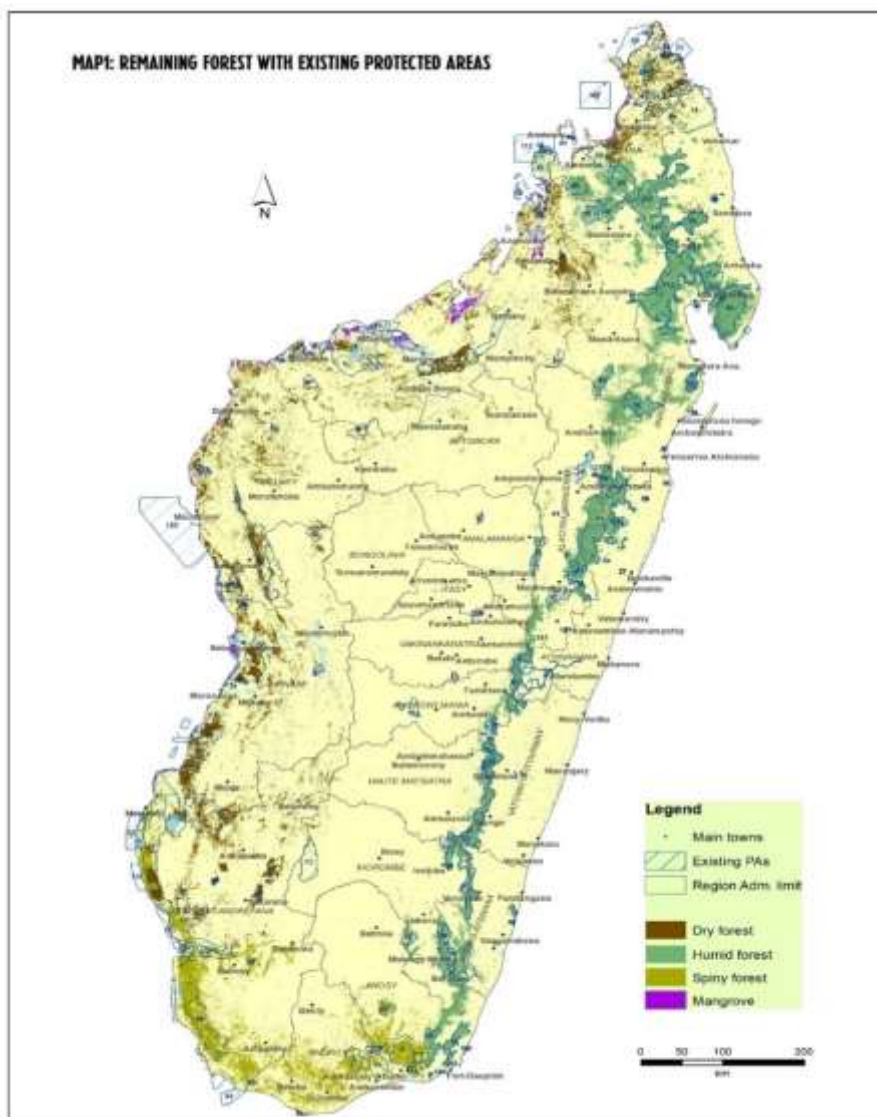
2.3.3. Madagascar's Protected Area Network

One of the biggest successes of the NSSB and NEAP was the establishment of Madagascar's protected area network (SAPM). At the 2003 IUCN World Parks Congress in Durban the Malagasy President announced an initiative to more than triple the area under protection from 3% to 10% of Madagascar's land area. Dubbed the "Durban vision," this led

to the creation of approximately 50 new protected areas bringing the total area of coverage from 1.7 to 7 million hectares, which includes around 70% of Madagascar's remaining natural forests.²⁴ Until the early 2000s the state, through parastatal organization ANGAP (now MNP, Madagascar National Parks), governed the parks, but with expansion came the need to adopt new alternative governance systems.

Today the SAPM consists of 122 parks. MNP manages 50 of the existing national parks, covering 2.6 million hectares, while the remaining newer protected areas are co-managed or 'sponsored' through formal contracts with national and international NGOs²⁵ and involve community forest management agreements with legally recognised local community institutions called "Communauté de Base" (COBAs). The Ministry of Environment and Sustainable Development (French Acronym: MEDD) is in charge of forest sector policy development and law enforcement of SAPM. **Annex 1** gives details of the number and size of protected areas in Madagascar in March 2017 by IUCN category.

Despite its big ambitions, the expansion of the SAPM was severely hampered by the 2009 political crisis which saw the protected area network management system face severe challenges. ODA funding for environment and conservation programmes was withdrawn or scaled back, which had a significant impact on the long term effectiveness and financial stability of the protected area network. The lack of donor funding, combined with resource constraints saw deforestation and illegal activity increase. According to a USAID/Traffic report (2016) 350,000 trees rosewood and ebony trees were felled inside protected areas between 2010 and 2015 and at least 1 million logs were illegally exported.²⁶



2.4. What are the gaps and barriers to effective protected area management?

This ICF investment seeks to ensure the future protection and sustainable management of Madagascar's protected areas. However, we have identified a number of barriers and gaps that need to be addressed.

- **Lack of long-term funding.** There is a significant gap between what is needed and what is available for successful park management. In 2013 the costs of managing the SAPM was estimated at US\$19 million/year. Put in perspective, government expenditure across the entire environment sector between 2003 and 2011 averaged US\$15.6 million per year.²⁷ Current domestic funding sources (such as tourism revenues, FAPBM, carbon credit sales) cover 8% of the SAPM's management costs while the remaining 92% of costs are met by donors, NGOs and private Foundations.²⁸ Mobilising sufficient resources to upscale successful programmes, develop innovative approaches to forest management and bring wider developmental benefits through ecotourism, healthcare and education, is still an enormous challenge for NGOs, particularly in isolated areas.²⁹ There is also concern around the future funding of protected areas due to the COVID19 crisis, with some NGOs and protected areas already suffering a financial loss as leading donors withdraw funds to deal with their own economic crises³⁰.
- **Lack of incentives.** As well as bringing shared benefits, forest conservation can also result in very real costs to households at the forest frontier. Communities in and around protected areas are often banned from using tavy³¹ and excluded from natural resource management and land-use planning. They often have their rights to resources restricted without seeing the benefits of doing so. Even where COBAs are well established and supported, communities that are not aware of the benefits of conservation can undermine long term sustainable management efforts. Furthermore, the 'promises' of development assistance from external actors has often failed to materialise, creating distrust of external interventions.
- **Lack of enforcement capacity.** In Madagascar there is significant evidence that improved forest protection is directly linked to strengthened staff capacity.³² However, in many cases the capacity of the regional authorities and COBAs to monitor and patrol protected areas effectively, particularly in the surrounding areas and buffer zones of protected areas, is constrained. Stakeholders have also suggested that COBAs who are well supported in the short term often lack the resources to be self-sufficient and to continue enforcement activities in the long term.

2.5. What are the opportunities for Defra to intervene?

Working through community managed protected area forests could provide an overarching entry point to address the above direct and indirect drivers of deforestation, as well as the gaps and barriers to governance identified above. These opportunities are identified below.

2.5.1. Supporting community managed protected areas

Madagascar has a long history of recognising the important role that communities play in managing forests.³³ *Transfer de gestion* contracts³⁴ (Transfer of management), where sustainable management rights are delegated by the state to COBAs, play a central role in newly created protected areas. There are clear examples of where resources rights have been transferred successfully through *Transfer de Gestion* agreements and where well-funded initiatives have helped to strengthen enforcement, improve the management of resources and create livelihood opportunities that have reduced pressure on forests. Today more than 15% of forests are now under community management³⁵ governed by 1,400 COBAs.

Working through the SAPM and fully functioning COBAs to protect terrestrial forests could therefore have many advantages, namely:

- **Secured tenure and resource rights.** Issues surrounding land tenure and resource rights are complex and poorly managed are a source of conflict. However, we have consulted a range of partners and stakeholders during the design of this intervention and there is good evidence to suggest that *Transfer De Gestion* agreements provide a strong foundation from which to strengthen community co-management structures and to test and build evidence around the different types of resource/access rights that work for different forest communities.^{36,37}
- **Improved governance.** Where national policy and institutional frameworks are lacking a bottom-up approach to strengthening governance through, for example building the operational capacity of COBAs could be far more effective than activities aimed solely at strengthening policy or national legislation. For example, fostering close collaboration between COBAs and the regional authorities in the management of resources can help strengthen legitimacy/authority over land and resources. Likewise, expanding *Transfer de Gestion* and scaling up forest management activities to include villages and hamlets on the forest edge (not just around protected areas) can help strengthen the visibility and legitimacy of COBAs in community governance.³⁸
- **Long-term rural development and financial sustainability.** Communities that can reap the benefits of increased income and reduced poverty are much more likely to be incentivised to sustainably manage forest resources. Evidence suggests that, with the right technical and financial support, COBAs provide the 'ideal structure' on which to link forest conservation with market based PES schemes, such as ecotourism, or voluntary carbon offsets which could generate long term benefits.³⁹ For example, a USAID study of COBAs in the eastern rainforests found that just four tourists a year paying an entrance fee of 10,000 Ar (\$5) would double their income to 42,000 Ar or \$20),⁴⁰ with the potential to generate jobs (such as cooks, guides). By capturing the positive externalities of effective COBA management communities are more likely to support and value community governance structures. Furthermore, successful market-based systems are also likely to attract further private sector investment which is key to long term sustainability. Integrating successful COBA management into PES has only just started to be explored in Madagascar and there is a real need to test and scale up successful approaches as well as support communities in attracting public-private sector partnerships.

3. STRATEGIC FIT

Through the ICF, the UK has committed at least £5.8bn from 2016/17 to 2020/21. In his statement at the UN General Assembly in September 2019 the Prime Minister committed to double this to at least £11.6bn from 2021/22 to 2025/26 to help vulnerable developing countries adapt to climate change and take up sustainable low carbon, resilient and inclusive development. Defra's contribution to the ICF supports developing countries protect the world's most biodiverse forests, promote sustainable livelihoods through improved land use and low carbon agriculture and contribute to global food security and resilience to climate change. So far Defra has invested £228m since 2011 into ICF projects around the globe to avoid over 90 million tonnes of CO2 emissions and 550,000 hectares of avoided deforestation.

In addition, this investment would:

- Reinforce the UK's international leadership in support of working with nature to deliver benefits for people, climate and biodiversity.
- Deliver on the 25 Year Environment Plan commitments to protect international forests and sustainable agriculture; and support zero deforestation supply chains;

- Support the UK's economic policy for strong, sustainable and balanced growth, and our domestic and international commitments on climate change, the environment and sustainable development through the Green Finance Strategy;
- Improve the delivery of the Sustainable Development Goals (SDGs), noting that HMG's 2015 Aid Strategy recognises that the fight against climate change is vital to sustainable development, and potential for climate change to reverse global development gains and push an additional 100 million people into poverty by 203020;
- Deliver for the HMG security and prosperity agenda and supporting implementation of the National Security Capability Review, given that avoiding the worst impacts of climate change and increasing sustainable land management is crucial to tackling instability.

