





# RED LIST OF THREATENED SPECIES AND IDENTIFICATION AND MAPPING OF KEY BIODIVERSITY AREAS (KBAS) IN MOZAMBIQUE

# Supporting the Policy Environment for Economic Development (SPEED+)

This publication was produced by the SPEED+ Project under Contract No. AID-656-TO-16-00005 at the request of the United States Agency for International Development Mozambique Mission. This document is made possible by the support of the American people through the United States Agency for International Development. Its contents are the sole responsibility of the author or authors and do not necessarily reflect the views of USAID or the U.S. Government



### DOCUMENT REGISTRY

DOCUMENT TITLE	RED LIST OF THREATENED SPECIES AND IDENTIFICATION AND MAPPING OF KEY BIODIVERSITY AREAS (KBAS) IN MOZAMBIQUE – INCEPTION REPORT				
VERSION CONTROL	REFERENCE	VERSION	DATE	PREPARED	APPROVED
	20190304_inception_report_RL_ KBA_MZ.doc	l	04-03-2019	Hugo Costa	James Bampton

### CONTENTS

INTRODUCTION	
COUNTRY CONTEXT AND BACKGROUND	
PROJECT RATIONALE	2
AIM OF THIS REPORT	5
OBJECTIVES OF THE PROJCET	6
PROJECT PARTNERS AND RELEVANT STAKEHOLDERS	6
ENGAGEMENT WITH RELEVANT STAKEHOLDERS	7
ENGAGEMENT WITH COMPLEMENTARY PROJECTS	8
ACTIVITY DESCRIPTION OBJECTIVE 1: NATIONAL PLATFORM ESTABLISHED FOR ENGAGING WITH THE GOVERNMENT ON IUCN RED LIST OF THREATENED SPECIES AND KEY BIODIVERSITY AREAS AND FOR PROMOTING THE NATIONAL PLATFORM'S ROLE INFORMING SPATIA PLANNING AND DECISION-MAKING ACTIVITY 1.1: KICK-OFF MEETING, INCEPTION REPORT WITH DETAILED WORK PLAN VALIDATION MEETING ACTIVITY 1.2: BRIEF ANALYSIS OF THE LEGAL FRAMEWORK APPLICABLE TO THE RED L AND KBAS IN MOZAMBIQUE ACTIVITY 1.3: ESTABLISH THE NATIONAL COORDINATION GROUP FOR KBAS WHICH WILL ALSO REPRESENT THE CURRENT NATIONAL RED LIST WORKING GROUP OBJECTIVE 2: GLOBAL RED LIST ASSESSMENTS UNDERTAKEN OF REPTILES, AMPHIBIAN FRESHWATER FISH AND LEPIDOPTERA AND KBAS IDENTIFIED AND MAPPED FOR MOZAMBIQUE ACTIVITY 2.1: HOLD INITIAL WORKSHOP TO EXPLAIN KBA STANDARDS AND CRITERI FOR THEIR IDENTIFICATION, ALIGN IT WITH THE TAXONOMIC WORKING GROUPS UNDER THE RED LIST WORKING GROUP AND UNDERTAKE JOINT ASSESSMENTS FOR RED LIST AND KBAS ACTIVITY 2.2: SUPPORT ASSESSMENT OF DISTRIBUTION OF SPECIES WITHIN EACH TA? OCCURRING IN MOZAMBIQUE BY TAXONOMIC WORKING GROUPS AND IN WHICH SITES THESE OCCUR ACROSS THE COUNTRY ACTIVITY 2.3. DEVELOPMENT OF RED LIST OF THREATENED SPECIES FOR MOZAMBIQUE ACTIVITY 2.4: SCOPING OF POTENTIAL RED LIST OF ECOSYSTEMS FOR MOZAMBIQUE ACTIVITY 2.5: ASSESSMENT OF RED LIST OF THREATENED SPECIES FOR MOZAMBIQUE ACTIVITY 2.5: ASSESSMENT OF KBAS FOR MOZAMBIQUE ACTIVITY 2.6: WORKSHOP WITH RELEVANT STAKEHOLDERS TO ASSESS AND REFINE RESULTS	10 AND 10 IST 11 12 S, 16 IA THE 16 XON 18 JE19 AS 20 21 23
OBJECTIVE 3: NATIONAL CAPACITY BUILT TO IDENTIFY, AVOID AND MITIGATE IMPAC ON PRIORITY BIODIVERSITY (NATIONAL KBAS AND RED LIST) IN MOZAMBIQUE ACTIVITY 3.1: SEMINAR TO PRESENT THE RESULTS TO THE STAKEHOLDERS AND THE GUIDING PRINCIPLES AND RECOMMENDATIONS FOR DOING BUSINESS IN AND AROU KBAS AND OBTAIN NATIONAL ENDORSEMENT OF FINAL RED LIST AND KBAS ACTIVITY 3.2: EDIT FINAL LISTS, MAPS AND GUIDELINES AND PUBLISH THESE ONLINE IUCN WEBSITE AND THE GLOBAL KBA DATABASE, MAKING DATA AVAILABLE FOR TH GOVERNMENT AND RELEVANT STAKEHOLDERS	25 JND 25 ON
PROJECT MANAGEMENT	28
MANAGEMENT APPROACH	28

PROJECT TEAM, ROLES AND RESPONSIBILITIES	28
WORKPLAN	35
QUALITY CONTROL REVIEW PROCESS DOCUMENT CONTROL SUB-CONSULTANT CONTROL FINANCIAL CONTROL SCHEDULE MANAGEMENT QUALITY CONTROL CHECK PROCESS BRANDING AND MARKING PLAN	37 37 38 38 39 40 40 40
REFERENCES	41
ANNEXES ANNEX I – DETAILED WORKPLAN	<b>4</b> 1 41

### INTRODUCTION

### COUNTRY CONTEXT AND BACKGROUND

In Mozambique, where the majority of the population lives in rural areas, economies and livelihoods rely upon natural resources, such as forests, fisheries and healthy soils. These resources provide income to the government, vital services to local communities, and global benefits such as climate regulation and habitat for biodiversity. With diverse ecosystems and rich natural resources, Mozambique is a country of opportunity. However, environmental degradation, from deforestation, wildlife poaching and overfishing, is threatening this potential (The World Bank, 2017).

The five-year plan of the Mozambican Government (PQG) aims to reduce poverty by improving the country's economy, with a focus on agriculture and industry, taking advantage of its natural resources (República de Moçambique, 2015). The five-year Government plan<sup>1</sup> states that this is to be done under a sustainable and transparent management of the natural resources and environment. Therefore improvements to the national capacity for spatial and biodiversity planning are some of the priority actions of the plan to guarantee that the public and private sectors are provided with best available information to plan their development projects. It is critical for the private sector that the species and areas that should be avoided are clearly identified, mapped and prioritized for the country.

In 2018, according to the five-year plan, Mozambique started its first National Plan for Territorial Development. One of its objectives is to "establish priorities for planning urban and population expansion, agriculture and biodiversity conservation, as well as the materialization of the main network of transport and communications infrastructures, energy, waterworks including water supply and sanitation". The Government has also prepared the legal framework to start a Marine Spatial Plan. Therefore, the development of tools/frameworks to support the decision-making process is essential.

Various initiatives set out guidance to help ensure that the tools for conservation are available and used. One such initiative aids the identification of species most under threat of extinction, so that authorities can target conservation efforts to where they are most needed. This initiative is led by the International Union for the Conservation of Nature (IUCN) with the global Red List of Threatened Species, which has become recognised as the global conservation standard, drawing attention to the most critically threatened species around the world (WCS 2016).

IUCN Red List data and information are increasingly used to inform policy and action of governments, international agencies, and the private and public sector. Many conservation conventions (notably CITES, CBD, Ramsar, CMS, UNCLOS, World Heritage, and the various taxa-

<sup>&</sup>lt;sup>1</sup> One of the five priorities defined in the PQG is to ensure a sustainable and transparent management of the natural resources and environment, which is reflected in the National Sustainable Development Program (NSDP). Some of the strategic objectives within that priority are: i) *improve planning and spatial planning and strengthen monitoring, oversight and accountability in the drafting and implementation of plans; ii) ensure <u>the integration of the Green-Blue Economy and the green growth agenda into national development priorities, ensuring the conservation of ecosystems, biodiversity and the sustainable use of natural resources; iii) strengthen the capacity for evaluation and monitoring of environmental quality, especially in the areas where <u>development projects are being implemented</u>.*</u>

based conventions) are drawing on these data to help guide policies. Concepts developed through the use of the IUCN Red List are also guiding national policies in many countries and regions. Funding agencies, such as GEF, foundations, and international non-governmental organizations, are also using the IUCN Red List to prioritize policies on conservation investments (IUCN 2013).

It is critical for the adequate implementation of adequate impact mitigation approaches, as well as for the identification of Critical Habitat under the International Finance Corporation's Performance Standard 6 that threatened species are properly documented and critical sites for conservation mapped and known. Combining conservation planning analyses with information on threats to species from The IUCN Red List has led to partnerships with industry to explore opportunities to reduce their negative impact on biodiversity and promote more sustainable production. Several conservation planning methodologies have been using the IUCN Red List to inform conservation planning, namely to identify important sites for conservation (IUCN 2015).

In September 2016, eleven of the world's leading nature conservation organisations, WCS included, launched the KBA Partnership to implement the KBA standard. The vision of the KBA Program is "a comprehensive network of sites that contribute significantly to the global persistence of biodiversity is appropriately identified, correctly documented, effectively managed, sufficiently resourced and adequately safeguarded" and its goal is "to implement a program to develop and maintain an up-to-date, fully documented list of sites identified against the KBA Standard, and to communicate, promote and position this information to enable the achievement of the KBA vision".

KBA Partners are committed to mobilize the expertise, experience and resources of their organization and partners to:

- Identify, map and document thousands of Key Biodiversity Areas worldwide;
- Promote targeted conservation action in Key Biodiversity Areas; and
- Inform and influence public policy and private sector decision-making regarding KBAs.

### **PROJECT RATIONALE**

The Wildlife Conservation Society (WCS), as one of the members of the KBA partnership, and current member of the KBA Steering Committee<sup>2</sup>, is raising funds to develop projects in its focal regions. The Mozambican Program WCS and its partners, through project COMBO<sup>3</sup>, are working with the Government of Mozambique (under a Memorandum of Understanding established with MITADER), developers and industry to reconcile economic development with conservation of biodiversity and ecosystems in the country. One of the specific objectives is to create the enabling conditions, including knowledge and information, for development projects to achieve no net loss of

 <sup>&</sup>lt;sup>2</sup> The KBA Committee is responsible for the governance and strategic direction of the partnership.
 <sup>3</sup> Conservation, Impact Mitigation and Biodiversity Offsets in Africa – project funded by AFD, FFEM and Fondation Mava and being implemented by WCS, Forest Trends and Biotope in Mozambique, Madagascar, Uganda and Guinea.

biodiversity through the adequate application of the mitigation hierarchy. This includes supporting national planning processes by proposing optional frameworks.

The National Directorate for Environment (DINAB) is MITADER's focal institution for WCS's COMBO Project and one of the steering committee members. DINAB is also the coordinating institution for 12 international conventions signed by Mozambique, including the Convention on Biological Diversity (CBD), the Convention on the Conservation of Migratory Species of Wild Animals (CMS) and the Convention on Wetlands (RAMSAR). Complying with the commitments done under these conventions is one of the country's obligations. Mozambique is also committed to achieving the Aichi targets and DINAB is also responsible for coordinating the National Biodiversity Strategy and Action Plan (NBSAP), which addresses the period 2015-2035 (MITADER 2015).

Additionally, MITADER is responsible for implementing the National Plan for Territorial Development (PNDT), in this case through the National Directorate for Territorial Planning and Resettlement (DINOTER). The Strategic Environmental and Social Assessment which will be developed during the PNDT implementation includes the "mapping of high-value biodiversity zones, fragile ecosystems, wetland systems and environmentally critical areas (erosion, pollution, deforestation, uncontrolled fires, droughts, etc.)".

One of the critical factors to achieve several of the country's targets under the NBSAP (Table 1), the commitment towards the international conventions, the Sustainable Development Goals (SDGs) and an effective territorial development plan, is the adoption, by the Government, of adequate conservation priorities derived from robust spatial planning, which should be informed by sound data based on internationally recognised guidance.

# Table 1- Actions included in the NBSAP, which would strongly benefit from the use of the Red List of Threatened Species and KBA identification or that are dependent on these tools to be undertaken.

3.1. Implement voluntary measures for compensation from biodiversity loss/reduction.

5.1. Identify and characterize the degradation level of critical ecosystems or those providing essential goods and services.