4. IMPACT, OUTCOMES, ACTIVITIES

4.1. Impacts

- The project aims to achieve sustainable forest management of the SAPM through community managed protected areas for climate change mitigation and adaptation and poverty alleviation.

4.2. Outcomes

In line with ICF objectives, the project will support Madagascar's national climate mitigation and adaptation efforts whilst contributing positively to poverty reduction and protecting biodiversity. The results will therefore be focused on achieving the following long term outcomes:

- **Carbon stored (mitigation):** The project aims to support Madagascar in delivering its national determined contributions through carbon emissions saved as a result of avoided deforestation.
- **Biodiversity:** The programme aims to support Madagascar in achieving Aichi Biodiversity Target 11 and 7 of the Convention on Biological Diversity, and the UN Sustainable Development Goals 2 (sustainable agriculture) and 15 (Life on Land) to sustainably manage the national park network, restore degraded habitats/ecosystems, protect biodiversity and increase the resilience of forest landscapes.
- **Livelihoods:** This programme seeks to bring about a significant shift in the way communities use forest resources by creating incentives to move away from destructive practices to implementing alternative livelihoods that will increase productivity and reduce poverty. Short-term success will focus on increasing the number of people trained and supported in alternative livelihoods, but long-term success will be demonstrated if these communities are able to generate significant income well beyond the timespan of the project.⁴¹

4.3. What would success look like?

While the specific outcomes will be decided by the delivery partner, a successful project would be likely to achieve the following:

- An increase in land under sustainable management;
- Reaching the targeted numbers and types of beneficiaries;
- Delivering income and job increases through alternative livelihoods;
- Carbon emission reductions through avoided deforestation targets;

- Increasing the area of forest restored;
- Securing private investment/long term finance;
- Communities earning additional income from sustainable forest management e.g. PES, REDD+;
- Improved and increased access to healthcare/education;
- Increasing the capacity of COBAs/communities to manage protected areas;
- Uptake of community managed protected areas in other protected areas in Madagascar
-

4.4. How will success be measured?

The project will report against a set of official key performance Indicators (KPIs) that are used to capture the results of the UK's ICF. For KPIs that have official methodologies delivery partners are expected to use these to quantify the expected benefits. All KPIs relevant will be monitored over the 7 year period of the project. However, we expect KPIs 6, 8 and 10 to deliver benefits for up to 20 years (i.e. beyond the life of the project). Expected results should reflect the full extent of these benefits although they will not be monitored once the project ends. Delivery partners are expected to report against at least one if not all of the following:

- KPI6: Change in Greenhouse Gas (GHG) emissions as a result of ICF support. (tCO₂e)
- KPI 8: Number of hectares where deforestation and degradation have been avoided through ICF support. (Hectares)
- KPI 10: Value of ecosystem services generated or protected as a result of ICF support.
- KPI 11: Public climate finance mobilised (GBP)
- KPI12: Private climate finance mobilised (GBP)
- KPI 15 the extent to which the ICF intervention is likely to have a transformational impact.

Defra will also seek to report on “the number of forest dependent people whose livelihood has been improved or protected”. This was formerly Key Performance Indicator 13 to support which an official methodology is available.

4.5. Activities

As part of the grant application process the delivery partner will identify the most vulnerable habitats and the site-specific drivers of deforestation and species loss and will then propose tailored relevant solutions. However, the following section outlines some of the likely activities to be undertaken by the project:

The programme will comprise of three main components which will aim to reduce the overall drivers of deforestation.

- i) Component 1 - Activities to build the capability and capacity for sustainable land management
- ii) Component 2 - Activities to support livelihoods and development
- iii) Component 3- Activities to increase capacity and enforcement

Component 1 - Activities to build the capability and capacity for sustainable land management

- Funds and resources to support community participation in consultations/meetings on land use planning and decision making in the sustainable use of resources;
- Strengthening community capacity to manage forests and other natural resources sustainably;

- Developing educational and communication tools to promote sustainable land management;
- Equipment/training for communities to restore degraded habitats for commercial or subsistence use;
- Supporting alternative land management strategies, such as agroforestry, to support biodiversity in crop land areas.

Component 2 - Activities to support livelihoods and development:

- Training, equipment or micro finance to create alternative livelihood opportunities e.g. bee keeping, fish farming, tour guides for eco-tourism.
- Equipment and training for communities in sustainable land management/farming practices designed to increase productivity and yields;
- Training to local communities in biodiversity/species monitoring so that successful performance could be linked to payments for environmental services schemes, or ecotourism;
- Developing and promoting family planning, education and health care services to improve overall wellbeing and reproductive health.
- Facilitating public/private sector engagement with communities.

Component 3- Activities to increase capacity and enforcement

- Training for community associations and regional authorities in how to respond to forest fires and illegal activities;
- Strengthening local authorities' capacity to respond appropriately to illegal natural resource extraction;
- Providing funds for travel costs to enable community associations to carry out patrols;
- Training community associations in financial accounting, management and resource monitoring to increase operational efficiency and long-term self-sufficiency

5. THEORY OF CHANGE

Figure 1. sets out a high-level theory of change (ToC) for the programme. There is good evidence set out in **Annex 3** that investing in protected areas remains one of the most effective in delivering nature-focused outcomes and that investments focused on strengthening implementation in existing protected areas “should be at least equal to investment in expansion.”⁴² It has also been shown that communities and indigenous groups integrated into the management, monitoring and enforcement of protected presented lower deforestation rates than protected areas or paper parks.⁴³ However, the evidence base is diverse and differing factors enable success in different contexts. In Madagascar there has been extensive research in conservation science conducted over the last few decades.⁴⁴ However, given the relative ‘newness’ of the SAPM and the diverse ecosystems it covers, it is important to build evaluations into any programs to add to the evidence base.

Barriers to successful community managed protected areas.:

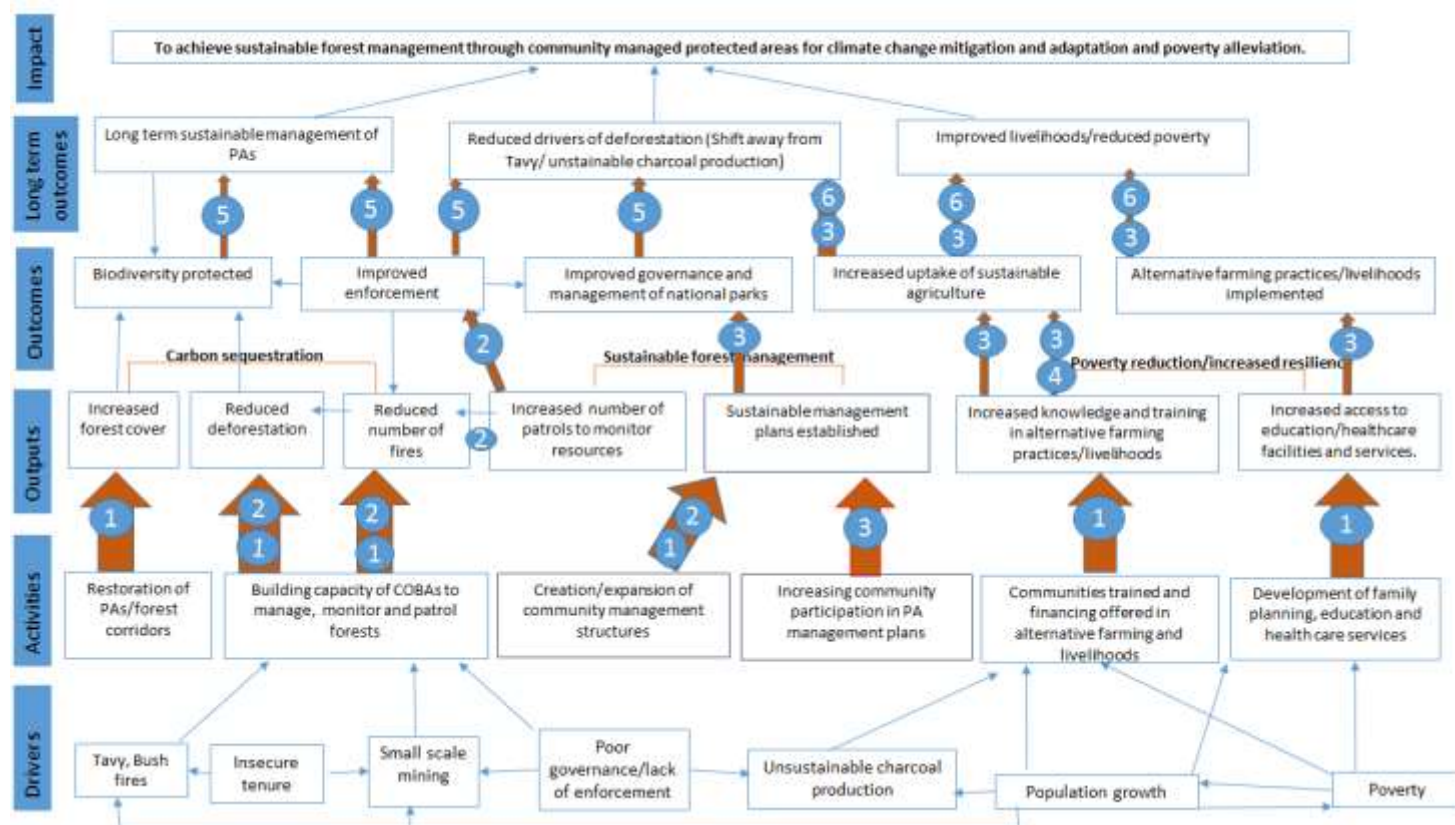
- *Policy barriers:* including unclear/underdeveloped forest policy, incomplete formalisation of rights, insecure or unclear tenure and resource rights in the buffer zones of national parks⁴⁵, lack of community participation in decision-making in land and resource planning.
- *Organisational barriers:* lack of local and regional institutional capacity, including regional authorities and COBAs to manage and monitor protected areas effectively, elite capture of resource rents and weak national forestry organisations.
- *Economic barriers:* including lack of capital to invest in or scale up alternative and/or sustainable livelihood and development opportunities (such as ecotourism) and limited markets/opportunities in and around protected

areas for forest products and services. Lack of finance to tackle leakage and extend programmes to include communities beyond buffer zones.

The proposed programme is designed to address these barriers through:

- Training and capacity-building processes which will improve the management, monitoring and enforcement of sustainable management plans;
- Training and capacity building processes to improve knowledge of sustainable farming practices and alternative livelihoods;
- Availability of funds for scaling-up successful forest management strategies and payment for environmental services schemes, and/or investments in infrastructure, tools, equipment and resources to help generate alternative incomes;
- Building on existing evidence to demonstrate what works in developing a successful community managed protected area.

Figure 1 – Theory of change



A number of key assumptions underpin the theory of change in terms of how outputs will translate into outcomes and ultimately impact. These include (numbers 1-5 correspond to numbers in diagram above):

1 *Communities are able and willing to apply knowledge and skills gained from capacity building/training. This assumes that the training, skills and resources given will address the needs of local communities and will be sufficient to implement alternative livelihoods/manage resources more effectively.*

2

Increased enforcement will deter outside actors from exploiting natural resources. This assumes that well equipped and resourced COBAs will be able to deter migrants, freeloaders as well as powerful vested interests from carrying out destructive practices. Understanding the political economy is key in this context.

3 *Communities can see the benefits of the project and are incentivised to continue to apply inputs.* This assumes that increasing community participation in the design of sustainable management plans will incentivise communities to manage those resource in the short and long term and that supporting activities, such as intensive farming practices that increase yields and productivity, as well as those able to link biodiversity/conservation impacts to payments, such as through ecotourism and PES, will provide greater incentives to protect biodiversity and forests in the long term.

4 *Livelihoods/development opportunities exist around protected areas.* This assumes that opportunities for market-based mechanisms (PES, REDD, ecotourism) to generate long term income and encourage protected area self-sufficiency exist but remain untapped, with evidence that Madagascar's ecotourism industry is hugely underdeveloped. There is also the assumption that private sector actors will be interested in developing these opportunities.

5 *Political stability/political will to create enabling conditions for long term sustainable management.*

Achieving long term sustainability

Supporting livelihoods and poverty outcomes will be key to the long-term sustainability of the project. Prospective bidders will need to demonstrate how they will achieve one or more of the following: i) strengthening community associations through COBAs to generate revenues through the management and monitoring of forest resources; ii) provide training/skills to communities in alternative and sustainable livelihoods and farming practices that will increase productivity and ensure economic sustainability; iii) support development opportunities that link successful enforcement and protection activities with income generation, for example through Payment for Environmental services (PES) schemes or ecotourism. As part of the grant application process all project proposals will need to demonstrate how the activities will continue beyond the life of the project, such as whether additional finance has been leveraged from public/private sources, what work is being done to foster public/private relationships or whether markets for forest products or ecotourism have been identified. Projects will also need to report against KPI15 'transformational change' to demonstrate the long-term benefits.

Box 1 - Case study to support the theory of change, Anja Miray community

Located in the dry forests of the Haute Matsiatra region of Madagascar, the Anja Miray community reserve is home to ring-tailed lemurs, chameleons and a variety of endemic bird species. Just 30 years ago more than half of the original Anja community forest had been illegally cleared through slash-and-burn methods, resulting in soil erosion, forest degradation and water shortages which further affected agricultural productivity.

Understanding the threat to community, 6 villages surrounding Anja began a campaign to reforest the area with native tree species, educate resident communities about environmental protection and develop the areas eco-tourism potential. They also resettled farmers outside of the protected area and instituted 'dina' (traditional community law) that banned further use of the protected area.

In 2001 the Anja Miray community were officially transferred land and resource rights to manage 60 hectares of forest and, with initial support from a small scale grant from the GEF and further funds from several NGOs, the community have been able to build their association and scale up their activities to include over 2,500 community members. After a successful evaluation a 10 year contract was granted and their area expanded to cover 72 hectares.

Anja Miray is now one of the most visited ecotourism sites in Madagascar with over 12,000 visitors a year generating \$45,000 in revenues. Sustainable farming techniques, such as rice Intensification, has improved productivity while alternative livelihoods such as ecotourism and fish farming, have funded a primary school and malaria education and healthcare. Restoration activities have successfully improved fresh water filtration in the soil and also helped to improve biodiversity. For example, in the 1990s there were fewer than 100 lemurs recorded in the area which has since grown to 415 recorded in 2010. Tree nurseries have also been created for the restoration of renewable fuel sources and wood harvesting to ensure sustainability.

Anja Miray has been recognised by UNDP's Equator Initiative as a leading model in community-based environmental conservation and sustainable development.

APPRAISAL CASE

The appraisal case sets out the options design process which establishes principles and perimeters for the programme, drawing on lessons learnt. It will then evaluate investment options in line with DFID's 4 E's value for money model - economy, efficiency, effectiveness and equity. It will conclude with an appraisal of the preferred delivery mechanism.

6. OPTIONS DESIGN PROCESS

In order to design the options for the programmes we did the following:

- drew on global literature and systematic reviews on the context for intervention and community-based approaches to forest management and corroborated findings through consultations with key experts;
- carried out a field visit in Madagascar to identify priority areas and understand the context for intervention.
- held a participatory workshop at the Zoological Society of London with conservation and development stakeholders, with experience in working in Madagascar, to share expertise/lessons learnt and identify vulnerable habitats and delivery models. Stakeholders included WCS, WWF, Durrell Foundation, Blue Ventures, ZSL, IUCN, Kew and researchers from Bangor University, Cambridge University and Kings College London.

Annex 2 lists a set of design principles that shaped the project based on the evidence gathered.

6.1. Options rejected

These principles were used to identify a set of feasible options which are appraised in section 6.2. The list of wider investment options considered but rejected are explained below.

Investing in mangrove habitat. The important role that mangroves play in climate change adaptation and mitigation is well known, and while deforestation rates of mangroves in Madagascar are still at unsustainable levels evidence suggest that overall mangrove deforestation has decreased and is lower than other terrestrial forest types, such as the moist, dry and spiny habitats. Defra already has its successful 'Blue Forests' programme through Blue Ventures which focuses on mangrove protection and we are already considering how to scale up his work as part of our ICF uplift. It was therefore decided that this ICF investment should be used to support other vulnerable forest types to ensure the best value for money and impacts.

Investing in the creation of a new protected area. As set out in the strategic case, around 70% of Madagascar's remaining forest are protected under the existing SAPM, however the lack of funding, technical expertise and enforcement has limited their effectiveness. Working in SAPM would allow Defra to ensure that all of its resources are channelled into supporting and scaling up existing successful approaches and tackling the wider drivers of deforestation and removing the barriers to successful park management. Establishing a new protected area would require significant resources to be diverted to agreeing a new management contract with the government, identifying new sites for protection and building the organisational capacity of the delivery agency to manage those sites.

6.2. Shortlisted investment options

The four shortlisted investment options are:

Option	Short description
0	Do not invest
1	Invest £5 million or less (low scenario)
2	Invest £20m or more (high scenario)
3	Invest £10.2 million (medium)

Option 0: Do not invest (not recommended)

An argument could be made to do nothing on the grounds that the Malagasy government is already obtaining support (indirectly) from Defra for mangrove protection and that other multilateral and bilateral agencies are supporting the protected area network, particularly through the Madagascar Biodiversity Fund. However, as set out in the strategic case, ODA assistance focused on biodiversity, climate change and desertification fell sharply during the political crisis from \$477M in 2006-2007 to \$236m 2010/2011 and, despite increasing between 2014-2015 to \$377m⁴⁶, it is still woefully short of the amount needed to meet Madagascar’s environment commitments and to support its protected areas. Both MNP parks and non-MNP sites are under huge pressure from encroaching deforestation and rely solely on donor assistance for their management. The COVID19 crisis is likely to put even further pressure on the protected area network, with some NGOs and parks already experiencing a financial loss⁴⁷. By “doing nothing”, deforestation is likely to increase and people living in and around protected areas are likely to become more vulnerable and less resilient to extreme climate events. Not investing the UK’s ICF to protect Madagascar’s forest could therefore have the following major implications for climate, biodiversity and poverty reduction:

- Madagascar has already lost 80% of its forest, and with 100,000 hectares being lost every year the window for intervention is short. Under a ‘do nothing’ scenario emissions from deforestation and land use change are set to tip the country’s status from carbon sink of 203 MtCO2 in year 2000 to an emitting source of 22 MtCO2 by 2030.⁴⁸
- The potential damage to Madagascar’s biodiversity is also likely to be “unparalleled in recent geological history”.⁴⁹ Madagascar is one the seventeen ‘Megadiverse States’, harbouring up to three quarters of the world’s estimated species⁵⁰. Without a UK contribution to global efforts to reduce greenhouse gas emissions the climate will be unsustainable for 25% of Madagascar’s species, with many extinct by 2080.⁵¹
- It is estimated that environmental degradation (forest and soil loss, the need to rebuild infrastructures due to erosion, diminished agricultural productivity etc.) will cost the country between \$US457 million and US\$495 million per year, between 9% and 10% of GNP annually⁵². Not investing is likely to have a negative impact on the ability of rural populations to adapt to climate change and will drive more people into poverty.

Option 1: Invest £5 million or less, low scenario (not recommended)

Under this option a smaller investment would greatly reduce the financial, delivery and operational risks of working in the country. It would also allow smaller NGOs with the skills and experience in Madagascar to apply for funding. However, as set out in the strategic case, many protected area managers both in MNP and non-MNP sites lack sufficient funds to manage protected areas effectively. NGOs struggle to deliver the development and alternative livelihoods assistance required to incentivise community based protected area management, as well as the capacity building assistance needed to make community associations sustainable in the long term. A project of this size would therefore likely support “business as usual” activities, and not provide the reach, additionality and transformational impacts

required of our ICF. It would also be less likely to achieve the scale needed to attract public/private sector investment for payments by results-based mechanisms. Overall, a smaller investment would significantly reduce the number of hectares of forests protected and number of communities supported. With less funds, but the same amount of resources required to implement the project, this option would not deliver the value for money expected from Defra's ICF.

Option 2: Invest £20 million or more, high scenario (not recommended)

This option would allow Defra to support several community managed protected areas throughout the SAPM, significantly increasing the number of hectares of forest under sustainable management and the number of people and communities supported. However, given the limited number of organisations working in Madagascar with both the authority to manage protected areas and the ability to absorb over £10 million (around £1.5 million per year), this option would likely increase the delivery and operational risks, as well as the risk of funds not being spent. A larger investment could be delivered through a multilateral organisation or the Madagascar Biodiversity Fund, however section 6.5 sets out in further detail why these options are not recommended. According to stakeholders consulted for this business case, working through an NGO increases the likelihood of reaching the poorest and most marginalised forest communities— those on the peripheries of protected area sites are often not reached by the work of large multilaterals. However, there is potential for the project to scale up at a later date, based on increasing capacity of NGOs, proof of concept with regards to sustainable livelihoods and leveraging private sector support.

Option 3: Invest 10.2 million (recommended)

Under this option funds would be used to support MNP or non-MNP protected areas to scale up or expand management activities. As set out in the strategic case, Madagascar is a poor country and investment is likely to bring significant impacts and value for money. This option therefore reflects our understanding that there is currently a limited number of organisations working in protected area management able to absorb and spend an investment of over £10 million. A project with a yearly spend of around £1.5 million a year would enable us to balance the need to deliver a quality project, ensure additionality but reduce overall delivery and fiduciary risks. This also reflects current learning from our existing ICF project in Madagascar, which was piloted as a small Darwin project but has since expanded to three sites in Madagascar and two further sites in Indonesia with £10.1 million of ICF support. This project is achieving impact and delivering transformational change, however it is also operating at its maximum. For a small to medium sized NGO a larger investment could result in funds being diverted away from activities on the ground to building in-country/organisational capacity, which does not deliver the best value for money. As above, this option still provides the opportunity to scale up at a later date.

6.3 Appraisal of delivery options

The above section sets out the justification for making a £10.2 million investment in Madagascar, the section below sets out the appraised delivery options. In the absence of monetised benefits of this programme an assessment of value for money has been undertaken through a multi-criteria analysis set out in Table 1.