6.1. Establish and implement coordinated programs for the systematic assessment of the conservation status of endemic and endangered species.

6.2. Identify and describe the Areas of Plant Importance (API).

6.3. Disseminate the Red data Book on national flora and fauna (including Red Data Book updated and published on the internet).

6.4. Establish and implement integrated management/ conservation plans effectively for endemic and endangered species, (in- situ e ex-situ measures).

6.5. Establish a coordinated program for conservation and rehabilitation of endangered biodiversity.

6.7. Assess the conservation status of forest reserves and develop/ redefine management or rehabilitations plans.

7.1. Mainstream biodiversity issues in the territorial planning.

IIA.3. Assess the status of Forest Reserves (FRs).

12.1. Map and characterize degradations of critical habitats.

12.4. Catalogue the distribution and abundance of endangered species.

12.8. Elaborate and implement the strategies for conservation of endangered species (lion, elephant, turtle, dugong, shark, etc.).

17.1. Elaborate sectoral targets for biodiversity conservation (including Guidelines to mainstream biodiversity in all key sectors).

17.2. Develop and implement sectoral action plans for the conservation of biodiversity.

In the past, some priority mapping analyses have been made for Mozambique to identify important areas for biodiversity (info available at http://www.keybiodiversityareas.org/site/mapsearch). However, these were done for specific regions of the country or specific taxa using different methodologies, such as Important Bird Areas (IBA) or Important Plant Areas (IPA). Regarding the latter, an exercise is currently underway by the National Institute for Agriculture Research (IIAM) and the Royal Botanical Gardens at Kew. Given that the conservation community has now agreed upon common approach to identifying globally important sites, KBAs, there is a need to assess these for each country on the planet. IBA identification uses the most similar method but BirdLife International is in the process of re-evaluating all IBAs in the World against the new KBA criteria. The same is true for IPAs and IPA criteria have been developed such that it is easy to identify which IPAs are KBAs in recognition of the importance of the latter.

KBAs are already indicators for the CBD Aichi targets 11 and 12 as well as for the SDGs 14 and 15. It is likely that language around KBAs will be adopted in the post 2020 CBD agenda following on from the current CBD action plan. The application of the KBAs Global Standard in Mozambique will have a major impact on improving the country's biodiversity conservation policy framework, by providing spatially explicit information identifying areas of high biodiversity priority which can be used to guide and minimize the impact of key infrastructure and economic developments defined in the Government's five-year plan (Table 2) (República de Moçambique, 2015).

Table 2- Some of the strategic objectives under the Government's five-year plan which can benefit from the KBA identification and mapping.

Ensure the integration of the Green-Blue Economy and the green growth agenda into national development priorities, ensuring the conservation of ecosystems, biodiversity and the sustainable use of natural resources. Continue the mapping and zoning of agrarian, tourist, geological and wildlife resources. Strengthen national capacity for biodiversity planning, management and conservation. Ensure the implementation of measures to mitigate the negative impacts caused by development projects.

The context for identifying and mapping KBAs in Mozambique is currently very favorable as there is a complementary initiative underway with which relevant synergies and complementarities have been created. The capacity for Mozambicans to lead on species extinction risk assessments has recently started to be built through a Red List training initiative and a commitment to form an interinstitutional National Red List Working Group<sup>4</sup>. The National Red List Working Group is led by the

<sup>4</sup> The word "National" in this designation refers to the fact that it is a Mozambican group. The current objective of this group is not to undertake a national red list assessment but a global red listing of endemic species to Mozambique or restricted range species with a significant part of its occurrence in Mozambique. It should be noticed that under IUCN's terminology a national red list is an assessment of nationally (rather than globally) threatened species and helps identify species that are at risk of being lost from the country. This is not what is being developed by the national working group. Additionally, only globally assessed species are used to assess criteria A for KBA identification. The actual threat status of a national red list is not used to identify KBAs but can be used to guide industry on what species to be concerned about. National Agricultural Research Institute (IIAM), and includes members from the University Eduardo Mondlane, the Mozambican Natural History Museum, the Fisheries Research Institute (IIP), the South African National Institute for Biodiversity (SANBI), the Royal Botanical Gardens at Kew, and Project SECOSUD II. The objective of this group, is to make global assessments of the threatened status of endemic or near endemic species that have not yet been assessed for the Red List. This is particularly relevant for plant species as there are nearly 800 endemic or near endemic species for Mozambique. Fauna with these characteristics include invertebrates, freshwater fish and also herpetofauna. The work is currently underway and while some progress has been made on red listing of plants due to an additional investment from Kew Gardens, none has yet been undertaken to assess Mozambican faunal groups.

Recognizing the importance of the National Red List Working Group and its current activities WCS decided to gather the funds to support this group to undertake global assessment of endemic and near endemic faunal species based on existing data which is available within several Mozambican institutions (Government, Academia and NGOs), which would in turn serve as a critical foundation for the identification of KBAs in the country. Considering that SPEED+ had interest in funding a similar project, WCS, in partnership with Mozambique's National Red List Working Group and DINAB, decided to apply to a Call of Proposals with the following main goals:

- SUPPORT THE MOZAMBICAN NATIONAL RED LIST WORKING GROUP in conducting the global assessment of endemic and sub-endemic *taxa* for which there is available data for the country, namely Reptiles, Amphibians, Freshwater Fish and Lepidoptera, contributing to have a complete global Red List for Mozambican species (including a first exercise on Red Listing of Ecosystems) and to
- **IDENTIFY AND MAP KBAS FOR MOZAMBIQUE** according to IUCN's 2016 Global Standards, and the current available information for the country, making these available to the Government, private sector, NGOs, SCOs, Academia and bilateral and multilateral institutions.

The funding gathered with this project is going to be applied to support the organisation of specific meetings and workshops where the endemic and near endemic species listing, distribution in the country, red list global assessment and KBA assessment will be made together. It will also support salaries for young Mozambican biologists to be involved in the project by preparing the data and drafting the assessments. Through twinning young Mozambican biologists with both national and regional specialists we aim to build the capacity of Mozambicans to conduct Red Listing and KBA assessments in the future.

### **AIM OF THIS REPORT**

The aim of the inception report is to update the technical proposal submitted to SPEED+, outlining the strategic approach and presenting the detailed work plan adjusted to the initiation date (including tasks, deliverables and schedule). It also includes a preliminary list of key public sector, private sector, and civil society stakeholders which will be involved in the process.

### **OBJECTIVES OF THE PROJCET**

The **OVERALL GOAL** of this project is to **develop a red list of threatened species** for specific *taxa* and **identify and map KBAs in Mozambique** using the information available up to end 2018.

The **SPECIFIC OBJECTIVES** of the project are as follows:

- <u>National Platform established</u> for engaging with the government on IUCN Red List of Threatened Species and Key Biodiversity Areas and for promoting the National Platform's role informing spatial planning and decision-making
- <u>Global red list assessments undertaken</u> of Reptiles, Amphibians, Freshwater Fish and Lepidoptera and <u>KBAs identified and mapped for Mozambique</u> according to IUCN's 2016 Global Standards
- 3. <u>National capacity</u> built to identify, avoid and mitigate impacts on priority biodiversity (national KBAs and Red List) in Mozambique

The outputs of this project will allow the Government of Mozambique to improve its efforts to reconcile economic development and biodiversity conservation. The **MORE RELEVANT OUTPUTS** of this project are as follows:

- A formal mechanism established to promote the long term monitoring and conservation of critical sites and species
- Threatened species and critical sites identified and used to guide government planning and business developments
- National database of species populated with the most comprehensive set of data known to date

### **PROJECT PARTNERS AND RELEVANT STAKEHOLDERS**

The current project is led by WCS/COMBO, working together with the National Red List Working Group and the Government (MITADER), namely the National Directorate for Environment (DINAB). Many other partners will be involved (Table 3).

Because WCS/COMBO has already a MoU signed with MITADER, being DINAB the focal point, <u>the</u> <u>project will create capacity within this institution to host the National Group for developing the Red</u> <u>List of threatened species and the KBA identification and mapping.</u> One of the key institutions of this group is IIAM, which is the leading institution within the National Red List Working Group. Others are UEM, the Maputo Natural History Museum, IIP, other NGOs, and the project SECOSUD II, which is developing the BioNoMo tool, a national platform similar to GBIF and to be integrated with it. The KBA Partners represented in Mozambique, namely WWF and IUCN will also be important technical partners of the project.

At the international level, the main partners will be the KBA Secretariat and its regional focal point, IUCN, the South African National Biodiversity Institute (SANBI) and BirdLife International.

#### Table 3 – Institutions which will be involved in this project

- DINAB / MITADER
- National Red List Working Group, which includes:
  - Mozambican Institute for Agrarian Research (IIAM)
  - Natural History Museum of Maputo (MHN)
  - Mozambican Fisheries Research Institute (IIP)
  - Entomotheque of the Ministry of Agriculture and Food Security (MASA)
- Project SECOSUD II
- Project CONNECT
- Faculty of Natural Sciences of the University of Lúrio
- Department of Biology of the University Eduardo Mondlane
- Faculty of Engineering and Agronomy of University Eduardo Mondlane
- Porth Elizabeth Museum, South Africa
- University of Swaziland
- South African National Biodiversity Institute (SANBI)
- South African Institute for Aquatic Biodiversity SAIAB
- South African Wildlife College
- Lepidoptera Society of Africa
- BirdLife International
- International Union for Conservation of Nature (IUCN)
  - Mozambique Country Office
  - Species Survival Commission (IUCN SSC)
  - o IUCN freshwater fish group
  - o IUCN amphibian region group
- KBA Secretariat
- KBA Community regional focal point
- World Wildlife Foundation Mozambique Country Office (WWF-MCO)
- Centre Living Earct (CTV)
- National Administration for Protected Areas (ANAC)
- National Directorate for Forestry (DINAF)
- National Directorate for Territorial Planning and Ressetlement (DINOTER)
- Foundation for the Conservation of Biodiversity (BIOFUND)

#### ENGAGEMENT WITH RELEVANT STAKEHOLDERS

Through COMBO, WCS already has created an excellent platform which comprises most of the relevant stakeholders that can contribute to this project, the Technical Advisory Board of the COMBO Project. It is comprised of over 50 institutions and is aligned with the Biodiversity Working Group which has been created by DINAB to deal with subjects related to the implementation of the international conventions which Mozambique has ratified. The National Coordination Group which will be created under this project (explained below) will be aligned with DINAB's Biodiversity Working Group. Some other relevant institutions that will also be engaged in the project are:

- National Directorate of Maritime and Fisheries Policies (DIPOL)
- National Directorate of Geology and Mining (DNGM)
- Mining National Institute (INAMI)

- Petroleum National Institute (INP)
- National Sustainable Development Fund (FNDS)
- Project MOZBIO
- Mozambican Association for Environmental Impact Assessment (AMAIA)
- Private sector (consultancy companies such as Impacto, Consultec, ERM, Golder Associates, among others, as well as project developers).

### ENGAGEMENT WITH COMPLEMENTARY PROJECTS

Finally, another relevant synergistic factor that the project is considering is the **ENGAGEMENT WITH COMPLEMENTARY PROJECTS** that have recently finished or are underway:

- The Project "Biodiversity information for the Lake Malawi/Nyassa/Niassa catchment Eastern Africa: data for decision-makers", is led by IUCN and is trying to: i) update the information baseline for freshwater biodiversity in the lake and its associated catchments (species IUCN Red List status and distribution maps), ii) track change in status of freshwater biodiversity over the last 12 years (this represents the elapsed time since the initial baseline assessment by IUCN), and iii) map the most important sites for the global persistence of freshwater biodiversity (Key Biodiversity Areas, KBAs). Coordination is being established between teams not to duplicate efforts. One of the specialists of this IUCN's project is involved in the current project team.
- The Project "*Coastal Resilience to Climate Change*" is a cooperation between IUCN, RARE and the Ministry for Marine, Inland Waters and Fisheries (MIMAIP). The project is funded by the Government of Mozambique and the Swedish Development Agency (Sida) via the Swedish Embassy in Maputo. The target areas of work are three districts: Inhassoro in Inhambane Province, Dondo in Sofala Province and Memba in Nampula Province. The target ecosystems of the project are mangroves, coral reefs, seagrass beds, sand dunes and coastal forests. A Red List Ecosystem assessment for these ecosystems is being considered. WCS is engaging with this team to create coordination between the projects.
- The Project "IUCN Red List of Ecosystems of Coral Reefs of the Western Indian Ocean" is being undertaken under a 5-year project "Innovating and sharing knowledge for coastal resilience in Eastern Africa" funded by the Norwegian development agency (Norad). The project is led by CORDIO East Africa, assisted by the IUCN Coral Specialist Group (CSG) and the IUCN global RLE team. The assessment builds on existing regional data sharing and reporting on coral reefs to generate an output targeting decision-makers. This WIO regional assessment is starting in 2019 and will identify the most vulnerable and threatened reefs, and the most resilient and robust reefs. It is expected that throughout the period 2020-23 assessments at finer scales will be developed to support conservation planning at national levels, in four focal countries (Kenya, Tanzania, Mozambique and Madagascar). WCS is engaging with this project to guarantee coordination with it and with the project mentioned in the previous topic.
- The Wetlands mapping project has been undertaken by WWF-MCO to provide the Government, in this case DINAB, with the information that will allow the country to report to RAMSAR Convention Secretariat on the Wetlands that exist in Mozambique. Although the criteria for identifying important wetlands and KBAs are different, the information collected by the former will be useful for the current project.
- National Plans and Strategies underway such as the National Territorial Development Plan, and the National Strategy and Plan for the Mangrove Conservation. The institutions that are leading

these strategies will be strongly involved in this project to allow for mutual benefits. It is expected that the outputs of this project, in particular the Key Biodiversity Areas, will be integrated in these national plans and strategies as avoidance areas for certain types of development projects that can compromise their integrity. WCS has been liaising with DINOTER and the team which is responsible for the PNDT so that KBAs are integrated in the planning process as avoidance areas.

# **ACTIVITY DESCRIPTION**

The project activities are described below, organized by objective. For each activity

### OBJECTIVE I: NATIONAL PLATFORM ESTABLISHED FOR ENGAGING WITH THE GOVERNMENT ON IUCN RED LIST OF THREATENED SPECIES AND KEY BIODIVERSITY AREAS AND FOR PROMOTING THE NATIONAL PLATFORM'S ROLE INFORMING SPATIAL PLANNING AND DECISION-MAKING

# ACTIVITY 1.1: KICK-OFF MEETING, INCEPTION REPORT WITH DETAILED WORK PLAN AND VALIDATION MEETING

The first Activity of the project corresponds to all preparatory tasks that will allow undertaking all the proposed activities and achieve the project's planned objectives. The detailed tasks under this first activity are presented below:

- Pre kick-off meeting with SPEED+
- Establishment of contacts with all partners and most relevant stakeholders
- Meetings and calls with the project's main partners
- Provisional schedule of each of the main meetings and workshops
- Prepare and submit inception report
- Technical meeting with DINAB
- Establishment of all necessary contracts and MoUs
- Share updated workplan with all partners
- Kick-off meeting with SPEED+, USAID and project's main partners

The current inception report includes all the details that was possible to define so far. It is expected that updates to this report are done up to the official kick-off meeting provisionally scheduled for March, the 18<sup>th</sup>.

During this initial planning period, the project's coordination team will coordinate closely with SPEED+, DINAB, the National Red List Working Group and other key stakeholders to confirm the members of each working group (as explained in Objective 2) and ensuring full commitment and participation from critical partners. This will be done through one to one meetings and email/skype.

The official kick-off meeting has the objective of identifying the major expectations, requirements and critical aspects from SPEED+ based on the inception report that is being submitted. This meeting will also allow to update SPEED+ and the partners on the final working groups and confirm some of the aspects detailed below.

CONCLUSION DATE	4 March 2019 (kick-off meeting on the 18 March)
EXPECTED OUTPUT	Inception report and work plan
PERFORMANCE INDICATORS	One inception report with work plan included
MAIN HUMAN RESOURCES	Hugo Costa, Hermenegildo Matimele, Eleutério Duarte

# ACTIVITY 1.2: BRIEF ANALYSIS OF THE LEGAL FRAMEWORK APPLICABLE TO THE RED LIST AND KBAS IN MOZAMBIQUE

This activity corresponds to a brief analysis of the legal framework applicable to the Red List and KBAs in Mozambique. It will be supported by Dr. Gildo Espada, a Mozambican legal advisor specialized in environment to be provided under an agreement with SPEED+. A meeting will be scheduled with the consultant and SPEED+ to discuss the objectives of this brief analysis and define the detailed scope of works.

The objective is that the outputs of this project, namely the Red List and KBAs are linked to the national legal framework, namely the Law for the Protection, Conservation and Sustainable Use of Biological Diversity and its Regulation, the Environmental Impact Assessment Decree, the Land Use Planning Law and the Regulation for the Use of the Maritime Space. The connection with the National Strategy and Action Plan for the Biological Diversity (NBSAP), the National Territorial Development Plan and the Marine Spatial Plan will also be considered. This analysis will highlight how these outputs can be relevant and effectively practical tools for decision making.

Other projects underway as it is the case of a specific legislation being developed for bird protection will also be considered. The objective will be to create synergies on the definition of potential lists of protected species not to duplicate efforts and to guarantee maximum efficiency.

Based on the national policy and legal framework mentioned above, the analysis will discuss the recommended process and present the legal arguments for approving the Red List and KBA list and map for Government endorsement.

Through project COMBO, WCS has already engaged with DINOTER/MITADER and the technical team responsible for the National Territorial Development Plan for almost one year, to include the outputs of the current proposal in this national plan. However to maximize results, the outputs of this activity will be discussed with DINAB to facilitate engagement with other Government institutions such as DINOTER, ANAC and DIPOL.

At the end of this activity, a brochure and a powerpoint presentation will be developed and submitted to SPEED+ and MITADER/DINAB for approval. The objective of this communication material is to ensure that a consistent description of the Red Listing and KBA identification and mapping processes are available to relevant stakeholders and the public in general, alongside with the roles and responsibilities of all involved parties. This will be used as a communication tool in live presentations (powerpoint) and for distribution (brochure) and is intended to create awareness among the government, private sector, civil society, academia and other relevant stakeholders.

CONCLUSION DATE	12 April 2019
EXPECTED OUTPUT	Brief analysis of the potential legal framework applicable to the Red List and KBAs in Mozambique available for disclosure
PERFORMANCE INDICATORS	One brochure/infographics and one powerpoint
MAIN HUMAN RESOURCES	Hugo Costa, Gildo Espada, Hermenegildo Matimele, Eleutério Duarte

# ACTIVITY 1.3: ESTABLISH THE NATIONAL COORDINATION GROUP FOR KBAS WHICH WILL ALSO REPRESENT THE CURRENT NATIONAL RED LIST WORKING GROUP

This activity corresponds to the creation of the **NATIONAL KBA COORDINATION GROUP** (**NCG**), which will fulfil the role of coordinating the KBA identification process at the national level through bringing together relevant stakeholders and data in a bottom-up, participatory and efficient way, and to liaise with the KBA Secretariat, KBA Regional Focal Point, and KBA Community. The KBA Global Standards (IUCN 2016) contemplates the KBA identification process to be largely driven by local organisations and experts to secure buy-in and ownership, which are essential for the future safeguard and conservation of these sites, therefore the creation of this group is essential. This activity is comprised of the following tasks:

- Prepare a preliminary list of potential members for discussion with DINAB, inclusing the operational structure of the group (preliminary list presented below)
- Prepare the draft of the NCG Terms of Reference (ToR)
- Agree with DINAB on the potential members of the NCG, which will consider both the KBA and Red List processes, and on the ToR
- Invite the potential members (an meet with those whenever necessary) to present the project, the Terms of Reference of the NCG, including its role on promoting the Red List and KBA process with the Government
- Undertake first NCG meeting, agree on final ToR and workplan for project and receive any recommendations for the current project
- Support DINAB in the creation of the NCG procedures and establishment of linkages with the KBA Regional Focal Point and the KBA Secretariat
- Preliminary contacts with the KBA Secretariat, IUCN Global Species Programme and IUCN Survival Commission (SSC) to ensure support and feedback on the approach as it proceeds

For the specific case of Mozambique, because the Red Listing process is underway and does not have an official engagement group with the Government (MITADER/DINAB), the **KBA NCG** will be used as a **MECHANISM OF ENGAGEMENT WITH THE GOVERNMENT FOR BOTH THE KBA AND RED LISTING** processes to guarantee that these are formally recognized. The National Red List Working Group is already created and led by IIAM, therefore it will be formalized it under the same NCG, creating synergies between the activities and optimizing the time of the involved institutions and its members. This means that the Red List community would be represented in the NCG. This strategy has been used before by WCS, namely in Uganda, which allowed for resource and time optimization, which is one of the Government priorities, due to their resource and time constraints (Plumptre 2017). This implies assessing with DINAB and the National Red List Working Group which of the institutions comprising the latter should be represented in the NCG (e.g. government, private sector, and civil society).

The role of the KBA NCG is to coordinate the experts, other national initiatives, data collection, the KBA review process, and review proposals from external proposers, in order to identify, document and delineate the most robust network of KBAs in Mozambique. The NCG will also play an important role in promoting the conservation, management, monitoring and protection of KBAs in Mozambique through the appropriate mainstreaming into policy, reporting and spatial planning. This group will also include members of the current National Red List Working Group, to guarantee that the Red List is taken up by the Government and relevant stakeholders in Mozambique.

As a member of the KBA partnership, WCS is mandated to play an important leading role in the establishment of the national NCG, and to liaise with the KBA Secretariat to enable support for this project in Mozambique. WCS will liaise with the KBA Secretariat and the KBA Regional Focal Point

to develop the necessary procedures to create the Mozambican KBA NCG according to the template Terms of Reference of the KBA partnership, hosting it in DINAB. The objective is that the current project creates the foundations which allow the group to undertake these roles in the near future. DINAB is the responsible for the coordination of the activities under the NBSAP and the achievement of the targets defined in the CBD, therefore building the capacity within this institution to report compliance to the KBA Secretariat and to the CBD Secretariat will be of extreme importance for Mozambique. DINAB has already created a large biodiversity working group for assessing related issues under the international conventions for which the institution is responsible. Therefore, coordination with the NCG will be ensured to promote resource and activities optimization (including meetings).

Besides supporting the creation of the NCG and capacity building of DINAB to host it, WCS, as a locally registered NGO and country office of one of the twelve KBA Partners, will be a member of the group and will have a catalytic role under this group leading the current project. It should be noted that once the KBA identification project is completed and mature, the catalytic role taken by WCS to develop this project should be assumed by the NCG, hosted by DINAB, which by then should have a trained team. From there on, WCS will have the same role as any other regular member, giving the necessary support to the group.

It is important that the NCG has a good mix of government, academic and NGO representation, but also remains effective at making decisions. Therefore, not only this group will consist of various taxa and ecosystem experts, representing the biodiversity elements for which the KBA and Red List criteria may be applied in Mozambique, but it will also consist of institutions that can promote advocacy within the Government to make these conservation tools effective. Figure I below shows how the project proposes the group to be organized and the engagement with other relevant stakeholders. The left hand side of the schematics explains how the working group and the KBA and Red List community involved in the current project are organized, and the right hand side shows how the potential relevant stakeholders can be engaged more effectively. In total, DINAB's Biodiversity Working Group, ANAC's Conservation Group, and Project COMBO Technical Advisory Board include all the relevant stakeholders for this project.

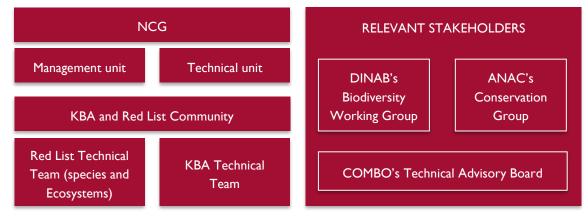


Figure I – Schematics of the general roles of the NCG and the Red List and KBA community which is expected to be involved in these processes

The membership of the NCG may include representatives of the following organizations and stakeholder groups:

• National representatives of the KBA Partners, such as WCS, BirdLife staff in Mozambique, IUCN and WWF;

- Relevant government departments and agencies, including DINAB. Others might be ANAC, DINAF, DINOTER, IIP, among others;
- Other organizations and scientific institutions holding relevant data or expertise, as is the case of UEM, IIAM, UniLúrio, Natural History Museum, among others, representing a broad range of *taxa* (e.g. vertebrates, invertebrates and plants);
- Among the institutions mentioned in the previous bullets, members of the current National Red List Working Group will be included
- Private sector organizations holding relevant data on KBAs.

The preliminary list developed so far for the NCG and which is under discussion with DINAB and the Red List Working Group is presented in Table 4.