Option	Short description
4	Malagasy government
5	Madagascar Biodiversity Fund
6	Multilateral
7	Impact investment
8	A lead single NGO relationship
9	NGO consortium with multiple equal stakeholders led by ICF team

Option 5: A direct grant to the Madagascar Biodiversity Fund (not recommended)

Under this option direct investment would be provided to the Madagascar Biodiversity Fund (FAPBM) through a sinking fund or an endowment to fund management activities across the SAPM. While this option would enable Defra to provide long term sustainable funding through the generation of interest, the returns on investment have so far been small. This option would also require Defra funds to 'sit' for a year before generating any interest or delivering any benefits. Under this option specific activities, outputs, outcomes and impacts could not be attributed to Defra funds. One option explored was for FAPBM to establish a grant-management function to earmark Defra funds to an NGO or consortium for the activities/geographic areas of interest to the project. However, this option does not offer the best value for money. Establishing a secondary financing mechanism would be onerous, risk delays to the project, result in additional transaction costs and would be a 'hands off' approach between donor and delivery partner. This option offers no advantages over Defra providing a grant directly to a delivery partner where we would have complete control over where the funds are allocated.

Option 6: Multilateral (not recommended)

Since the 2009 political crisis there are currently few multilaterals working in the SAPM, which places limitations on this option. Having played a significant part in Madagascar's conservation efforts for 30 years the World Bank has now significantly scaled back its activities. For example, the funding for one of its largest projects, the Bio Carbon Fund 'Ankeniheny-Mantadia-Zahamena Corridor REDD+ programme in partnership with Conservation International, ceased in 2017. WB is now largely focused on supporting large-scale infrastructure and development projects. The Global Environment Facility (GEF) is supporting a number of projects through multilaterals (e.g. UNEP) in Madagascar. These projects are providing vital support to the government by strengthening the policy and legislative frameworks to support protected areas. As the UK is the fourth largest donor of the GEF, we suggest that the UK's money could be better targeted to complement rather than duplicate existing work in this area.

Option 7: Impact fund (not recommended)

Given the right context, investing in an impact fund could leverage significant amounts of private capital thus multiplying the impact of ICF funds. However, there are a limited number of investment opportunities in Madagascar that could provide a large return on investment that would attract private investors, especially in relation to protected areas. Many impact investment funds which focus on conservation outcomes in Madagascar are relatively new, with many projects still in the scoping stage. Althelia's Climate and Conservation Fund, for example, has failed to move beyond the design and capital-raising phase, and while some of their smaller scale projects have been taken forward the lack of opportunities for large scale investment, political insecurity, lack of basic infrastructure and corruption are seen as some of the barriers to investment. This option is not recommended given the risks of working in an untested market and the challenges of developing market-based solutions. The lack of investable projects would also be likely to impact negatively the commitment of additional funding by other public or private funding sources.

Option 8: A lead single relationship (preferred)

Defra's existing ICF bilateral investment in Madagascar utilises the model of a single relationship successfully (in this case with an INGO) to deliver the programme. This option is likely to require relatively active management by the ICF team to ensure effective oversight. Under this option, the lead delivery partner could subcontract other third party organisations to work on the project, however working directly through one partner will enable us to develop a strong relationship with clear lines of responsibility for programme implementation. In Madagascar they will have deep and well-established working relationships with local authorities, national NGOs and community groups and are likely to be

the designated park managers holding an existing contract or agreement with the Malagasy government to manage the protected area. They will be able to contract out specific work streams to other partners (which may include other INGOs and national NGOs) within the programme if additional input or expertise from external parties is required.

Option 9: NGO consortium led by ICF team (not recommended)

A consortium of both international and Malagasy organisations/stakeholders would be assembled that could provide capacity in governance, enforcement, expertise and experience, potentially increasing the impacts of a programme across a range of outcomes. However, this option would be resource-intensive for the ICF team who would effectively take on direct responsibility for leading and co-ordinating the delivery of the project remotely and would also involve managing several funding agreements. Aside from resourcing, this option would increase risk exposure to the department including risks associated with managing multiple delivery partners and multiple funding streams.

Option 10: NGO consortium headed by one lead partner (not recommended)

This is an adapted version of option 9 involving utilising a larger NGOs to lead a consortium. The lead NGO would hold the contract to manage the protected areas, thereby providing reliable expertise on managing protected areas successfully, help facilitate on-the-ground implementation, delivery and coordination. However, forming a consortium of delivery partners in advance of programme implementation would be onerous as it risks delays, while providing no tangible benefit over and above Option 8. Also, the formalised nature of a consortium, where each organisation has a strictly defined role, could present obstacles to adaptive management - an important aspect of effective programming. This option, while likely less resource-intensive than Option 9, would face similar challenges around potential conflicts of interest and management of relationships, which presents risks to the effectiveness of the programme. Officials at DFID have advised us of the difficulties when using this programme structure and it is not recommended.

Table 1. Scoring of potential delivery options

Delivery options were assessed and scored based on the following criteria.

Potential to deliver against the programme objectives – this takes into account technical criteria needed to deliver the project, such as a strong track record of working with communities in Madagascar, the ability to be flexible and responsive in programming, the ability to work in close collaboration with a range of different stakeholder and partners for delivery, the ability to deliver ICF outcomes in a cost-effective way that delivers good value for money.

Ability to leverage capital – this is based on the ability of the delivery partner to leverage further support from donors, private sector investors and development banks.

In-country presence – this takes into account the difficult political, logistical and delivery challenges of working in Madagascar and with communities. It’s about having the legitimacy and authority to work in protected areas as well as the ability to access rural communities. It also considers the opportunities to build on existing programmes.

Defra on Burden – this takes into account whether the chosen delivery option is an effective and efficient use of Defra/ICF resources in order to manage and monitor the project.

	Potential to deliver against the programme objectives	Ability to leverage capital	In-country presence	Burden on Defra	Score
Weighting	2	0.5	1	1	-

Direct grant to National government/MNP	Weak (0)	Weak (0)	High (2)	High (0)	2
Madagascar Biodiversity Fund (FAPBM)	Medium (1)	Medium (1)	Significant (1)	High (0)	3.5
Multilateral	Medium (1)	High (2)	Low- medium (1)	Medium (1)	5
Impact Fund	Low (0)	Medium – high (2)	Weak (0)	Low (2)	3
Single delivery partner	High (2)	Low-Medium (1)	Significant (1)	Medium (1)	6.5
Consortium of delivery partners led by ICF	Medium (1)	Low-Medium (1)	Significant (1)	High (0)	3.5
Consortium led by lead partner	Medium (1)	Low-Medium (1)	Significant (1)	Medium (1)	4.5

6.4. Recommendation

As outlined in the strategic case, evidence suggests that on a global level, the carbon, livelihood and biodiversity benefits of protecting Madagascar’s forests far outweigh the costs. Option 3 to invest £10.2 million in Madagascar’s SAPM would allow Defra to create permanent change in a small number of critical protected areas that harbour exceptional biodiversity and ecosystem services that have the potential to be sustainable over the long term. We recommend investing in MNP and non-MNP protected area sites that are in the humid, dry or spiny forest. A project would not have to cover all of one ecoregion and may cover part of more than one as appropriate. Annex 3 sets out the strength of the evidence behind this option.

Stakeholder feedback supports our recommendation that delivering the project through option 8-10 would make the most difference to communities living at the forest frontier. Option 8 would be the preferred based on our experience of project delivery. Working through a new delivery partner always entails some risk. To mitigate this risk the delivery partner must have a proven track record, demonstrate good connections to the Malagasy government and have excellent relationships with other grass roots organisations/smaller NGOs and the private sector working in the country. They will also need to provide evidence that they are supported by the regional government authorities to work in protected areas, through an interim or formal contract.

Other reasons for wanting to work through an NGO include:

- A wide range of skills and expertise is needed, particularly in working with communities and COBAs and in developing conservation and livelihoods projects;
- NGOs will be better equipped to respond and adapt to the changing political context and the potential impacts/risks to this programme of work;
- NGOs are already likely to have good connections and relationships with local Malagasy NGOs/civil societies and with the regional authorities, which is vital for successful enforcement.
- We have strong evidence from Defra, from our existing successful ICF Blue Forests project in Madagascar, delivered through the UK NGO ‘Blue Ventures’, that this type of partnership and approach can generate excellent results.

6.5. Costs/benefit analysis

As set out in the commercial case, ICF funds for this project will be awarded through a competed grant. This means that the design of the programme and its precise cost-benefit ratio (BCR) cannot be calculated at this stage.

HMT and DFID ODA Value for Money guidance recognises that competition is normally the best way to achieve value for money⁵³. Through the grant application process, Defra will require detailed information in order to carry out a full value for money assessment for all project proposals submitted. Section 7.1.1 sets out in further detail how value for money will be assessed as part of the procurement and evaluation process. The successful applicant will therefore need to demonstrate what benefits will be delivered, how they align to ICF strategic aims and KPIs and that they exceed the costs of the programme. The successful proposal will be then be submitted to Defra's Investment Committee and ODA board for further review and for VFM assurance. If a proposal does not meet the minimum value for money criteria or Defra is not satisfied with the overall quality of applications, then Defra reserves the right not to award the funding.

6.5.1. Approach and limitations

Given the competitive process outlined above, the cost benefit analysis carried out below is 'light touch'. The project costs are presented in section 6.5.2. in as much detail as currently known. This is followed by an assessment in section 6.5.3 of the range of potential benefits (quantifiable and non-quantifiable) associated with the preferred Option 8. This is in line with [Green Book](#) guidance to consider quantitative and qualitative benefits in appraisal. In section 6.5.4, we provide a simplified example of how the minimum value for money could be demonstrated in a proposal. Having reviewed a range of similar DfID business cases and consulted ICF analysts across BEIS and DfID, this quantitative and quality approach was considered the best option for ICF programmes with high levels of uncertainty regarding expected benefits.

6.5.2. Costs

- The full cost the programme is £11, 010,113, this includes
 - The financial costs over the life time of the project will be £10.2 million
 - ICF staffing costs, including overheads, are estimated at £106,000 a year: FTE capacity of different posts is as follows: EO (0.05); HEO (0.7); G7 (0.2); G6 (0.1); SCS (0.05). The overall present value of staffing costs (including overheads) over 7 years is £751,113. The costs associated with this capacity have been provided by Defra Finance.
 - Defra is looking to recruit 1-2 panellists with expertise of project delivery in Madagascar to review and evaluate the projects proposals. Consultancy fees are likely to vary subject to the amount of proposals received and therefore time taken to review, however an approximate estimate is £1000 (2 x panellists for 2 days at to £250 per day).
 - In addition to the due diligence carried out in-house as part of the grant application process, an independent due diligence review of the chosen delivery partner will be carried out by an external agency before the grant is awarded. This will be Defra funded and is expected to cost between £50,000 (excluding VAT).
 - Defra will carry out at least three field visits for the duration of the project, estimated to cost £ 8,000.

6.5.3. Benefits

Madagascar's forests provide significant benefits both to the communities that depend on them and to the greater global good. Based on the literature available, an assessment of the potential benefits (quantifiable and non-quantifiable) of the three ecoregions (humid, dry, spiny) is presented in **Annex 4**. We also consider the extent to which we believe there is a clear funding need in an ecoregion. The benefits derived from existing ICF programmes were also considered (**Box 2**). Both the ICF Blue Forest project in Madagascar and the Cerrado project in Brazil provide examples of the type and range of benefits that we could expect this programme to provide.