INSTITUTION	SHORT NAME	RELEVANCE TO THE GROUP
National Directorate for Environment	DINAB	Government institution that coordinates implementation of NBSAP and international conventions implementation (except CITES); Proposed to be the host of the NCG
Wildlife Conservation Society	WCS	KBA partner leading the current project
World Wildlife Fund	WWF	KBA Partner
International Union for the Conservation of Nature	IUCN	KBA Partner
University Eduardo Mondlane	UEM	Main University of the country with more work done in biodiversity (Terrestrial and Marine)
University of Lúrio	UniLúrio	University of the North of Mozambique with a Biodiversity Department (Terrestrial and Marine)
Maputo's Natural History Museum	MHN	Associated to UEM; has biological collections and does research wok
National Administration for Protected Areas	ANAC	Protected Area Management Authority; owns data for Protected Areass
National Fisheries Research Institute	IIP	Collects and owns the data for aquatic environment
National Institute for Agriculture Research	IIAM	Collects and owns data for plants and ecosystems
Foundation for the Conservation of Biodiversity	BIOFUND	Conservation Trust Fund; funds data collection and management of Protected Areas; makes public data available to citizens
National Directorate for Land Planning and Resettlement	DINOTER	Government institution responsible for Land Use Planning and the new National Territorial Development Plan
National Directorate for Forests	DINAF	Government institution responsible for forests and forest reserves
Centre Live Earth	CTV	Local NGO which does monitoring work in the marine environment for ANAC in the National Network of Protected Areas
Associação Moçambicana de Avaliação de Impacto Ambiental	AMAIA	Association that represents the environmental institutions and private consultants who own data on biodiversity associated to the Environmental Impact Assessment procedure

#### Table 4 – Preliminary list of potential NCG members

Some of these potential members will be invited. The remaining ones will be part of the global community which will be consulted and informed of the process.

The initial meeting with the NCG members will explain in detail the proposed NCG ToR so that an agreement regarding the final text is reached. The main roles of the NCG will most likely include the ones detailed below, which are usually cross-cutting to the NCGs all around the world :

- Establish contact with the relevant KBA Regional Focal Point and Regional Representative of the KBA Community
- Compile and maintain a list of relevant stakeholders at the national level who can play a role in the KBA Programme
- Agree on principles of data sharing among the participating institutions and individual experts for the benefit of KBA identification
- Compile or review supporting data for the application of the KBA Standard (e.g. data regarding potential trigger species and/or ecosystems, most appropriately-scaled human footprint maps and biotic integrity information and available systematic conservation plans, existing KBA inventories)
- Set up an account in the World Database of KBAs (WDKBA)
- Coordinate the formal KBA proposal and up-dating process (proposal, review, nomination) at the national level through the WDKBA to ensure proper documentation of proposed KBA sites
- Ensure consultation among relevant experts of KBAs proposed by external experts.

Considering that this group will be jointly working on KBAs and the Red List, specific roles regarding the latter will also be discussed and defined in the meeting mentioned above. This meeting should also result in the formal approval of the final *taxa* working groups structure for the current project.

The following results are expected from the NCG:

- Up-to-date and comprehensive national inventory of KBAs developed by the NCG, held in the WDKBA and disseminated through the KBA Website
- Regular exchange of information with the relevant KBA Programme structures (KBA Secretariat, KBA Regional Focal Point, KBA Community, other NCGs).
- Global Red List assessments of Reptiles, Amphibians, Freshwater Fish and Lepidoptera completed for Mozambique.
- Broad stakeholder and government buy-in to the KBA Programme and Red List at the national level

CONCLUSION DATE	24 May 2019 (First meeting to be hold between 9 and 12 April)
EXPECTED OUTPUT	National Coordination Group created and operational and Meeting minutes
PERFORMANCE INDICATORS	I. KBA National Coordination group (NCG) created; 2. Number of members of the NCG; 3. One initial meeting held with most of the members of the NCG; 4. One meeting held with the KBA Secretariat
MAIN HUMAN RESOURCES	Hugo Costa, Hermenegildo Matimele, Eleutério Duarte, Daniel Marnewick, Andy Plumptre, Justina Ray

### OBJECTIVE 2: GLOBAL RED LIST ASSESSMENTS UNDERTAKEN OF REPTILES, AMPHIBIANS, FRESHWATER FISH AND LEPIDOPTERA AND KBAS IDENTIFIED AND MAPPED FOR MOZAMBIQUE

As previously defined, the taxa that will be assessed for the red listing process are **Reptiles**, **Amphibians, Freshwater Fish and Lepidoptera**. A first exercise on Red Listing of Ecosystems will also be undertaken, creating synergies with the other projects that are being undertaken with similar objectives. This work will be of major interest for some of the work to be done under the KBA identification and mapping process. Regarding the KBAs assessment, besides the groups mentioned in the previous paragraph, Birds, Mammals, Plants and Marine Biodiversity will also be considered.

### ACTIVITY 2.1: HOLD INITIAL WORKSHOP TO EXPLAIN KBA STANDARDS AND CRITERIA FOR THEIR IDENTIFICATION, ALIGN IT WITH THE TAXONOMIC WORKING GROUPS UNDER THE RED LIST WORKING GROUP AND UNDERTAKE JOINT ASSESSMENTS FOR THE RED LIST AND KBAS

The first technical workshop will be organized after the first NCG meeting. The objective of this workshop is to train the NCG and remaining specialists participating on this project on the Global Standards and KBA criteria application. It will also allow to establish an initial list of KBA trigger species and ecosystems and a preliminary species by site database and to create synergies between the Red List and KBA assessments providing tools to the *taxa* working groups. To hold this training event and workshop, the following tasks will need to be developed.

- Settle the final structure of each working group
- Implement the proposed organization model (explained in the following chapter), including the definition of a focal point per group
- Determine any additional resources that might be required for each group
- Define list of species / biodiversity feature to be assessed by each working group
- Determine any additional data gathering needs
- Define data organization model for the KBA assessments and Red List Assessments
- Prepare ToR for each of the working groups (Red List and KBAs)
- Brief each group on the data organization model and on the planning approach for the workshops
- Undertake species identification for some of the groups (e.g. Reptiles, Amphibians and Freshwater fish)
- Define list of taxa to which a sample assessment will be done during the workshop
- Undertake weekly meetings with the focal point of each working group to assess the status of the data gathering
- Undertake at least one meeting with each working group to understand which data will be possible to gather till the workshop
- Prepare the training and workshop logistics (including informing SPEED+ with 30 days on advance on who will attend the workshop)
- Send the Terms of Reference of the workshop and any supporting materials to the participants in advance to allow for an adequate preparation to the event
- Undertake the technical preparatory work for the workshop (trainer to arrive earlier and train local coordination team)
- Run the workshop
- Prepare the workshop report and submit to SPEED+

The workshop will be preceded by the creation of each of the working groups mentioned above which will be used for KBAs assessment: Reptiles, Amphibians, Freshwater Fish, Lepidoptera, Birds,

Mammals, Plants, Marine Biodiversity and Ecosystems. Terms of Reference will be created for each group, including its organizational model and identifying who is the group member focal point. As explained further below in the section **PROJECT MANAGEMENT**, these will include national and regional key-experts (taxon experts, NGOs and government institutions) who might have important information for species or habitats in Mozambique. Some of them will be designated as the main members of the group and other as supporting members.

The workshop attendees will include the members of the NCG (including the National Red List Working Group members) and some of the members of the working groups.

The workshop will start with a training on the KBA concept and on KBA criteria application and designation. This will be given by the head of the KBA Secretariat, Andy Plumptre. He will arrive to Maputo with some days in advance to train the local coordination team on the subjects that will be taught in the workshop.

The workshop will continue after the first day with the Red List Working Group and other taxonomic experts to start creating an initial list of KBA trigger species and ecosystems and a preliminary species by site database for each taxon.

Because some previous work on Important Bird Areas (IBAs), Important Plant Areas (IPAs), Areas of Zero Extinction (AZEs) and Key Areas for Biodiversity under the Critical Ecosystem Partnership Fund (CEPF) has been made for Mozambique, these will be used as a starting point for the assessment. The idea will be to reassess these sites using the criteria under the new global standard. Additional areas for which there is available information will also be assessed regarding the biodiversity groups mentioned above.

The sites lists will be agreed and data on locations where the globally threatened species occur will be collected (previous, during and after the workshop). Coordination with SECOSUD II project will happen throughout the project as currently the project has been working with the National Red List Working Group to digitize and validate the existing information for plants, invertebrates, fish, birds, amphibians and reptiles (BioNoMo tool).

The national and regional experts that are part of each group will inform on where they know species occur at sites, how many occur there (if known) and area of habitat where they occur (if known). A specific data sheet will be provided to the *taxa* working groups and training on how to fill it in will be provided previous to the workshop as described above.

This event will also contribute to the global assessments that are being done by the taxonomic groups under the National Red List Working Group (Amphibians, Reptiles, Freshwater Fish, Lepidoptera), as it will allow the members to meet, share information between them and with the regional key-experts. The current status of the assessments will be determined as well as the final list of *taxa* to be assessed, composition of the *taxa* working groups and regional specialists needed. The Global Red List status will be assigned to as many species as possible in the preliminary species by site database.

CONCLUSION DATE	15 June 2019 (First workshop to be hold between 29 and 31 May)
EXPECTED OUTPUT	Initial workshop and training held and report
PERFORMANCE INDICATORS	I. Number of participants in the initial workshop.; 2. One report submitted

### ACTIVITY 2.2: SUPPORT ASSESSMENT OF DISTRIBUTION OF SPECIES WITHIN EACH TAXON OCCURRING IN MOZAMBIQUE BY TAXONOMIC WORKING GROUPS AND IN WHICH SITES THESE OCCUR ACROSS THE COUNTRY

The current activity will be a continuation of the former, building on the preliminary KBA trigger species and ecosystems list established during the initial workshop. This will be done for all the working groups described above. The following tasks will be developed under this activity:

- Agreement on the final list of KBA trigger species and sites
- Creation of the final species by site database for each taxon
- Each working group to pull together the available data into the database structure previously defined, building on the work undertaken in the workshop
- Engagement of the focal point of each working group with the coordination team on a weekly basis
- Monthly meetings of the coordination team with the specialists of each working group
- Regular feedback from the coordination team to the groups
- Brief summary of technical meetings held

The final list of KBA trigger species and sites will result from the improvement of the one established during the initial workshop. Additional consultations and clarifications will be done with each of the taxonomic working groups and other regional specialists and institutions, that might have information for specific *taxa* or sites in the region. On a weekly basis, the focal point of each working group will update the data spreadsheet and will inform on the status of the task. The coordination team will meet on a monthly basis with the specialists of each working group. In both cases the coordination team will go through the data, highlighting what is missing and providing the necessary feedback. Whenever necessary the coordination team will have online meetings with the specialists and WCS team based abroad to request feedback.

This work will allow the team to create a species by site database for each site for each taxon under assessment. Currently, the SECOSUD II project, funded by the Italian Agency for Development Cooperation is creating and institutionalizing an integrated platform and networks for biodiversity databases called BioNoMo. This national platform will be connected to regional/international networks as GBIF and BioCASE. BioNoMo will be key on establishing the species by site database.

During this stage WCS will use three international experts on KBA identification and additional qualified staff to work with the taxonomic groups to guarantee the achievement of the defined milestones. These will analyse the *taxa* lists, check the descriptions and sites and give feedback on the criteria to the taxonomic groups. The final species by site database should include as many species as possible assessed under the Global Red List status.

CONCLUSION DATE	30 October 2019
EXPECTED OUTPUT	Existing biodiversity data compiled with the support of experts allocating species to sites across the country; Red List of globally threatened species for the four proposed <i>taxa</i> with data identified and compiled; Brief summary with meetings held

PERFORMANCE INDICATORS	I. Percentage of species in each assessed taxon with national distribution known; 2. Percentage of species assessed in each taxon; 3. One brief summary submitted
MAIN HUMAN RESOURCES	Hermenegildo Matimele, Hugo Costa, Domitilla Raymondo, Krystal Tolley, Luca Malatesta, Hedley Grantham, Kendall Jones, Eleutério Duarte, Jorge Sitoe and working group members

### ACTIVITY 2.3. DEVELOPMENT OF RED LIST OF THREATENED SPECIES FOR MOZAMBIQUE

This activity is related to the two previous and specifically refers to the support that will be given to the National Red List Working Group to i) create four taxa working groups, namely Amphibians, Reptiles (these two will be managed as one), Freshwater Fish and Lepidoptera; and to ii) undertake the global red list assessments for endemic and near endemic species and potentially some range restricted species that might have most of its distribution range in Mozambique.