This project intends to deliver benefits that are both quantitative and monetizable (e.g. avoiding greenhouse gas emissions) as well as qualitative and non-monetizable (e.g. avoided biodiversity loss). It is important therefore to note that while there is significant evidence available that seeks to quantify and value global environmental benefits associated with forests, it is generally recognised that placing a monetary value on 'the environment' is often problematic (for example, what value should you place on the survival of a species?). Studies often fail to adequately capture the non-quantifiable or indirect benefits (such as socio-cultural or biodiversity benefits) that forests provide. The ongoing [Dasgupta review](#) was established explicitly to fill the evidence gap of the economic benefits of biodiversity and the economic costs/risks associated with biodiversity loss.

In Madagascar of particular note are the following benefits:

- **Carbon stored (mitigation):** avoided carbon emissions from preserving standing forests. Our assessment includes a combination of the carbon storage potential of a forest and the rate of deforestation.
- **Non-carbon ecosystem services:** including the provision of food, water and nutrient cycling, air purification and the value of tourism. Some of these are non-quantifiable benefits which we consider from a qualitative angle.
- **Livelihoods:** ensuring the livelihoods of poor people with high levels of natural resource dependence are supported. We consider population density to understand how many people the intervention might reach if operating in a particular area. These are also often non-quantifiable benefits considered from a qualitative angle.
- **Biodiversity:** ensuring that we are working to protect especially biodiverse habitats and ecosystems will ensure this project delivers major co-benefits in key HMG priority areas. We consider local plant and fauna diversity endemism, as well as progress to date, on CBD Aichi target 11⁵⁴.

Box 2- Assessing project costs/benefits: drawing from Defra's ICF experience

This business case has looked across the Defra ICF portfolio to understand the potential deliverables and outcomes expected for a £10.2 investment. For example, the ICF's Blue Forest programme in Madagascar uses a similar community driven model to protect mangroves through sustainable fisheries/mangrove management. It also helps communities generate alternative livelihoods through fish farms and bee keeping. The Brazil Cerrado project, which concluded in June 2018, had forest management/land registration and forest fire management components similar to this project. Both of these projects have similar levels of ICF investment over a similar period, so in a broad sense we should expect similar results from this project.

For example, ICF have invested £10.1 million in Blue Forests over a 7 year period (but with benefits expected to follow for 20 years), which is likely to achieve:

- 89,000 hectares protected or under sustainable management;
- 13.9 million carbon emissions savings;
- 120,000 people benefiting from the project;
- 20,000 hectares restored/deforestation avoided; and
- Over 5000 people trained in alternative livelihoods.

We have also invested £10 million over a 7 year period for the Brazil project which is expected to achieve:

- 861,143 hectares under sustainable forest management
- 48.5 million carbon emissions savings;
- 128,000 hectares reforested/deforestation avoided;
- 2,500 people benefitting from the project; and
- £218,240,000 worth of ecosystem services preserved.

While a good indication of what to expect, the outcomes of this projects are likely to vary. Firstly, the cost/benefits will be based on the scope, size and location of the project, particularly in regard to the forest type. For example, rainforests are likely to have a higher carbon emission saving potential than spiny or dry forests. We would also expect this project to deliver even greater biodiversity benefits than the examples provided above given the huge endemism of particular species, not just in Madagascar but in each ecoregion. Secondly, a significant proportion of BV's project costs/resources were used to create community associations and actually establish community protected areas, whereas this project seeks to work within existing protected areas and through established COBAs to scale up existing activities. This suggest that greater results and VFM can be achieved.

6.5.4. Value for money potential

This section provides a simplified example of the cost-benefit analysis that will be carried out on proposals. The analysis estimates the minimum deforestation that would need to be avoided in order for the benefits (the monetised CO2 emissions avoided and ecosystem services preserved) to exceed the costs, if these were the only benefits from the programme. Previous Defra ICF programmes have had a BCR of 3:1 or higher. However, given the expected biodiversity benefits from this programme and challenges set out above in quantifying global environmental benefits, it is not a reliable and rigorous baseline from which to assess other ICF projects. A basic value for money assessment has therefore been conducted through comparing the costs of the project and identifying the 'minimum benefits' a proposal would

have to achieve to be positive value for money⁵⁵. This analysis assesses the benefits over a 20 year period in order to capture the medium-term benefits of the project.

- As set out in section 6.5.2, the total nominal costs of the project to Defra are **£11,010,113**.

As the site for the project has not been determined, analysis of the four main forest biomes (dry forest, moist forest, spiny forest and mangroves) was conducted. The benefits from each biome type were calculated:

- The tCO₂ of carbon stored per hectare of different biome, avoided deforestation of a hectare of forest results in that amount of avoided emissions.
 - o Moist Forest – 567.13 tCO₂/ha
 - o Dry Forest – 151.35 tCO₂/ha
 - o Spiny Forest – 48.63 tCO₂/ha
- The monetised value of carbon emissions avoided is based on the BEIS International Carbon Price Series central values (in £ per tCO₂e avoided). The BEIS Domestic Carbon Price series values, which are similar, range from⁵⁶
 - o £58 per tonne of CO₂e in 2020; to
 - o £74 per tonne of CO₂e in 2027
- The monetised value of ecosystem services per ha of deforestation avoided, specific to Madagascar (in £ per ha) from the Ecosystem Service Valuation Database⁵⁷. The main ecosystem service monetised for all types of forest is tourism. For moist forests only, bioprospecting (medical ecosystem services) is also included.
 - o Dry Forest/Spiny Forest/Mangroves - £266.60 per year
 - o Moist Forest - £333.70 per year

To note that this calculation does not attempt to include or monetise other benefits described in **Annex 4**, such as livelihoods or biodiversity benefits.

To achieve benefits that are valued at more than £11,010,113, the project would need to achieve the minimum levels of deforestation avoided presented below in any one particular forest type, not all. If the project were to achieve this level of deforestation avoided it would have a **BCR of 1:1**.⁵⁸

- Dry forest - **1,116** hectares of deforestation avoided
- Moist forest - **298** hectares of deforestation avoided
- Spiny forest - **3,462** hectares of deforestation avoided

A BCR higher than 1:1 will mean that the monetizable benefits exceed project costs and in turn the programme has an easily calculated positive impact, without even considering the non-monetizable benefits. As these minimum values are small relative to the avoided deforestation of other similar projects, for example, less than 300 hectares compared to 20,000 hectares for the Blue Forests and 128,000 hectares for the Ceraddo project in Brazil. (see Box 2), we might expect the project proposals submitted to deliver significantly greater monetizable benefits than described above. Other non-monetizable benefits, such as biodiversity, gender equality, redistributive benefits or transformational potential, will also be assessed to ensure that the full range of benefits of each proposal is captured. It is therefore important to note that the figures of avoided deforestation presented above are indicative and not a minimum threshold for the competitive process, as proposals may be delivering other types of benefits that represent value for money. All proposals will be assessed in full based on the information provided by the applicants as part of the grant evaluation process.

6.6. Value for money indicators

The project specific outputs and outcomes will be finalised with the chosen delivery partner and a final value for money assessment conducted before the grant is awarded. Using DFID 4 E framework: economy, efficiency, effectiveness and equity, it is expected that value for money will be secured through:

- Efficient and effective use of funding to deliver the desired outputs
- Ensuring that delivering the chosen outputs are logical and likely to lead to the project's intended outcome
- Sustainability of the intervention and equitable distribution of any results

Possible value for money indicators could therefore include:

- Reaching the targeted numbers and types of beneficiaries
- Delivering income and job increases through alternative livelihoods
- Achieving avoided carbon emissions targets
- Achieving restoration targets
- Attracting private investment/long term finance
- Increasing the capacity of COBAs/communities to manage protected areas after the project closes
- Uptake of community managed protected areas in other areas

Section 7.1 in the commercial case sets out in further detail how value for money will be achieved through the procurement process.

COMMERCIAL CASE

The Appraisal Case provides a high level justification for establishing a new ICF programme in Madagascar, including the associated costs and benefits. The following sections (Commercial and Financial) provide further information on the financing method and how the delivery partner will be procured.

7. Procurement/commercial requirements

The preferred funding route is through a competed grant. In deciding the best procurement route a number of steps were taken. First, an assessment was made with regards to whether it was appropriate to undertake a commercial procurement or award a Government Grant. As advised by Defra Commercial, given the outputs and outcomes of the programme are not of direct benefit to the department (e.g. reports written, goods and services purchased), but instead help Defra to meet departmental and international objectives and global public goods, a commercial procurement was not considered the best route. A commercial contract was also discounted due to the fact that relatively few organisations hold contracts with the Malagasy government to manage protected areas in Madagascar. A commercial enterprise would therefore likely need to subcontract the work to an organisation with an existing contract/MOU with the government, which in terms of project delivery would create an unnecessary 'intermediary', resulting in additional costs and reducing overall value for money. A grant was therefore determined to be the most appropriate route.

Second, as set-out in the [Government Grants and Alternative Funding Options](#) guidance document, the project has considered the different grant funding options. A direct award grant was discounted as it could compromise Defra's adherence to ODA guidelines around fair competition and transparency and therefore a robust case would be needed to justify the selected partner. This process could also penalise/deny smaller NGOs or less established NGOs from applying. Therefore the alternative considered was a competed grant, in which organisations compete against each other for a single grant in response to a published advert with pre-published award criteria. This provided the benefit of increased value for money and was deemed the preferred route to market.

Our rationale for a competed grant can be summarised below:

- Through stakeholder engagement and a stakeholder workshop held in October 2018, our understanding is that a number of different organisations could deliver this work;
- No specific services or goods are being purchased by Defra. Instead, Defra seeks to provide funding to an entity that carries out activities which align with the departmental strategic policy.
- Defra will not gain direct benefit as a result of this project (for example Defra owning intellectual property rights as a result of this project). Instead, the project outcomes and impacts are related to our international objectives and global public goods. However, there will be robust KPIs and performance milestones to measure performance;
- It is in line [HMT and DFID official guidance of Value for Money in ODA](#) that "value for money must be the key driver for all public procurement and this will normally be achieved through competition".

On September 18th, 2019, the agreed funding route was reviewed and endorsed by the Government's National Advisory Panel for Grants (NGAP). The scope of the NGAP includes only new government grants over £100k that are high risk and/or novel or contentious. **Annex 5** sets out the recommendations of the Panel and Defra's actions taken to address these in the business case.

The competed grants process is expected to take between 3-6 months. Once the Invitation to Apply (ITA) has been published applicants will be given 6-8 weeks to submit their application. After the deadline an evaluation team

comprising of the SRO, ICF project lead, ICF economist and two independent experts in Madagascar will be formed to evaluate shortlisted proposals in line with the Terms Of Reference.

Once the successful delivery partner has been selected a separate due diligence review will be carried out by an independent third party or Defra may use BEIS's due diligence contract. A separate due diligence is carried out to ensure that the delivery partner has the management, governance and fiduciary systems in place to manage the grant and is necessary to comply with ODA guidelines. This is additional to Defra's own due diligence which will be carried out as part of the grant application process and will be used to screen out ineligible applicants. On satisfactory completion of the due diligence review, a grant agreement will be developed by Defra commercial, the ICF Project lead and Senior Responsible Owner (SRO) for the programme, which sets out the project scope, Monitoring & Evaluation and terms and conditions. Once agreed by all interested parties the delivery partner will be awarded the full £10.2 million grant.

7.1. Value for money through procurement

7.1.1. Evaluation criteria

In line with ODA guidance Defra will seek to assess the value for money (VFM) of grant applications using the DFID 4 E framework of economy, efficiency, effectiveness and equity. Applications will be assessed based on costs and a set of technical criteria necessary to deliver the project. **Annex 6** provides further examples of the criteria/questions that will be used.

In order to assess the value for money of the project applicants will be asked to provide the following:

- **CVs** which outline the skills and experience of the project lead and key team members, including whether specific technical advisors have been hired for the role.
- An indicative **Theory of Change** which sets out how change is assumed to come about through the intervention.
- An indicative **log frame** which sets out the expected outputs, outcomes and impacts of the project against milestones and Key Performance Indicators.
- A **work plan/delivery plan** of intended activities.
- A **budget breakdown of costs** which includes overhead. Overheads must not exceed 20% of the overall programme costs. M&E costs should be between 5 and 10%.
- A robust **M&E plan** to set out how milestones and indicators will be measured against the KPIs.

As well as the above delivery partners will need to set out in their application how VFM has been assessed and how it will be evidenced and analysed during programme implementation. Applicants will be asked to provide further details on:

- The expected benefits (results) of the programme, demonstrating that these represent good value for money, i.e. that benefits exceed costs. Benefits are expected to link to the key activities of the project in Section 4 and also to the ICF KPIs. This should include quantifiable as well as qualitative or non-quantifiable benefits and costs, such as those relating to equity or transformational change. Benefits and costs should be monetised (assigned a £ value) where possible;
- Explain all assumptions used to calculate costs and benefits and how VFM has been assessed in developing the project proposal;
- How it will be evidenced and analysed during programme implementation and over the life of the programme, referencing the M&E plan as above.
- How the impact on COVID19 has been factored in when assessing VFM, and detailed impacts on any specific benefits or costs.
- How gender has been considered and the impact/benefits for different socio-economic groups.

- Explain how they will manage third party arrangements including policy and process to manage Fraud and corruption in third party contracts.

An ICF economist/analyst and two Darwin Committee members who have extensive experience of delivering projects on the ground in Madagascar will be used to evaluate project proposals within the context of VFM. If the project does not meet the minimum value for money criteria, or Defra is not satisfied with the overall quality of applications, then Defra reserves the right not to award the grant. Once the delivery partner has been chosen, the log frame and Toc will be further refined and a final VFM assessment carried out before the grant is awarded. The final ToC and log frame will be developed in the first 6 months of the project.

7.2. Evaluation and monitoring of activities

Between 5-10% of the overall programme costs will be allocated for monitoring performance and delivering against the milestones set out in the grant agreement. All applicants will need to develop a robust M&E plan and log frame to demonstrate how results will be collected and measured against the KPIs. Once the grant is awarded, the chosen delivery partner will need to provide quarterly financial and progress reports which are assessed against the deliverables set out in the log frame. On satisfactory receipt, grant payments will be made in accordance with the grant payment schedule. Section 9.4 sets out in further detail Defra's M&E requirements.

7.3. Compliance with the International Development Act 2002

The legal power to invest is under the International Development Act 2002.

7.4. Gender equality statement and compliance with gender sections of 2002 International Development Act

Women in forest-dependent communities are primary users of forest resources and are particularly affected by deforestation. Studies show that women in forest communities derive up to half of their income from forests, whereas men derive only a third⁵⁹. Gender also greatly influences individuals' roles in managing forests, their access to forests, and how they use forest resources. Empowering women in the forestry sector can create significant development opportunities and generate important spill-over benefits for their households and communities, particularly in rural areas. Owning assets such as land or trees also strengthens the position of women in households and communities and provides them with incentives to sustainably manage their resources.

This intervention has the potential to reduce gender inequality through assisting women to secure rights over forest land/resources and create livelihoods opportunities. However, there is a risk that approaches which don't address the structural factors preventing gender equality can make the situation worse by reinforcing an existing status quo.

Under the International Development Act (Gender Equality) 2014 Defra's ICF investment is required to contribute to reducing gender inequality. The following steps during design and implementation will help ensure an integrated focus on reducing gender equality:

As part of the grant application process delivery partners will be required to demonstrate the socioeconomic and cultural context of the programme area; the different priorities, demands and needs of men and women; and the constraints to the participation of men and women in programme activities;

- the programme will seek to enhance participation of both men and women in all programme activities;
- Delivery partners will analysis of risks involved in the implementation of gender strategies and steps needed to mitigate these risks;

- the programme will focus on supporting livelihoods opportunities that offer livelihood improvements for women;
- the monitoring, evaluation and learning component of the programme will establish gender sensitive baselines and indicators.

It is the responsibility of the SRO to ensure that the impact of this development assistance on gender equality receives ongoing consideration and is monitored carefully throughout the project cycle.

7.5 Environmental and Social Safeguards (ESG)

The overall aim of the projects is to reduce poverty and improve the livelihoods of forest communities, thus it seeks to do no harm. Progress towards delivering those benefits and having a transformational change will be assessed in the log frame and KPIs. The delivery partner must also be committed to maximizing the positive environmental and social outcomes of its work while minimising the risks and negative impacts to people and natural capital. In practice this means protecting and investing in natural and social resources, responding to the challenges of climate change, promoting sustainable infrastructure solutions and ensuring social inclusion and accountability. The delivery partner must also provide safeguarding assurances that themselves, and any third parties consulted on their behalf, have the appropriate policies and processes in place.

7.6. Procurement Policies

This project will follow the standard Defra grant processes [Guidance for Grant Managers 2018](#).

7.7. Commercial Risks

We expect the commercial risks to be low. Those foreseen and any mitigation strategies in place are summarised in the risk table in section 8.4. Other risks associated with this grant are set out in **Annex 7**.

7.8. State Aid

Defra's state aid team have confirmed that this intervention is not expected to have the potential to distort competition and trade in the European Union and is therefore not deemed to amount to State aid.

FINANCIAL CASE

The following Financial case establishes that the preferred option outlined previous is affordable, is the best use of Defra ICF funds, and that the principles of sound financial management for public funds are followed.

8. Expected Project Costs

Defra’s overall ICF allocation for SR15 is £210 million until FY20/21. The grant commits Defra to £10.2m in total, of which £9.2 million will extend beyond the current spending review period. This was included part of Defra’s SR20 ICF bid and approved by Treasury in September 2019. SR 20 runs from FY21/22 to FY 25/26 and therefore this project will also run into the post 25/26 SR period. Approval for this has not been sought, however given that the majority of the project would have funded by then, we expect the risk of HMT not approving to be low. Front line delivery costs are costed separately and set out in section 8.2.

The project’s administrative costs will be included in the full £10.2 million and grant applicants will need to include these costs as part of as part of the application process. From previous ICF projects, admin costs vary between 5% and 17%, with the Blue Forests project in Madagascar around 4%. For a project of this size, we would not expect admin costs to exceed 10%. Admin costs will be reviewed as part of the application evaluation process to ensure value for money.

Based on previous experience, monitoring and evaluation costs are likely to be between 5-10%. of the overall programme costs. This includes the costs of internal M&E carried out by the delivery partner, as well as the costs of hiring an independent organisation to carry out the mid and final evaluations. Costs are likely to vary depending on the size and type of M&E activities undertaken. These costs will also be reviewed as part of the grant evaluation process. Section 9.4 sets out in more detail Defra’s M&E requirements.

While the project costs are unknown, we expect this investment to purchase some of the following:

- Expertise – staff time/days spent on the project.
- Seeds/seedlings for restoration
- Equipment/tools for sustainable farming activities
- Training/microfinance for alternative livelihoods for livelihoods.
- Equipment/tools for alternative livelihood (bee hives, fishing equipment)
- Educational/campaign materials
- Mobile health/education facilities (infrastructure, books, equipment/tools)
- Park infrastructure (eco-tourism, storage facilities) and equipment
- Community consultations/workshops for land use and resource planning

8.1. Proposed Budget and payments

An indicative resource budget breakdown is shown in Table 3.

Table 3 - Budget profile

	Phase 1		Phase 2		Phase 3		Phase 4	Project total
Financial year	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/2027	Work completed March 2027

Q1		500,000	400,000	500,000	800,000	800,000	150,000	
Q2		400,000	300,000	400,000	700,000	700,000	100,000	
Q3		300,000	300,000	300,000	600,000	600,000	100,000	
Q4	500,000	300,000	250,000	300,000	400,000	400,000	100,000	
Total	500,000	1,500,000	1,250,000	1,500,000	2,500,000	2,500,000	450,000	£10.2 million

An indicative payment schedule is shown in Table 4. In line with ODA best practice and to avoid payment in advance of need, payments will be spread quarterly (Apr, July, Oct and Jan). The first payment of £500,000 will be made at the end of FY20/21. Subsequent payments will be made following receipt of quarterly financial and narrative reports and invoice/receipts that demonstrate that expenditure is in line with the approved activities.

The final payment schedule will be agreed between the delivery partner and Defra as part of the grant award process. The amounts and times may be subject to variation depending on the development of the project and yearly spend targets. They may also vary depending on the specific costs incurred by chosen delivery partner to deliver the project, as well as the project completion date.

Table 4 – Payment schedule (profile of spend)

This table illustrates the payments that would be made if the grant claims are received on time and for the full amount

	Phase 1		Phase 2		Phase 3		Close		
Year	2020	2021	2022	2023	2024	2025	2026	2027	
Jan			300,000	300,000	300,000	600,000	600,000	100,000	
Apr		500,000	300,000	250,000	300,000	400,000	400,000	100,000	
July		500,000	400,000	500,000	800,000	800,000	150,000		
Oct		400,000	300,000	400,000	700,000	700,000	100,000		
Total		1,400,000	1,300,000	1,450,000	2,100,000	2,500,000	1,250,000	200,000	£10.2 million

8.2. Staffing Costs

The allocation of Full-time equivalent (FTE) is an expected average across the lifetime of the project, with peak staff time at the beginning whilst the project is set up. The overall present value of staffing costs (including overheads) over 7 years is £751,113. FTE capacity of different posts is as follows: EO (0.05); HEO (0.7); G7 (0.2); G6 (0.1); SCS (0.05). The costs associated with this capacity have been provided by Defra Finance. Defra has sufficient frontline resources under the current SR to fund staffing cost for this project. Resource costs beyond SR15 have been taken into account and included as part of Defra's SR20/21 bid which was approved by Treasury in Sept 2019.

8.3. Reporting, monitoring and accounting for funds

Grant payments will be linked to performance against agreed costs and deliverables set out in the final grant agreement. The delivery partner therefore bears the risk of poor performance. The delivery partner is expected to provide quarterly reports on the spend progress against budget and an annual, externally audited, financial report for the programme. These audited reports should separately identify Defra funding and spend, associated payments and show any unspent funds. This is in line with the precedent set by our existing ICF portfolio and meets the expectations of our Finance Business Partner. The costs for the external audit will be included in the overall programme costs.

The delivery partner is also expected to provide quarterly progress reports which sets out the progress made against the KPIs and the deliverables set out in the log frame and work plan. Overall performance will also be measured yearly through an annual review which is scored and can be used to take remedial action against poor performance. See section 9.4 for further details of ICF M&E requirements.