The support includes project coordination, helping to educate and engage members about the IUCN tools, establishing meeting agendas, coordinating logistics, and documenting working group activities, as well as overarching technical support in applying IUCN Red List criteria. This activity will include at least one technical workshop for each of the assessed groups, which will be conducted in Maputo, with the participation of national and regional specialists. The following tasks will be undertaken during this activity; some of them have already been listed as they are common to the previous two activities:

- Settle the final structure of each red listing working group
- Implement the proposed organization model for the group and definition of the focal point per group
- Determine any additional resources that might be required for each group
- Support the taxa working groups on producing a list of taxa of conservation concern to assess (endemic and near endemic)
- Determine any additional data gathering needs
- Define data organization model for the Red List Assessments
- Prepare ToR for the working groups
- Brief each group on the data organization model and on the planning approach for the workshops
- Undertake species identification for some of the groups (e.g. Reptiles, Amphibians and Freshwater fish)
- Undertake weekly meetings with the focal point of each working group to assess the status of the data gathering
- Prepare the Red Listing workshop logistics (including informing SPEED+ with 30 days on advance on who will attend the workshop)
- Send the Terms of Reference of the Red Listing workshop and any supporting materials to the participants in advance to allow for an adequate preparation to the event
- Undertake the technical preparatory work for the workshop
- Run the Red Listing workshop
- Prepare the Red Listing workshop report
- Co-ordinate institutional partners in Mozambique's National Red List Working Group to complete assessments of Mozambique's endemic fauna
  - Engagement of the focal point of each working group with the coordination team on a weekly basis

- Monthly meetings of the coordination team with the specialists of each working group
- Regular feedback from the coordination team to the groups
- Herpetofauna digitizer to receive training in South Africa to mobilise Mozambican species data that are housed there
- Co-ordinate the taxa working groups on mobilising Mozambican species data that are housed in partner institutions and combine with Mozambican data.
- Co-ordinate and support the taxa working groups in conducting Red List assessments for taxa of conservation concern.
- Prepare the Red Listing report and submit to SPEED+

Following the workshops and meetings referred in this activity and the remaining ones under the current objective (Activities 2.1, 2.2 and 2.6), assessments will be edited and prepared for review. WCS will co-ordinate the independent review, sharing and discussing the list with the Government, and the publication on the Global Red List of the assessments conducted. Should the National Red List Working Group have finished the assessment of other taxa such as plants or birds, it will be evaluated if those lists can also be included in the final report.

The reference documents that will be used are presented below in the **QUALITY CONTROL** section.

CONCLUSION DATE	15 February 2020
EXPECTED OUTPUT	Report with initial Red List of Threatened Species for Amphibians, Reptiles, Freshwater Fish and Lepidoptera
PERFORMANCE INDICATORS	I. Number of species of Amphibians, Reptiles, Freshwater Fish and Lepidoptera assessed; 4. One report with preliminary Red Listed species submitted
MAIN HUMAN RESOURCES	Hermenegildo Matimele, Hugo Costa, Domitilla Raymondo, Krystal Tolley, Luca Malatesta, Eleutério Duarte, Jorge Sitoe and working group members

# ACTIVITY 2.4: SCOPING OF POTENTIAL RED LIST OF ECOSYSTEMS FOR MOZAMBIQUE AS TRIGGERS FOR KBA IDENTIFICATION

Through COMBO, WCS has initiated one exercise for preparing an updated ecosystem map for Mozambique, which could be used for conservation planning activities in the country. This exercise is being done in coordination with national and regional stakeholders, namely IIAM, UEM, FNDS, SECOSUD II, SANBI and the Royal Botanical Gardens at Kew to create synergies and discuss a consensual approach. So far, WCS has worked on an existing regional ecosystem map which could build the foundations of this activity.

A working group for ecosystems is being created as explained in the following section (**PROJECT MANAGEMENT**). Meetings with this group will follow a similar approach as described above, where the focal point will liaise regularly with the coordination team. Resources and time will not allow a similar level of comprehensive assessment needed to complete a proper Red List of Ecosystem Assessment as input into the KBA process similar to that which is proposed here for the Red List of Species. However, using existing data a preliminary list of ecosystems found within the country will be developed using a hierarchical approach where some classes will be more finely identified than that of others. Using existing landcover and ecosystem maps, the Red List of Ecosystems criteria will be applied as best as possible to scope for ecosystems that might trigger threatened status. If time permits, for those ecosystems that appear to be threatened further investigation will be done to their attributes (distribution, rarity, threats) to see if they can be properly identified as threatened and incorporated into the KBA delineation process.

As explained earlier in section **ENGAGEMENT WITH COMPLEMENTARY PROJECTS** there are currently two projects being developed by international partners which are also considering Red Listing of Ecosystems in Mozambique, specifically coastal ecosystems (mangroves, coral reef, seagrass and coastal forests). Coordination is already being promoted with these projects to guarantee that there is not a double effort and that synergies are created. The tasks below explain the approach that is being undertaken, which will be revised according to the results of the meetings that will happen with the teams of these complementary projects:

- Select baseline ecosystem map to be used to this activity
- List the ecosystems found within the country using a hierarchical approach
- Prepare the map to undertake the analysis
- Create coordination with the other projects to use the same map for the same ecosystems
- Engagement of the focal point of each working group with the coordination team on a weekly basis
- Monthly meetings of the coordination team with the specialists of each working group
- Regular feedback from the coordination team to the groups
- Produce maps with distribution and change in distribution of select ecosystems
- Apply the Red List of Ecosystems criteria to scope for ecosystems that might trigger threatened status
- If possible, investigate the attributes of ecosystems that appear to be threatened to see if they can be properly identified as threatened and incorporated into the KBA delineation process
- Prepare a summary report with the application of Red List of Ecosystem criteria where possible

CONCLUSION DATE	15 March 2020
EXPECTED OUTPUT	Working typology of ecosystem types (list); Maps with distribution and change in distribution of select ecosystems; Summary report with the application of Red List of Ecosystem criteria where possible
PERFORMANCE INDICATORS	I. Number of ecosystems assessed for threat status
MAIN HUMAN RESOURCES	Hermenegildo Matimele, Hugo Costa, Hedley Grantham, Kendall Jones, Luca Malatesta, Eleutério Duarte and working group members

The reference documents that will be used are presented below in the **QUALITY CONTROL** section.

#### ACTIVITY 2.5: ASSESSMENT OF KBAS FOR MOZAMBIQUE

As explained before the existing Important Bird Areas (IBAs), Important Plant Areas (IPAs), Areas of Zero Extinction (AZEs) and Key Areas for Biodiversity under the Critical Ecosystem Partnership Fund (CEPF) will be used as a starting point for the assessment. The idea will be to reassess these sites using the criteria under the new global standard. Additional areas for which there is available information will also be assessed. If there will be enough data and time, the same approach will be

done for the main Protected Areas of the country (National Parks and Reserves or those that potentially have greatest potential of qualifying as KBAs).

Once the databases are compiled with red list status and presence/area occupied/abundance at each site, the KBA assessments can be made. This activity will apply the criteria and standards defined in the 2016 KBA Global Standard and detailed in the technical guidelines published at the end of 2018 to identify KBAs and delineate the sites. The purpose of the criteria is to locate and highlight existing sites in Mozambique that make significant contributions to the global persistence of biodiversity.

The KBA criteria incorporate elements of biodiversity across genetic, species and ecosystem levels, but their purpose is not to include every species or ecosystem within a KBA. The benefits that biodiversity delivers to people are not incorporated into the criteria. If these are known by the experts working on the assessments, these will be documented.

A principle for developing the Standard has been to keep it as simple as possible; however, having criteria and thresholds that both build from existing approaches and that can be robustly applied across taxonomic groups and all elements of biodiversity has meant that some complexity cannot be avoided. Sites should be assessed against all relevant criteria for which data are available, but meeting the thresholds under any one of the criteria or sub-criteria is sufficient for a site to be recognised as a KBA, assuming documentation requirements are met. Individual elements of biodiversity may trigger more than one criterion at the same site (IUCN, 2016). This activity will be led by WCS team and will include the following tasks, namely:

- Selection of sites to run the criteria based on the information gathered under the previous activities
- Application of KBA criteria and thresholds by each group of taxonomic experts independently (this task will start in the first workshop – Activity 2.1 – and will continue till the end of this activity)
- Engagement of the focal point of each working group with the coordination team on a weekly basis
- Monthly meetings of the coordination team with the specialists of each working group where the provisional results are presented and discussed
- Regular feedback from the coordination team to the groups
- Delineation procedures of agreed KBA sites established, including
  - Undertake scoping analysis: assembling spatial datasets
  - Identify potential KBA
  - Derive initial site boundaries based on ecological data
  - Assess if each potential KBA trigger meets the threshold at each potential site
  - Confirm the presence of each potential KBA trigger at each proposed site
  - Refining the ecological boundaries to yield practical boundaries
    - Delineation with respect to existing sites of importance for biodiversity
    - Delineation with respect to protected areas and other conservation areas
    - Refining boundaries using other management data
- Document delineation precision

More details on the procedures will be developed as the project develops. The reference documents that will be used are presented below in the **QUALITY CONTROL** section.

CONCLUSION DATE	15 March 2020
EXPECTED OUTPUT	Initial list and maps of KBAs in Mozambique
PERFORMANCE INDICATORS	I. Map of identified KBAs; 2. List of trigger species and criteria that meet target for KBA status for each species; 3. Number of shapefiles of species distributions within KBAs; 4. Number of technical meetings held
MAIN HUMAN RESOURCES	Hermenegildo Matimele, Hugo Costa, Andy Plumptre, Domitilla Raymondo, Krystal Tolley, Justina Ray, Hedley Grantham, Kendall Jones, Eleutério Duarte, Jorge Sitoe, Naseeba Sidat and working group members

### ACTIVITY 2.6: WORKSHOP WITH RELEVANT STAKEHOLDERS TO ASSESS AND REFINE RESULTS

The assessment of the KBAs and Red Listing will start with the preparatory works for Activity 2.1 and will last till the end of the current activity. Another technical workshop will be required to assess and refine the results. Simultaneously, engagement work with the Government and other relevant stakeholders needs to be done to make sure that the project results are taken up by national policy making. This activity will be comprised of the following tasks:

- Meeting with the government to present the initial results of the KBA process and the Red List results (WCS will preferentially use COMBO Project's Steering Committee to try to present the results at the Technical Council of MITADER)
- Prepare the final technical workshop logistics (including informing SPEED+ with 30 days on advance on who will attend the workshop)
- Send the Terms of Reference of the workshop and any supporting materials to the participants in advance to allow for an adequate preparation to the event
- Undertake the technical preparatory work for the workshop
- Undertake the workshop to present and discuss the results with the taxa working groups and eventually other members of the KBA and Red List Community and get their feedback (it will be assessed if this workshop should be aligned with a meeting of COMBO's Technical Advisory Board)
- Prepare the workshop report
- Working groups to revise the assessments and produce final lists and maps of KBAs and Red List to be provided to the government (at this stage, if the National Red List Working Group already has globally assessed other taxa, such as plants, it will be evaluated if these lists can also be included in the report)
- Brief analysis on the potential of the identified KBAs to be proclaimed as Protected Areas according to the categories included in the Conservation Law 5/2017 (Law for Protection, Conservation and Sustainable Use of Biological Diversity)
- Formal submission of proposed KBAs to KBA Secretariat for adoption in World Database of KBAs and of the Red List to IUCN

The identification of KBAs will be critically important in informing the National Plan for Territorial development (PNDT), which should be finished during 2019. It is therefore important that after the assessments are done and the preliminary results are obtained, the results are packaged in an appropriate format and taken to the decision making level.

As soon as the first results are obtained, WCS will lead the NCG on engaging with the Directorate of Planning and Cooperation (DPC) of MITADER and DINOTER to include the KBAs in the National Territorial Development Plan. To avoid potential mismatch in the timings of both projects,

even if the KBAs are not confirmed yet, these will be supplied to the PNDT team as proposed sites. Additionally, WCS/COMBO will work closely with a partner project which is also being developed under DINAB, the CONNECT project (funded by UNEP/WCMC), which can also contribute to take this information to decision making level, as that is one of the project's objectives.