8.4. Avoiding payment in advance of need

In line with HMT's guide on Managing Public Money, we will ensure that Defra is not paying in advance of need. The ICF team at Defra will monitor the payment schedule agreed with the delivery partner to assess if they are ahead or behind schedule, and revise the payment schedule if necessary. Any changes to the payment schedule will be discussed and agreed with Defra finance.

8.5. Transparency

Defra requires all its partners to meet the [International Aid Transparency Initiative \(IATI\) standard](#) that aims to ensure that organisations publish information to 'improve the coordination, accountability and effectiveness to maximise their impact on the world's poorest and most vulnerable people'. This includes information on the organisation, funds, and planned activities. This project is will generate significant outputs including log frames, annual reviews, project proposals and technical reports which will be of interest to other countries and stakeholders. All outputs should be published on IATI and free to users whenever possible. Most agencies are now following this standard.

8.6. Financial Accounting Considerations

Defra finance have considered what would be the appropriate accounting treatment. Consolidated Budget Guidance (CBG) states that the spend is to be deemed Capital (CDEL) expenditure:

Capital grants are unrequited transfer payments, which the recipient has to use to either:

- buy capital assets (land, buildings, machinery etc.)
- buy stocks
- repay debt (but not to pay early repayment debt interest premia) or
- acquire long-term financial assets, or financial assets used to generate a long-term return

The grant has been determined as resource RDEL because the activities set out in Section 4.3 do not met the CBG definition of Capital expenditure.

8.7. Avoiding Fraud and Corruption

In line with ODA guidance, Defra expects all organisations to have a zero tolerance approach to fraud and corruption; acting immediately if it is found, working with authorities to bring perpetrators to account and pursuing aggressive loss recovery approaches. All agencies must have systems in place to detect and combat fraud. Defra has worked closely with its Fraud and Risks team to identify all of the fraud risks associated with this grant which are set out in **Annex 7**. As part of ODA best practice, an independent due diligence review of the selected delivery partner will be carried before the grant is awarded to ensure they have the financial capability to deliver the project.

8.8. Currency Risks

Defra will issue grant payments in Pound Sterling (GBP) while the delivery agency will convert the amounts into Malagasy Ariary (MGA). This means that, in the event of adverse currency movement, there will be reduced potential for project fulfilment. To mitigate this Defra will track the movement in exchange rate between MGA and Pound Sterling

and adjust the timing of payments to avoid liquidity risk if necessary. However, it should be noted that perfect matching may not be possible.

8.9. Provision for Defra to Withdraw Funding

Defra will ensure that there are several clauses in the grant agreement to ensure that fund can be withheld. In the event the Contribution has not been used for the defined purposes, DEFRA will send a written notice requesting that the delivery partner:

- i. Provide specific information regarding the use of the Contribution;
- ii. Implement appropriate measures to ensure the Contribution is used in accordance with the purposes stated in the grant agreement.

If the measures agreed by DEFRA and the delivery partner stated above are not or cannot be carried within 30 days (or any other period agreed), then DEFRA or the delivery partner may, on one month’s written notice, terminate this grant agreement. Any remaining balance of the Contribution, which was not committed for the purpose of the Project prior to the receipt of such notice, shall be returned to DEFRA within sixty (60) days of the date of the notice. Upon completion of the Project or closure of, the delivery partner shall return any remaining uncommitted balance of the Contribution to DEFRA within thirty (30) days, if applicable.

Figure 2- Provision for the return of any uncommitted funds to Defra from the delivery

Scenario	Timing and reporting trigger (if relevant)
Occurrence of any illegal or corrupt practice	Annual Reviews (by Defra), Quarterly updates (from the delivery partner)
<p>“Extraordinary circumstances that seriously jeopardise the implementation, operation or purpose of the programme”</p> <p>This is primarily designed to cover instances of force majeure. We assess this may also provide some cover in extreme cases of under-delivery.</p>	Quarterly Delivery reports, Annual Reviews, independent evaluations at mid-term
“If [name of delivery partner] does not fulfil its commitments according to the cooperation contract”	At the time if/when this happens or if identified as part of Annual and quarterly Delivery Plan reporting, Annual Reviews, independent evaluations at mid-term

9. Management and Governance Arrangements

Defra has extensive experience of managing ICF projects in accordance with DfID [SMART rules](#). The below sets out the roles and responsibilities of the delivery partner and Defra. It then sets out mentoring and evaluation requirements that are used to manage and monitor progress of the project.

9.1. Defra

9.1.1. *Project lead and SRO*

Defra's ICF Project lead is responsible for the day to day management of the project while responsibility for the overall project is with the Senior Responsible Owner (SRO). **Annex 8** sets out in more detail their roles and responsibilities.

9.1.2. *ODA board*

The role of an ODA board is to provide accountability and assurance for Defra's ODA budget and to provide strategic direction for Defra's ODA spend. The ODA board meets quarterly and consists of Senior Civil servants from DfID and Defra. Within Defra the ODA Board has a remit to:

- Monitor the strategic direction for ODA spend in Defra
- Monitor the implementation of Defra's ODA strategy and policy priorities
- Clear Business Cases for ODA spend above £5 million
- Monitor progress against the results set out in business case
- Monitor and advising on significant risks to implementation
- Recommend remedial actions to the SRO if operational or financial performance is off track
- Ensure ODA rules are met
- Ensure consistency with X-Whitehall ODA rules.

The ICF project lead will provide updates to the ODA board on the progress of the project every month and/or flag any risks or concerns related to the project. For specific advice, a paper setting out the issue and proposed recommendations is submitted ahead of the monthly ODA meeting for the board's consideration. Actions and recommendations will be proposed/endorsed by the ODA board for the SRO to carry forward. If ministerial approval is required, then a submission to ministers will follow.

9.2. Delivery partner

The delivery partner is responsible for the final design and implementation of the project. They are expected to:

- Contract third party organisations to deliver the work as needed.
- Comply with the financial and M&E requirements set out below (section 8.4 and 9.4)
- Maintain their own risk register and notify Defra of any new risks or updates to existing risks
- Report any suspicions and/or allegations of fraud, terrorism financing, money laundering, bribery, corruption, or sexual exploitation, harassment and abuse, immediately to the project lead.
- Carry out any remedial action should the above be reported.

9.3. Resourcing and recruitment

Resourcing and staff needed to manage the project has been identified and outlined in Section 8.2

9.4. Monitoring and Evaluation Governance

The monitoring and evaluation of all Defra ICF projects is consistent with the requirements of the UK International Development Act 2015. The delivery partner will be responsible for ensuring that the project meets Defra's ICF monitoring and reporting requirements. All of Defra's monitoring and evaluation criteria will be set out in the Terms of Reference for the grant and in the final grant agreement. **Annex 9** provides an example of the lessons learnt from managing and monitoring our existing Blue Forests project.

In line with the SMART rules, it is expected that the delivery partner will provide the following:

9.4.1. *Work plan/delivery plan*

All Defra ICF project require a work plan/delivery plan which sets out the proposed approach and timeline for managing the project and breaks down activities and outputs, which are clearly cross referenced to payment mechanisms and governance/quality assurance mechanisms, to ensure effective delivery on time and within budget. An indicative work plan will have been provided as part of the grant application process and this will be finalised in the first month of the project starting and updated periodically to reflect any changes to the project.

9.4.2. *Theory of change.*

All Defra projects are required to have a Theory of Change which sets out the context, evidence, long-term change and assumptions that underpin and inform the chosen intervention. An indicative theory of change will have been submitted as part grant application process and will be finalised within the first 6 months of the start of the project. The Theory of Change will be revised and updated annually to any reflect changes to the project and to test whether assumptions or pathways to impact are still valid.

9.4.3. *Annual reviews and log frames*

Log frames are a key means of holding delivery partners to account and measuring the effectiveness of UK ODA spend. All Defra projects will report progress against a log frame or equivalent indicator framework setting out activities, outputs, outcomes and impacts of the project (see Section 4). An indicative log frame will have been provided as part of the grant application process which will then be finalised with the delivery partner within the first 6 month of the start of the project.

All Defra ICF log frames must include at least one of the ICF Key Performance Indicators (KPIs) set out in section 9.3.4. Quarterly progress and financial reports submitted by the delivery partner will be used to monitor progress through an annual review. Although the annual review is expected to be a collaborative effort between the delivery partner and Defra, Defra are responsible for the final scoring, conclusions and publishing of this document. Log frame indicators and milestones should be updated annually to take into account programme performance, changes to programme design and/or feedback on the usefulness of current indicators. Best practice is that log frames should be updated and agreed in the annual review.

9.4.4. *Key performance indicators*

Performance will be measured through Key Performance Indicators (KPIs). The KPIs are a set of official cross government indicators which will capture, where possible, results relating to the core goals and objectives of the ICF. They are a major contribution to the evidence base upon which climate finance policy and programme decisions can be made. All KPIs relevant will be monitored over the 7 year period of the project, however we expect KPIs 6, 8, 10 to deliver benefits

for up to 20 years (i.e. beyond the life of the project). Expected results should reflect the full extent of these benefits, however they will not be monitored once the project ends.

For KPIs that have an official methodology, delivery partners are expected to use these to estimate potential benefits/results to be achieved.

The project should report one or more of the following:

- KPI6: Change in Greenhouse Gas (GHG) emissions as a result of ICF support. (tCO₂e)
- KPI 8: Number of hectares where deforestation and degradation have been avoided through ICF support. (Hectares)
- KPI 10: Value of ecosystem services generated or protected as a result of ICF support.
- KPI 11: Public climate finance mobilised (GBP)
- KPI12: Private climate finance mobilised (GBP)
- KPI 15: The extent to which the ICF intervention is likely to have a transformational impact (*qualitative*).

Within this project's M&E framework we also recommend the use of an indicator to report the "number of forest dependent people whose livelihood has been improved or protected, disaggregated by age and gender". This was formerly a Key Performance Indicator 13 and an official methodology is available to support reporting.

9.4.5. Independent Evaluations

All new Defra ICF projects will have independent evaluations, including consideration of the extent to which the project has provided Value for Money. Independent here means that the evaluation will be carried out by a third party who is not a member of, or directly controlled by, either Defra or the implementing partner. The delivery partner may already have experienced M&E consultants who can be hired and a contract tendered for this work.

Activities to be carried out are as follows.

- **Evaluation plan:** With support from Defra, an evaluation plan will be designed and baseline data will be collected in year 1. This should set out the types of study to be carried out (process evaluation, impact evaluation, theory based evaluation etc.), methods to be used and when these studies are expected to take place. This plan should also outline any data collection requirements for the interim until the evaluation takes place and give ballpark estimates of the costs of the evaluation studies. Independent authoring of this plan is encouraged.
- **Mid-term evaluation (approx. year 3 or 4).** The delivery partner shall be responsible for contracting the services of a third party to undertake a mid-term evaluation of the Fund's activities. The scope of such mid-term evaluation will be mutually agreed between the delivery partner and Defra, which may include verification of project results.
- **Final evaluation (approx. end of year 6):** The delivery agency shall be responsible for contracting the services of a third party to undertake a final evaluation of the project. The scope of such evaluation will be mutually agreed upon between the delivery partner and Defra.

9.5 Stakeholder considerations

Due to the success of ICF Blue Ventures programme in Madagascar, FCO has been keen to harness Defra’s international forests expertise to increase the UK’s influence in the country. DfID also has a new Development Councillor in Madagascar, demonstrates growing HMG interest in the country. Madagascar is a challenging country context; however many NGOs and MNP parks have legitimate authority from the government to manage national parks in collaboration with the local authorities and that this management structure is embedded in the SAPM network. The lack of significant multilateral or donor presence in supporting protected areas also creates a unique space in which Defra could have a significant impact and reduces the risk of duplicating interventions. An ICF field trip to Madagascar in 2018, and a follow-up stakeholder meeting with ALBs (Kew), researchers, NGOs (WCS, WWF, Durrell Foundation), scientists and policy advisors has informed the business case, and feedback on our approach so far been very positive. However, all have stressed the need to work through organisations that have existing contracts with the government to manage protected areas in order to ensure efficiency, alignment to existing interventions, and add value. A follow up visit to Madagascar is expected in June 2020 to further strengthen diplomatic and stakeholder relationships before the project begins.

9.6 What are the key risks to the programme?

The following risks have been identified in the risk register below, which will be revised once the project has been chosen. The project lead is responsible for updating the risk register, ensuring the mitigating actions are carried out and escalating risks to the SRO/ODA board. The SRO has overall responsibility for all the risks identified in the risk register.

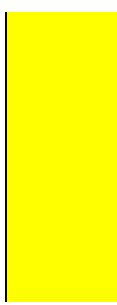
The overall risk rating for this project is **Major**. There are some general risks associated with successfully managing programme delivery outlined in the table below.

Probability (or likelihood) is based on a scale of Very unlikely > Unlikely > Possible > Likely > Certain; **Impact** is based on the scale of Insignificant > Minor > Moderate > Major > Severe; and the overall level is based on the Red Amber Green (RAG) system.

Risk description	Likelihood (Rare, Unlikely, Possible, Likely, Almost Certain)	Impact (Insignificant, Minor, Moderate, Major, Severe)	Owner	RAG	Comments/Mitigating Actions
COVID 19 causes delays to project, as programme activities are not able to go ahead, meaning the programme misses log frame targets, underspends, and is unable to deliver expected results over the lifetime of the programme.	Likely	Major	SRO		Grant applicants will be asked to consider and factor in COVID19 in their project proposals to ensure that outcomes and impacts are realistic and achievable. They will be asked to clarify how COVID19 has been taken into account in assessing value for VFM, and the impacts on any specific benefits or project costs. For example, they will be asked to provide detail on how COVID19 is likely to impact on alternative livelihoods options, activities and vulnerable groups and where mitigating actions will be taken to ensure that benefits can still be delivered. They will also be

					asked to provide a risk register detailing the risks and mitigating actions. Once the delivery partner has been chosen, Defra ICF team will work with the them to monitor spend and continually review progress against log frame milestones to ensure that VFM and impacts are achieved. We are currently learning valuable lessons from our Blue Forests project that we hope we will be able to apply to this project.
Political instability prevents Defra’s project from being delivered (or delays parts of the project, or introduces inefficiencies)	Possible	Moderate	SRO		The Madagascar government is committed to protecting nature. As part of the procurement process, NGOs will need to demonstrate they have a PA management contract/agreement. Careful monitoring will be required. We will work closely with the selected delivery partner and with FCO to monitor risks.
Corruption which would result in a misuse of fund.	<i>Possible</i>	<i>Major</i>	SRO		The delivery partner will demonstrate that they have procedures and processes in place for dealing with fraud within their own organisation and with third parties. They will need to agree to alert Defra to any concerns they have over the misuse of funds. In the event of fraud being detected, the project may be suspended pending investigation, and Defra will have the right to terminate the agreement funds should corruption or fraud be identified. The disbursement schedule set out in the grant agreement will ensure that payment in advance of need is reduced, thereby reducing in the amount of funds that could be misused. Due diligence assessment will be carried out to ensure fraud and risk standards are met.
Lack of support from the Malagasy authorities/regional authorities’ results in delays to delivery.	Unlikely	Major	SRO		The delivery partner will need a formal/interim contract or MOU to demonstrate support from government to work in Madagascar National Parks (MNP) or non MNP sites. Diplomatic and advocacy work with the Malagasy government, regional authorities, HMG and Defra ministers to build and foster a sound working relationship.
Selected delivery partner does adhere to agreed reporting requirements set out in grant agreement which results in Defra not being to assess performance against the deliverables.	Unlikely	Moderate	SRO		Applicants must agree to provide an indicative delivery plan, Theory of Change and log frame (which sets out indicators and milestones) as part of their applications. Applications will then be evaluated by independent experts and finalised with the selected delivery partner in the first 6 months once the grant has been awarded.

					The disbursement schedule, set out in the grant agreement, will ensure that payments are given subject to satisfactory progress.
Lack of effective management of the project by the delivery partner which results in project not meeting agreed milestones /indicators set out in grant agreement	Unlikely	Major	SRO		<p>Applicants must agree to provide an indicative delivery plan, Theory of Change and log frame (which sets out indicators and milestones) as part of the grant application process, which will be evaluated by independent experts, and finalised with the selected delivery partner in the first 6 months, once the grant has been awarded. Payments will be subject to satisfactory performance based on quarterly financial and progress reports. Annual reviews will also be used to review performance and payments withheld if poor performance is not addressed.</p> <p>A site visit will be conducted after the grant has been awarded and periodically as part of our due diligence.</p>
Lack of support from within communities for the projects due to lack of incentives, lack of awareness of benefits of project or high transaction costs of joining COBAs	Possible	Major	SRO		The delivery partner will need to demonstrate skills and experience of working with community associations and in supporting community forest management. Project proposals will need to demonstrate how livelihood/development opportunities will provide incentives, both in the short and long-term. Proposals will also need to identify households or socio-economic groups whose livelihood maybe threatened by the project will be addressed.
Long-term benefits/sustainability of project not realised due to a failure to provide sufficient skills, finance and training for alternative livelihoods.	Possible	Major	SRO		The project must incentivise communities/COBAs towards sustainable management through provision of training/skills in alternative livelihoods and farming practices and support development opportunities that link successful enforcement and protection activities with income generation (e.g. Eco tourism, PES). It is also necessary to provide education and to raise awareness of the benefits of the project. ICF Key Performance Indicator 15 (transformational change) will also help counteract this risk.
Land tenure and property rights not properly recognised so PA management ineffective	Unlikely	Major	SRO		A delivery partner that holds a formal/interim contract or MOU to work in a protected area will help minimise this risk as community land tenure and resource rights will have been considered as part of PA management plan. However, the delivery partner must continue to hold consultations/land and resource mapping exercises to understand the needs of communities.

<p>Payments are susceptible to currency fluctuations which means, in the event of adverse currency movement, there will be reduced potential for project fulfilment and less VFM.</p>	Possible	Moderate	SRO	 <p>Defra will issue grant payments in Pound Sterling (GBP) while the delivery agency will convert the amounts into Malagasy Ariary (MGA) and carry the risk. Defra will track the movement in exchange rate and adjust the timing of payments to avoid liquidity risk, if necessary. However, it should be noted that perfect matching may not be possible.</p>
---	----------	----------	-----	---

END NOTES

¹ Food & Agriculture Organisation (2017) FAOSTAT

² Griscom et al (2017) "Natural climate solutions". Proceeding of the National Academy of Sciences.

- ³³ Rasolofoson et al (2016) <https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/conl.12272>
- ³⁴ *Transfer de Gestion* (Transfer of management') agreements, the state delegates limited tenure and sustainable use rights (sometimes including commercial) to a legally recognized local community institution, called Communauté de Base or COBA) in exchange for a contractual obligation to conserve the forest and prevent illegal activities. This contract is usually for 3 years then given for 10 years.
- ³⁵ Julia Jones (2019) https://www.nature.com/articles/s41893-019-0288-0.epdf?author_access_token=-7vvmqg31kQwhGBYU1q449RgN0jAjWel9jnR3ZoTv0MjVAcURdCK4nOvz1W_OuCMYLZTNwTvfcoab7hLX2x83boUuetFOh-rc-7jM4QNpnjd2hcxo4gyqSq3fDGRA_lucAwMkPC86hg1Ed7xhqugqA%3D%3D
- ³⁶ Rasolofoson et al (2015) <https://www.sciencedirect.com/science/article/pii/S0006320715000488>
- ³⁷ Rasolofoson et al (2016) <https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/conl.12272>
- ³⁸ Hockley (2007) <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.604.409&rep=rep1&type=pdf>
- ³⁹ *ibid*
- ⁴⁰ *ibid*
- ⁴¹ Poudyal et al (2018) <https://peerj.com/articles/5106/>
- ⁴² Kuempel et al (2016) <https://onlinelibrary.wiley.com/doi/full/10.1111/conl.12433>
- ⁴³ <https://www.cifor.org/library/3461>
- ⁴⁴ Rafidimanantsoa et al (2018) <https://www.journalmcd.com/index.php/mcd/article/view/mcd.v13i1.3/551>
- ⁴⁵ Jones et al (2018) <https://rgs-ibg.onlinelibrary.wiley.com/doi/10.1002/geo2.50>
- ⁴⁶ <https://www.oecd.org/environment/resources/mainstream-biodiversity/events/Madagascar-Biodiversity-related-Official-Development-Assistance.pdf>
- ⁴⁷ <https://news.mongabay.com/2020/05/as-visitors-vanish-madagascars-protected-areas-suffer-a-devastating-blow/amp/>
- ⁴⁸ <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Madagascar%20First/Madagascar%20INDC%20Eng.pdf>
- ⁴⁹ <https://www.intechopen.com/online-first/parks-and-reserves-in-madagascar-managing-biodiversity-for-a-sustainable-future>
- ⁵⁰ <https://www.cepf.net/our-work/biodiversity-hotspots>
- ⁵¹ https://d2ouvy59p0dg6k.cloudfront.net/downloads/wwf_wildlife_in_a_warming_world_2018_1_1.pdf
- ⁵² <http://documents.worldbank.org/curated/en/599641468054534317/pdf/779930WP0MDGOC00Box377320B00PUBLIC0.pdf>
- ⁵³ ODA Value for Money Guidance (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/712367/ODA_value_for_money_guidance.pdf)
- ⁵⁴ <https://www.cbd.int/sp/targets/rationale/target-11/>
- ⁵⁵ This means a Net Present Value > 0 and a Benefit Cost Ratio > 1:1
- ⁵⁶ <https://www.gov.uk/government/publications/valuation-of-energy-use-and-greenhouse-gas-emissions-for-appraisal>
- ⁵⁷ [TEEB Ecosystem services valuation database](https://www.teeb.org/en/valuation-database)
- ⁵⁸ Figures have been calculated through calculating total benefits from a hectare of forest (the expected tCO₂e avoided through deforestation avoided (tCO₂) plus the expected ecosystem service benefits per hectare). Then, calculating the number of hectares of deforestation avoided needed for the value of total benefits to be at least equal to total project costs.
- ⁵⁹ http://www.cifor.org/publications/pdf_files/factsheet/4057-factsheet.pdf