There are two additional relevant aspects to highlight associated to this activity:

- At the national level, the legal analysis on how the potential KBAs can be proclaimed as Protected Areas can be of great value. On the one hand this information is extremely important to comply with Aichi Target II and the targets defined in the NBSAP, namely the need to define Protected Areas in places where they have most impact in conserving biodiversity. On the other hand, the national guidance on the adequate application of the Mitigation Hierarchy according to the EIA legislation that is being developed by DINAB with the support of the COMBO Project and BIOFUND, identifies KBAs as avoidance areas and as potential offset receiving areas (one of the options is to gazette a KBA in a Protected Area using a biodiversity offset for such). Therefore having the legal background in place can be extremely useful.
- At the international level, the project will be continuously liaising with the KBA Committee and Secretariat as well as with IUCN to avoid any delays in the validation processes and also that any other similar initiative to this project is identified in advance, creating synergies and avoiding double work. The head of the KBA Secretariat is involved in the project and will be the trainer of the initial workshop to help train in the KBA Criteria and Standard; the secretariat will be involved in helping validate KBAs proposed as the process is implemented to check criteria are being applied correctly. Engagement with the IUCN Global Species Program and the Species Survival Commission will also be done in coordination with the National Red List Working Group and SANBI to support the publication of the assessment.

CONCLUSION DATE	15 March 2020 (workshop to be potentially undertaken on the 24-25 October)
EXPECTED OUTPUT	Minutes of the meetings with the Government; Workshop undertaken and report; Brief analysis on the potential of the identified KBAs to be proclaimed as Protected Areas according to the categories included in the Conservation Law 5/2017
PERFORMANCE INDICATORS	I. Number of participants from different stakeholders in the discussion workshop; 2. One workshop report submitted; 3. One draft report and maps submitted
MAIN HUMAN RESOURCES	Hermenegildo Matimele, Hugo Costa, Hedley Grantham, Andy Plumptre, Daniel Marnewick, Domitilla Raymondo, Krystal Tolley, Gildo Espada, Eleutério Duarte, Jorge Sitoe and Naseeba Sidat

### OBJECTIVE 3: NATIONAL CAPACITY BUILT TO IDENTIFY, AVOID AND MITIGATE IMPACTS ON PRIORITY BIODIVERSITY (NATIONAL KBAS AND RED LIST) IN MOZAMBIQUE

### ACTIVITY 3.1: SEMINAR TO PRESENT THE RESULTS TO THE STAKEHOLDERS AND THE GUIDING PRINCIPLES AND RECOMMENDATIONS FOR DOING BUSINESS IN AND AROUND KBAS AND OBTAIN NATIONAL ENDORSEMENT OF FINAL RED LIST AND KBAS

Once the technical work is finished, it is essential to disclose all the produced information and make sure the Government of Mozambique takes up the outputs to support decision making. It is also important to get the buy in from other stakeholders including the private sector (developers and environmental consultants as it is important they are aware of both Red Listed species and KBAs). A final validation seminar will be organized to achieve that goal. The following tasks are included in this activity:

- Select the stakeholders to invite
- Prepare the seminar logistics (including informing SPEED+ with 30 days on advance on who will attend the workshop)
- Undertake a preliminary analysis to IUCN's KBA and Business guidelines to adjust these to the Mozambican context
- Send any supporting materials to the participants in advance to allow for an adequate preparation to the event
- Undertake the seminar
- Prepare the seminar report

A set of relevant stakeholders both within the government (identified with the support of DINAB), and from other sectors (such as private, CSO, NGOs, donors, financial institutions, etc.) will be invited for this event. As explained in Activity I.3 the stakeholders to involve in this seminar are already captured in DINAB's working group, ANAC's conservation group and project COMBO's Technical Advisory Board. The Biodiversity Offset Working Group hosted by BIOFUND might also include any additional relevant stakeholder not included in the other three groups. The following topics will be presented during the validation seminar:

- KBA partnership, what are KBAs and current status and initiatives around the world
- Presentation of the KBA list and maps identified for Mozambique
- What is the IUCN Red List of Threatened Species and how it is being used around the world
- Presentation of the Red List developed for Mozambique
- Integration with the legal framework and contribution to the conservation objectives of the country
- IUCN's Guiding principles and recommendations for the private sector to operate in and around KBAs

CONCLUSION DATE	II May 2020 (seminar to be potentially undertaken on the 16 March 2020)
EXPECTED OUTPUT	Stakeholders seminar undertaken to share the project's outputs and recommendations for business and seminar report
PERFORMANCE INDICATORS	I. Number of participants from different stakeholders; 2. Seminar program includes recommendations for business

MAIN HUMAN	RESOURCES

### ACTIVITY 3.2: EDIT FINAL LISTS, MAPS AND GUIDELINES AND PUBLISH THESE ONLINE ON IUCN WEBSITE AND THE GLOBAL KBA DATABASE, MAKING DATA AVAILABLE FOR THE GOVERNMENT AND RELEVANT STAKEHOLDERS

The final activity of the project will be comprised of several complementary tasks, including the final reports with the KBAs and Red List. The following tasks have been considered to complete this activity:

- Prepare a policy brief to support the effectiveness of the Red List and KBAs;
- Prepare final report with the KBA list and maps
- Submit final KBA report to the KBA Secretariat for review and integrated into the global KBA database and make it available online;
- Make Guidelines on Business in and around KBAs available online;
- Submit Red List assessments to IUCN for review and integration in the global database and make it available online;
- Create a Google Drive folder with all background documentation collected during the assignment and share it with SPEED+ and any other agreed stakeholders;
- Prepare a report with the description of the process undertaken, documents produced, the roles and responsibilities carried out by all players and the recommendations for next steps
- Prepare a powerpoint presentation with the outputs of the project

With the outputs and recommendations obtained in the validation seminar, WCS, DINAB and the remaining NCG members will draft a policy brief on the achievements and recommended next steps to create political measures to support the effectiveness of the KBAs and its inclusion in the future spatial planning exercises, as well as for the use of the Red List of threatened species for the decision making. Coordination with project CONNECT will also be established to maximize the potential of these outcomes. The target is to present the policy brief to the Technical Council of MITADER so that it can be taken to the Minister's level. At this stage, the role of other international NGOs members of the KBA partnership will also be very important in raising awareness for the obtained results. Therefore, as a KBA partnership member, WCS will liaise with other members to promote that interaction.

Another task will correspond to the editing of the final KBAs lists and maps, IUCN Red List and publication of the data online. Following up on the work done before, ongoing contact with the regional focal point of the NCG and with the KBA Secretariat, as well as IUCN's Global Species Program and Species Survival Commission is necessary for its validation and incorporation of sites into the World Database of KBAs (online WebGIS database) and IUCN database. However the data will only be available online once they are validated by the KBA Secretariat and by IUCN. That might take some time as it is dependent on the availability of the reviewers.

As previously explained, by the time the project ends, if the National Red List Working Group has already finished the assessment of other *taxa* not included in this proposal (as for example plants), it will be considered if the corresponding lists can be included in the report.

It should be noticed that once KBAs are incorporated in the World Database of KBAs it automatically becomes available on the IBAT database also which is a database that provides

assessments for businesses about where company operations have risks of significant impact on biodiversity. The results will therefore be made available to all companies who are interested in operating in Mozambique.

Through DINAB and the remaining members of the NCG, WCS will make sure that the Government is involved in all the process to build its capabilities for future complementary activities. Both the Red List and the KBA list and maps are not static. The more information is available the more sites that qualify as KBAs can be identified. The Red List status of the species depends on the pressures on biodiversity and conservation efforts, therefore it is also a dynamic process. These lists and maps can and should be regularly updated, especially when new and updated relevant information is developed for the country.

As a closing task of the project, a verbal debrief to SPEED+ management on recommendations and next steps will also be made. A powerpoint presentation will support the debrief.

CONCLUSION DATE	II May 2020 (seminar to be potentially undertaken on the 16 March 2020)
EXPECTED OUTPUT	Policy brief to support the effectiveness of the Red List and KBAs; Final report with the KBA list and maps submitted to the KBA Secretariat for review and integrated into the global KBA database and made available online; Guidelines on Business in and around KBAs are made available online; The Red List submitted to IUCN for review and integration in the global database and made available online; Google Drive folder with all background documentation collected during the assignment is shared with SPEED+ and any other agreed stakeholders; Report with description of process and documentations for next steps (including powerpoint)
PERFORMANCE INDICATORS	I. One policy brief on the relevance of the Red List and KBAs for the country; 2. Number of online publications; 3. One shared google drive folder with the project outputs; 4. One Powerpoint presentation on recommendations and next steps; 5. One report with documentation of the roles and responsibilities carried out by all players and recommendations for next steps; 5. Meeting minutes of the verbal debrief with SPEED+
MAIN HUMAN RESOURCES	Hermenegildo Matimele, Hugo Costa, Andy Plumptre, Daniel Marnewick, Domitilla Raymondo, Krystal Tolley, Eleutério Duarte, Jorge Sitoe and Naseeba Sidat

## **PROJECT MANAGEMENT**

### MANAGEMENT APPROACH

This project involves several institutions and people. Therefore, it requires strong coordination which can only be achieve by implementing a project management approach. A coordination structure has been created, as presented in the organogram further below. It will rely in continuous communication between the different members of the team and the project manager of WCS and SPEED+ representative, so that:

- The activities are carried out with the adequate quality from the technical-scientific perspective;
- The project progress is monitored continuously by providing weekly bullet points and brief monthly reports summarizing activities;
- Unnecessary delays are avoided by acting in a timely manner should deviations occur;
- The costs associated with the project are controlled.
- Inputs are provided for SPEED+ Communications as necessary (briefs on activities, blogs, news articles, press releases, website content, etc.). All inputs will be provided to SPEED+ for approval and publishing. Public communications regarding SPEED+ activities will not be published or released without prior consent.

### PROJECT TEAM, ROLES AND RESPONSIBILITIES

The project organogram is presented in Figure I below and shows the members of the team that will be responsible for the management and technical coordination of the project. Table 2 identifies to which institution each belongs to and describes their role. Annex I, which presents the workplan, shows how each member of this team is distributed by activity.

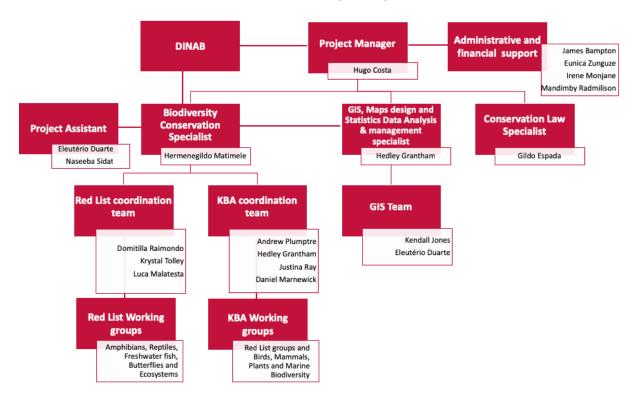


Figure 2 – Organogram of the management and technical coordination team

## **PROJECT MANAGEMENT**

The overall management of the project is undertaken by <u>Hugo Costa</u> from WCS Mozambique, who is the <u>Project Manager</u>. Hugo is coordinating the 3 main specialists and liaising with SPEED+, the Government and the main partners, including the KBA Secretariat and Community and also IUCN. He will lead the creation of the NCG, he will support the training, workshops and seminar, the legal analysis that need to be done, the reporting of the activities and the final validation seminar. Hugo will also be liaising with the complementary projects from other institutions with which the current project will engage.

Hugo is having the administrative, logistic, financial and legal support from WCS's Mozambique office (Eunica Zunguze and Irene Monjane), from the regional office (Mandimby Radmilson) and also from the global Headquarters in New York, namely contracts management, payments, financial and quality control. James Bampton, the current Country Program Director will be in permanent contact with Hugo overseeing the quality control of the project and will participate in the opening workshop and final seminar representing top management of WCS.

## **TECHNICAL COORDINATION**

The <u>Biodiversity Conservation Specialist</u> of the project is <u>Hermenegildo Matimele</u>. He is the technical coordinator of the project for the species Red Listing and the KBA identification, so he will liaise with all the technical partners, with the remaining specialists and the Red List and KBA teams. He will be leading and supporting each of the *taxa* and ecosystems working groups. Hemernegildo is working directly with WCS and the Manager of the Project, Hugo Costa, who will also be responsible for the coordination of some of the activities (as described in Annex I).

## **PROJECT ASSISTANTS**

Hermenegildo is being assisted by Eleutério Duarte and Naseeba Sidat, both Mozambican biologists from WCS Mozambique. Eleutério will be the main Project Assistant and he will support Hermenegildo both in the Red Listing and KBA processes, by helping in educating and engaging members about the IUCN tools, establishing meeting agendas, coordinating logistics, and documenting working group activities, as well as overarching technical support in applying IUCN Red List criteria, if needed. Eleutério will be liaising with the focal points of each working group on a weekly basis, having weekly meetings with each of these groups and also be compiling data for some of the KBA working groups. Naseeba will be mostly dedicated to support the team on the workshops, seminar and reports. Eleutério and Naseeba will also provide assistance to the Project Manager. Eleutério on Project Management and himself and Naseeba in the activities that are under the responsibility of Hugo Costa.

## **RED LIST COORDINATING TEAM**

Domitilla Raimondo, works for SANBI and she is also the Deputy Chair of the IUCN Species Survival Commission (SSC) and Chair of the IUCN's National Working Group Alliance will support Hermenegildo with a focus on the Red List work by linking key specialists from IUCN SSC with Mozambican species assessors and by supporting the Red List assessment planning and workshops.

Krystal Tolley is the head of the Molecular Ecology group at SANBI. She also serves as the Red List Focal Point for the IUCN Chameleon Specialist Group, and drives the Redlisting initiatives, which has ensured that every species of chameleon has been assessed for IUCN. She also leads the IUCN Southern African Regional Reptile Specialist Group. Krystal will support Hermenegildo on the Red Listing process.

Luca Malatesta is the coordinator of the SECOSUDII project responsible for implementing Mozambique's Biodiversity Network project BIONOMO. He will give support to the Red Listing

team by facilitating the contact with the young Mozambicans that have been receiving training on data compilation for red listing and by coordinating the insertion of species data on national databases.

## **KBA COORDINATING TEAM**

Andrew Plumptre is the head of the KBA Secretariat. He will support the coordinating team on the training in the KBA process according to the Global Standards and the technical team on the workshops, training and application of the criteria to identify and map the KBAs. He will also be representing the KBA Secretariat guaranteeing the process of validation of the proposed KBAs and its publication in the World Database of KBAs.

Hedley Grantham and Justina Ray, both of them WCS staff and members of the Technical Working group for KBAs who have led or participated in identification of KBAs in other countries, eg. Canada and Myanmar, are another two members of the KBA technical team. They will be supporting Hermenegildo and Andrew on the KBA assessment and mapping. Daniel Marnewick, Key Biodiversity Areas Community Chair and Africa Representative and Manager of South Africa's Important Bird and Biodiversity Areas (IBA) Program, will be another team member and will have a key role in supporting the creation of the NCG and the KBA assessments for birds.

## GIS AND DATA MANAGEMENT TEAM

The GIS, Maps design and Statistics Data Analysis & Management Specialist will be Hedley Grantham who is the Head of the spatial planning team of WCS's Global Conservation Program and a member of the Technical Working group for KBAs. Hedley will be liaising with the other specialists and with the Project Manager. He will be responsible for supporting the team on data organization, managements, analysis, undertaking the assessments, producing the necessary species and sites maps. He will also be responsible for the assessment of Criteria C of the KBA process and for Activity 2.4 (Scoping of potential Red List of Ecosystems for Mozambique as triggers for KBA identification). Hedley will be directly supported by Kendall Jones, also WCS staff member of the spatial planning team. Eleutério Duarte, the Project Assistant will also be the local GIS specialist giving day to day support to the working groups.

## LEGAL ADVISORY TEAM

Gildo Espada, a Mozambican lawyer with 16 years of experience in Environmental Law will be the Conservation Law Specialist. He will give legal advisory to the project team on Activities 1.2 and 2.6. He will be liaising directly with the Project Manager and the Biodiversity Conservation Specialist.

POSITION	NAME	INSTITUTION	ROLE	
Management team	Hugo Costa	WCS Mozambique	Project Manager	
	James Bampton WCS Mozambique		Management support	
	Eunica Zunguza	WCS Mozambique	Administrative support	
	Irene Monjane WCS Mozambique Administrativ		Administrative support	
	Mandimby Radmilson	WCS Africa	Administrative support	
Coordination team	Hermenegildo Matimele	National Herbarium of Mozambique / IIAM / University of Kent	Technical Coordinator	
	Eleutério Duarte	WCS Mozambique	Project Assistant	

Table 5 $-1$ ist o	f members of	f the management	and technical	coordination team
	members of	I une munugement	und teenneur	coordination team

POSITION	NAME	INSTITUTION	ROLE
	Naseeba Sidat	WCS Mozambique	Project Assistant
Red List Coordination team	Domitilla Raimondo	SANBI / IUCN	Red List coordination support, training, and assessments
	Krystal Tolley	SANBI / IUCN	Red List coordination support, training, identifications and assessments
	Luca Malatesta	SECOSUD II / University of Rome	Red List coordination support, training and insertion of data in databases
KBA Coordination team	Andrew Plumptre	KBA Secretariat	KBA coordination support, training, assessments and mapping
	Hedley Grantham	WCS (Global Conservation Program)	KBA coordination support, assessments and mapping
	Justina Ray	WCS Canada	KBA coordination support, liaison with the KBA Technical Working Group and support to the NCG creation
	Daniel Marnewick	BirdLife South Africa / KBA Community	KBA coordination support, assessments and support to the NCG creation
GIS and data management team	Hedley Grantham	WCS (Global Conservation Program)	GIS, Maps design and Statistics Data Analysis & management specialist
	Kendall Jones	WCS (Global Conservation Program)	GIS, Maps design and Statistics Data Analysis & management assistant
	Eleutério Duarte	WCS Mozambique	GIS, Maps design and data management assistant
Legal advisory team	Gildo Espada	Independent advisor	Conservation Law Specialist

## **RED LIST WORKING GROUPS**

Four taxonomic working groups are being created to undertake the global red list assessment: Amphibians and Reptiles, Freshwater Fish, Butterflies and Ecosystems. The preliminary list of members of each working group is presented below in Table 6. Most of the members will be specialists on that specific group. Each of them will be providing data, contributing to data compilation and organization and running the red list assessments. Within the main members there will be a focal point, who will be responsible for compiling all the information in the specific forms that will support the assessments. This team member will also be responsible for liaising with the specialists on a weekly basis and providing weekly updates to the Project Assistant who, on his turn, provide feedback to the Technical Coordinator or Project Manager. The main members will be supported by others specialists, sometimes based outside the country, but with local knowledge. These will supply data to the group and provide special assistance to the assessments.

Table 6 – Preliminary list of members of each taxonomic working group under consideration for the Red List assessments (\* to be confirmed)

GROUP	NAME	INSTITUTION
Amphibians and Reptiles		
Main members	Harith Farooq	University of Aveiro and University of Gothenburg
	John Measey	IUCN Amphibian Specialist Group for Southern Africa
	Werner Conradie	Port Elizabeth Museum
	Avelino Miguel	University of Zambezia
	Raquel Raiva	Independent consultant
Supporting members	Philip Bowles	IUCN Reptile Specialist Group
	Daniel Portik*	Department of Ecology and Evolution, University of Arizona
	Luis Ceríaco*	National Museum of Natural History and Science of Portugal
	Caroline Pollock	IUCN Red List Unit
	Luca Malatesta	SECOSUD II
Freshwater fish		
Main members	Roger Bills	South African Institute for Aquatic Biodiversity
	Albert Chakona	South African Institute for Aquatic Biodiversity
	Graça Jaime	Faculty of Natural Sciences of the University of Lúrio
	Vanessa Muianga*	Natural History Museum - Maputo
Supporting members	Catherine Sayer	International Union for Conservation Nature
	Ivan Nerantzoulis*	Faculty of Sciences of the University Eduardo Mondlane
	Caroline Pollock	IUCN Red List Unit
	Luca Malatesta	SECOSUD II
Butterflies		
Main members	Alan Gardiner	South African Wildlife College (SAWC) / Lepidopterists Society of Africa
	Silvia Krikman	Lepidopterists Society of Africa
	Joelma Souane	Independent biologist
Supporting members	Audrey Ndaba	South African National Biodiversity Institute
	Caroline Pollock	IUCN Red List Unit
Ecosystems		

GROUP	NAME	INSTITUTION
Main members	Camila de Sousa*	IIAM
	Célia Macamo* Faculty of Sciences of the University Eduardo Mondlane	
	Jonathan Timberlake* Independent consultant	
	Mervyn Lotter*	Mpumalanga Tourism and Parks Agency
Supporting members	Muri Soares* National Sustainable Development Fu	
	Luca Malatesta	

## **KBAS WORKING GROUPS**

Besides the Red List working groups mentioned before, which will also be assessing KBAs, another four working groups are being created to undertake the KBA assessment: Birds, Mammals, Plants and Marine Biodiversity. Similarly to above, the preliminary list of members of each working group is presented below in Table 7. The process will be exactly the same that was explained above, with several specialists for group and one of the members being the focal point.

Table 7 – Preliminary list of members of each taxonomic working group under consideration for KBAs assessment (\* to be confirmed)

GROUP NAME		INSTITUTION
Birds		
Main members	Carlos Bento	Natural History Museum - Maputo
	Gary Alport	BirdLife International
	Emidio Sumbane*	Gorongosa National Park
	Martin Taylor*	BirdLife International
Supporting members	Vincent Parker*	Independent consultant
	Claire Spottiswoode*	University of Cambridge / FitzPatrick Institute of African Ornithology
	Callan Cohen*	FitzPatrick Institute of African Ornithology
	Sam Jones*	Royal Holloway, University of London
	Gregory Davies*	Independent consultant
Mammals		
Main members	Valério Macandza	Faculty of Agronomy and Forest Engineer of the University Eduardo Mondlane
	Cornélio Ntumi*	Faculty of Sciences of the University Eduardo Mondlane
	Ara Monadjem	University of eSwatini
	Carlos Bento	Natural History Museum - Maputo
	Ana Gledis da Conceição*	Gorongosa National Park

GROUP	NAME	INSTITUTION
Supporting members		
	Roberto Zolho*	National Sustainable Development Fund
	Baldeu Araquechande	Niassa National Reserve
Plants		
Main members	Camila de Sousa	Mozambican Institute for Agriculture Research (IIAM)
	Teresa Alves	Mozambican Institute for Agriculture Research (IIAM)
	Alice Manjate*	Faculty of Sciences of the University Eduardo Mondlane
	Clayton Langa*	IIAM
Supporting members	Jonathan Timberlake*	Independent consulyant
	Jo Osborne*	Royal Botanic Gardens Kew
	lain Darbyshire*	Royal Botanic Gardens Kew
	John Burrows*	Buffelskloof Nature Reserve
Marine Biodiversity		
Main members	Paula Santana Afonso	National Fisheries Research Institute (IIP)
	Isabel Silva	Faculty of Natural Sciences of the University of Lúrio
	Marcos Pereira	Centre Living Earth (CTV)
	Salomão Bandeira*	Faculty of Sciences of the University Eduardo Mondlane
	Alima Taju	WWF-MCO
	Almeida Guissamulo*	Natural History Museum - Maputo
	Jorge Sitoe	WCS Mozambique

The coordination team will give support both to the Red List and KBA processes. Several of the main specialists that are not based in Maputo will be participating in the KBA training and workshop and/or in the Red List workshops. The detailed list of attendees of each meeting that requires travelling from the abroad or from other regions of Mozambique will be sent to SPEED+ with 30 days in advance. The proposed structure of the table that will be sent to SPEED+ is presented below. Other national and regional specialists might be contacted to provide data or support to the assessments but are not expected to travel to Mozambique.

NAME OF THE PARTICIPANT	ROLE	CITY FROM WHERE COMES FROM	DATE OF ARRIVAL	DATE OF DEPARTURE

## WORKPLAN

The **DETAILED WORKPLAN** is presented in a table format in Annex I. The table is organized by objective, activities, outputs expected for each activity, indicators, management and coordinating team members associated to each activity and schedule.

Table 8 shows the **DUE DATE** for each of the **DELIVERABLES** that will be produced under this project.

Table 8 – Due d	late for each of the	deliverables of the project
-----------------	----------------------	-----------------------------

DELIVERABLE	DUE DATE
I.I.I Inception report and work plan	4-Mar-19
<ul> <li>1.2.1 Brief analysis of the potential legal framework applicable to the Red List and KBAs in Mozambique available for disclosure</li> <li>1.3.1 National Coordination Group created and operational and Meeting minutes</li> <li>2.1.1 Initial workshop and training held and report</li> </ul>	15-Jun-19
2.2.3 Brief summary with meetings held to compile existing data of biodiversity with the support of experts allocating species to sites across the country and to create the Red List of globally threatened species for the four proposed taxa	30-Oct-19
2.3.1 Report with initial Red List of Threatened Species for Amphibians, Reptiles, Freshwater Fish and Lepidoptera	15-Fev-20
<ul> <li>2.4.2 Maps with distribution and change in distribution of select ecosystems</li> <li>2.4.3 Summary report with the application of Red List of Ecosystem criteria where possible</li> <li>2.5.1 Initial list and maps of KBAs in Mozambique</li> <li>2.6.2 Workshop undertaken and report</li> <li>2.6.3 Brief analysis on the potential of the identified KBAs to be proclaimed as Protected Areas according to the categories included in the Conservation Law 5/2017</li> </ul>	I 5-Mar-20
<ul> <li>3.1.1 Stakeholders seminar undertaken to share the project's outputs and recommendations for business and seminar report</li> <li>3.2.2 Report with the KBA list and maps submitted to the KBA Secretariat for review and integrated into the global KBA database and made available online</li> <li>3.2.4 The Red List submitted to IUCN for review and integration in the global database and made available online</li> <li>3.2.5 Google Drive folder with all background documentation collected during the assignment is shared with SPEED+ and any other agreed stakeholders</li> <li>3.2.6 Report with description of process and documentation of the roles and responsibilities carried out by all players and recommendations for next steps (including powerpoint)</li> </ul>	II-Mai-20

A set of **MEETINGS**, **WORKSHOPS AND FINAL SEMINAR** have been planned and are presented in Table 9.

Table 9 – Meetings, workshops and seminar to be undertaken during the project lifetime (\* dates to be defined; \*\* dates can change)

MEETING	OBJECTIVE	DATE
Pre kick-off meeting with SPEED+	Update on current status of the project and define dates for the kick- off meeting	15-Feb-19
Initial meeting with DINAB	Update on current status of the project, explain main objectives of NCG and schedule working meeting	22-Feb-19
Kick-off meeting with DINAB	Explain in detail the different phases of the project and main role of DINAB	7-Mar-19
Project's official kick-off meeting	Meeting with SPEED+, USAID and main partners	18-Mar-19
Meeting with legal advisor	Meeting with SPEED+ and legal advisor who will support the brief analysis of the legal framework applicable to the Red List and KBAs in Mozambique	19-Mar-19
Red List Assessment Refresh	Refresh meeting (on-line and live) on how to prepare data for RL Assessments targeted to the data digitizers of each group and supporting team	Mar-19*
KBA Assessment induction	Meeting (on-line and live) on how to prepare data for KBA Assessments targeted to the data digitizers of each group and supporting team	Mar-19*
NCG first meeting	First official meeting of the NCG to approve list of members and ToR	9, 10, 11 or 12 April 2019
Meetings for confirmation of species identification	Meetings where one specialist for herpetofauna and another for freshwater fish will come to Maputo to confirm species identification at the Natural History Museum	Apr-19*
Preparation meeting to the KBA Training and Workshop	Prepare the supporting team which will participate in the KBA and Training and Workshop	26-28 May 2019
KBA Training and Workshop	Explain KBA Standards and criteria for their identification, align it with the taxonomic working groups under the Red List Working Group and undertake joint assessments for the Red List and KBAs	29-31 May 2019
Red List Assessment Workshops	Make the first Red List Assessments; another workshop might be scheduled in July or August	16-24 June 2019
KBA and Red List technical stakeholders workshop	Update on the work done by each of the working groups and clarify on any main issues; support the assessments	24-25 October 2019**
Final KBA and Red List stakeholders validation workshop	Final validation workshop with most of the relevant stakeholders	16-Mar-20**

# **QUALITY CONTROL**

The quality control of the project will be ensured by the process described in the following topics. The purpose of the quality control is that the project is adequately undertaken throughout all the activities of the project, with a focus on information gathered, assessments undertaken and reports produced. This section is to be addressed to all the team involved in the project.

## **REVIEW PROCESS**

Data is gathered by team

member(s)

The review of the most important tasks (data gathering, assessments and reports) is done according to the processes described below. Detailed instructions on how the data should be gathered will be provided to each of the working groups by the coordination team.

Document is reviewed

by coordinating team of

each project component

(RL, KBAs, GIS)

The review of the assessments is done according to the process described below. The inception report is prepared by the project manager and reviewed by WCS's country director. In this case detailed instructions on how the Red List and KBAs Assessments should be undertaken, will be provided by the coordination team to each of the working groups (information available here for <u>species</u>, <u>ecosystems</u> and <u>KBAs</u>). These are based on IUCN's reference documents, and others available online, namely:

#### Red List of Species

- IUCN. (2012). IUCN Red List Categories and Criteria: Version 3.1. Second edition. Gland, Switzerland and Cambridge, UK: IUCN. iv + 32pp.
- IUCN Standards and Petitions Subcommittee. 2017. Guidelines for Using the IUCN Red List Categories and Criteria. Version 13. Prepared by the Standards and Petitions Subcommittee.

#### Red List of Ecosystems:

- IUCN (2016). An Introduction to the IUCN Red List of Ecosystems: The Categories and Criteria for Assessing Risks to Ecosystems. Gland, Switzerland: IUCN. vi + 14pp.
- Bland, L.M., Keith, D.A., Miller, R.M., Murray, N.J. and Rodríguez, J.P. (eds.) (2017). Guidelines for the application of IUCN Red List of Ecosystems Categories and Criteria, Version 1.1. Gland, Switzerland: IUCN. ix + 99pp.

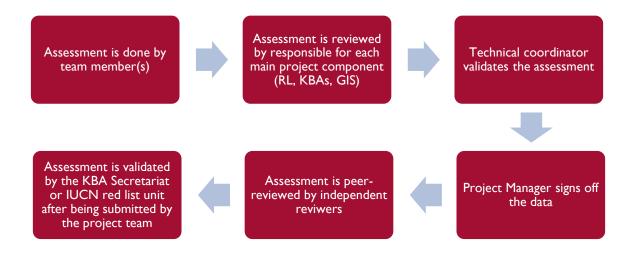
#### KBAs:

- IUCN (2016) A Global Standard for the Identification of Key Biodiversity Areas, Version 1.0. First edition. Gland, Switzerland: IUCN.
- KBA Standards and Appeals Committee (2019). Guidelines for using a Global Standard for the Identification of Key Biodiversity Areas. Version 1.0. Prepared by the KBA Standards and Appeals Committee of the IUCN Species Survival Commission and IUCN World Commission on Protected Areas. Gland, Switzerland: IUCN. viii + 148pp.

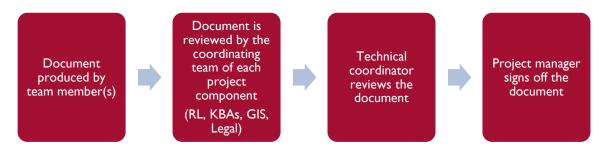
Technical coordinator

signs off the data

gathered



The review of the documents is done according to the process described below. The inception report is prepared by the project manager and reviewed by WCS's country director.



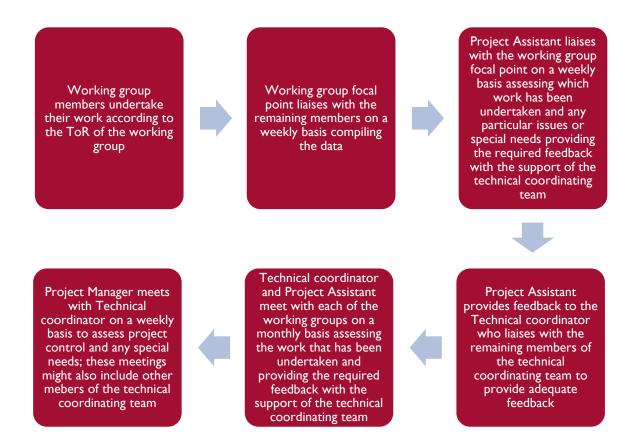
## DOCUMENT CONTROL

Documents need to be signed off by the project manager after being reviewed by the technical coordinator. Documents produced by the project manager are signed off by WCS's MZ Country Director. The table below shows the type of document control registry that will be done for each of the final documents that will be produced under this project

DOCUMENT TITLE					
VERSION CONTROL	REFERENCE	VERSION	DATE	PREPARED	APPROVED

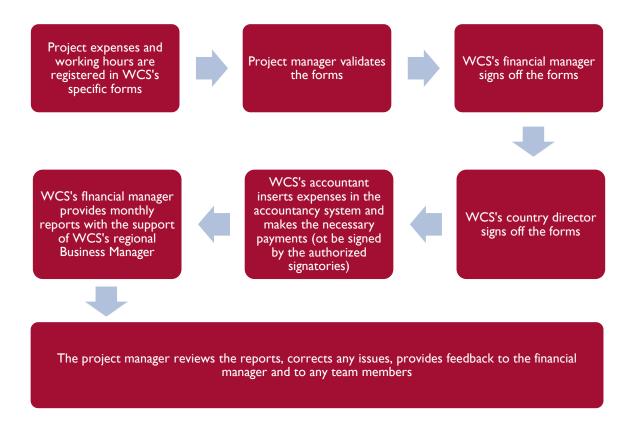
## SUB-CONSULTANT CONTROL

This project will not have real sub-consultants. All the team will be working under the management and technical coordinating structure presented earlier in this document. The process below shows how the team guarantees the coordination of the working group members



#### **FINANCIAL CONTROL**

The financial control of the project will be undertaken according to the process described below:



## SCHEDULE MANAGEMENT

The management of the schedule will be of the solely responsibility of the Project Manager, who will be supported by the Project Assistant. He will liaise with the Technical Coordinator on a weekly basis to guarantee the schedule compliance. Coordinating meetings are scheduled for each Friday at 9:00am MZ time). Whenever necessary he will also liaise with the remaining members of the technical coordinating team and, should it be necessary, with each of the working groups.

## QUALITY CONTROL CHECK PROCESS

Each of the quality control check processes is presented above. The Project Manager will liaise with the Technical coordinator, remaining members of the coordinating team and Project Assistants to ensure that the quality plan is taken up by the working teams.

## **BRANDING AND MARKING PLAN**

The Wildlife Conservation Society (WCS) will comply with the approved USAID SPEED+ Branding Strategy and Marking Plan provided by Development Alternatives Inc. (DAI). WCS recognizes the Activity Name as "Supporting the Policy Environment for Economic Development SPEED+" in English and "Facilitando o Ambiente de Negócios para o Crescimento Económico SPEED+" in Portuguese.

The USAID logo and brandmark, together comprising the "USAID Identity," along with the tagline "DO POVO DOS ESTADOS UNIDOS" will be used in conjunction with the Activity Name as follows:



Facilitando o Ambiente de Negócios para o Crescimento Económico SPEED+

The above logo will be included on all SPEED+-related communications and project materials distributed in Mozambique, including materials such as banners, posters, reports, informational media, and meeting agendas. Additionally, as required by the SPEED+ Branding Strategy and Marking Plan, WCS will acknowledge USAID's contribution to SPEED+ activities by using the phrase "made possible with the generous support of the American People" (or its Portuguese equivalent) next to the USAID Identity.

WCS will acknowledge the intended project audience and program message described in the approved USAID SPEED+ Branding Strategy and Marking Plan, and will work closely with DAI to ensure all aspects of that plan are understood and implemented effectively.

It should also be considered that both the **IUCN RED LIST AND KBAS HAVE ITS OWN BRANDING GUIDELINES** that need to be taken into account when developing the products of this project, including any communication materials.

## REFERENCES

IUCN Red List Committee. (2013). The IUCN Red List of Threatened SpeciesTM Strategic Plan 2013 - 2020. Version 1.0. Prepared by the IUCN Red List Committee.

IUCN. (2015). The IUCN Red List of Threatened Species. Gland, Switzerland and Cambridge, UK: IUCN. 15pp.

IUCN. (2016). A Global Standard for the Identification of Key Biodiversity Areas, Version 1.0. First edition. Gland, Switzerland: IUCN. 37pp.

Ministério da Terra, Ambiente e Desenvolvimento Rural (MITADER). (2015). Estratégia e Plano de Acção para a Conservação da Diversidade Biológica em Moçambique. Maputo. MITADER. 112 pp.

Plumptre, A.J., Ayebare, S., Pomeroy, D., Tushabe, H., Nangendo, G., Mugabe, H., Kirunda, B., & Nampindo, S. (2017). *Conserving Uganda's Biodiversity: Identifying critical sites for threatened species and habitats*. Unpublished report to USAID and Ministry of Tourism, Wildlife and Antiquities.

República de Moçambique. (2015). Programa Quinquenal do Governo 2015-2019. Conselho de Ministros, Maputo. 59.pp.

The World Bank. (2017). Landscapes, Forest, People. Integrated Landscape and Forest Management in Mozambique. The World Bank, Government of Mozambique, National Sustainable Development Fund and the Embassy of Sweden in Mozambique. Washington DC, USA. 47pp.

WCS. (2016). Nationally Threatened Species for Uganda. National Red List for Uganda for the following Taxa: Mammals, Birds, Reptiles, Amphibians, Butterflies, Dragonflies and Vascular Plants. Uganda. 70 pp.

## **ANNEXES**

ANNEX I – DETAILED WORKPLAN